What have future generations done for me lately?

Making sense of the role of media in shaping awareness and engagement with climate change



University of Colorado-Boulder

CIRES Center for Science and Technology Policy Research

22 October 2013

for the Sustainability Lecture series

University of Copenhagen







sustainability & sustainable development





- holding up, maintaining, supporting
- the capacity to endure
- long-term maintenance/stewardship of the planet, along intersecting environmental, economic, political, cultural, societal dimensions

"Sustainable development is development that meets the needs of present generations without compromising the ability of future generations to meet their needs."

~ WCED, Brundtland Report (1987)

Roots & Culture

Tract on Money Reform (1923) "in the long run, we are all dead"

Economic Possibilities for Our Grandchildren (1930)

→ early (mainstream) conceptions of SUSTAINABILITY



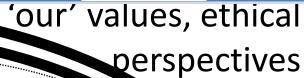
human-environment relationships

sou

St

und





sinks

intersecting influences
(science, policy, values) and powers
that shape climate discourse(s) via media
are artifacts/manifestations of competing
perspectives, histories, priorities.

supports & barrierss politics & policies

wages, use-value, exchange-value, poverty, (in)equality

ere

ogical ices

conditions of engagement

In this 2008 photo provided by the

paleoanthropologist Richard Leakey

discusses the evidence for human

evolution. (AP Photo/Turkana Basin





"The deficit model is dead...long live the deficit model." ~ Brian Wynne (2008)



Posted on May 29, 2012 at 8:38am by Billy

NEW YORK (The Blaze/AP) Leakey predicts skept over evolution will soon be history. Despite surrounding the debate over life's origins, the t sees a light at the end of the tunnel.

Sometime in the next 15 to 30 years, the Kenyan-born paleoanthropologist expects scientific discoveries will have accelerated the point that "even the skeptics can accept it."

"If you get to the stage where you can persuade people on the evidence that it's solid, that we are all African, that color is superficial, that stages of development of culture are all interactive," Leakey says, "then I think we have a chance of a world that will respond better to global challenges."

Leakey, a professor at Stony Brook University on Long Island, recently spent several weeks in New York promoting the Turkana Basin Institute in Turkana Basin Institute, Kenya, The institute, where Leakey spends most of his time, welcomes researchers and scientists from around the world dedicated to unearthing the origins of mankind in an area rich with fossils.

Institute, Bob Campbell) His friend, Paul Simon, performed at a May 2 fundraiser for the institute in Manhattan that collected more than \$2 million. A National Geographic documentary on his work at Turkana aired this month on public television.

Now 67, Leakey is the son of the late Louis and Mary Leakey and conducts research with his wife, Meave, and daughter, Louise. The family claims to have unearthed "much of the existing fossil evidence for human

On the eve of his return to Africa earlier this week, Leakey spoke to The Associated Press in New York City about the past and the future.

Sometime in the next 15 to 30 years, the Kenyan-born paleoanthropologist expects scientific discoveries will have accelerated to the point that "even the skeptics can accept it."

"If you get to the stage where you can persuade people on the evidence, that it's solid, that we are all African, that color is superficial, that stages of development of culture are all interactive." Leakey says, "then I think we have a chance of a world that will respond better to global challenges."

"providing information and filling knowledge gaps is at best necessary but rarely sufficient to create active behavioural engagement."

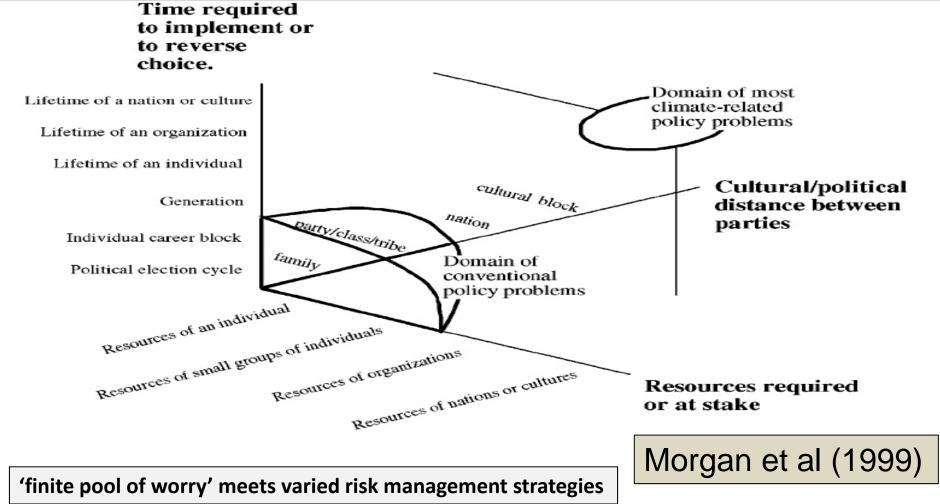
~ Susanne C. Moser(2009)

"If you look back, the thing that strikes you, if you've got any sensitivity, is that extinction is the most common

communicating (& confronting) climate change







"We...must stop viewing climate change as yet another opportunity to apply our existing tool kit." ~ Mike Hulme (2009)

communicating (& confronting) climate change





"All the News That's Fit to Print"

The New York Times

National Edition

Colorado: Partly sunny. A shower the afternoon. Highs from the 70s

\$2.50

VOL. CLXII ... No. 56,234

80 2013. The New York Timers

TUESDAY, AUGUST 20, 2013

Saudi Arabia

Undercutting Leverage of U.S. Over Cairo

By ROD NORDLAND

emerged as the foremost sup-

porter of Egypt's military rulers,

explicitly backing the violent crackdown on Islamists, using its

oil wealth and diplomatic muscle

to help defy growing pressure from the West to end the blood-

shed in search of a political solu-

As Europeans and the United

States considered cutting cash

aid to Egypt, Saudi Arabia said

Monday that it and its allies

effectively neutralizing the West's main leverage over Cairo.

With Egypt's economy in free

fall, the country's authorities

might not have survived interna-

dead and 4,000 wounded without

the deep pockets of its Persian

In recent days, King Abdullah

hood, sent field hospitals to

Egypt and in rare public com-

where he pushed back against of

forts to punish Egypt's rulers.

And Saudi Arabia delivered a

blank check to Cairo, promising

to shower it with money as need-

Egypt and against all those who

try to interfere with its domestic.

affairs," King Abdullah said Fri-

day in a televised speech.

ets vowed continued support

would make up any reduction -

CAIRO - Saudi Arabia has

Olympian Is Indicted on Murder Charge

The double-amputee track star Oscar Pistorius was indicted on Monday in South Africa in the killing of his girlfriend. Page A9.

CHINA TAKES AIM AT WESTERN IDEAS

Party Paper Lists Perils, Including Democracy

By CHRIS BUCKLEY

MONG KONG - Communist Party cadres have filled meeting halls around China to bear a son ber, secretive warning issued by senior leaders. Power could e cape their grap, they have been

These seven perils were enu-

Climate Panel Cites Near Certainty on Warming

By JUSTIN GILLIS

An international panel of scientists has found with near certainty that human activity is the ause of most of the temperature increases of recent decades, and warns that sea levels could conreivably rise by more than three feet by the end of the century if emissions continue at a runaway

are reported in a draft summar of the next big United Nations cli mate report, largely dismiss a recent slowdown in the nace of varming, which is often cited by uting it most likely to short-term. Sees Human Cause - Seas May Rise 3 Feet by 2100

ing emissions are likely to be pro-"It is extremely likely that hu-

man influence on climate caused more than half of the observed increase in global average surface nperature from 1951 to 2010," the draft report says. "There is high confidence that this has rmed the ocean, melted snow and ice, raised global mean sea

published every five or six years, are considered the definitive asessment of the risks of climate change, and they influence the actions of governments around the world. Hundreds of billions of dollars are being spent on efforts to reduce greenhouse emissions. for instance, largely on the basis of the group's findings.

The coming report will be the fifth major assessment from the group, created in 1988. Each report has found greater certainty that the planet is warming and greater likelihood that humans

The 1007 report found "un-

Vows to Back Egypt's Rulers

HIS FUTURE UNCERTAIN

Rolling Back Since a President's Exit

CAIRO - A court on Munday ordered the release of former for the first time it was conceiv able he might go free - a meas shaking Egypt has rolled back the sweeping changes and soar ing hopes that followed his exit two and a half years ago.

Few legal analysts thought a release was likely at least in coming weeks. But under the tional outrage at a crackdown new government installed last that has left as many as 1,000 month by Gen. Abdul-Fattah el-Sisi, they say, it is no longer : foregone conclusion that pro sons to detain the former auto crat, who was arrested after the

of Saudi Arabia has publicly con-demned the Muslim Brother-Even the possibility of Mr. Mubarak's release, previously un he foreign minister. Prince Saud of the return of his authoritarian

Since the ouster of President Mohamed Morsi, the interim gov only prominent faces of the Mu barak era but signature olomoof his authoritarian state, includ ing an "emergency law" remov curbs on police abuse, the appointment of generals as gover nors across the provinces and Saudi Arabia, which itself is a moves to once again outlaw the

close ally of Washington, has not only undermined Western efforts | ist threat. has revealed diminished United early Tuesday morning that the States influence across the Arab Brotherhood's spiritual leader world. The United States and Europe have been unable to perrested, and a private television

EGYPTIAN COURT ORDERS RELEASE FOR MUBARAK

A Stark Sign of Changes

By DAVID D. KIRKPATRICK

Days in Darkness, a Cry of Save Me, and Joy

derstorms, mostly over the mountains. Highs from the upper 50s to

, 2013

Printed in Colorado

\$2.50

Heat-Trapping Gas Passes Milestone, Raising Fears

CO2 at Level Not Seen in Millions of Years, Portending Major Climate Changes

By JUSTIN GILLIS

The level of the most important the high level. heat-trapping gas in the atmoscarbon dioxide, has passed a long-feared milestone. scientists reported Friday, reachthe earth for millions of years.

reported the new reading.

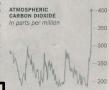
Ralph Keeling, who runs another monitoring program at the Scripps Institution of Oceanography in San Diego, said a continuing rise could be catastrophic. "It means we are quickly losing the possibility of keeping the climate below what people thought were possibly tolerable thresholds," he

Virtually every automobile ride, every plane trip and, in most places, every flip of a light switch adds carbon dioxide to the air, and relatively little money is being spent to find and deploy al-

The new measurement came from analyzers atop Mauna Loa, the volcano on the big island of Hawaii that has long been ground zero for monitoring the worldwide trend on carbon dioxide, or CO2. Devices there sample clean. Scientific instruments showed that the gas had reached an avercrisp air that has blown thouage daily level above 400 parts sands of miles across the Pacific per million - just an odometer Ocean, producing a record of rismoment in one sense, but also a ing carbon dioxide levels that has sobering reminder that decades been closely tracked for half a of efforts to bring human-procentury. Carbon dioxide above 400 parts duced emissions under control per million was first seen in the The best available evidence Arctic last year, and had also suggests the amount of the gas in spiked above that level in hourly the air has not been this high for readings at Mauna Loa. But the average reading for an at least three million years, before humans evolved, and scienentire day surpassed that level at tists believe the rise portends Mauna Loa for the first time in the 24 hours that ended at 8 p.m. large changes in the climate and the level of the sea. Eastern Daylight Time on Thurs-"It symbolizes that so far we day. The two monitoring prohave failed miserably in tackling grams use slightly different prothis problem," said Pieter P. Tans, tocols; NOAA reported an averwho runs the monitoring proage for the period of 400.03 parts gram at the National Oceanic and per million, while Scripps reported 400.08. Atmospheric Administration that

Carbon dioxide rises and falls on a seasonal cycle, and the level will dip below 400 this summer as leaf growth in the Northern Hemisphere pulls about 10 billion tons of carbon out of the air. But experts say that will be a brief re-

Continued on Page A12



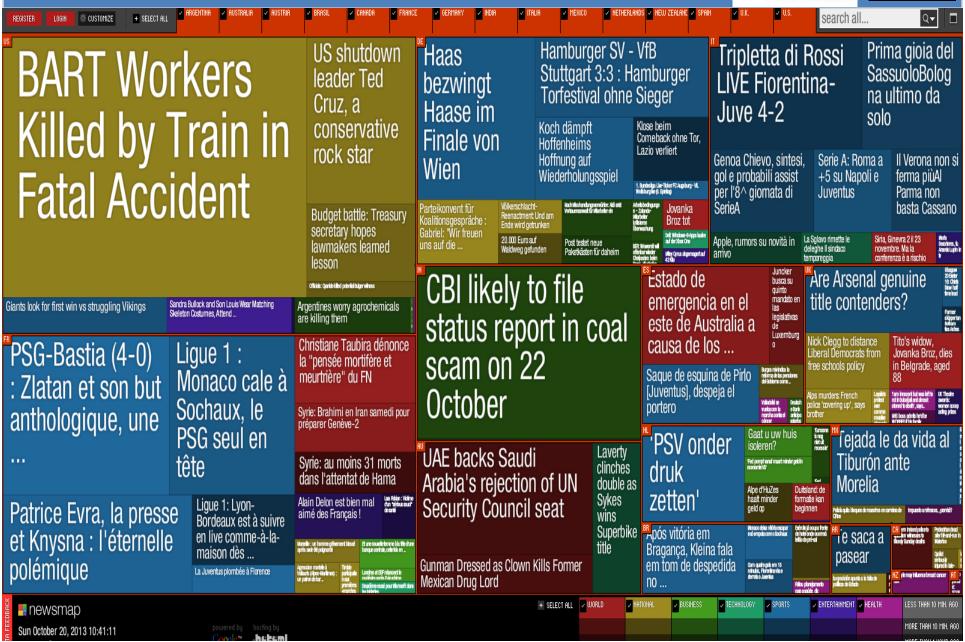
New York Times 20 Aug 2013

New York Times 11 May 2013

'news holes' & agenda-setting in the public sphere





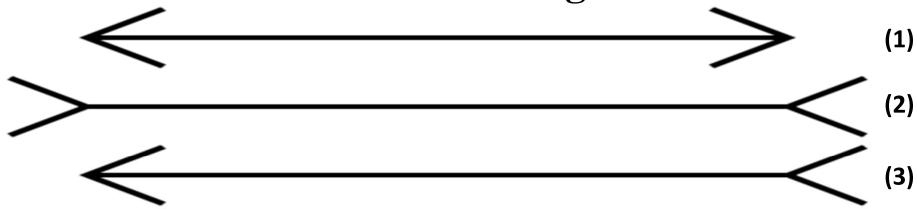


perception is reference dependent





Which line is longer?



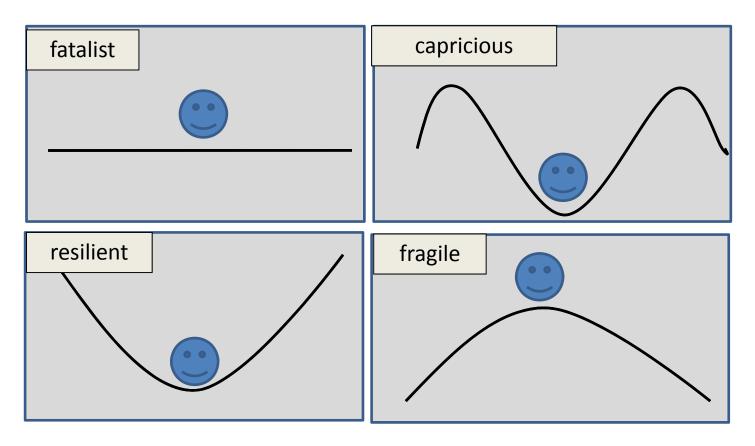
.

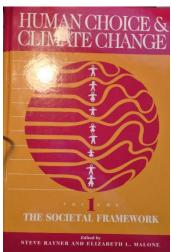
.

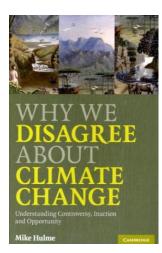
risk perception, human choices & climate change











'Cultural Theory of Risk' meet 'views of environment' Douglas & Wildovsky (1992)

the role of mass media as climate change messengers





mass media (n. pl)

- (1)means of public communication reaching a large audience
- (2)publishers, editors, journalists, and others who produce, represent, interpret and disseminate information, through newspapers, magazines, television, film, (digital) radio, mobile phones and the Internet

"Few things are as much a part of our lives ...a[n] instant historical record of the pace, progress, problems, and hopes of society." ~ W. Lance Bennett (2002)

changing media landscapes





traditional/legacy media

- (1) 'one-to-many' (often one-way) communications
- (2) centralized 'broadcast' communication → gatekeeping
- (3) influential content production \rightarrow dominant communication through television

digital/new/social media

- (1) fundamental shift to 'many to many' interactive webs of communications
- (2) promotes interaction thru user-led decentralized communication
- (3) democratized content production \rightarrow blogs, Twitter, Tumblr, Reddit, Kapost etc.



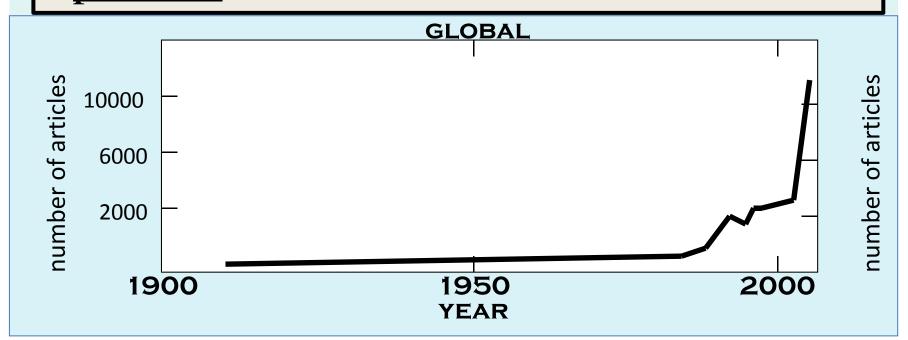
media representations over time





RESONANT THEMES:

- ecological/meteorological events and issues
- scientific events and issues
- <u>cultural</u> events and issues
- political events and issues



NBURGH ADVERTISI

From FRIDAY SEPTEMBER 2, to TUESDAY SEPTEMBER 7, 1784.

From Mr. KNOX's VIEW of the BRITISH EM-

Of the Famine; the Failure of the Fisheries; and the Hurricanes, of 1782.

ceding pages, an event of the more calmitous nature befel the inhologistable region, which I had inhos catamitous nature befet the inhospitable region, which I had been describing. Theyear 1782 proved remarkably cold and wet, the crops over great part of Euope were more or lefs injured, and the northern

imates experienced a fearcity, amounting to a fanine. The feanty crops in the Highlands of Scotland were green in October, when a fall of fnow, attended with froft, prevented every species of grain from arriving at maturity. The labour, the feed, and the ftraw were loft. Potatoes, which in had feafons had proved a fubilitute for grain, were this year frost-bitten, and rendered entirely useless. Thus the earth withheld its bounty for the sup-port of man and beast. During this diffress at home.

the granary of the Hebrides and western shores of Scotland, thut its ports against the exportation of grain; those of the Clyde were unable to give any affiftance; while, on the eaftern fide of the king- der, dom, the hazards of enemies cut off the necessary | Co Supplies from Germany, the Baltic, and in a great measure from England.

Thus deprived of every refource, by the double calamity of war and scarcity, many bundred persons languished and died through the want of sustenance. The husband and the parent, unable to withhold these scenes of diffress without endeavouring to relieve them, fet out, amidft froft and fnow, upon the long and almost impracticable journey to Inverness, where they expected to purchase a little grain with the produce of their clothes or furniture, which they had previously fold, in the districts where they refided. Several of those who had engaged in this generous enterprize, fell a facrifice to hunger and cold, in their way to the market. They or all of thefe, is a future continged were found dead on the roads, in caverns, and us uncertain. But stall subjects new amongst thickets, where they had taken shelter dress of a grievance, without certainty from the inclemencies of the weather, while the not fufficient to justify efforts for landable finall, emaciated horses, the companions of their differes, could scarcely stand or wall. Such was the dreadful situation of the main-

land, and the iflands, during the winter and fpring; and though expresses were dispatched to the Lowlands by the clergy and others, imploring immediate relief for a periffiing people, it doth not ap-pear that application had been made to government, for that purpose, before the beginning of the fummer, 1783, when a generous supply was reachly granted.

Let us now suppose that a few small harbours and granaries were established at proper distances, great degree prevented, might be fo far mitigated for the relief of those parts.

when these little vifitors, scenied to conspire with the feafons, in order to rouze the notice of governelements kept back or deftroyed the natural pro-

uninterrupted fucecfilon of florms, fuch as nad not bappened within the memory of man, prevented iminifiers! Was in not the plea for their both unge, the them from attempting the white fiftery; neither could they, had the weather been moderate, go to to the med unanimous openition of partition of partition of partition. The all 1990 gave the people a valuable privilege, of

ontrary direction. ent Sovereign and Parlia s well as political attention, th le are most humbly recommended

o the PRINTER of the EMNBURGH ADVERTISES

DER MII me, through the channel of your paper, to make a few remarks on the argoments against the ate refolutions of the General Seffions of Edinburgh, in he ecount of Principal Robertion's very clegan and flouid be rememered, principal Robertion's very clegan and flouid be rememered, principal Robertion's very clegan and flouid be rememered, principal Robertion and flouid be remembered, which was the aright of the Section, aim tenths of sile of the people, we an eco ceding and relief meetings, crected these last forty Soutland, though they wo ears, have been occasioned by the violent settlement of gree of power than that of efeatees. In that period, though there have been keen a Tory minifry yet have negles in parithes where heritors and elders had the refloration of King Willia e of a minister, a fair election terminated them, can legally claim, or hall parties acquicked. Mr. Dan's fettlement at Cal-They will not therefore M'Night's at Maybole, and Mr. Watton's at mill ken or pretended fri . are inflances of this.

were many violent fettlements from 1730, to vere none or them in which there was to k ngdom on this head, as ence as in the later appointments concern- Edinburgh queiled it, I is no Wh g-yet I find no ing Fenwick. from 1734 to 1752, compared with ever means proposals for ken place fince that time. Repeated addressing the legislature to ments happen those which have patronage have not reconciled the law. Indeed, we of the decifions in favor people of Scotland to they become indifferen has are the principles and cha-

afters of their teachers ning the refloration of King a deaf par : Therefore ev The improbability of o applying for it, and we Willi m's law is argued aga are told no stuffance can be exp from opposition, from the land What affiftance fhall purpofes, that there is no cause of despair? esfe there is none. Many of chief influence, min' ? ion and in the opposition, if they to their declared Whig principles, muft favour fure. It is true, that the landed intereff, as a bo not been formally confulted in this matter; but i qually true, that motions for confuting them, repeat y arade in Gener .! Aff. mbhes, have been opputed an rej ded by the friends of patronoge. These gentlemen value themselves on being better politicians than those whom they stile the wild party, and I believe they are not millaken; but, if they knew that the notifity and por gentry in Scotland were on their fide, what maxim of found policy makes them reluctant to sik ther oping as along these western stores, and that the commu- What man in his sober senses, who has an important lest the p pirations to the Lowlands were shortened by means cause at stake, declines applying to a judge, and dreads some pop of inland navigation; such calamities, if not in a his sentence, because he knows it would be favourable? pretended h great degree prevented, might be fo far mitigated I is a firor goffertion, that the landed interest is deep is greater now as to fave the lives of thousands, besides obviating by concerned in opposing every attempt of this nature, to Edinburgh; the necessity of occasional calls upon the Treasury Is it their spinitual interest to have no in sounce in the month occasional choice of their religious infiructors, unless what they who influgated or The year 1782 furnishes another argument in derive from the precarious favour of a Minister of State, which burnt the Po The year 1782 furnishes another argument in favour of these proposals. The annual arrival of or of some non-residual side for the persons in the Persons and injured the herrings in the West Highlands had never been those in the herrings in the West Highlands had never been those of the herrings in the West Highlands had never been those of the herrings in the West Highlands had never been those of the herrings in the West Highlands had never been those of the herrings in the West Highlands had never been the herrings in the West Highlands h reign climes? Or, is their interest deeply concerned in been occasioned by a zeal to promote it. Jefust calastry

This was not all. While thefe people were depires, more especially SCO PLAND; and some form of grain, toots, milk, vegetables, and here was too candid, and well informed, to have ventured
proped als for the Improvement of that Country,
the Extension of its Fineries, and the Relief of the
people.

en without the means of fuftenance. Here, there, was a double farmer; the cup of affection and which, by the repeal of it, at least as interpreted by the s a double tombine the problem of th that matters will revert into a a to the whole congregation, to be either approven or matters win revert and a
the additions of a benevothe additions of a benevothe additions of a benevothe addition of the description of the description of the
difference where to give in their reasons, to the dimin, that country and peotiff for the affir might be cognofeed by the preflyerer
minended.

"""
of the bounds, as whole judgment, and by whole de-" termination, the election and entry of a minister was to he or issued and concluded." The recovering this mar appear a fmall matter to focieties chiefly an connected with the Secotion or Pref-

Patriors, as the Prin to alk too much, may occ When the trump of fe

nce, 'Supplicating reliefand from administration, delayed till the restoration on room administration, delayed till the restoration interest, or from the facemed an intumation, the procured from any, they would not object to take no force in their arguments of successive the processive function of the Take and the processive function of the Take face in the processive function of the Take function of will Ly that excellive con

ch it well merited. s we are told, that o the Popul bill ulree raife a

the seasons, in order to rouze the notice of governthose who farm their lands becoming less able to improve the formerly advised doing evil, that good might come;
then, and to pay their rents, by the burden of supports and Jesint concern for the danger of Protestants, who elements kept back or defroyed the natural pro-ling feeding or r. lief minifers:

| Since | S



7 Sept 1784

QUESTION I was engaged in the prew ceding pages, an event of the most calamitous nature befel the inhospitable region, which I had been describing. The year 1782 proved remarkably cold and wet. the crops over great part of Eu-

rope were more or less injured, and the northern climates experienced a scarcity, amounting to a famine. The scanty crops in the Highlands of Scotland were green in October, when a fall of snow, oth in additional most be refused till double not be refused till attended with frost, prevented every species of plenty. This undoubled the refused till attended with frost, prevented every species of set only some of the speak at the refusion of the grain from arriving at maturity. The labour, the as the refusion of the only she proposed of t feed, and the firaw were loft. Potatoes, which in had feafons had proved a fublitute for gruin, were this year frost-bitten, and rendered entirely useless. Thus the earth withheld its bounty for the support of man and heaft. During this distress at home, no relief could be obtained from abroad. Ireland,

4 Dec 1841



14.11.	WAUMIE	STALL THE	114 66 11	IS COMS.	PARK	
HARRISON REED,]	IN THIS PAPER THE LAW	S, RESOLVES, AND PUBLIC	TREATIRE OF THE UN	ITED STATES ARE PUBL	LIBHED BY AUTHORITY.	EDITOR & PROFESSION.
NEW SERIES, VOL. 1.	NO. 7(MIL	WAUKIE, WISCONSI	N, SATURDAY,	DECEMBER 4, 184	II. ¡VOL	UME V, NUMBER 11.
BUSINESS and secretary is less assessed to be a second of the second	DREAM OF OF THE MEANT. The Meant of the Mea	all earthly conducts have delf from health conducts and the conduct of the conduc	And the second of the second o	would report to them he are the control of the cont	Of all all of the property of	THE PARMER THE PA

Important Discovery in Agriculture.

of moisture. The moisture of the earth, or the substratum, being continual, facilitates the gradual and constant absorption of carbonic acid grass from the surrounding atmosphere, and hydrogen and carbon, the chief elements of nourishment to vegetables, and thus economised in regular supplies where they are constantly required, and pass in combination with oxygen from the roots up to the stems and branches of the plants in which they are assimilated, and the oxygen throws off in exhalation from the leaves. The straw decays but slowly, and thus







Miscellanp Section

The Washington Post.

Miscellany Section.



Bank To Hold Morgan Millions 🖺

Extras in Colonial Times

Washington Post 23 March 1913

How and Why Earth Will End CIENTISTS RELIEVE OUR HWIVERSE WILL SOME DAY DINNE

s of Aerial Exp



Beating the Prohibition Laws HIS DEVICES OF THE THIRSTY IN DRYEST MAINE

Battle Names

How and Why Earth Will End

CIENTISTS BELIEVE OUR UNIVERSE WILL SOME DAY PLUNGE INTO THE SUN.



the beginning and ending of the world. According to him the sun is dissipating and wasting inconceivable amounts of heat every year, and while its enormous energy may endure this loss for ages, the time must come when the sun will cool down and cover itself with a solid crust as our earth has done, and as the other

planets have or will do some day.

Svante Arrhenius, a Swedish scientist, has contributed much to the theory of

But no human being, he says, will be able to watch this death of the sun, for in spite of all man's desperate struggles and infinite inventions, all life will long have ceased on the earth for want of heat and life. Nor if people exist on any of the other wandering satellites of the sun will they be able to note its exfinction, for they, too, will have failed to survive.

But the end of the world by this means is far, far distant. We have every reason to believe, he assures us, that the chemical energy of the sun is sufficient to sustain the solar neat for many thousand millions of years, perhaps even billions of years to come.

resonant themes examples:

heavy rainfall, floods, hurricanes as ecological/meteorological events





1. POLITICS:



Senators say Sandy poses severe challenge to climate skeptics

Evan Lehmann, E&E reporter

Published: Friday, November 30, 2012

Senate Democrats believe the wreckage from Superstorm Sandy could hasten a "turning point" in the public's blurred perception of climate change and spur a bipartisan effort to build dunes and sea walls to protect Americans.

Special report

Eight days, 1,000-year rain, 100-year flood

The story of Boulder County's Flood of 2013

By Charlie Brennan and John Aguilar, Camera Staff Writers

POSTED: 09/21/2013 07:49:24 PM MDT UPDATED: 09/22/2013 01:19:34 PM MDT

Boulder Daily Camera (2013)





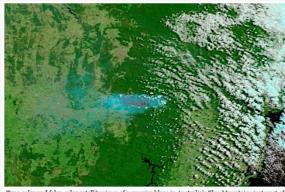


« Space Momma

Beijing Airpocalypse Redux »

Climate Context on Continuing Australia Fires

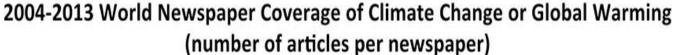
By Tom Yulsman | October 18, 2013 1:36 pm

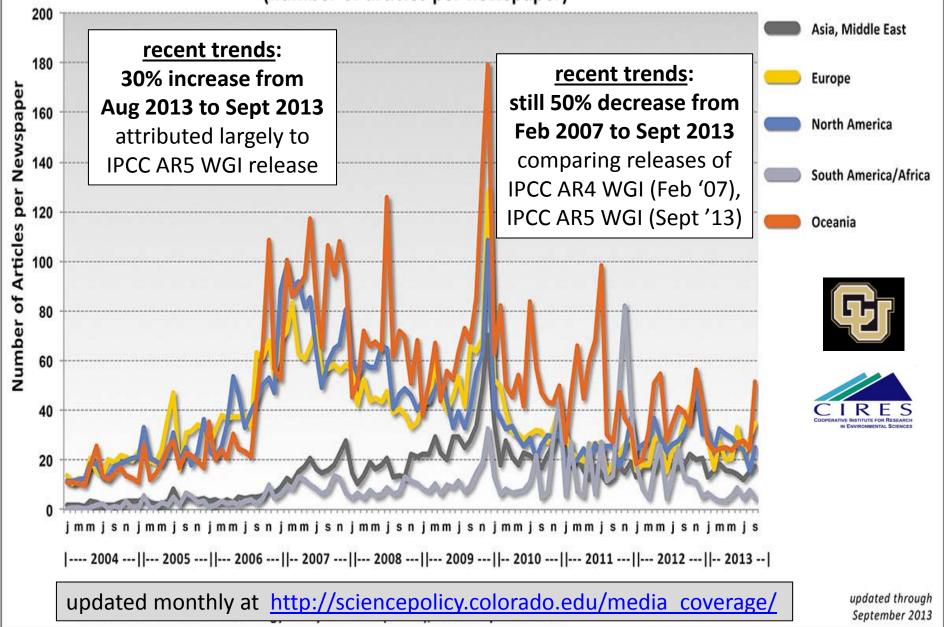


True-color and false-color satellite views of a massive blaze in Australia's Blue Mountains just west of Sydney alternate in this animation. (Images: NASA)

More than two thousand firefighters continue to battle blazes across New South Wales in Australia, with more than 20 fires still uncontained despite easing weather conditions, the Australian Broadcasting Corporation reports.

Discover on above shows true- and false-color satellite images of one of





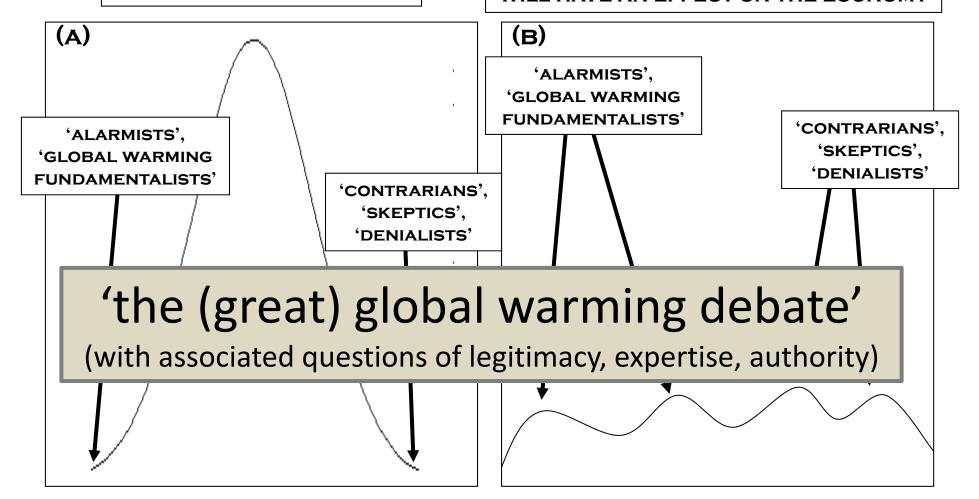
CONVERGENCE / DIVERGENCE OF VIEWS IN CLIMATE SCIENCE AND GOVERNANCE





HUMANS CONTRIBUTE
TO CLIMATE CHANGE

INTERNATIONAL GREENHOUSE GAS
EMISSIONS REDUCTIONS AGREEMENTS
WILL HAVE AN EFFECT ON THE ECONOMY



understanding media amplification of climate contrarian views





- mapping contemporary stances onto pro-privatization, antiregulatory neoliberal political stances
- modern-day Copernicuses? or contemporary courtesans...



"The reason [climate change as an environmental issue] has staying power is it's got so much money. And when you get into clean energy, so called clean energy, it just becomes this whole ideology. It's a whole funded movement, and it corrupts the science...It's the madness of our age; man made global warming fears." -- Marc Morano (ClimateDepot) at ICCC, 2011

implications - an increasingly polarized and tangled atmosphere







climate contrarianism

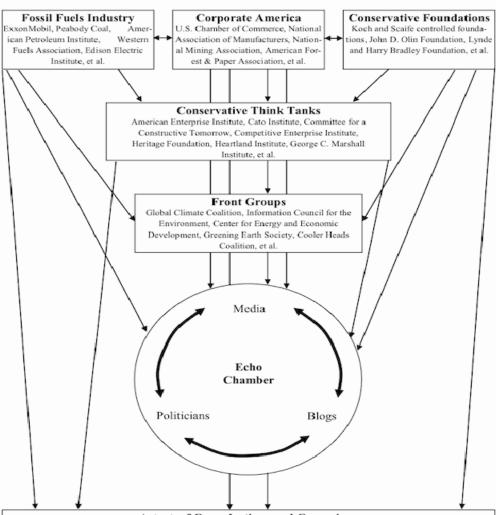
SALES OF THE PER AS NOT THE LESS RATE TO THE PER AS NOT THE PER AS NOT THE LESS RATE TO THE PER AS NOT THE PER AS NOT THE LESS RATE TO THE PER AS NOT THE PER

machinations of contrarianism





Key Components of the Climate Change Denial Machine



Astroturf Organizations and Campaigns

Americans for Prosperity ("Regulation Reality" tours), Freedom Works ("Hot Air" rallies), Americans for Balanced Energy
Choices ("citizens" army" to lobby for coal and oppose climate legislation), American Coalition for Clean Coal Energy (media
and lobbying campaigns, forged letters to Congress), Energy Citizens (rallies against climate legislation), et al.

Dunlap and McCright, "Organized Climate Change Denial" (2011)

"anti-environmentalism has been, from the start, a keystone of neoliberal antiregulatory politics. But the perceived threats posed by climate change discourse intensified this opposition, mobilizing energy companies and other related industries and broader free-market forces...." - Antonio & Brulle (2011)

A PARADOX







SCIENCE WORLD REPORT sciencewr.

HOME SPACE NATURE & ENVIRONMENT HEALTH & MEDICINE TECH

Nemo Caused by Climate Change Nor'easter Had More Snow





CONTRIBUTING INFLUENCES

- weather events (e.g. snowstorms)
- → technical capacity issues (e.g. specialist training)
- → ethical perspectives & stances (e.g. utilitarianism)
- → cultural differences (e.g. trust in science & media)
- → political econ drivers & factors (e.g. media consolidation)
- → journalistic norms, pressures & values (e.g. balance)

(Photo: Flickr) Nemo slammed into the East Coast this weekend, but was it fueled by climate change? This image was taken during the storm in Maine.

HOW DO JOURNALISTIC NORMS & PRESSURES SHAPE MEDIA REPRESENTATIONS OF CLIMATE CHANGE?







Outputs:

news

media coverage

informatio

Inputs:

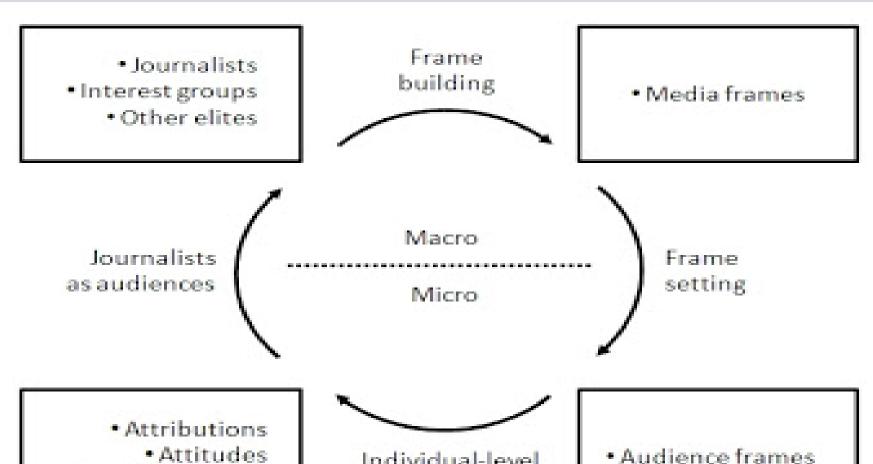
issues

events

processes of framing

Cognitive effects





Individual-level

effects of

framing

Schuefele (2009)

continuing & formidable challenges:





- translating complexities of culture, politics & climate change
- participatory & comparative studies across place/context and time
- navigation through AND valuation of varying ways of knowing:
 observational/experiential access to understanding vis-à-vis 'expert' knowledge
- engagements with power of new/social media (e.g. democratizing content production; addressing signal-to-noise considerations)
- mobilizations of metaphors & analogies; accurate, effective & appropriate 'hooks'



burgeoning research engagements:





translating complexities of culture, politics & climate change



going INSIDE THE GREENHOUSE





THE PROJECT:

provides a living laboratory and intentional space for development and experimentation with creative modes to communicate, evaluate and confront climate change through a range of mitigation and adaptation strategies







ASSOCIATED UNIVERSITY COURSES:

"Climate Change: Science & Expression through Video-Production & Presentation" (ATLS 3519/EBIO 4460) http://vimeo.com/cuebio/channels (Safran)

"Inside the Greenhouse: Using Media to Communicate Positive Messages about Climate Change" (ENVS 3100) www.insidethegreenhouse.net (Boykoff/Osnes)

'Inside the Greenhouse' EVENTS & PROGRAMS: Inspired by Inside the Actors Studio, events draw out process, motivations & creative communications surrounding engagement w climate change





Fight Semantic Drift: discourse (& material) matters

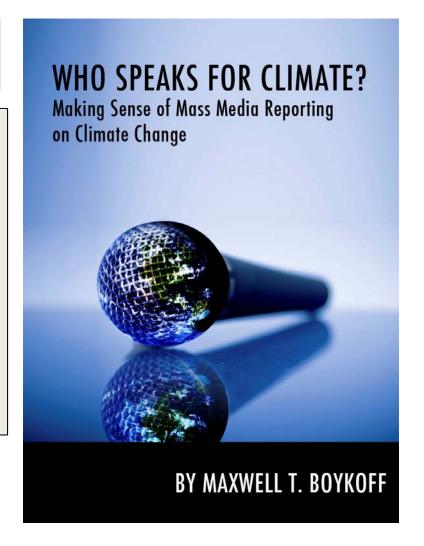


a key challenge: **SMARTENING UP**, not DUMBING DOWN communications

considerations of 'who speaks for climate' via media are as important as formal climate governance architectures themselves to the long-term success or failure of environmental decision-making

"All the world's a stage, and all the men and women merely players. They have their exits and their entrances..."

~ William Shakespeare in 'As You Like It'



'Our Common Future': carbon-based lives & livelihoods





"...if things are made rather than found, then the possibility exists for them to be unmade, or made differently."

~ Stephanie Rutherford, 2007



(2013)

thank you

Max Boykoff

Cooperative Institute for Research in Environmental Science (CIRES)

Center for Science and Technology Policy Research

University of Colorado-Boulder





