Envirotech emails about essay book, through March 4, 2005

March 8, 2005

Hi envirotech, Joy and I are placing this archive of old Envirotech emails on the web so that we can retain the ideas that were generated in our October, 2004, discussion about the scope and content of "an Envirotech book of essays." I went through to delete all but professional contact info: you will not find personal email addresses. I stripped away other contact info, including our email addresses, because Envirotech member Dann Sklarew has reminded us that there is public access for information posted on the web that is not available for information posted on our Stanford Univ., email list. If I did this incorrectly, please be patient but let me know; I am new to navigating privacy on the web! Regards, Betsy Mendelsohn, bmendel@mail.umd.edu

Here the area: "kind of" in order from most recent to earliest

Hubbell to Envirotech, 10-21-2004
Subject: Re: TOC and edited volume
Date: Thu, 21 Oct 2004 12:35:18 -0400
To: envirotech@lists.Stanford.EDU

Dear all,
I've been a silent observer and I do need to contribute some lines to
the newsletter...but my two cents.

I like the approach suggested by Sara Pritchard over the table of
contents posted by Marty Reuss. Since history has moved towards a theme
approach and since this book would be more about epistemology than
survey of history, I quickly thought of an adjustment of Reuss' TOC.
Yes, it is a silly approach using the old Elements but hey, it was
familiar. I was thinking each section would teal with different
theoretical issues but along the same lines. Other Readers are set up
similarily - like Mirzoeff;s Visual Culture Reader, only using critical
hotspots like Race and Gender to govern the organization. I don't think
we would want to use the same touchstones but we also cannot neglect
them. So I was thinking each section would deal separately with themes
like - BASE (human body, land, trees, animals water), manipulation
(organizing the base), refining (food processing, stream control and
dams etc.), culture (the aggregate of manipulation) and Infrastructure
(the institutions and physical objects created by the aggregation).

Just playing around, I altered Reuss' TOC and pasted it below.
-jeremy hubbell
History Department
SUNY Stony Brook

Sklarew to Envirotech, 10-23-2004
Subject: water focus for history of tech & env't RE: table of contents
Date: Sat, 23 Oct 2004 00:56:10 -0400
To: <envirotech@lists.Stanford.EDU>

Dear colleagues,

2

I share with Maurits and others an interest in considering a focus (perhaps one of serveral) on water-related issues, or "the way humans transform their environment ... in manipulating their water(s)... Water is pretty central in human interactions with the environment."

After 5000 years of water diversions in "Messopotamia," the contemporary situation in the Euphrates-Tigris (ET) river valley is more complex than just "irrigate to problems," however, a topic which I would be happy to discuss (outside of this thread) with others interested or provide to email reference for water management experts from (and situated in) the region. I recently reviewed part of this legacy in a presentation with contemporary ET water managers. Happy to share that with those who are interested (as opposed to spamming the list with a big .ppt file).

Perhaps it is in such complexity that our historical perspectives on tech & environment interactions may reveal valuable insights for our present circumstan ces. If our scope is global (or "transnational"), I suspect that UNESCO may also be interested in the product.

Kind regards,
Dann

Harris to Envirotech, 10-23-2004
Subject: RE: water focus for history of tech & env't RE: table of contents
Date: Sat, 23 Oct 2004 15:14:14 -0400
CC: <envirotech@lists.Stanford.EDU>

within the water focus, it is sometimes possible to see an agricultural thread . . .

when euroamerican settlers began arriving in southwest, they found the remnants of a native american rainfed agriculture and a terrain with a high percentage of swamps and wetlands . . . because the settlers wanted to create an agriculture of extensive, upland crops, it was necessary to drain the swamps and wetlands . . . the technology and social organization of drainage made this possible . . .
by the late 1900s, roughly 150 years later, farm operators wanted a more intensive, dependable production system . . . the technology and social organization of irrigation made this possible (and continues to do so) . . .

in this case, i would suggest that there are three questions . . .
1) what developments of technology and social organization made possible the implementation of new technologies . . .
2) what were the environmental consequences of the new technologies . . .
3) what factors ("drivers") influenced the implementation of the new technologies . . .

cheers,

craig

craig k harris
department of sociology
michigan agricultural experiment station
national food safety and toxicology center
institute for food and agricultural standards
kellogg biological station longterm ecological research project
michigan state university

Reuss to Envirotech, 2-24-2005
Subject: RE: Envirotech book project
Date: Thu, 24 Feb 2005 07:34:11 -0500
From: <Envirotech@lists.Stanford.EDU>,

Hi, All:

Does this discussion need a chair? Well, if one's necessary, I'd be glad to
serve, just so long as orange juice and coffee are available.

May I suggest that, based on earlier e-mails, we might want to start by
defining what "envirotech" actually means.

Cheers,

Marty

Parr to Envirotech, 2-23-2005
Sent: Wednesday, February 23, 2005 7:24 PM
To: Envirotech; Betsy Mendelsohn
Subject: Envirotech book project
Hello,
You'll remember the stimulating discussion of what a first collaborative
volume in Envirotech might be that occurred on this list following the
Amsterdam meeting last October
Betsy (who seems lately to have been sent to Coventry irremediably by the
Stanford listserv) asks that I ask you, on her behalf, to come to Houston
prepared to resume the discussion of the content and purpose of the book and
the roles of editors.
She'll also report on developments.
Perhaps Marty Reuss, an early and persisting defender of this project, can
be persuaded to chair this discussion?
Emails on this topic (and others) in advance of the meeting cheerfully
accepted. The banished Betsy's email address is above.

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Best wishes,
Joy Parr

Nye to Envirotech, 2-24-2005
Subject: RE: Envirotech book project
Date: Thu, 24 Feb 2005 08:40:28 +0100

Envirotech members will be interested to know that the proposed volume might
conceivably fit within the oarameters of a new series of books that will appear with
Rodolphi (Amsterdam).
"Architecture/Technology/Culture" (ATC), will combine criticism in all three fields and
introduce new cross- and interdisciplinary approaches (a collection of essays that came
out of an international conference on "space" is scheduled to be the opening volume and
will appear later this year. The editors are

Klaus Benesch
Department of English/American Studies
University of Bayreuth

Miles Orvell
English/American Studies
Temple University

and myself
David Nye (History, Warwick)

I look forward to seeing you in Houston,

Best wishes

David

Parr to Envirotech, 2-23-2005
Sent: Wednesday, February 23, 2005 7:24 PM
To: Envirotech; Betsy Mendelsohn
Subject: Envirotech book project

Hello,

You'll remember the stimulating discussion of what a first collaborative
volume in Envirotech might be that occurred on this list following the
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Betsy (who seems lately to have been sent to Coventry irremediably by
the Stanford listserv) asks that I ask you, on her behalf, to come to
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the book and the roles of editors.

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Perhaps Marty Reuss, an early and persisting defender of this project, can be persuaded to chair this discussion?

Emails on this topic (and others) in advance of the meeting cheerfully accepted. The banished Betsy's email address is above.

Best wishes,
Joy

Reisz to Envirotech, 10-25-2004
Sent: Monday, October 25, 2004 10:11 AM
To: envirotech@lists.Stanford.EDU
Subject: [ENVIROTECH] Discussion logs

I've very much enjoyed the recent discussion on what study of the interaction of the environment and technology is, and of what it is for. I think it would be great if the Envirotech list could be rehomed somewhere that keeps an archive of discussions and allows them to be read online by list members (and others, optionally).

Betsy is not opposed, but isn't sure where would host the list. Being British I only know of H-NET, which isn't appropriate for a social science list; and of British academic listservs, like www.JISCmail.ac.uk , where I manage a list.

Would members like searchable logs, and if so, does anyone know a good free server with proper academic credentials?

PS Apologies for being the speaking lurker! I work on the history of 'development' in Malaysia, and am interested in particular in a) technology and environment in global trade b) the political and moral economy of divergent approaches to production and c) the construction of models of global economic and social 'improvment' in environmental and technological context.

Emma

Dr Emma Reisz
Junior Research Fellow in History
Jesus College, University of Oxford
Jesus College, Oxford, OX1 3DW, UK

Mendelsohn to Envirotech, 10-25-2004
From: Betsy Mendelsohn [betsy@umd.edu]

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Sent: Monday, October 25, 2004 9:26 AM
To: envirotech@lists.Stanford.EDU
Subject: Envirotech central themes?

Hi everyone,

I wrote a list of central themes 10 days ago when Marty challenged us to identify our intellectual moorings or fundamental issues. When I thought about his question, I re-conceived of it as "Envirotech: so what?" or "Envirotech, a distinctive kind of STS"; in other words, I intend to focus on peculiar qualities of the environment and technology interface. Like any list, this isn't complete, just a discussion document.

I'm going to lob it into the mix below. It's not a table of contents.

On logistics, I like Maurits's idea of asking people to send in abstracts of something they would write because there might be quite a gap between what we'd like to have in the book and what people would like to write! Also, I'd like to note that for the book to feature "Envirotech" as a SIG of SHOT, its content would be reviewed by SHOT's editorial committee. They would not choose the essays: that's up to the SIG; but, they would sign off on the collection.

Regards, Betsy

Envirotech central themes

I can think of a few things that seem distinctive of the interface between environment and technology: public goods, inter-disciplinarity, naturalized technological systems, reliance on expertise, a science-based conception of causality, and the importance of knowing that our knowledge is smaller than environmental reality.

I think of one uniting theme as the public goods characteristic of environmental things, or what Ann Vileisis has called a "commons component". Air, water and ecology defy compartmentalization geographically, and therefore provide a medium through which people (and their technologies) affect each other. My training in legal history has helped me identify the ways that society creates laws to coordinate the behavior of people who affect each other through environmental media, such as through air and water.

Environmental phenomena also challenge disciplinary explanations for the causes of things because it seems that many kinds of science may be required to understand environmental behavior. So an understanding of water-borne disease might draw on hydrology, hydraulics, microbiology, chemistry, and physiology, and as historians we can see this inter-disciplinary collaboration emerge in the late 19th century.

A technology issue arises in the way that society has built robust technological systems that are "environmental" in that they are in the background or naturalized into the mix of services provided by our surroundings. So, we can trace the hard technological and legal

battles of the late 19th century that preceded the transformation of water-logged prairies into productive corn farmland in the Midwest; now, the drainage tiles and resistant neighbors are underground.

A fourth theme related to inter-disciplinarity and technological systems is the rising importance of expert knowledge of environment and technology in modern times. If our 18th century counterparts relied on their leaders to provide national security through politics and war, we now may look to a government regulatory state staffed by experts to provide security through expertise in healthy environments that embody a mix of natural and technological components.

Similarly, we now know that we "know" things not through the experience of our senses or through a mystical knowledge of causation that may be based on religion, but through an "inference of the unseen" that draws on scientific knowledge. Our modern understanding of causation in the environment looks a lot more like a technological conception of observation-based or science-based cause and effect than notions of causation based on experience or mysticism. [I don't know whether mysticism is the right term here; it's just the one I use for "not science".]

Finally, it seems important to envirotech that there is a reservoir of explanations for why things happen that are based on intuition or guesswork or old science or whatever, and that there is a really vast bunch of physical systems out there that human efforts only hope to model. In other words, that a "lesson" of the interface of environment and technology might be that people have not figured it out and can't control it. "It" being the physical environmental systems of Earth; I guess that's the beware-of-hubris thing.

Heavens, she's gripped the podium between her teeth.

Betsy Mendelsohn

Sklarew to Envirotech, 10-23-2004
Sent: Saturday, October 23, 2004 12:05 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

If we end up taking a media-based approach, as in Section II below, we might also consider adding sub-sections on Energy and on Biota/Life/Living Beings.

Thanks,
Dann

Sklarew to Envirotech, 10-22-2004
Sent: Friday, October 22, 2004 11:56 PM
To: 'envirotech@lists.Stanford.EDU '
Subject: water focus for history of tech & env't RE: table of contents

Dear colleagues,

I share with Maurits and others an interest in considering a focus (perhaps one of serveral) on water-related issues, or "the way humans transform their environment ... in manipulating their water(s)... Water is pretty central in human interactions with the environment."

After 5000 years of water diversions in "Messopotamia," the contemporary situation in the Euphrates-Tigris (ET) river valley is more complex than just "irrigate to problems," however, a topic which I would be happy to discuss (outside of this thread) with others interested or provide to email reference for water management experts from (and situated in) the region. I recently reviewed part of this legacy in a presentation with contemporary ET water managers. Happy to share that with those who are interested (as opposed to spamming the list with a big .ppt file).

Perhaps it is in such complexity that our historical perspectives on tech & environment interactions may reveal valuable insights for our present circumstan ces. If our scope is global (or "transnational"), I suspect that UNESCO may also be interested in the product.

Kind regards,
Dann

Moore to Envirotech, 10-22-2004
Sent: Friday, October 22, 2004 1:49 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Although previously silent, I rather like the general structure of the proposed TOC. Under the third section, III. Technology and the Human Environment , I would strongly recommend a chapter on "cities" as there has been much recent research regarding the relation of urban morphology to sustainable development.

Cheers,

Steven
Dr. Steven A. Moore
Associate Professor
Director, Sustainable Design Program
Co-director, Center for Sustainable Development
School of Architecture
The University of Texas
1 University Station B7500
Austin, TX 78712

Ertsen to Envirotech, 10-22-2004
Sent: Friday, October 22, 2004 8:20 AM

To: 'envirotech@lists.Stanford.EDU '
Subject: RE: table of contents

Hi all,

Just a pragmatic remark: books can be developed from the perspective of demand (what should it be about etcetera), which is good. Designs should meet certain demands. But given the practical situation that books need to be written too, we may want to consider to develop another perspective alongside demand, the one of supply. Some of us already suggested certain topics, or expressed an interest to contribute. We could nominate a small group (three persons, those very active in this discussion perhaps?) who would collect proposals (abstracts) to be included in 'a book on env. hist.'; anarchistic as it may seem to start with individual contributions and not with a structured content, I would argue that it should be possible to see some lines in a collection of proposals sufficiently large (20 to 25?). To propose some 'supply': I would be interested to have some attention in the book for the way humans transform their environment (landscape, but also quality/quantity issues) in manipulating their water(s). The Netherlands is one of the examples how to pump yourself down, Mesopotamia (correct?) is the standard example to irrigate yourself into problems (although climate change may have been the bad one here), etcetera. Water is pretty central in human interactions with the environment.

regards,

Maurits Ertsen

ir. M.W. Ertsen

Water Resources / Water Management group
Department of Civil Engineering and Geosciences
Delft University of Technology
PO Box 5048, 2600 GA Delft, the Netherlands
Stevinweg 1, Delft
http://www.watermanagement.tudelft.nl <http://www.watermanagement.tudelft.nl/>

Reuss to Envirotech, 10-22-2004
Sent: Friday, October 22, 2004 7:35 AM
To: 'envirotech@lists.Stanford.EDU '
Subject: RE: table of contents

Hello, All: Gregory is raising another important issue--cross-disciplinary, large technological systems and their relationships with biomes/ecosystems/biosphere. I think we are starting to get a full appreciation for the numerous ways in which this book can be parsed. That leads me back to some of my original questions (and, I gather, Sara's and other's as well) about what exactly the book is to do. To some extent, I think Gregory's concerns can be addressed in some of the chapters I suggested. However, it's true that, for instance, none of the chapters would fully capture the story of climate change, acid rain, bio-degradation, fossil fuel depletion, etc. It may be another section should be added

dealing with these large subjects. Of course, that makes the book longer, and there are trade-offs. Moreover, I think it appropriate to remember that we don't want the book to be a jeremiad (I don't mean to imply that is what Gregory was advocating); all the issues about technology, pro and con, need examination. We are, after all, historians, not prophets. Any ideas?

Marty

Unruh to Envirotech, 10-22-2004
Sent: Friday, October 22, 2004 5:57 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Hi All, I just wanted to add my 2 cents. The outline certainly covers the range of issues, but by organizing by environmental media (Chapter II) and technological sector (Chapter III) it doesn't allow exploration of important cross-media, transdisplinary issues. Some of the best work is on ecosystem-wide multimedia analysis that takes into account the interconnectedness of the biosphere. Also research into large technological systems, like urban centers/cities and energy infrastructure, is where interesting integration is occuring in the technology-environment literature.

Gregory C. Unruh
Catedra Asociacion de Antiguos Alumnos de Etica y Responibilidad Social
Instituto de Empresa
Serrano 105
28006 Madrid

Cutcliffe to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 11:57 AM
Cc: envirotech@lists.Stanford.EDU
Subject: Re: TOC and edited volume

The Bijker et al, SCOT book from 1987 of course does precisely that with
Part One being a more theoretical approaches set of essays, with
subsequent section being more focused on 'mid-level' frames of analysis
and case studies. So, as I think Sara suggests, a judicious combinatrion
of both sorts of things might well work for us. [And just look at what
that book did for that field.] Steve

Wade to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 1:50 PM
Subject: RE: TOC and edited volume

Marty - A different Sarah. Since as I indicated earlier, I'm not in academia and expect to be a consumer of rather than contributor to the journal, I'm a little hesitant to reply to all - but I concur wholeheartedly with your remarks. That potential is what made me sign up for the envirotech listserve. I'm in the midst of exercising my intellectual curiosity on this

topic and one paper that I came across is referenced below. It talks about the democratization of policy development and the inherent bias in scientific experts. It's dated, but in my view marrying pieces like the one that follows with some of what I've seen described in these emails would seem to begin to address what you are getting at and would make for good reading.

Sarah Wade

http://www.rpi.edu/~woodhe/docs/HoppeDemExp.htm

Reuss to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 1:01 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: TOC and edited volume

Sara and all:

I have no problems with Sara's comments, except that my earlier efforts to stimulate such a discussion about what is "unique" about envirotech generated limited response. Do we have something special to say about methodology and theory or are we applying old ideas (not necessarily bad) to our field. No one has yet offered a definition of what we mean by "envirotech", at least so far as I recall. Can we develop new analytic approaches, as Sara suggests, or is this putting too great an intellectual burden on us? The fundamental point, I suspect, that makes envirotech studies exciting is the realization that the two fields of environmental history and technological history, which perhaps were once considered at opposite ends of the historical spectrum, are inextricably related. The ways in which this linkage is portrayed are what gives the discipline its vitality. Indeed, the essence of what we are doing to a large degree, I think, is appropriating various methodologies-- everything from SCOT to ANT to various anthropological/geographical/sociological insights-- to compel a more explicit realization within the historical community that any study of human relationships must lie at the intersection of the environment and technology.

Marty Reuss

Reuss to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 12:39 PM
To: Envirotech
Subject: RE: Book of essays -- TOC

Jim and all: I doubt there is too much of a danger of significant overlap, but Jim's and Sara's Table of Contents does remind me that one area that I did not explicitly note in my proposed Table of Contents was resource management. I am not sure this deserves a special chapter in a volume of essays, although the subject raises major issues dealing with the appropriate use of science (both to manage the resource and to enhance professional authority). The subject is worthy of a book in itself, but in our book it may be able to be subsumed in various chapters dealing with natural resources.

Marty

Williams to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 11:19 AM
To: Envirotech
Subject: Book of essays -- TOC

Friends,

Following up Sara's posting, it's probably important for you to know
that she and I are plugging along on a joint writing venture on
Technology and Nature in History, which will appear next fall in the
SHOT/AHA booklet series. It would be a shame if the book of essays and
our booklet look too much the same, so please perhaps you all should
know our table of contents:

Introduction
Conceptual tools
Agriculture
Energy
Resource use and management
Built environment
Body
Rethinking technology and nature
Conclusion

All the best,

Jim

* *
James C. Williams
Professor of History Emeritus - De Anza College
Vice President - International Committee for the History of Technology

Web Site: <http://www.deanza.edu/faculty/williams>

Pritchard to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 10:54 AM
To: envirotech@lists.Stanford.EDU
Subject: TOC and edited volume

Dear all,

Many thanks to Betsy for starting this discussion and to all who have
contributed. Jim Williams will be writing about our current joint writing

project in a separate message, but let me raise one issue about the possible edited volume.

Of course, all of our research is grounded in specific "topics" -- water technologies, transportation systems, nanotech, whatever -- in different historical and cultural contexts. What seems significant to me about the "envirotech" field of research in which we are working and which we are creating (as Tim LeCain put it), however, is the conceptual framework(s). A topical organization of the volume might be the most pragmatic way, but I would like to see the volume include (perhaps even based around?) essays that raise methodological issues and make analytic and theoretical contributions to not only environmental history and the history of technology individually, but also the discipline of history more generally.

In other words, I would like to see not only envirotech-historical (?!) narratives about, say, French dams or nanotech, but also essays that mediate upon and develop "envirotech" analytic approaches through their analysis of these specific topics. I certainly do not think that there should be one "envirotech" way (!?). But I do believe that essays should be methdological and analytical as much as they are topical and thematic.

Thoughts?

Best,
Sara

Sara B. Pritchard
Assistant Professor
Department of History & Philosophy
Montana State University
2-155 Wilson Hall
P.O. Box 2320
Bozeman, MT 59717-2320

Cutcliffe to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 11:24 AM
Cc: envirotech@lists.Stanford.EDU
Subject: Re: table of contents

Marty, Thanks for doing this, and I am sure others on the list welcome your effort as well. Steve

Sklarew to Envirotech, 10-21-2004
Sent: Thursday, October 21, 2004 10:39 AM
Cc: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Does anyone have access to a wiki engine? If so, we could all 'co-authorly' revise this TOC on-line and watch it evolve lickety-split! My two cents, Dann

Reuss to Envirotech, 10-21-2004 (Table of Contents proposal)
Sent: Thursday, October 21, 2004 10:05 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Hi, everyone:

Ok, I will be the sacrificial lamb and propose a Table of Contents that I hope allows the major issues to surface:

I. Introductory Essay

II. Technology and Natural Resources

    Air

    Water

    Land and Agriculture

    Extractive Resources

III. Technology and the Human Environment

    Buildings

    Transportation

    Communication

    Health

    War

    Animals as Technology (Just for Ed Russell and Joel Tarr!)

IV. Technology. Epistemology, and Human Nature

    Technology and Biology: Where does the Human End and Technology Begin?
        (includes discussion of bio-engineering)

    The Way We Know What We Know: Technology. Science, and Professional Expertise

Technology, Environment, and the Role of the Divine

Technology and Law

Order and Disorder in a Changing World

V. Conclusions

No pride of authorship involved. Hack away at the above. I'll be interested in reactions. One point though: I consciously chose in most cases not to use a classification built on type of technology, whether we mean levers, pumps, wind-driven machines, electrical, turbines, nanotechnology, computers, etc. I think it more interesting to discuss these types of technologies under the more general categories, above, especially as they pertain to environmental impacts. However, I am willing to be convinced otherwise.

Pardon me, while I seek shelter.

Ok, now fire away.

Marty Reuss

LeCain to Envirotech, 10-20-2004
Sent: Wednesday, October 20, 2004 12:55 PM
Subject: RE: table of contents

Thanks Marty—I think this will be a very interesting and valuable exercise, sort of an informal state-of-the-field overview. I suspect I may ask for some follow up info in months to come. I also agree on the importance of not excluding non-industrialized nations. As David Edgerton provocatively suggested in a paper at the last SHOT meeting, the non-industrialized nations are better thought of as the "core" rather than a "periphery," at least in technological terms. If we take seriously the use of ubiquitous common technologies like corrugated galvanized steel panels in vast urban agglomerations around the world, it's very clear that these societies have important relationships to modern technologies. Sheer numbers alone suggest their patterns of enviro-technical relationships are essential to understanding global history and contemporary policy.

Cheers,

Tim

Wade to Envirotech, 10-20-2004
Sent: Wednesday, October 20, 2004 12:24 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Hello all -

I just joined this list yesterday, after coming across it while doing some research for a presentation regarding public perceptions of and public outreach around carbon capture and sequestration (CCS) technologies. I am working to engage the public in support of the basic research necessary to determine if CCS technologies will provide an acceptable option to mitigate climate change - and if so, under what conditions.

Interestingly, the majority of opinions about how to address climate change seem to be converging on at least the notion that it will require many options including advanced or even new technologies, significant increased deployment of some existing / emerging technologies and improved use of common technology. Many also seem to agree that it will take a policy framework, or mandate, to catalyze these responses - as the market does not seem to be an adequate stimulant at this time.

My questions are: in the face of pressure to move relatively quickly, how do you foster large scale technology change (and diffusion /deployment)? What role does competition among technologies play in this development, and can you turn it into a positive impact rather than a negative one? What concrete steps can be used to overcome the momentum of status quo? What are the inherent risks in accelerating technology change and how can they be mitigated?

As a reader, any reflection on some of these and the related questions would seem to be timely - (and any thoughts that you could send to me by Tuesday would be even more timely!). I'm not in academia, and so do not know if there are people exploring these kinds of general questions in the context of their specific work. It would seem to me that you could request/commission some opinion pieces to accompany case studies and other scholarly papers in order to draw out the connection between history, environment and technology.

Sarah M. Wade
AJW
Washington, DC 20036

Cutcliffe to Envirotech, 10-20-2004
Sent: Wednesday, October 20, 2004 8:16 AM
To: envirotech@lists.Stanford.EDU
Subject: envirotech projects

Folks,
I am in the very early stages of looking at environmental
implications--both positive and problematic--related to current
developments in nanotechnology, for which I hope to be able to frame in
a comparative historical context.
Steve

Stephen H. Cutcliffe

Science, Technology, and Society Program
Lehigh University

Reuss to Envirotech 10-20-2004
Sent: Wednesday, October 20, 2004 6:54 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Tim, I very much appreciate your willingness to take on the task of compiling a list of what people are doing. As for me, my present research/writing is on a history of hydrology in the United States. The topic clearly rests at the intersection of science, technology, and public policy, with profound environmental consequences as well.

I also must say that I welcome Dann's reminder about the importance of not developing a book that disregards the concerns of non-industrialized nations.

Marty Reuss

Sklarew to Envirotech, 10-19-2004
Sent: Tuesday, October 19, 2004 10:06 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Howdy folks,

I would suggest we aim for a broader perspective than just recent North America, i.e., beyond the glitzy "scifi" topics like nanotech, biotech, AI, etc...

There's over a billion people w/o even basic access to clean water on this planet, ever more efficient and large-scale resource extraction and utilization technologies are multiplying the detrimental side-effects of demographic explosion upon the ecosystems upon which we depend. Fisheries are collapsing world-wide, invasive species carried by our technologies are threatening ecosystems world-wide (see IUCN Congress next month) along with previously unknown & lightning-fast pandemics (a la "SARS" or "avian bird flu") emerging through our techs "from the bush."

Many of these issues have historical analogs for which taking a "long now" view (i.e., seeing "now" not as this second, but as this century, millenium or era) would be a valuable contribution. Such would allow us to provide some context, perhaps even some guidance for how humanity might use technology toward a more "sustainable" (ok, that's cliche) or establish a consciously "symbiotic" relationship between our socio-technological systems and the larger ecological system(s) unto which they are embedded.

In sum, there's a bunch of regional and global ecological crises occuring in our generation through inappropriate application of technology in the context of

demographic and climatic change. What can we learn from our own histories to help address these critical issues to ensure human welfare, prosperity and collective survival?

Well, that's my diatribe for the week.

Best wishes to all,

Dann Sklarew

LeCain to Envirotech, 10-19-2004
Sent: Tuesday, October 19, 2004 2:59 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

I second Hugh's recommendation, and I would be happy to compile the list. I agree with Marty and others that we should first give some serious thought to the hybrid field that we are all simultaneously working in and creating. The very existence of our sub-discipline suggests there are fundamental linkages between technology and environment that bear further thought. We are, I think, something more than historians of technology who also happen to do some environmental history or vice versa. Identifying that "something more" might be a valuable way to frame this collection of essays.

If people would take a few moments to explain what they are working on and how they see it fitting into Envirotech, I would be happy to compile them into some sort of report for the next news letter. Send to tlecain@montana.edu.

Cheers!

Tim

Timothy J. LeCain
Assistant Professor
Department of History and Philosophy
Montana State University
Bozeman, Montana 59717-2320

Bissell to Envirotech, 10-19-2004
Sent: Tuesday, October 19, 2004 12:38 PM
To: envirotech@lists.Stanford.EDU
Subject: Re: Envirotech Essay Collection

Well, the obvious, at least to me, is some ideas about the implications of AI, Nanotech, Global Communications.

The reason I suggest these is because they are the 'hot' topics in SciFi at the moment which means they should hit the 'general concern' category in about a year. Bill

McGibben's (The End of Nature) new book, "Enough" addresses the issues, but it's a bit, IMHO, hysterical. It would be interesting to see a more dispassionate analysis. Not by moi, BTW.

Steven

Q. How do you make God laugh?
A. You tell Her your plans.
   2nd corollary to Murphy´s Law

Gorman to Envirotech, 10-19-2004
Sent: Tuesday, October 19, 2004 1:00 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: table of contents

Hi all,

Marty Reuss suggested that we hold off imagining a table of contents for a potential book of Envirotech essays until we further discuss what Envirotech is about. Another parallel possibility is to compile a list of what various people are working on and then see if that helps an organizational device to emerge. I propose that people send a brief description of what they are working on to Tim LeCain so that he can compile the list for the next newsletter. From that list, something interesting may emerge.

To move in the direction of thinking about themes, we can look at the tagline that the American Society for Environmental History uses in various places (such as the top of its membership registration form): "Promoting the interdisciplinary study of human interaction with the environment."

Clearly, technology shapes a large part of the human interaction with the environment, and historians of technology, therefore, have a role to play in any effort to understand that interaction. Furthermore, others have emphasized examining not only changes in how we interact with the environment but also changes in how we perceive the physical environment and changes in natural systems and the environment itself. Again, technological change is relevant to both.

If we look at the issue from a SHOT perspective, the main questions may revolve around how the environment (and changing views of the environment) shape our technological choices. For example, at the most general level, I am interested in how a sustainability ethic (which suggests that we monitor the environment and manage human actions to maintain specific measures of environmental health) affects our technological choices.

But after several attempts to come up with organizing themes--and not being happy with any of them--I am thinking that seeing a list of what people are working on might help.

Hugh

Hugh S. Gorman
Associate Prof. of Environmental History and Policy
Michigan Technological University

Reuss to Envirotech, n.d.
I suppose one way to further the discussion would be to focus on a table of contents. However, I would first prefer a discussion about what the book is all about and what the significance of envirotech is. The book is our opportunity to provide rationale and structure. I suggest that there are certain concepts, methodologies, and intellectual moorings that unite our members no matter what their individual topics might be. I would like to see some explicit treatment of these unifying ideas as well as some of the case studies, etc., that Betsy mentions.

Marty Reuss

Reuss to Envirotech, 10-19-2004
Sent: Tuesday, October 19, 2004 10:18 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: Envirotech Essay Collection

Ok, everyone, the surf is up and no one is jumping in! Betsy asked us an important question dealing with the book of essays on envirotech, but so far few have offered suggestions. What's keeping you!!! We need ideas about topics, sections, and focus. Time to jump in and let us know what you think.

Urr, hope the above was clear enough.

Best,

Marty Reuss

Mendelsohn to Envirotech 10-15-2004
From: Betsy Mendelsohn [betsy@umd.edu]
Sent: Friday, October 15, 2004 11:40 AM
To: envirotech@lists.Stanford.EDU
Subject: table of contents

Hi Envirotech,

I'm enjoying reading all the ideas about the content of an envirotech book of essays.

The book could be organized different ways and have a diversity of essay types. For example, there could be historiography, case studies, theory, debates, connections with and distinctions from allied areas of inquiry, and arguments for new directions.

It would be very generous of people to begin proposing "table of contents" for the book. What would a useful structure of 10-20 essays look like?

Betsy Mendelsohn
bmendel@mail.umd.edu

Curtis to Envirotech, 10-15-2004
Sent: Friday, October 15, 2004 7:28 AM
To: envirotech@lists.Stanford.EDU
Subject: RE: Envirotech Essay Collection

The importance of the SCOT analysis, as I understand it, was its ability to reframe questions about technology from one that saw technology(ies) as neutral tools in the hands of various biased users, to one that saw technology(ies) as biased products with biased impacts (the biases being formerly concealed by the 'technology is a neutral tool' idea).

I guess, I'm not convinced that the same issues are (or were) present in environmental scholarship, and they seem even less present in scholarship that has tried to understand interrelationships between technology and enviroment as analytic categories in history.

Instead, what has drawn me toward envio-tech questions is the way that these questions help uncover curious and unexpected answers to questions of historical causality. I think these inquiries have the potential to move us beyond SCOT analyses that sometimes reify social biases as prime causes and environmental analyses that either view the environment as a passive victim or see nature as "unknowable' and thus retreat to dissections of ideals alone.

For that reason, I agree with Marty that the more interesting questions have to do with the constraints influencing human intentions. In an oversimplified characterization, I conceive of technologies as the physical extension of human ideas and will into the world and the environment as the physical extension of (for lack of a better term) the wild back up against those ideas and intentions. Neither side is unproblematic and the resulting interplay or dialectic(s) that unfold at that meeting point is even more interesting as a result. The promises for interdisciplinary scholarship, as Marty points out, are rich.

Kip Curtis

Harris to Envirotech, 10-14-2004
Sent: Thursday, October 14, 2004 7:35 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: Envirotech Essay Collection

the social construction of the environment is alive and well in sociology . . .
i won't even attempt to offer an overview, but one could be provided if it were desired . . .
while it does not represent all the streams of thought, one place to start is Environmental Sociology: A Social Constructionist Perspective by John A. Hannigan (London and New York) Routledge 1995

cheers,
craig

craig k harris
department of sociology
michigan agricultural experiment station
national food safety and toxicology center
institute for food and agricultural standards
michigan state university

Washington Envirotech 10-14-2004
Sent: Thursday, October 14, 2004 1:46 PM
To: envirotech@lists.Stanford.EDU
Subject: RE: Envirotech Essay Collection

I support Marty's suggestion of a "SCOE" framework or what I have always thought as an STS paradigm for environmental history however...

As a former NASA and corporate environmental engineer (as well as formerly trained historian of technology and the environment) I have always found that many environmental histories to date have avoided a detailed discussion of the "costs" of technological development to human society.

This has always stood out to me since it was critical for me as a practicing environmental engineer to understand the historical as well as contemporary relationships between technological design on the environment from an anthropocentric perspective.

Environmenal justice issues if properly understood really gets at this "downside" to technology to human society...even though this negative environmental aspect of technological development is "color blind."

I think that examining this relationship (between technology and humanity) will be fruitful and useful for a number of audiences; historians, anthropologists, engineers, geographers, sociologists as well as policy planners.

Please also realize that I think this should not dominate the essay collection but that it should be a part of the larger collection.

Sylvia Hood Washington, MSE, Ph.D.
Visiting Scholar, History
Northwestern University

Reuss to Envirotech, 10-14-2004
From: owner-envirotech@lists.Stanford.EDU
Sent: Thursday, October 14, 2004 12:44 PM
Subject: RE: Envirotech Essay Collection

I think we need a discussion about what "envirotech" really means. Surely a book that embraces the worlds of technology and the environment can include a large and diverse number of historical essays, but will this advance what our interest group is all about? As the one (I think) who proposed the book of essays in Victoria, I remain enthusiastic about it. Yet, I think we need to be intellectually honest about what things new we are bringing to scholarship. Why should readers care enough to read these essays?

One answer, I suppose, is the growing interest in analyzing the impact of technology over time on the human and physical environment. Is there a counterpart to SCOT (social construction of technology). Can we have a SCOE (social construction of the environment). The easy answer, probably, is in the affirmative. But then the more interesting question becomes, what constraints are there on SCOE and what does history tell us about the suitability of technological answers to those constraints? Clearly, the field is one rich for interdisciplinary study, including anthropologists, geographers, engineers, sociologists, and physical scientists.

Well, I don't want to stay on the podium too long. Any other thoughts?

Marty Reuss

Gutierrez to Envirotech 10-14-2004
Sent: Thursday, October 14, 2004 12:01 PM
To: envirotech@lists.Stanford.EDU
Subject: Re: Envirotech Essay Collection

Hello ... just a few more thoughts about "the interrelationship between technology, environmental justice and sustainable communities..." and the "demonstrable historical contradictions between technological development and the pursuit of egalitarian societies".

A critical ingredient that must be taken into account is what has been called "affluenza", i.e., the addiction to extravagant consumption. Willard Fey and Ann Lam have written about the "ecocosm paradox", which means that most people are simply not willing to make decisions for long term sustainability at the expense of short term financial gain. I am working with them, and you may wish to take a look at this work:

http://www.ecocosmdynamics.org

I am one of those who thinks that viable solutions to the "addiction to growth" problem will be 1% technological and 99% social. The physics are pretty well understood. EE has given us a method to calculate sustainable material and energy flows. But an understanding of "addiction to growth" as a disorder that requires modification of human behavior is still lacking. This is critically urgent, because terrorism is nothing but an extreme manifestation of the growth syndrome.

I have been doing some independent research about the required change in
mindset, and my working hypothesis is that we have to move away from the
"patriarchal" mindset and toward a mindset of "solidarity". This is of
course work in progress, but if you care to take a look, I am collecting
my notes at the following location:

http://www.pelican-consulting.com/solisust.html

I would be grateful for any comments and suggestions to carry forward
this research project.

Take care,
Luis Gutierrez

Washington to Envirotech, 10-13-2004
Sent: Wednesday, October 13, 2004 10:59 PM
To: envirotech@lists.Stanford.EDU
Subject: Envirotech Essay Collection

Dear Colleagues,

I am responding to Betsy's most recent message about gathering thoughts about an
Envirotech Essay Collection.

I would like to see the collection include essays that specifically address the
interrelationship between technology, environmental justice and sustainable
communities.

Another venue that should be considered is the demonstrable historical contradictions
between technological development and the pursuit of egalitarian societies. This
admittedly can be seen as very close to the above suggestion but it doesn't have to be.

Just a few thoughts...

Sylvia Washington

Mendelsohn to Envirotech list, 10-13-2004 (SHOT meeting notes)
From: Betsy Mendelsohn [bmendel@mail.umd.edu]
Sent: Wednesday, October 13, 2004 1:47 PM
To: envirotech@lists.Stanford.EDU
Subject: SHOT follow-on

Hi Envirotech,

I had a great time at the Society for the History of Technology (SHOT) conference in
Amsterdam, and I hope many of you did, too. It would be very nice for those of us who
attended to share our write-ups of sessions with other subscribers. I'd like to suggest

write-ups of sessions 4, 6, 7, 13, 17, 18, 20, 32, 36, 38, and of course others that come to mind.

Frank Uekoettor chaired the breakfast with elegant precision, forming an oasis of order in what was the most playful, democratic, loud, and fun academic conference I've ever attended.

There were 21 people at the breakfast (4 registrants did not attend, and 3 folks crashed, so I guess we're ahead). We collected $124.57 in dues, which I'm mailing to SHOT treasurer Richard Hirsch; please note that dues are matched by SHOT to finance the best article prize and minor photocopying expenses.

Attendees welcomed Joy Parr as co-chair, as Jim Williams, who founded Envirotech with Sara Pritchard, moves on to the very busy life of an emeritus professor.

There was a good discussion about the goals of Envirotech's best article prize and the wording of the call for submissions. Attendees recognized that Erik Conway will join Frank Uekoetter and Sylvia Washington on the committee, as Hugh Gorman moves on. Please look for the call for submissions announcement from the committee.

Attendees also recognized Tim LeCain as the newsletter editor, succeeding Erik Conway as its second editor.

We again discussed the format of an "Envirotech book of essays" first aired at the last American Society for Environmental History (ASEH) meeting in Spring, 2004. There is interest, and it now is time to hear from people about the content. Please write to the list with your ideas so we can create a proposal for the publisher that has expressed interest in reviewing it.

One piece of business was diverted to this email, rather than extending the meeting past our ending time. Last summer, the program chair for the 2005 ASEH meeting in Houston, contacted the Envirotech co-chairs about SHOT sponsoring sessions at that conference. This seemed like a good idea to me and Joy, and we will meet with the 2006 ASEH program committee in 6 months. Please air your thoughts on this using the listserve.

Other folks involved in Envirotech, please step in if I've missed anything, welcome the new people who have taken on responsibilities, thank those who have moved on, and please write up your impressions of the SHOT sessions.

Best wishes,
Betsy

co-chair, Envirotech, a special interest group of SHOT
Betsy Mendelsohn

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