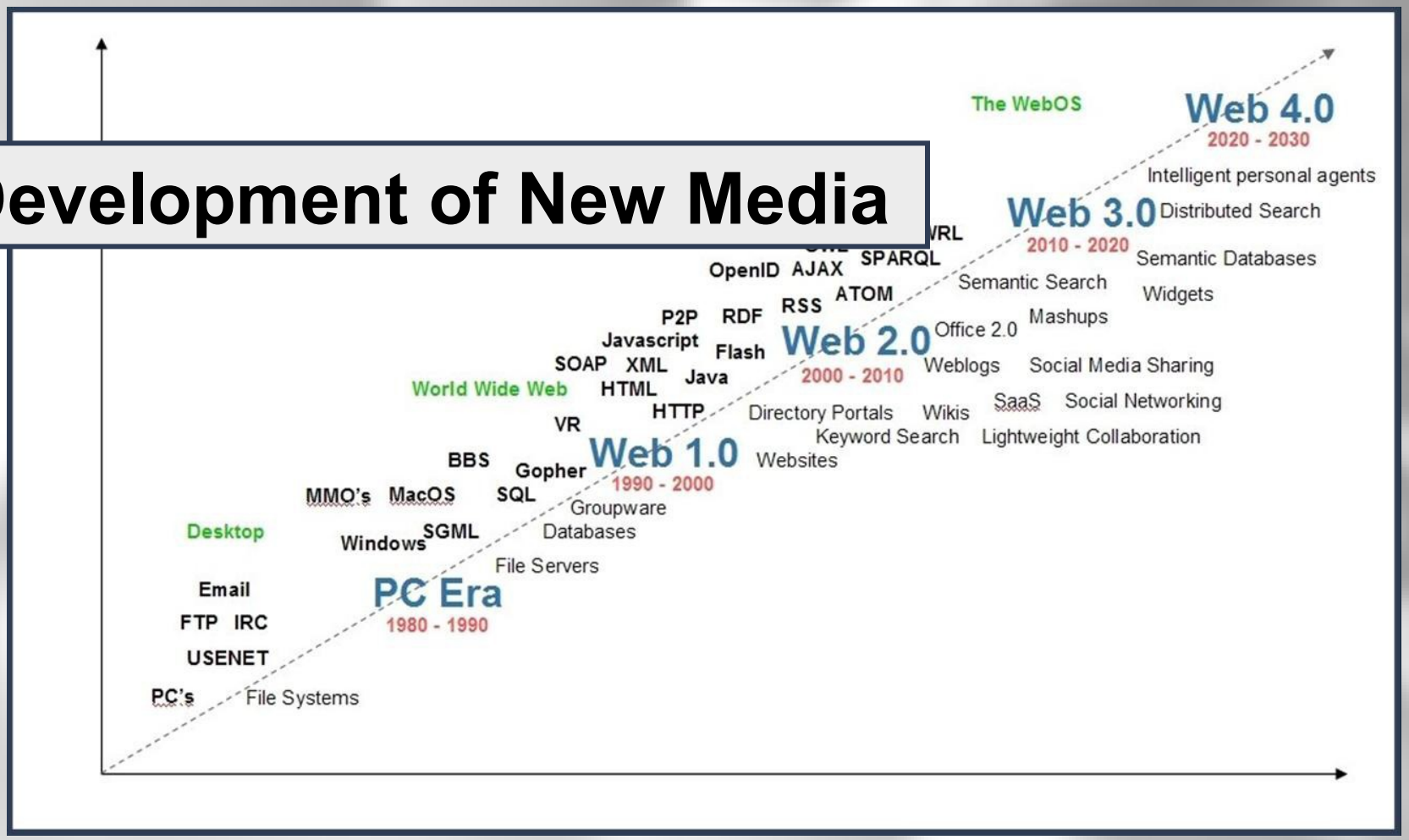
Paradigm Shifts

New Perspectives on Interactive Multimedia Journalism

David J. Gunkel
Presidential Teaching Professor
Northern Illinois University

David J. Gunkel - http://gunkelweb.com

Development of New Media



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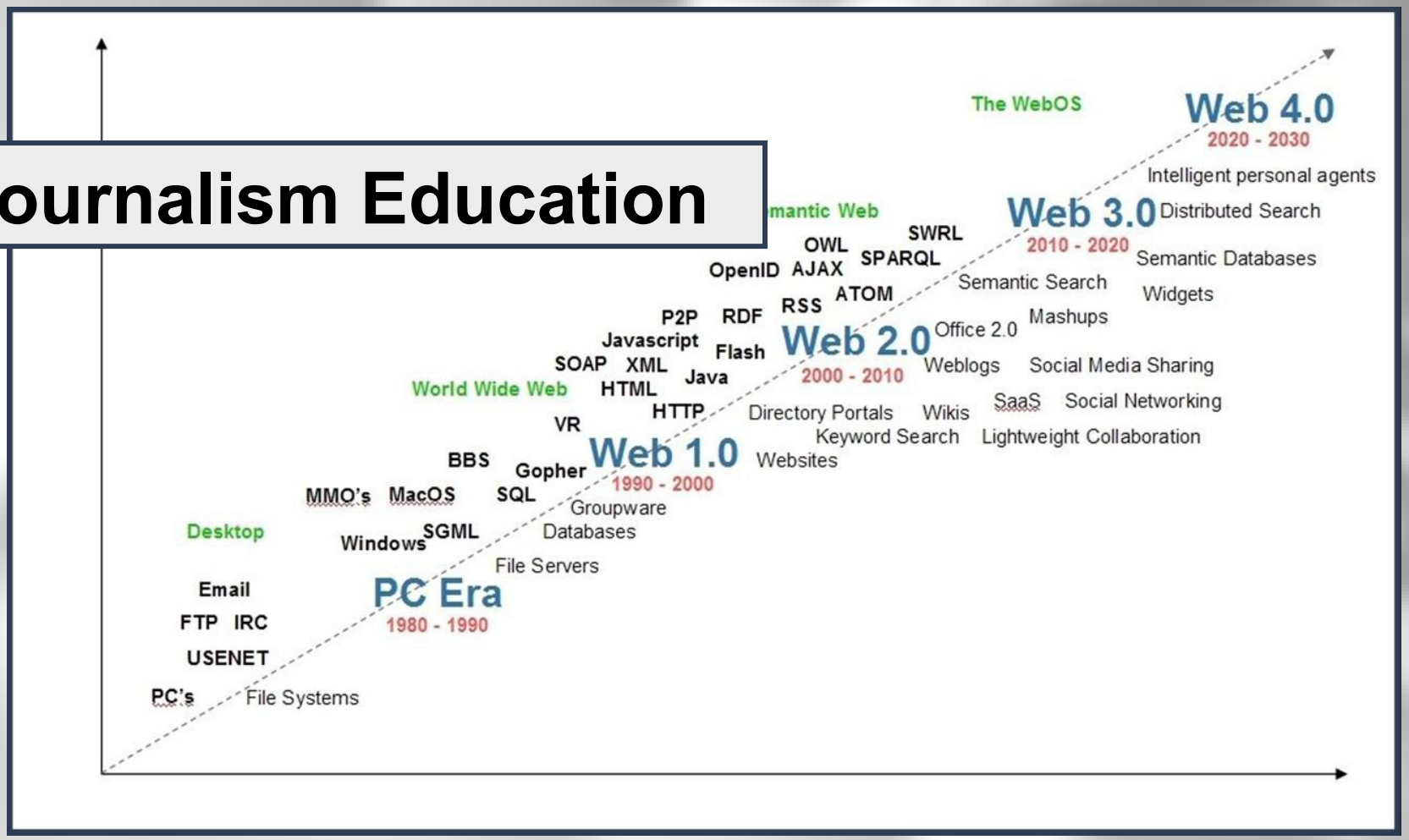
Journalism Education



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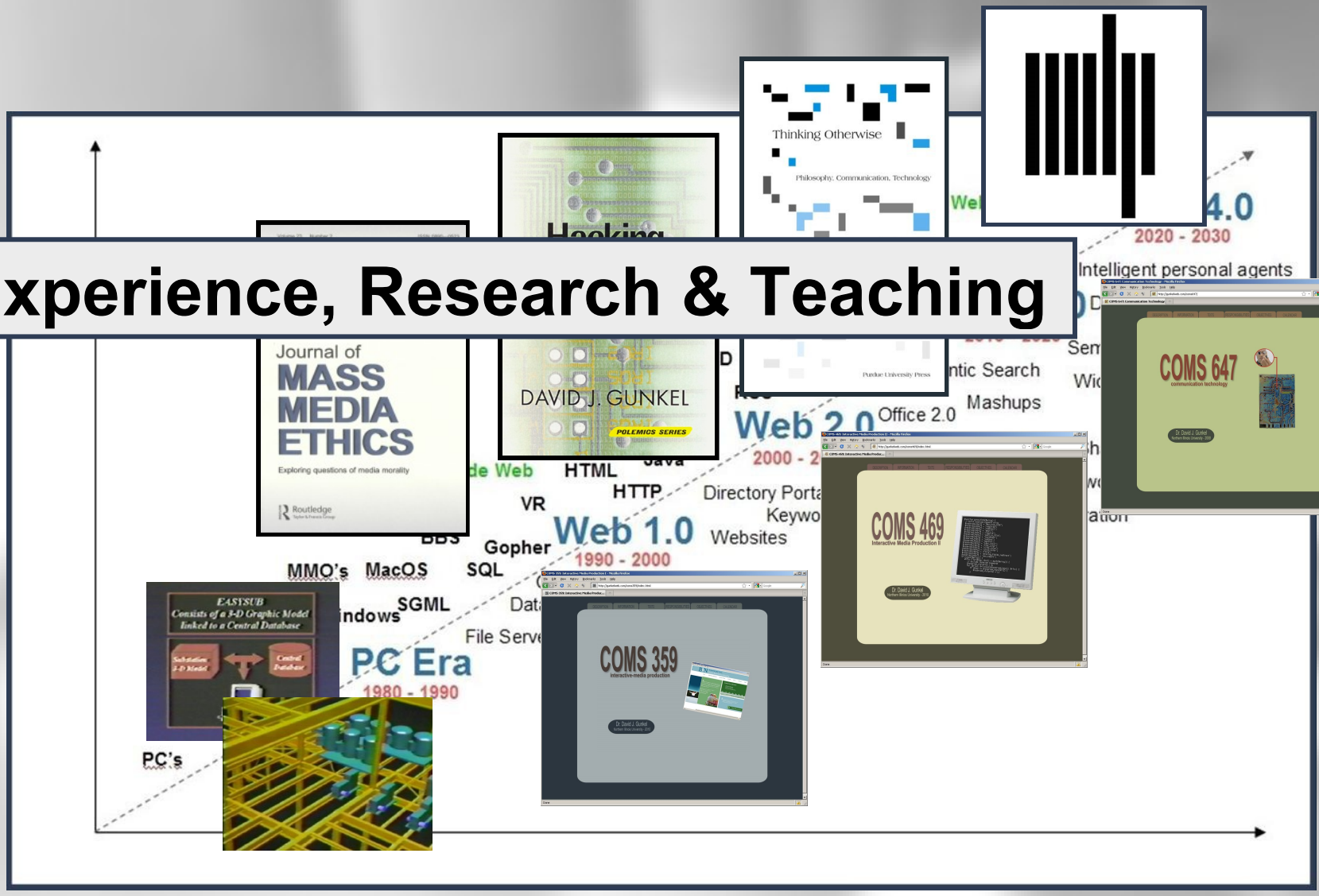
Experience, Research & Teaching



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Web 1.0

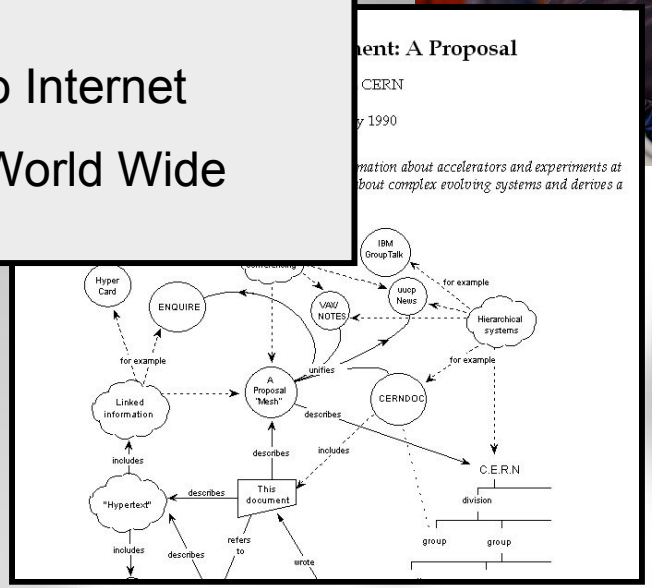
World Wide Web

Proposed by Tim Berners-Lee in 1980 as a system for organizing documents for physicists

Incorporated *hypertext*, developed by Ted Nelson in the 1960's

Operational in 1989; released to Internet

Development overseen by the World Wide Web Consortium (W3C)



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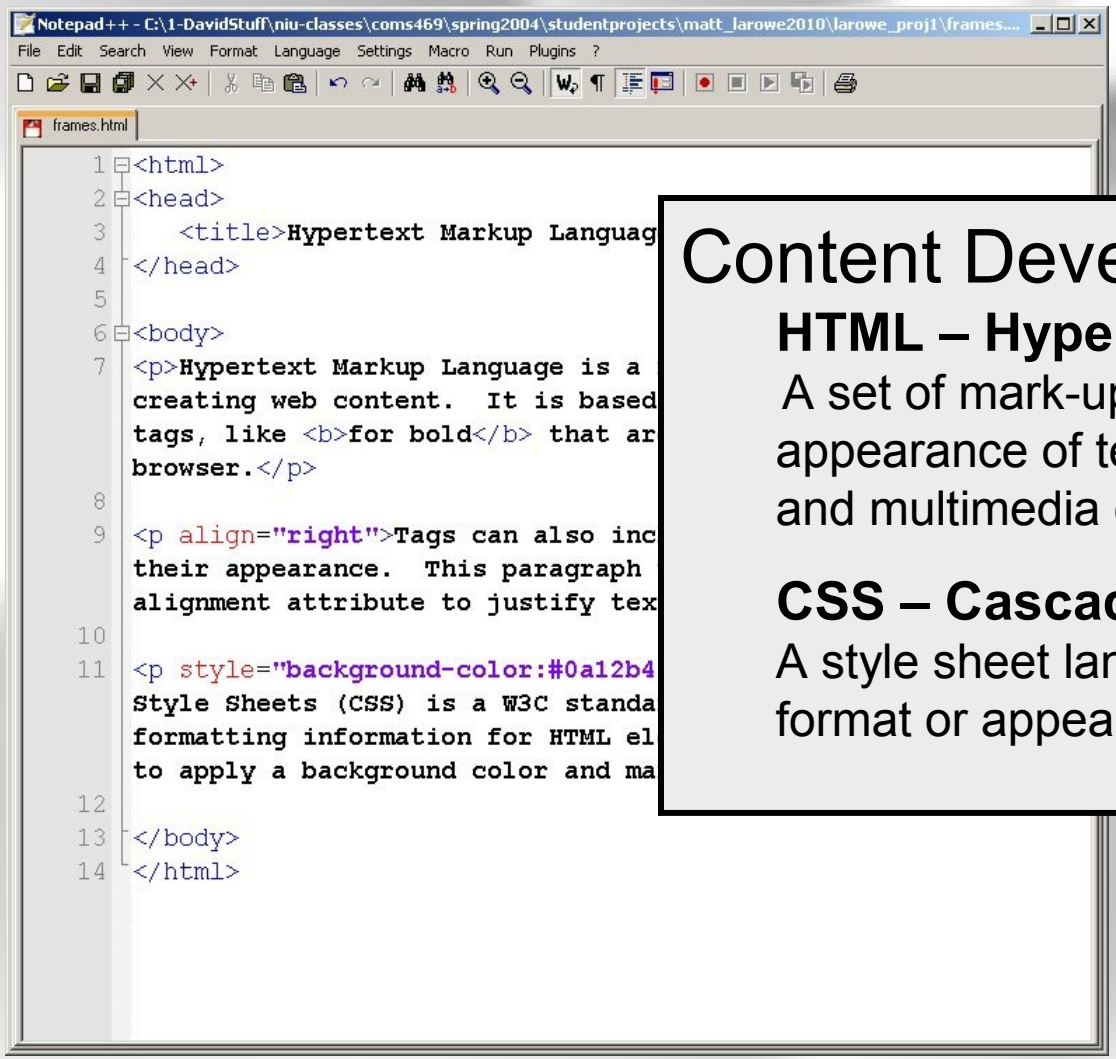
Web 1.0



Content Development

HTML – Hypertext Markup Language

A set of mark-up tags used to specify the appearance of text, images, hypertext links, and multimedia elements.

CSS – Cascading Style Sheets

A style sheet language used to specify the format or appearance of HTML elements

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Web 1.0

Browsers – Web Client

- Interprets HTML and CSS code to display content
- Mosaic, Netscape, Internet Explorer, Firefox, Safari, Chrome

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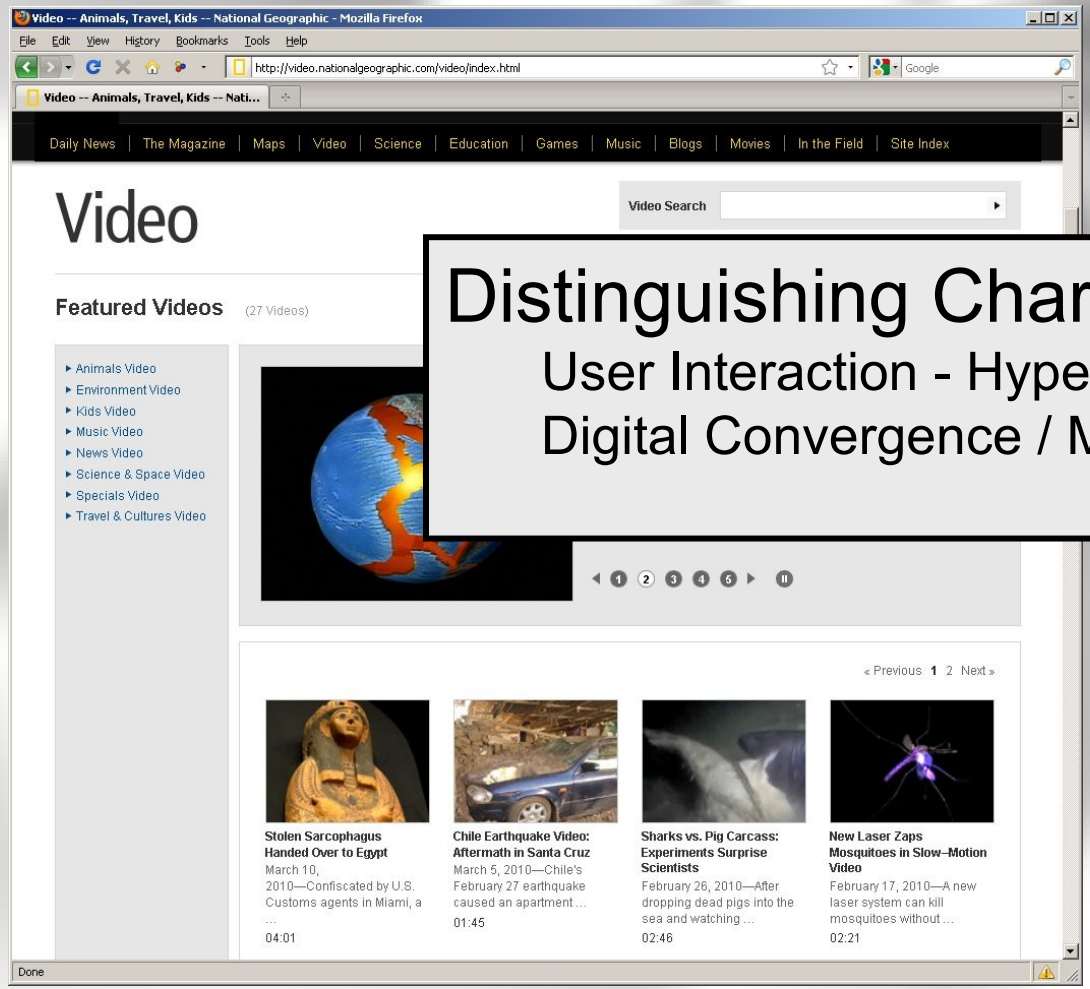
Web 1.0



Distinguishing Characteristics

- User Interaction - Hypertext
- Digital Convergence / Multimedia

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Web 1.0

Web of Documents

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Web 1.0

Web of Documents

Publishing Model

Web provided a means for creating and distributing documents: *web pages.*
"Content is king"

Producer/Consumer

Documents created by professional content providers, made available over the Internet, and accessed by consumers of information.

Hypertext

Interaction is created by linking documents to each other and permitting users to follow these links. Read-only experience.

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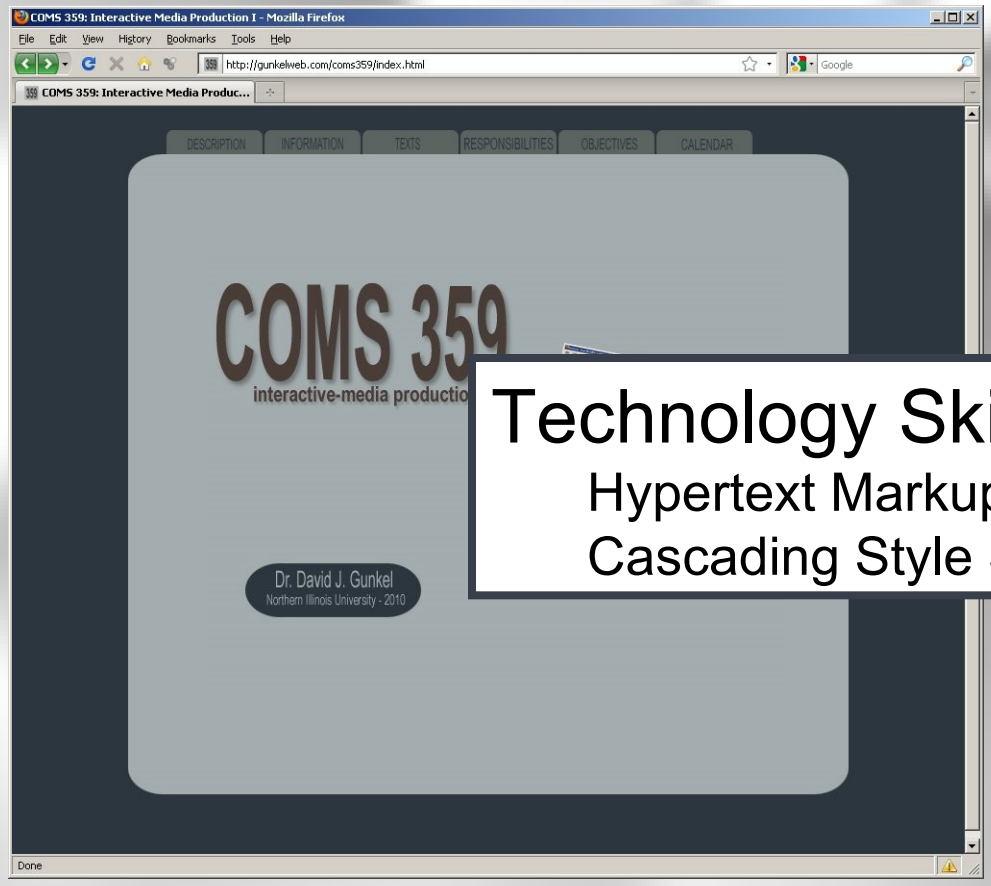
Web 1.0



Technology Skills

- Hypertext Markup Language (HTML)
- Cascading Style Sheets (CSS)

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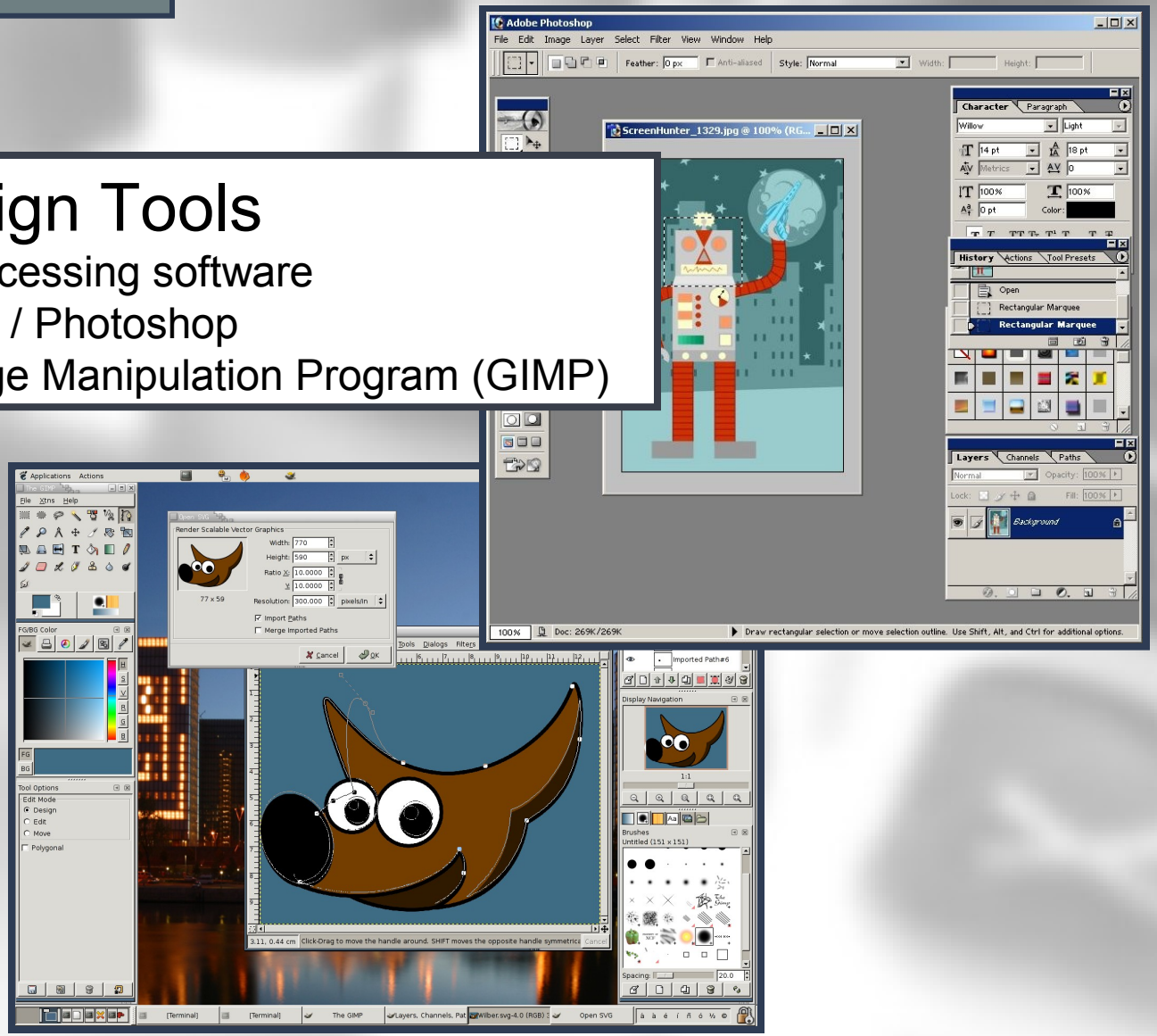
Web 1.0

Web Design Tools

- Image processing software
- Adobe CS / Photoshop
- GNU Image Manipulation Program (GIMP)



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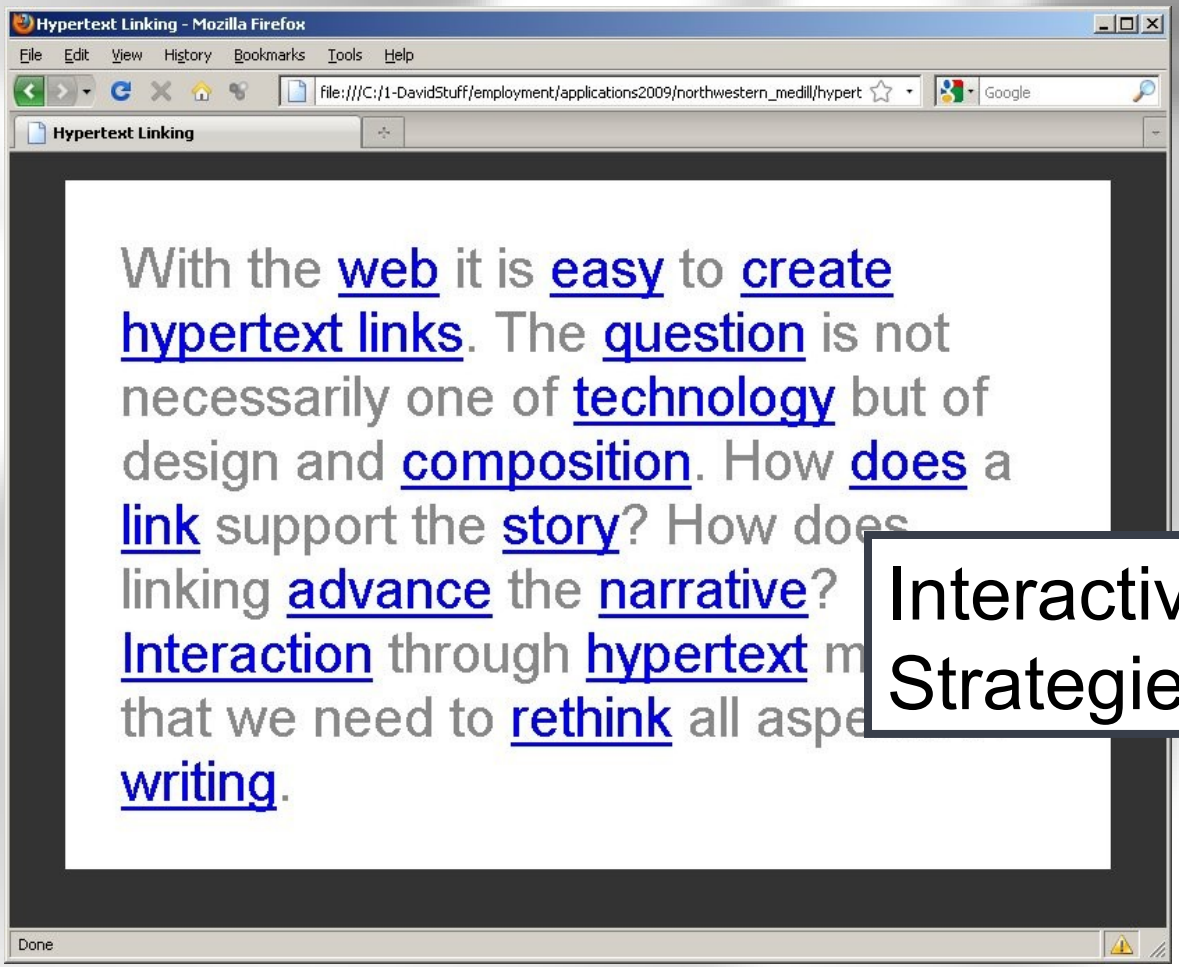
Web 1.0



Interactive Design Strategies & Approaches

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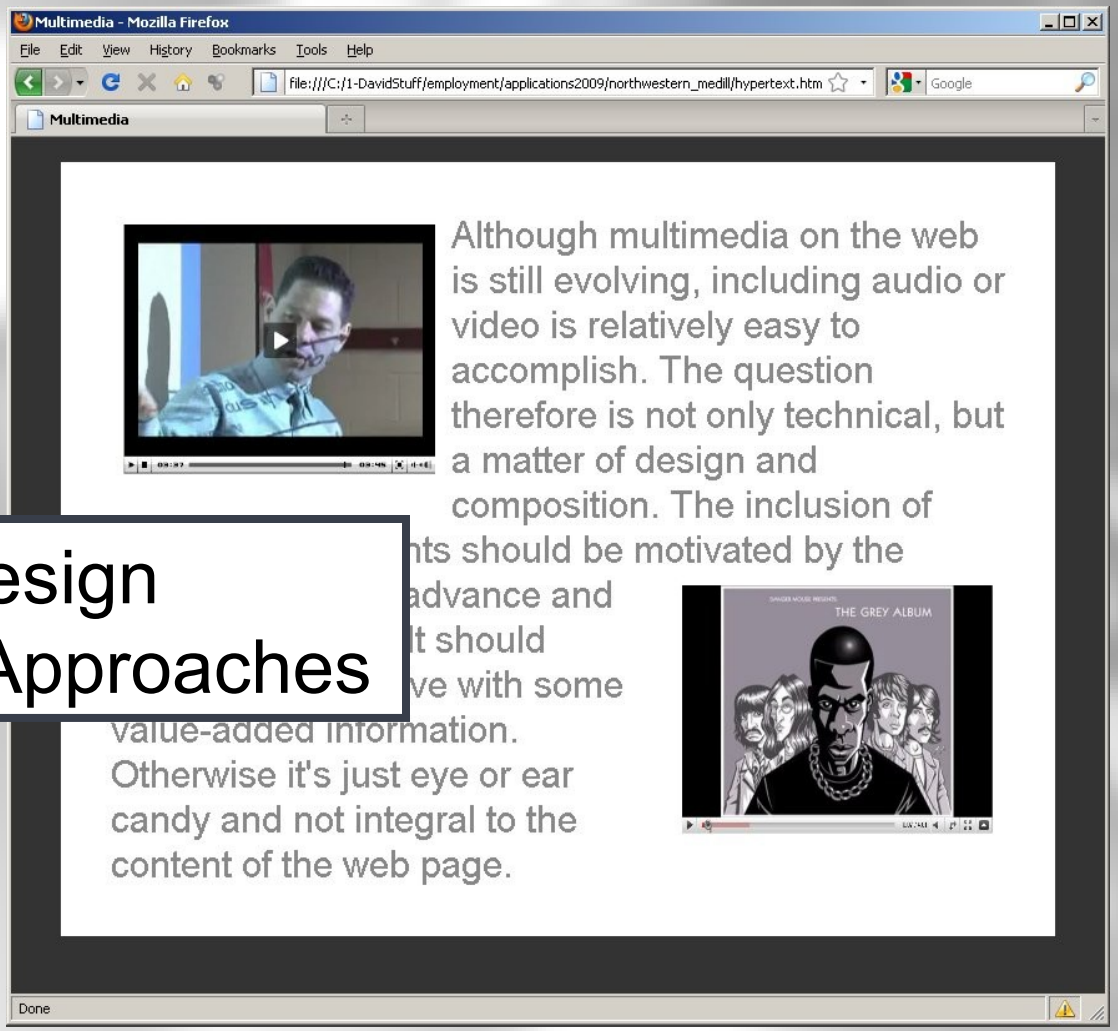
Web 1.0

Teaching

Multimedia Design Strategies & Approaches



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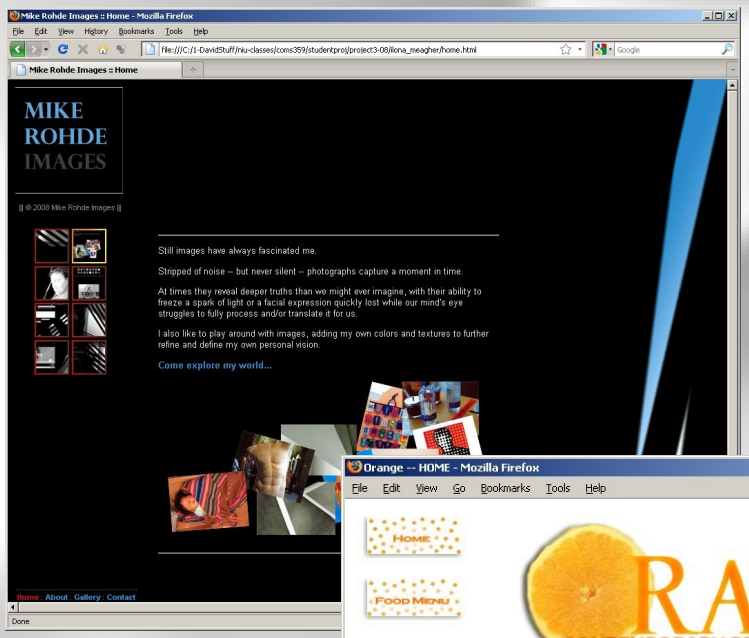
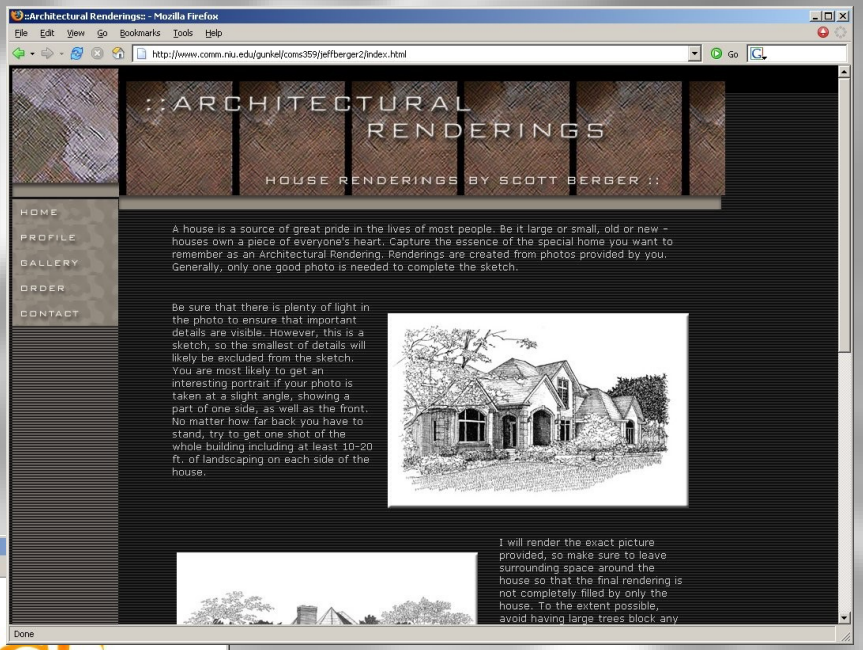
Web 1.0





Service Learning

- Digital storytelling
- Collaboration with content experts
- Project management

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Web 1.0

Research

Critical Studies in Mass Communication
14 (1997), 123–137

Virtual Geographies:
The New Worlds of Cyberspace

David J. Gunkel and Ann Hetzel Gunkel

This article embarks on an exploratio
have called "the new world of cyberspa
investigates the legacy, logic, and conseq
cyberspace to the Columbian voyages of
expansionism. It therefore engages in a cr
this seemingly innocent taxonomy, examin
research, and inquires about its position
cyberspace.

Today another frontier yawns before u
far more fog-obscured and inscrutable
its opportunities than the Yukon. It co
sists not of unmapped physical space
which to assert one's ambitious body, b
unmappable, infinitely expansible cer
bral space. Cyberspace. And we are goi
there whether we want to or not (Barlo
1994, p. 1).

If a new world were discovered toda
would we be able to see it? Would we
able to clear from our minds the images
habitually associate with our expectatio
of a different world to grasp the real diff
ence that lay before our eyes? (Calvin
1994, p. 1).

If a *new world* were discovered tod
would its contours conform to o
understanding of "world" and "disco
ery?" Would it take place as a taking
place? Would it supervene as an unco

David J. Gunkel is assistant professor of comm
nication technologies at Northern Illinois Un
versity, and Ann Hetzel Gunkel is assista
professor of philosophy and cultural studies
Carthage College.

The Empire Strikes Back Again:
The Cultural-Politics of the Internet

David Gunkel
Assistant Professor of Communication Technologies
Northern Illinois University

In the March 1996 issue of *Wired*(4.03), Nicholas Negroponte provided one of the more recent expressions of a concept that has been at the heart of on-line interaction for quite some time. In this editorial, which is titled "Pluralistic, not Imperialistic," the founding director of MIT's Media Lab argues that the telematic [1] network is not the next stage of American imperialism but rather a free domain that fosters and encourages global pluralism. "The idea that the Net is another form of Americanization and a threat to local culture is absurd. Such conviction completely misses and misunderstands the extraordinary cultural opportunities of the digital world" (Negroponte, 1996, p. 216). Contrary to the imperialist aspirations that had accompanied the "mechanical age," the "information age" has been determined to offer global liberation and multicultural empowerment [2]. According to Negroponte's assessment (1996), "the Net is humankind's best chance to respect and nurture the most obscure languages and cultures of the world" (p. 216).

I would like to reconsider this rather popular line of argumentation that has had profound effects on the perceived social and political implications of the telematic network. Although the internet appears to be international, it has distinct national origins and was developed for purposes other than global communication. The Net originates in the Advanced Research Projects Agency of the US Department of Defense. In the early 1960's, the DOD was experimenting with a new data communications technology called "packet-switching." This technology fostered the development of a new kind of computer network, one which supported multiple-users and resisted system-wide crashes by automatically rerouting data around downed circuits. The goal of this experimental network, originally named ARPANET, was not the decentralized global information system that is heralded in current technical and popular discourses. Rather, its original purpose was directed by the exigencies of the cold war. The DOD researchers that developed ARPANET sought to design the prototype of a national-defense, data-communications systems that would be immune to and survive the devastation of nuclear aggression. The internet, therefore, traces its genealogy directly to one of the primary agents of American hegemony and the effects of this paternity can still be read in the very structure and content of the "global network."

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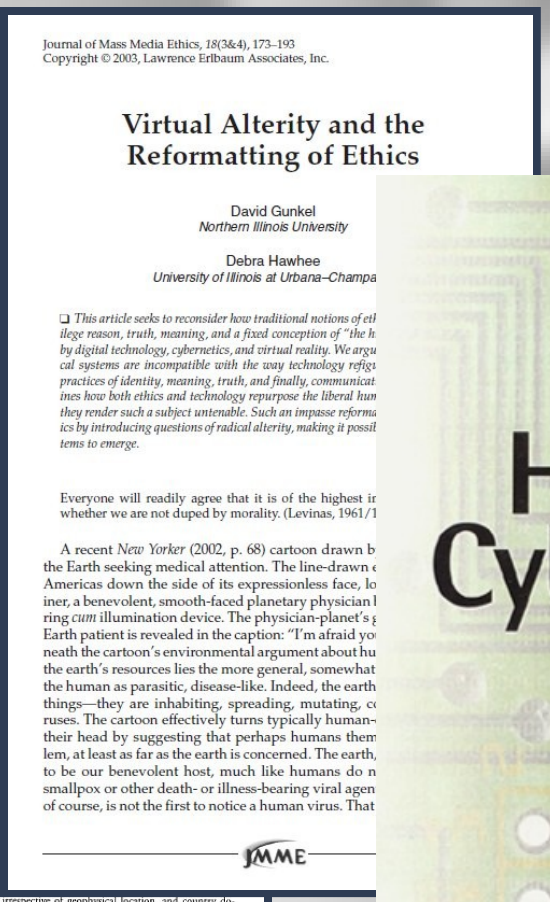
assigned irrespective of geophysical location, and country domains, which are specified in ISO 3166 and administered locally. Despite the apparent neutrality of this conceptual schema, its practical implementation has, in effect, granted a privileged position to American users. The Electronic Frontier Foundation's *Everybody's Guide To The Internet* (1991) indicates this privilege without comment. "In general, American [Email] addresses end in an organizational suffix, such as ".edu," which means the site is at a college or university. Other American suffixes include: .com for businesses, .org for non-profit organizations, .gov and .mil for government and military agencies, and .net for companies or organizations that run large networks. Sites in the rest of the world tend to use a two-letter code that represents their country" (p. 23).

Top-level domain designations for users in the United States have not, in practice, incorporated suffixes indicating their nation of origin. Although some US institutions (most notably federal offices and state agencies) do employ the .us suffix specified



Journal of Mass Media Ethics, *18*(3&4), 173–193
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Virtual Alterity and the
Reformatting of Ethics

David Gunkel
Northern Illinois University

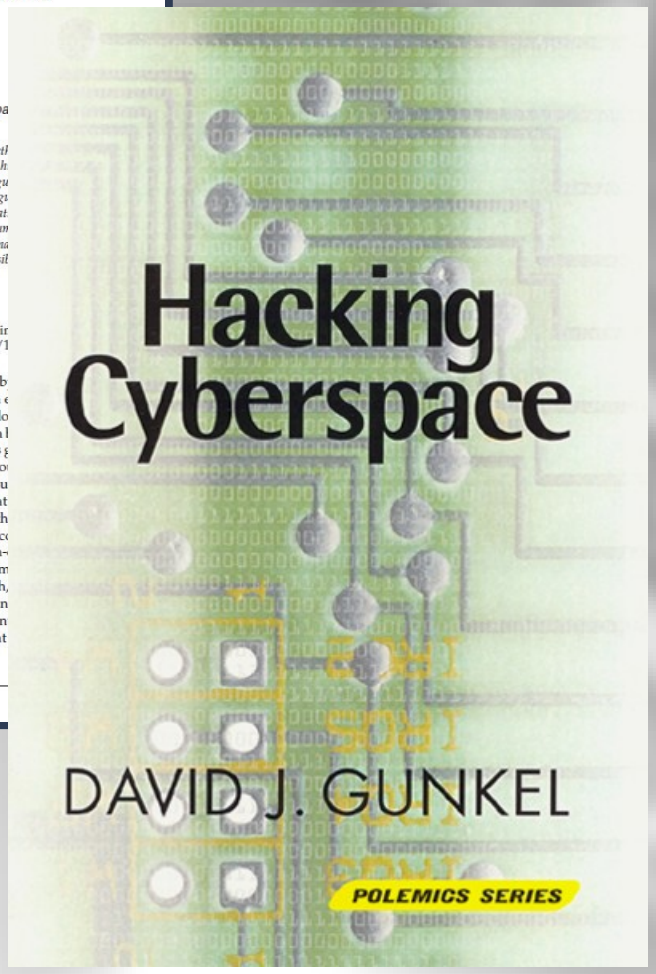
Debra Hawhee
University of Illinois at Urbana–Champa

This article seeks to reconsider how traditional notions of et
llege reason, truth, meaning, and a fixed conception of "the h
by digital technology, cybernetics, and virtual reality. We argu
cal systems are incompatible with the way technology refigu
practices of identity, meaning, truth, and finally, communicat
ines how both ethics and technology repurpose the liberal hum
they render such a subject untenable. Such an impasse reforma
ics by introducing questions of radical alterity, making it possi
tems to emerge.

Everyone will readily agree that it is of the highest i
whether we are not duped by morality. (Levinas, 1961/1

A recent *New Yorker* (2002, p. 68) cartoon drawn b
the Earth seeking medical attention. The line-drawn
Americas down the side of its expressionless face, lo
iner, a benevolent, smooth-faced planetary physician
ring *cum* illumination device. The physician-planet's
Earth patient is revealed in the caption: "I'm afraid yo
neath the cartoon's environmental argument about hu
the earth's resources lies the more general, somewhat
the human as parasitic, disease-like. Indeed, the earth
things—they are inhabiting, spreading, mutating, c
ruses. The cartoon effectively turns typically human-
their head by suggesting that perhaps humans them
lem, at least as far as the earth is concerned. The earth,
to be our benevolent host, much like humans do n
smallpox or other death- or illness-bearing viral agen
of course, is not the first to notice a human virus. That

JMME



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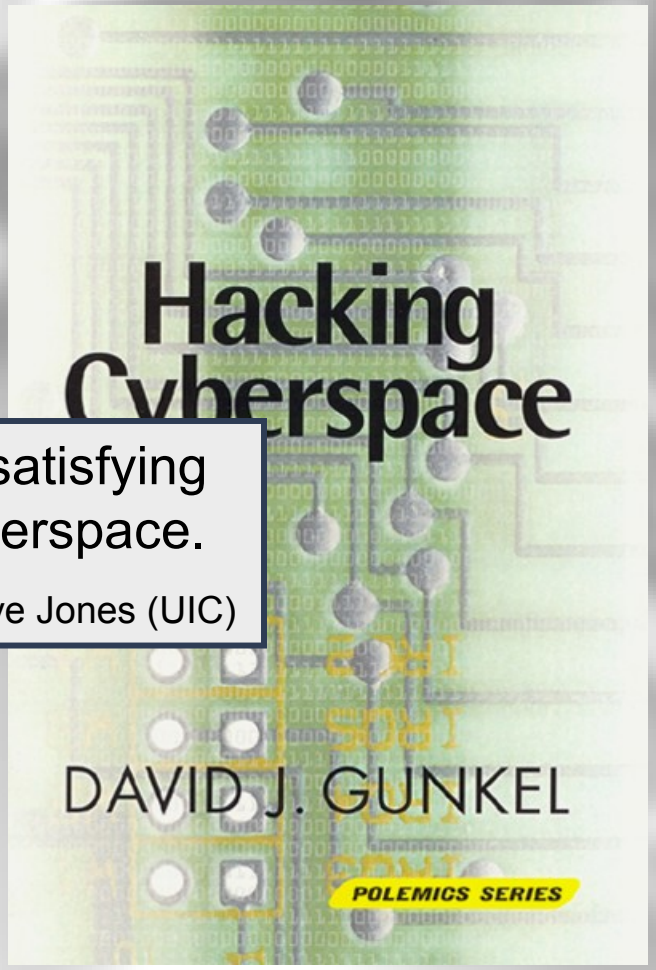
Web 1.0



The first substantial and satisfying cultural geography of cyberspace.

Steve Jones (UIC)

David J. Gunkel - http://gunkelweb.com

Web 2.0

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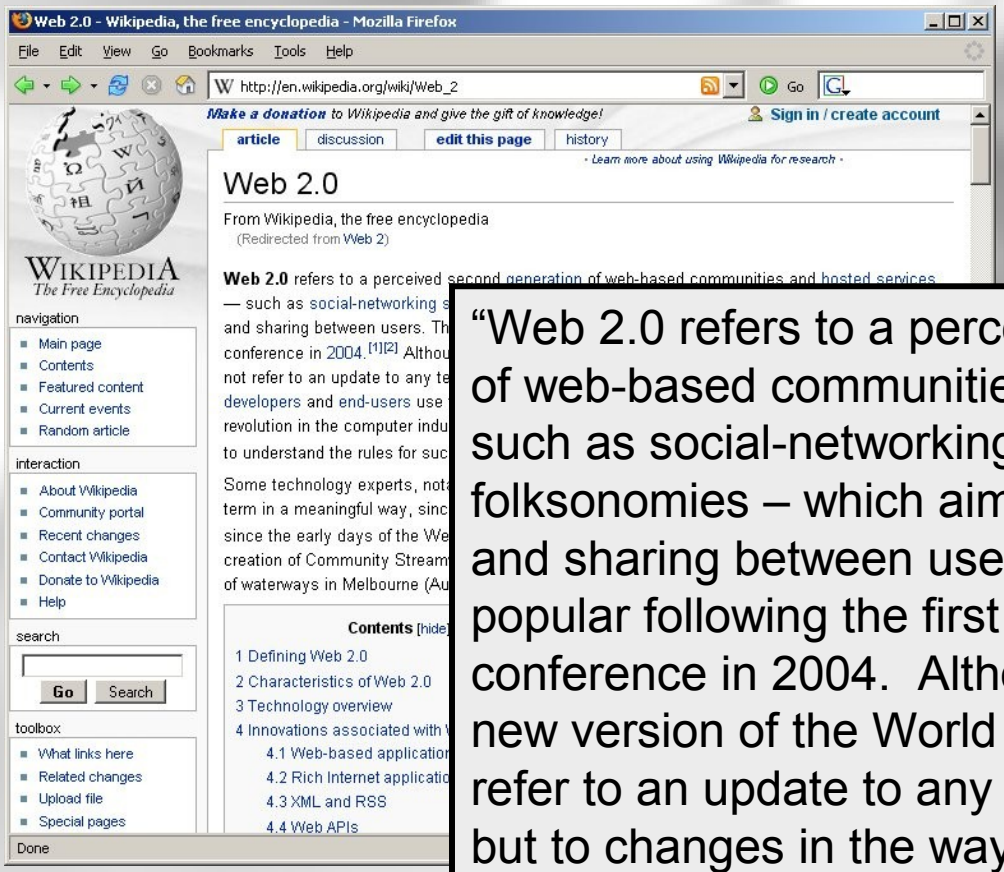
Web 2.0



"Web 2.0 refers to a perceived second generation of web-based communities and hosted services – such as social-networking sites, wikis and folksonomies – which aim to facilitate collaboration and sharing between users. The term became popular following the first O'Reilly Media Web 2.0 conference in 2004. Although the term suggests a new version of the World Wide Web, it does not refer to an update to any technical specifications, but to changes in the ways software developers and end-users use the web."

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Web 2.0

Participation Platform

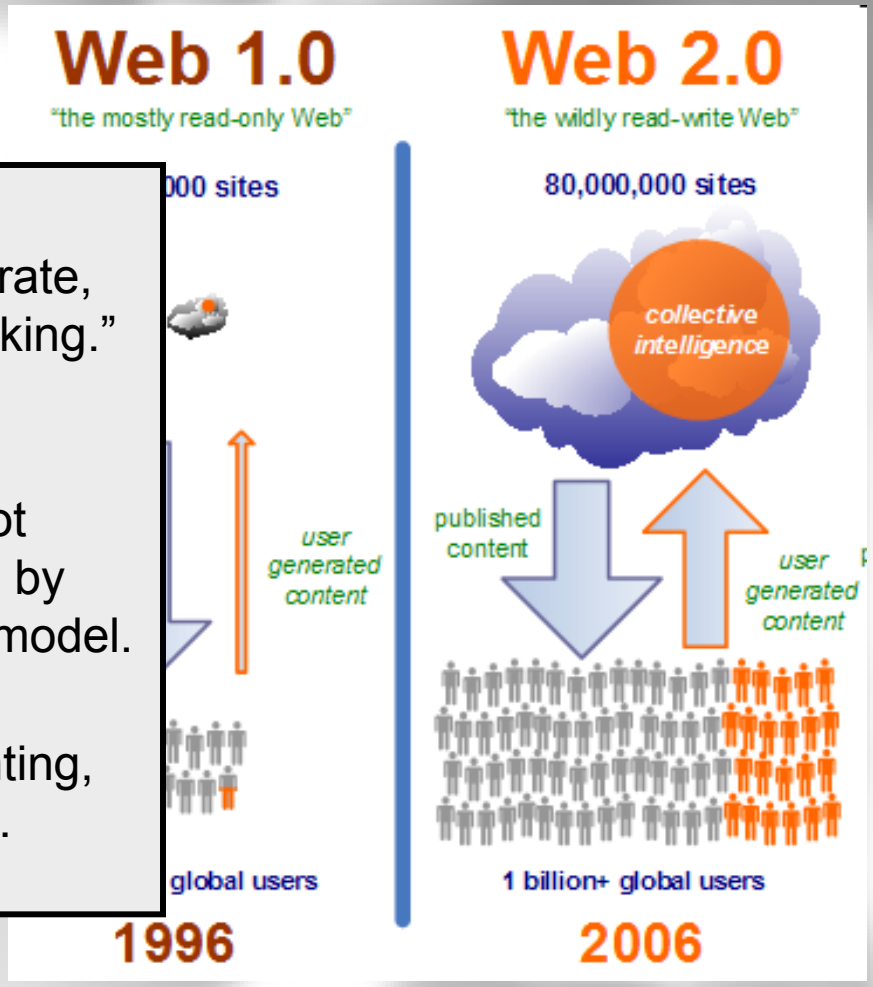
Provide a platform for users to collaborate, share, and contribute. "Community is king." Web of People.

Prosumer

User generated content. Content is not produced by professionals but created by users for users. Amateur-to-amateur model.

Read/Write Interaction

Rewriting/editing information, commenting, and tagging. Collaborative intelligence.



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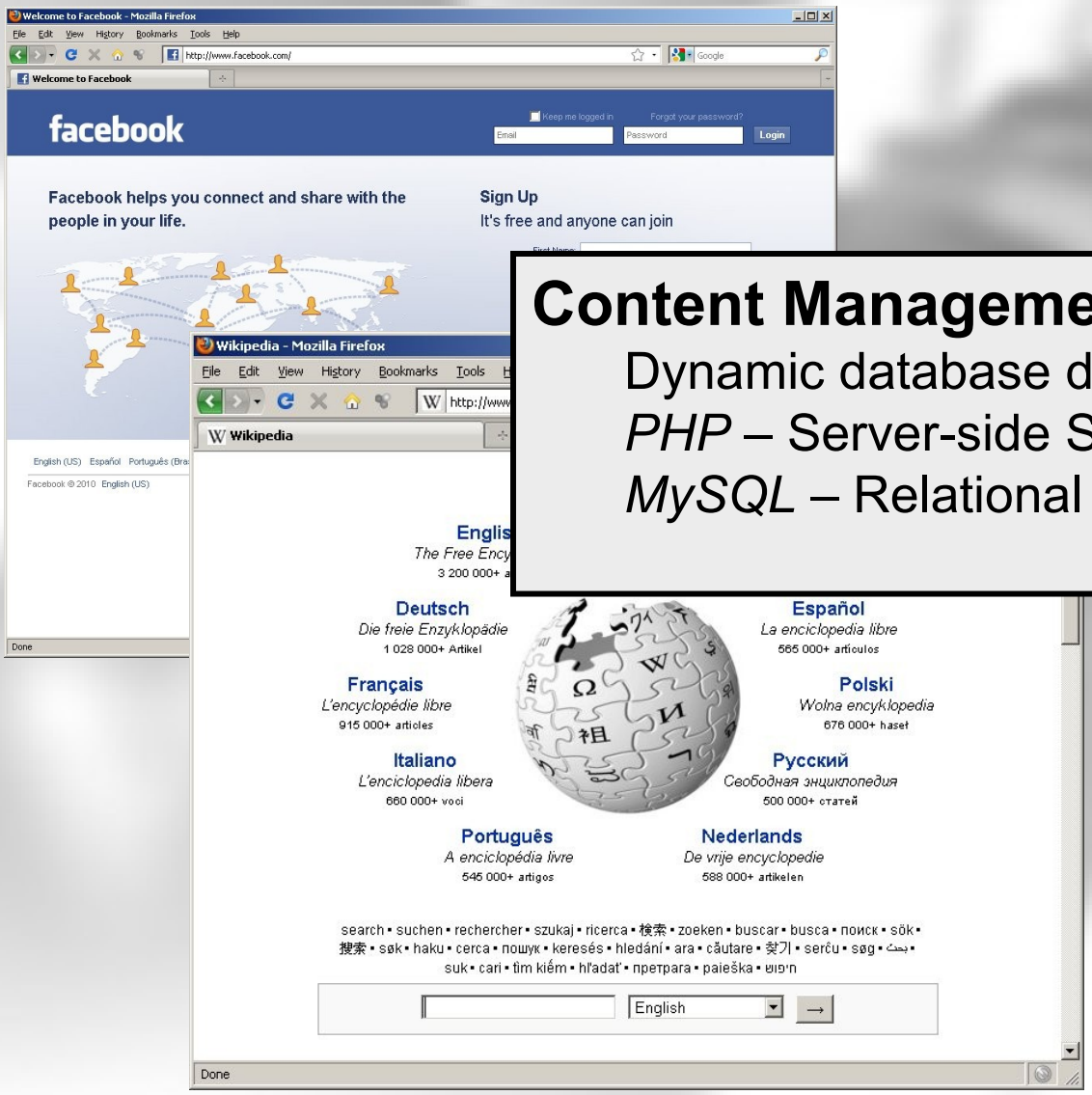
Web 2.0



Content Management System (CMS)

- Dynamic database driven content
- *PHP* – Server-side Scripting Language
- *MySQL* – Relational Database

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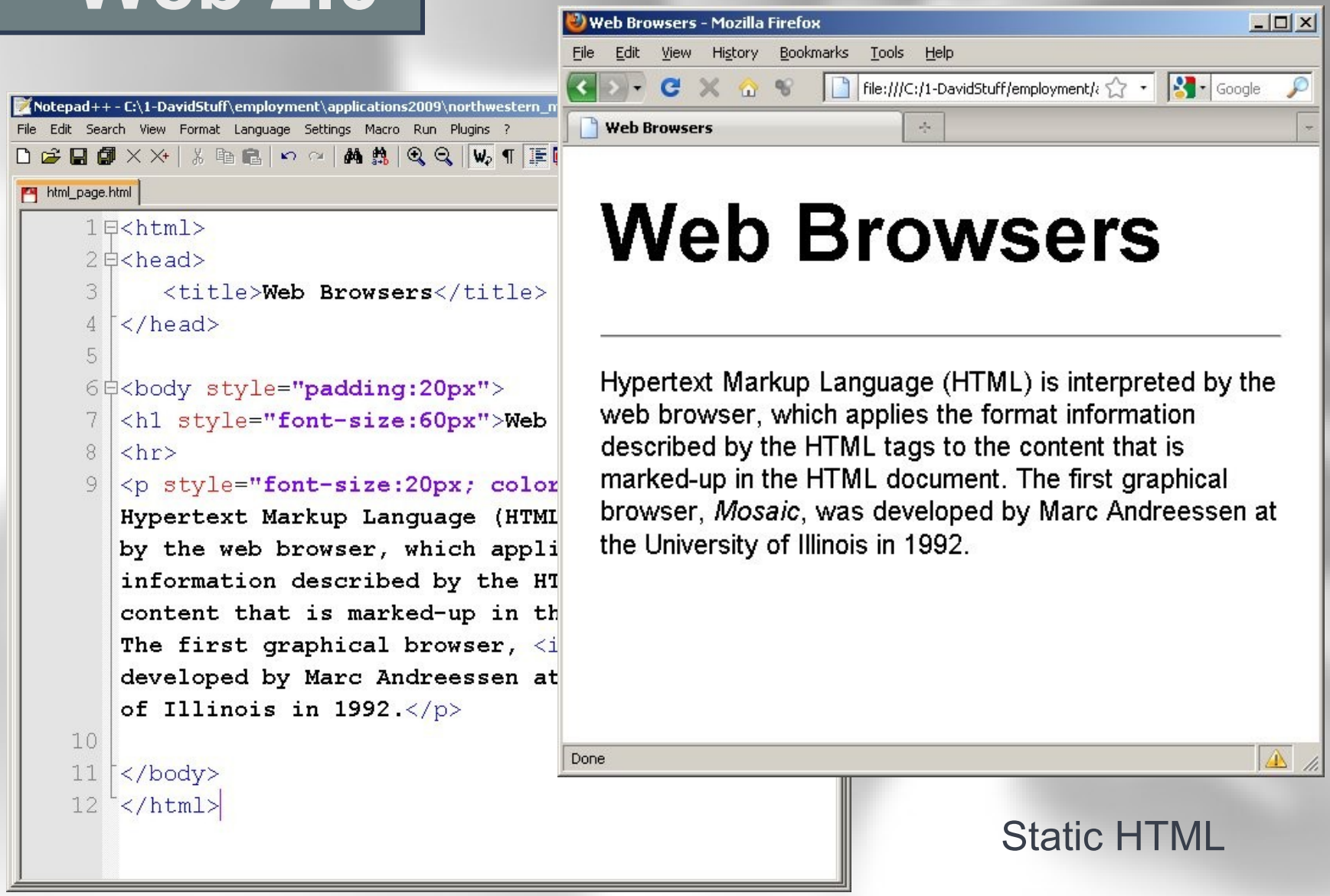
Web 2.0



Static HTML

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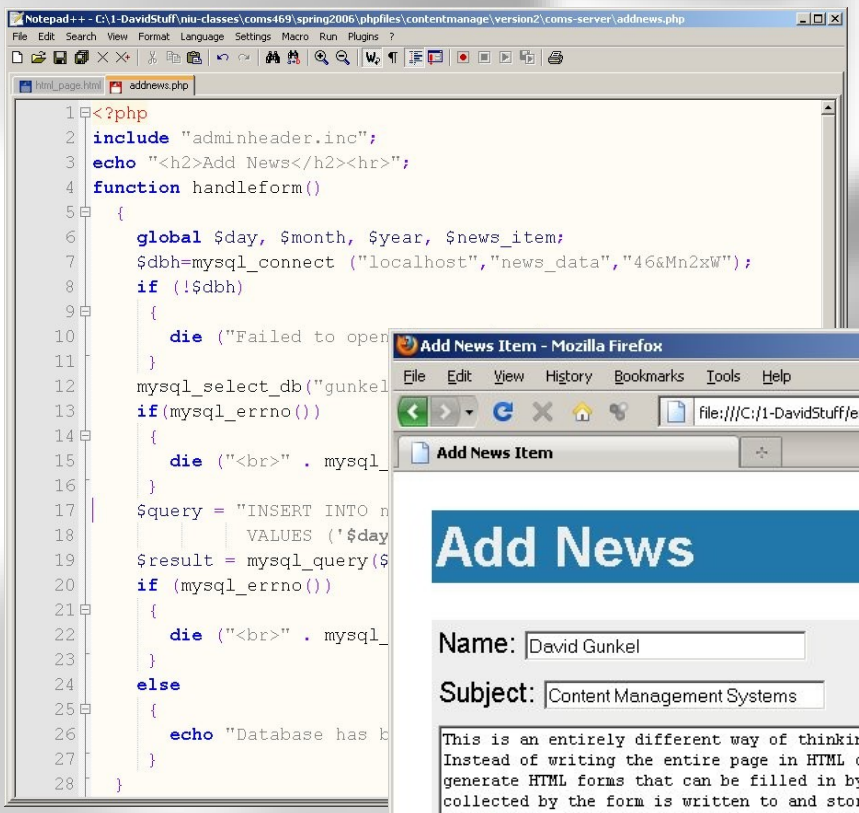
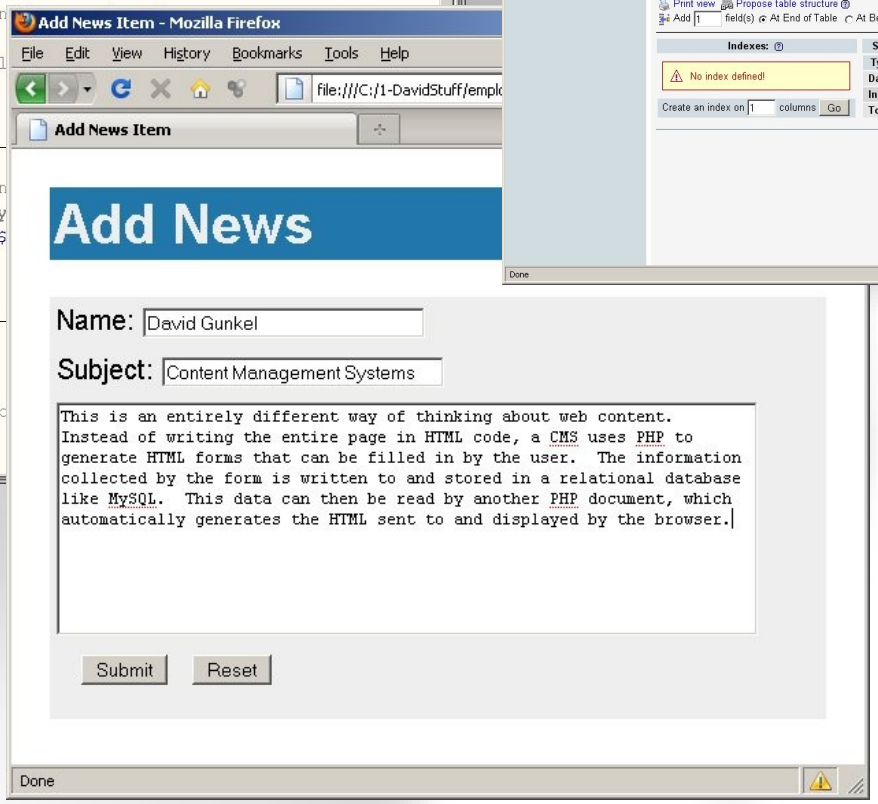
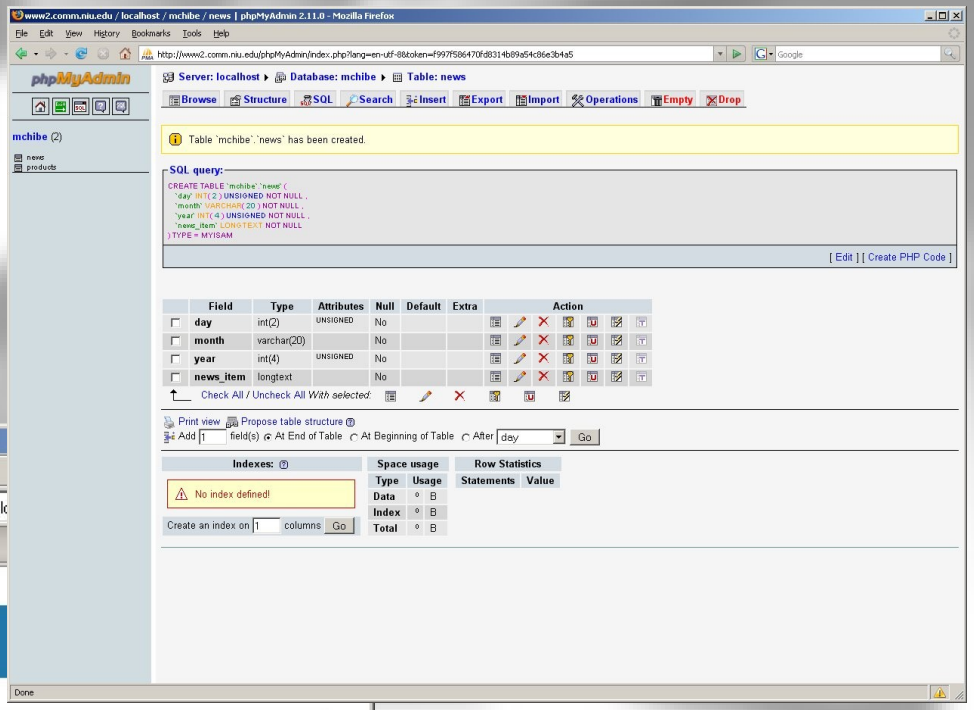
Web 2.0

Teaching







Dynamic database driven content

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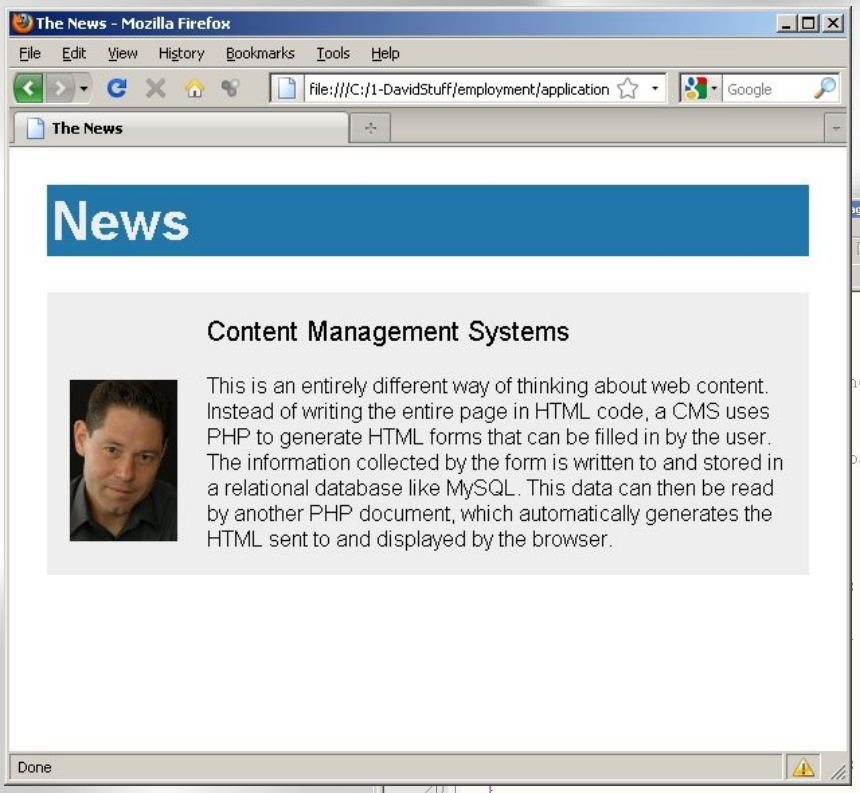
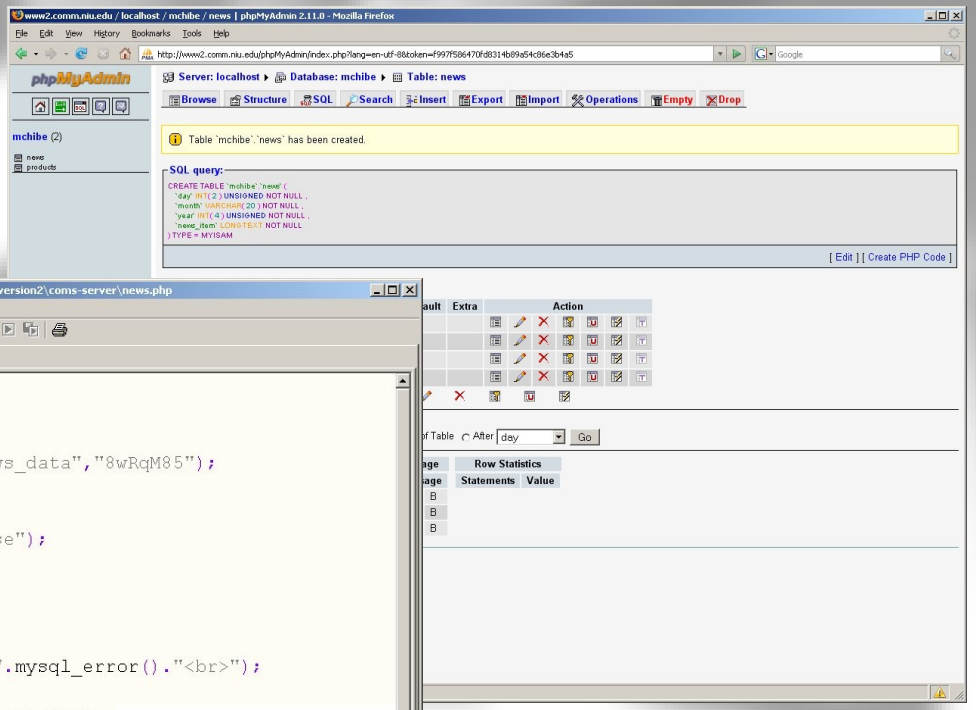
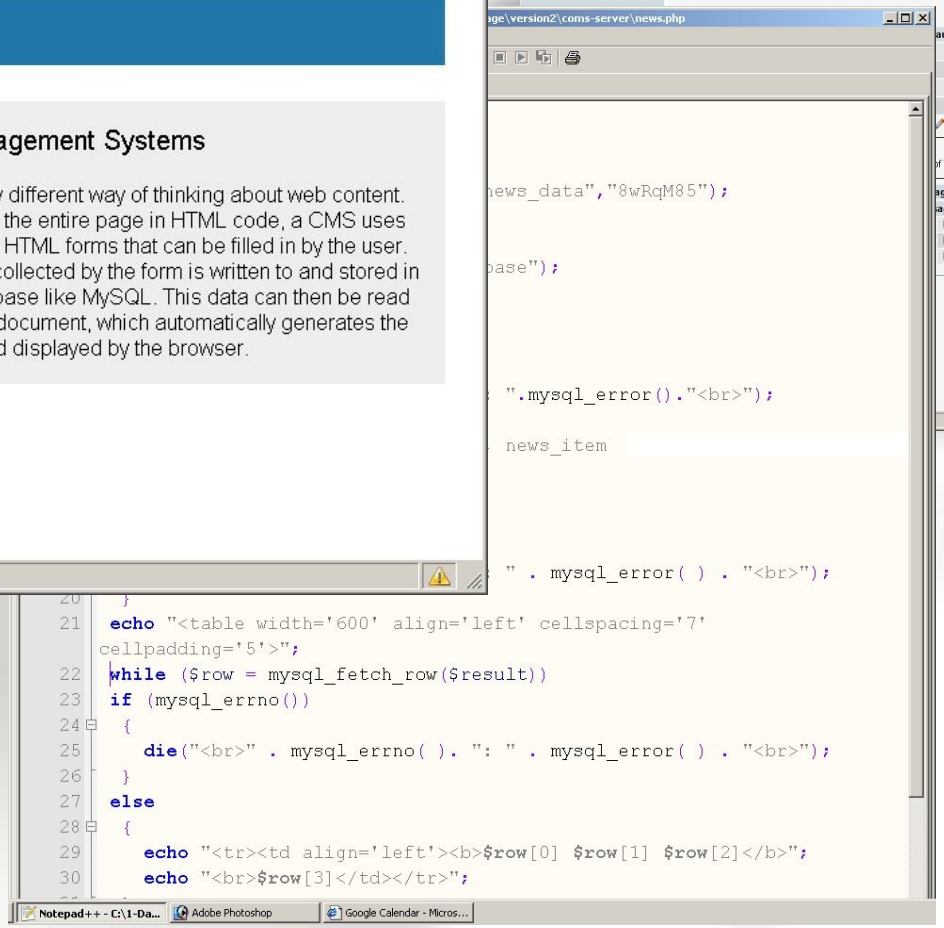
Web 2.0

Teaching







Dynamic database driven content

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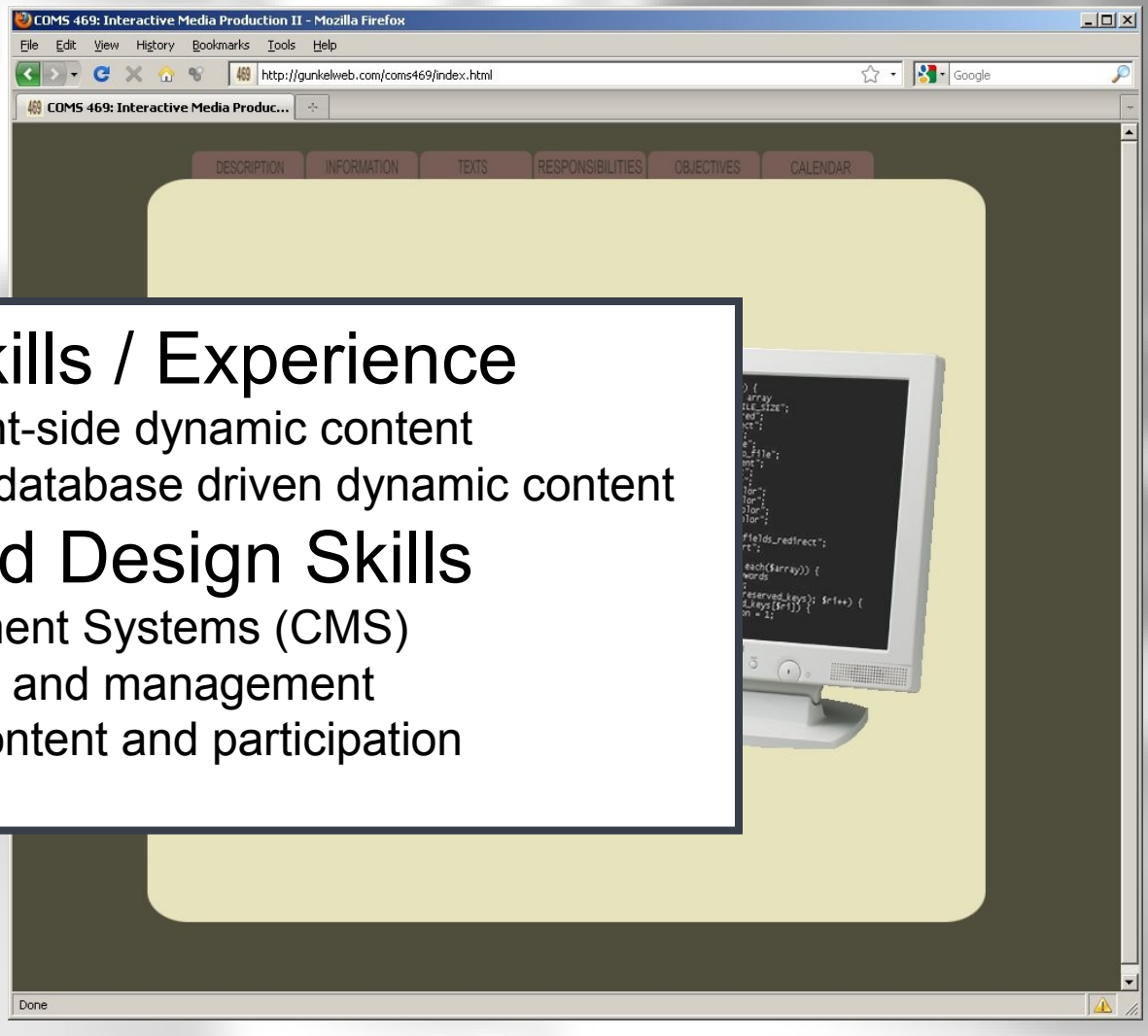
Web 2.0



Technology Skills / Experience

- Javascript for client-side dynamic content
- PHP / MySQL for database driven dynamic content

Conceptual and Design Skills

- Content Management Systems (CMS)
- Database creation and management
- User generated content and participation

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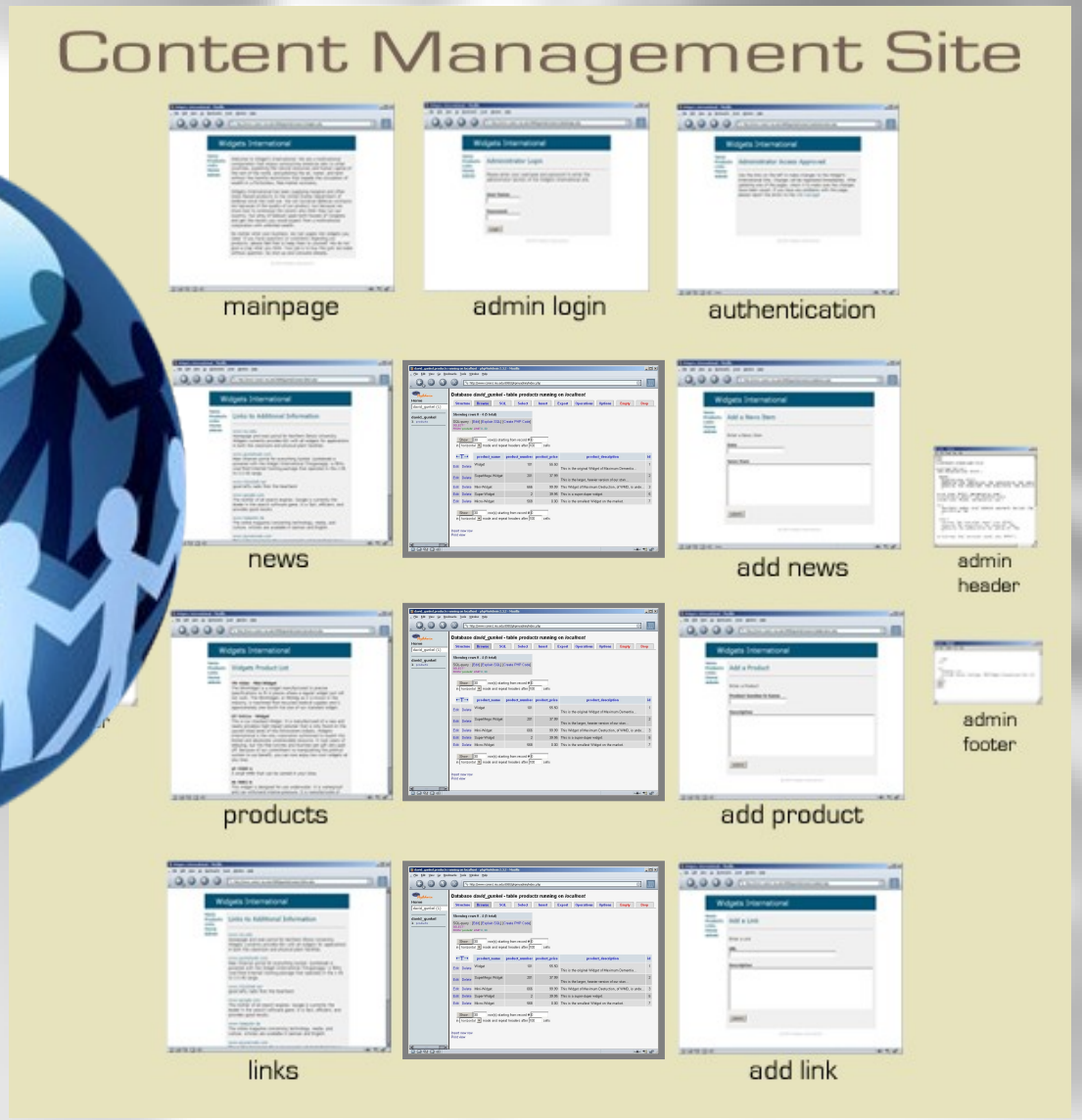
Web 2.0

Teaching



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Web 2.0

Reverse Engineer Facebook

Facebook Stats

CMS programmed in PHP/MySQL; one of the most-trafficed PHP sites in the World

More than 400 million active users; Estimated to reach 5% of global population by the end of 2010.

Projected 2010 revenue = $710 million

Average user spends more than 50 minutes a day on Facebook

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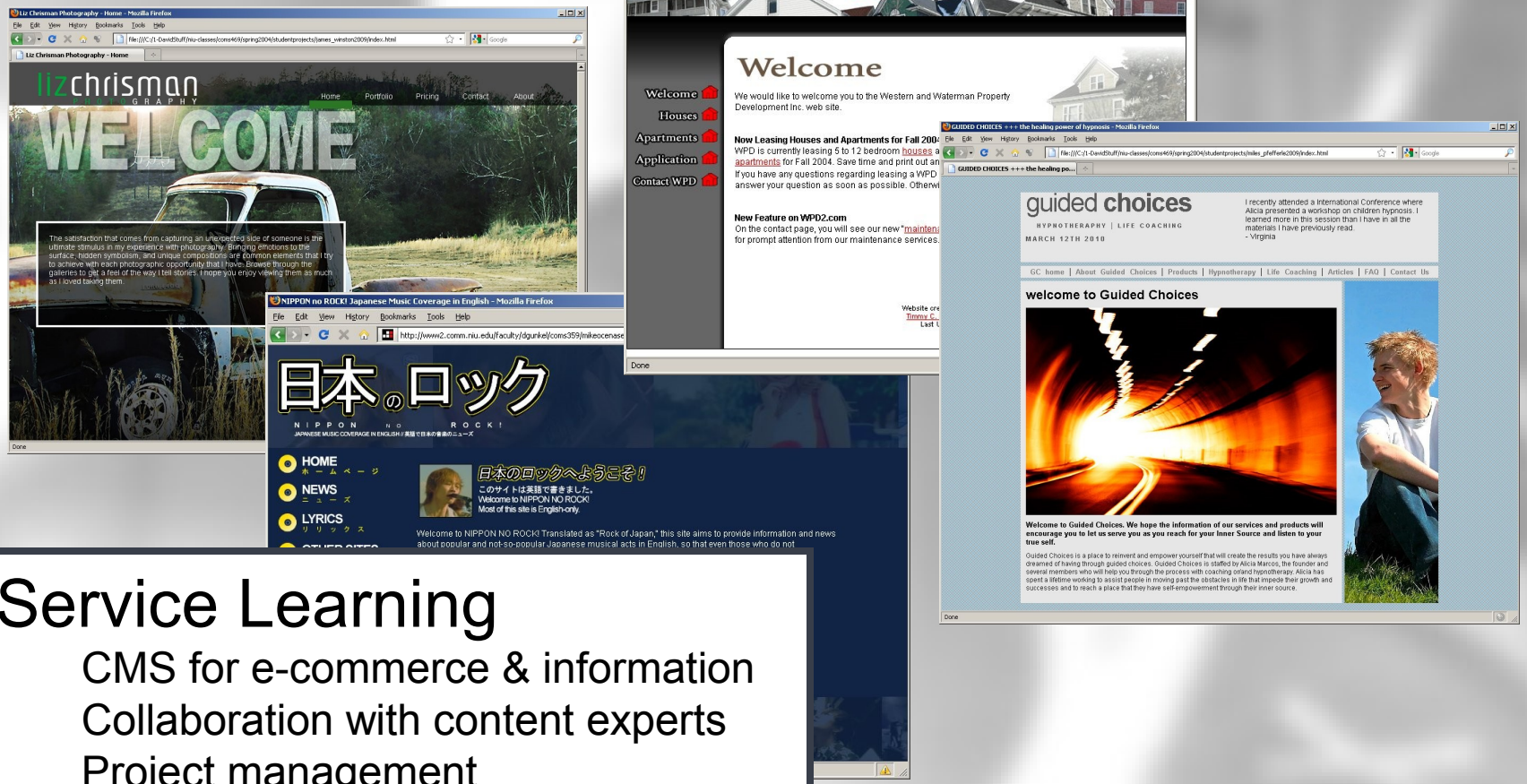
Web 2.0

Teaching



Service Learning

- CMS for e-commerce & information
- Collaboration with content experts
- Project management
- “Real Life” experience

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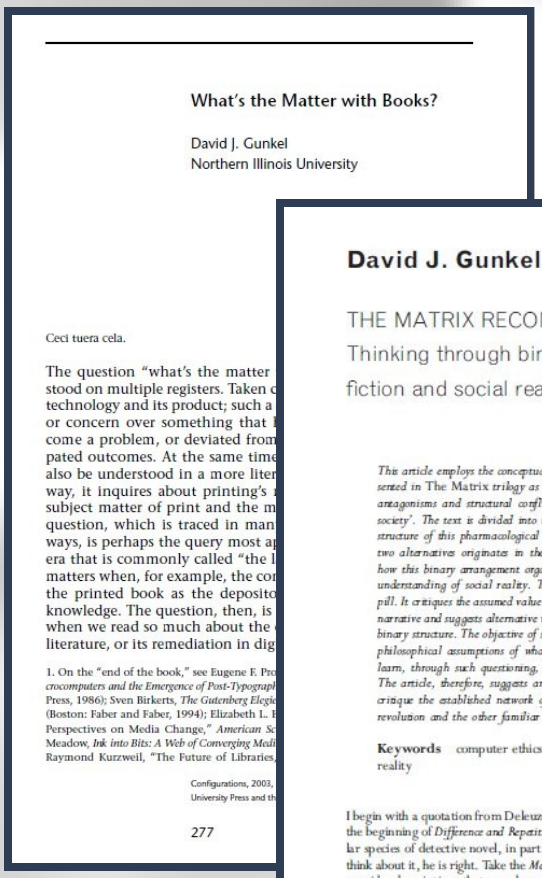
Web 2.0

Research



What's the Matter with Books?

David J. Gunkel
Northern Illinois University

Ceci tuera cela.

The question "what's the matter
stood on multiple registers. Taken
technology and its product; such a
or concern over something that
come a problem, or deviated from
pated outcomes. At the same time
also be understood in a more liter
way, it inquires about printing's
subject matter of print and the m
question, which is traced in man
ways, is perhaps the query most a
era that is commonly called "the
matters when, for example, the co
the printed book as the deposito
knowledge. The question, then, is
when we read so much about the
literature, or its remediation in dig

1. On the "end of the book," see Eugene F. Pro
crocomputers and the Emergence of Post-Typograp
Press, 1986); Sven Birkerts, *The Gutenberg Elegi*
(Boston: Faber and Faber, 1994); Elizabeth L.
Perspectives on Media Change," *American Sc*
Meadow, *Ink into Bits: A Web of Converging Medi*
Raymond Kurzweil, "The Future of Libraries

Configurations, 2003,
University Press and th

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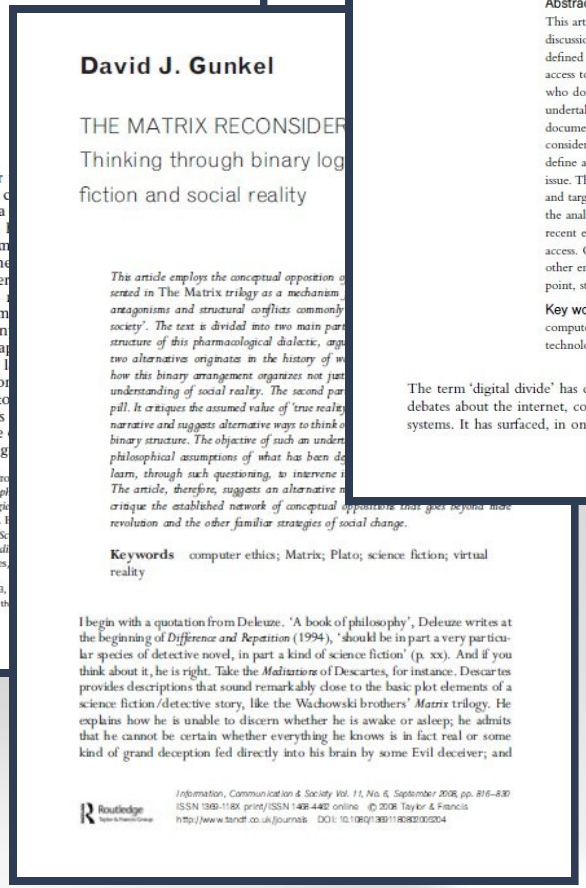

David J. Gunkel

THE MATRIX RECONSIDER
Thinking through binary log
fiction and social reality

This article employs the conceptual opposition
sented in The Matrix *trilogy as a mechanism*
antagonisms and structural conflicts commonly
society'. The text is divided into two main part
structure of this pharmacological dialectic, argu
two alternatives originates in the history of w
how this binary arrangement organizes not just
understanding of social reality. The second par
pill. It critiques the assumed value of 'true reality
narrative and suggests alternative ways to think o
binary structure. The objective of such an underta
philosophical assumptions of what has been de
learn, through such questioning, to intervene i
The article, therefore, suggests an alternative m
critique the established network of conceptual oppositions that goes beyond mere
revolution and the other familiar strategies of social change.

Keywords computer ethics; Matrix; Plato; science fiction; virtual reality

I begin with a quotation from Deleuze. 'A book of philosophy', Deleuze writes at the beginning of *Difference and Repetition* (1994), 'should be in part a very particular species of detective novel, in part a kind of science fiction' (p. xx). And if you think about it, he is right. Take the *Meditations* of Descartes, for instance. Descartes provides descriptions that sound remarkably close to the basic plot elements of a science fiction/detective story, like the Wachowski brothers' *Matrix* trilogy. He explains how he is unable to discern whether he is awake or asleep; he admits that he cannot be certain whether everything he knows is in fact real or some kind of grand deception fed directly into his brain by some Evil deceiver; and

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new media & society

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Vol5(4):499–522 [1461–4448(200312)5:4;499–522;038271]

ARTICLE

Second thoughts: toward a critique of the digital divide

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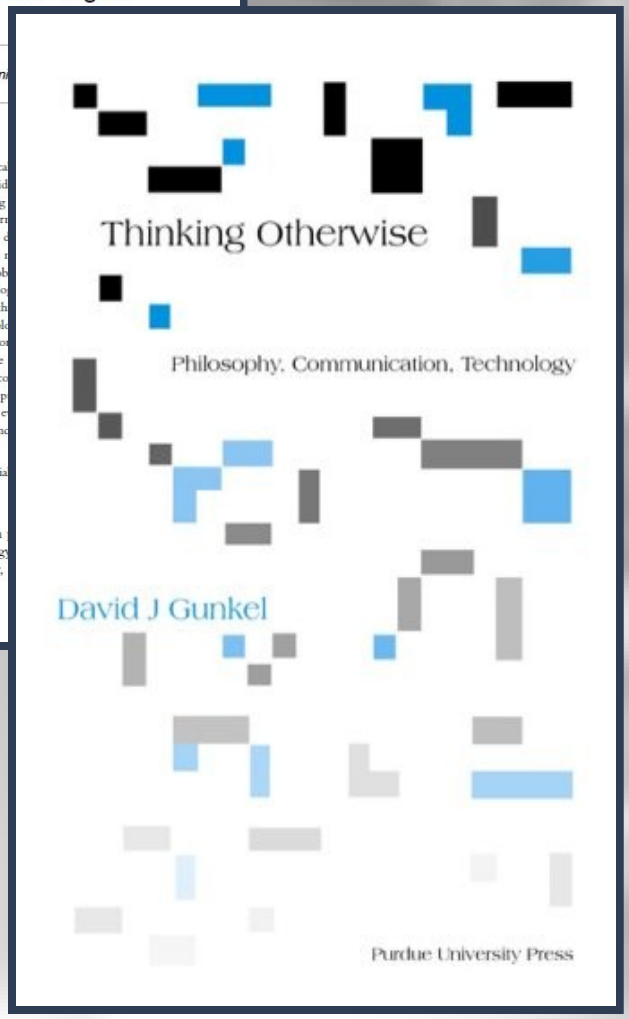
Department of Communi
University

Abstract
This article introduces critica
discussion of the digital divid
defined as the gap separating
access to new forms of inform
who do not. The analysis is c
undertakings addressing this
document the empirical prob
considers the terminology, lo
define and direct work on th
issue. The investigation emplo
and targets extant texts, repo
the analysis does not dispute
recent empirical studies of co
access. On the contrary, its p
other endeavors by making e
point, stakes, and consequenc

Key words
computers • computers–socia
technology • theory

The term 'digital divide' has come to occupy a
debates about the internet, computer technology
systems. It has surfaced, in one way or another,



Thinking Otherwise

Philosophy, Communication, Technology

David J Gunkel

Purdue University Press

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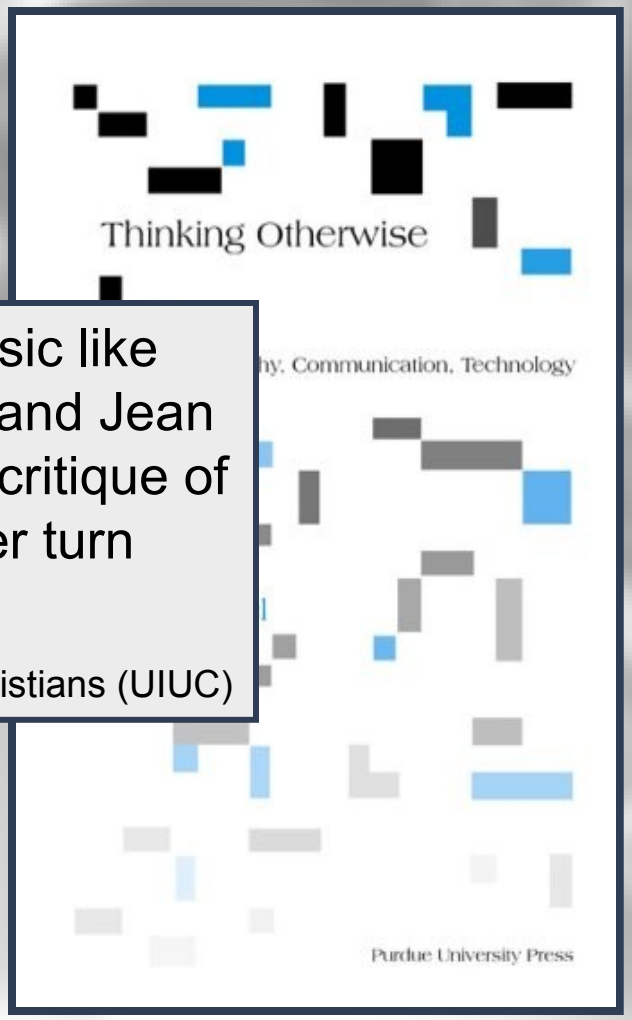
Web 2.0

Thinking Otherwise will become a classic like Jacques Ellul's *Technological Society* and Jean Baudrillard's *Simulations*… [Gunkel's] critique of digital reason and his machine-as-other turn communication ethics on its head.

Clifford Christians (UIUC)



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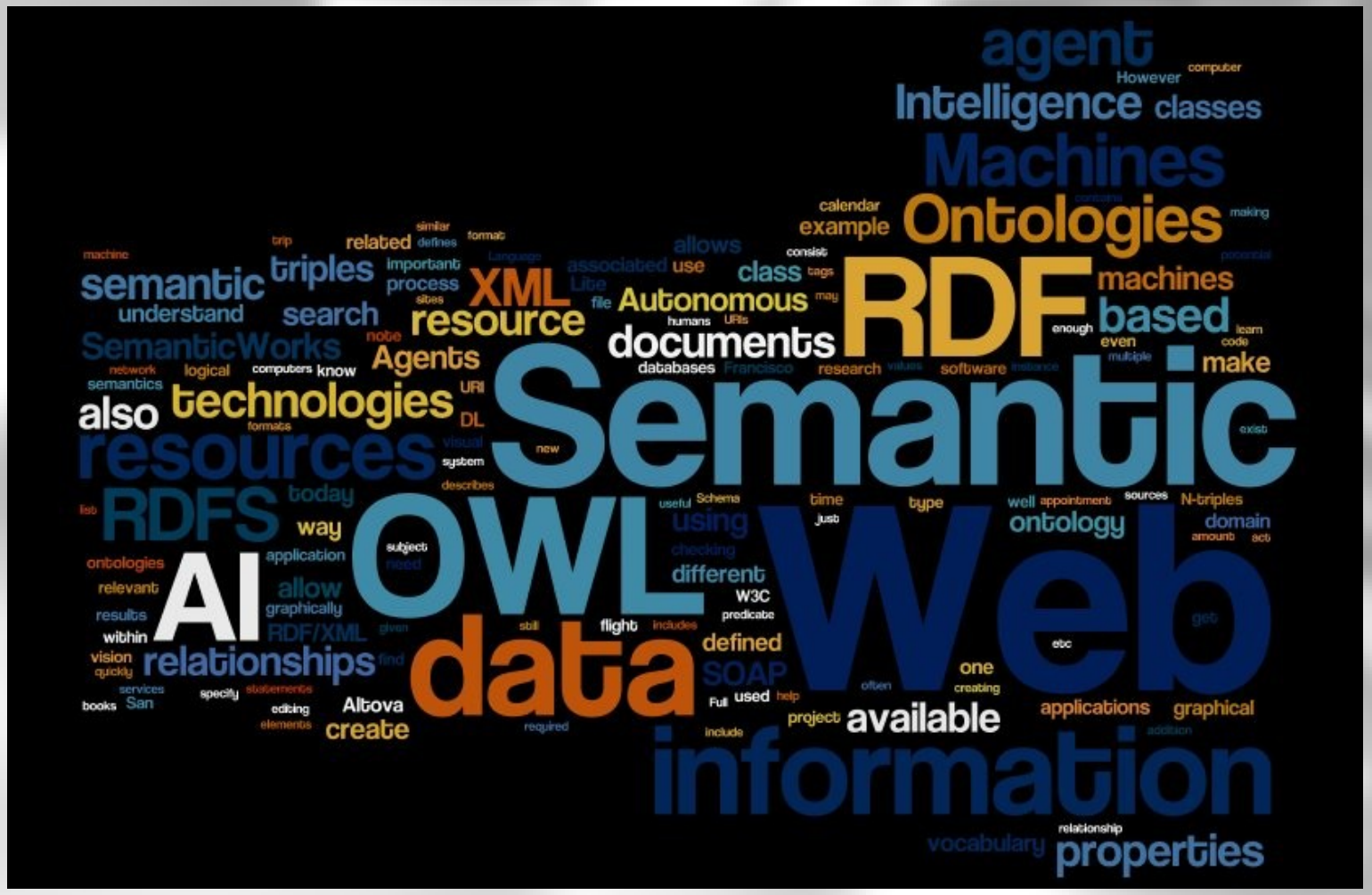

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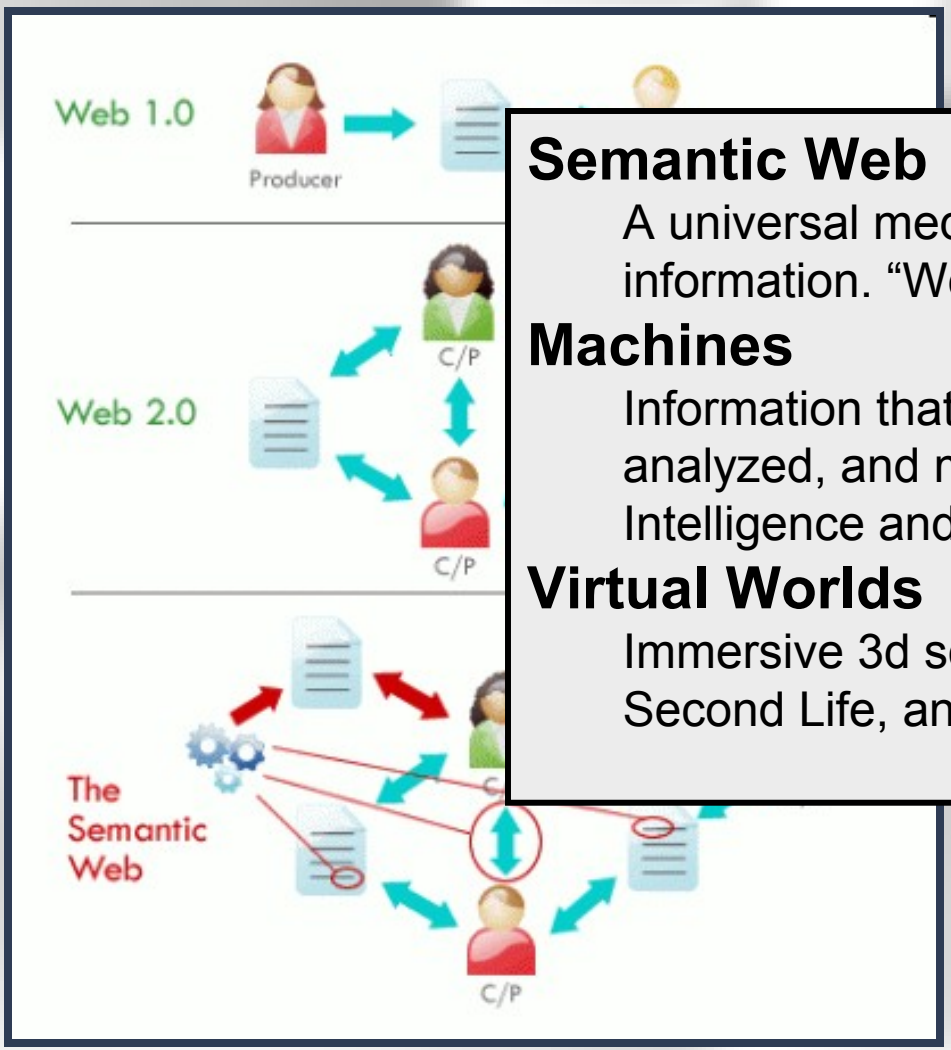

Semantic Web

A universal medium for the exchange of data and information. “Web of Data.”

Machines

Information that can be read, understood, analyzed, and manipulated by machines. Machine Intelligence and Autonomous Agents.

Virtual Worlds

Immersive 3d social environments. MMORPGs, Second Life, and avatar-based 3d web.

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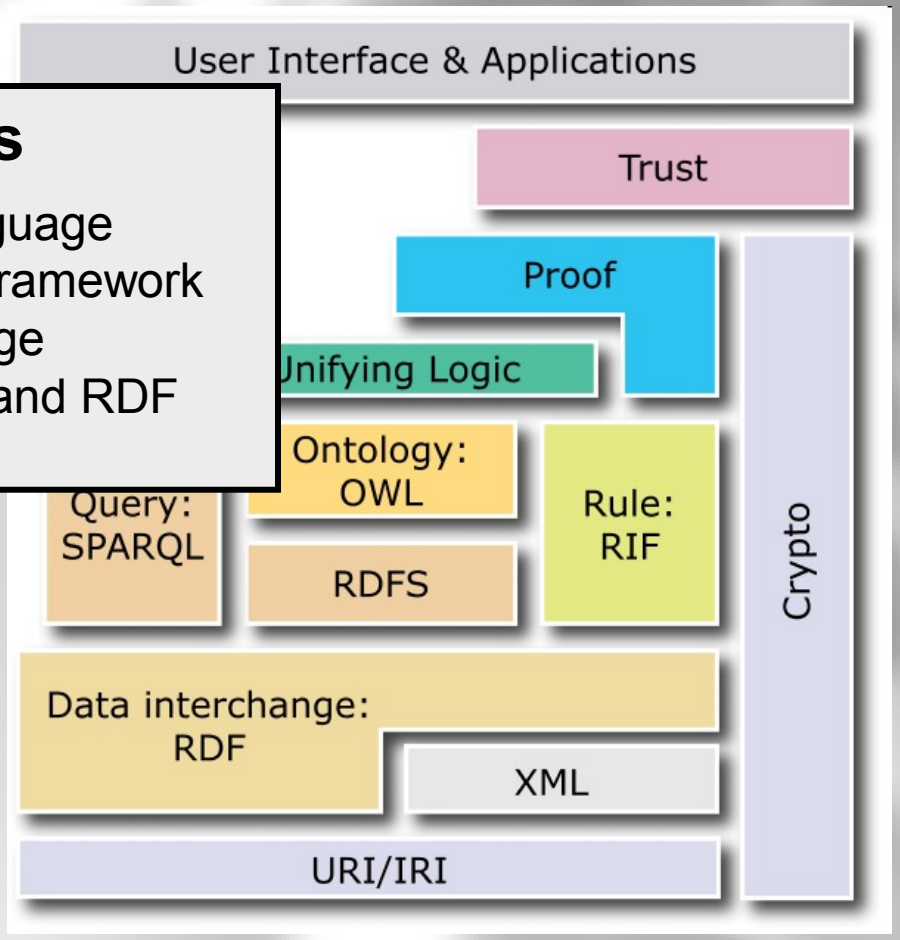
Web 3.0+

Semantic Web Standards

XML - Extensible Markup Language
RDF - Resource Description Framework
OWL – Web Ontology Language
SPARQL - SPARQL Protocol and RDF Query Language



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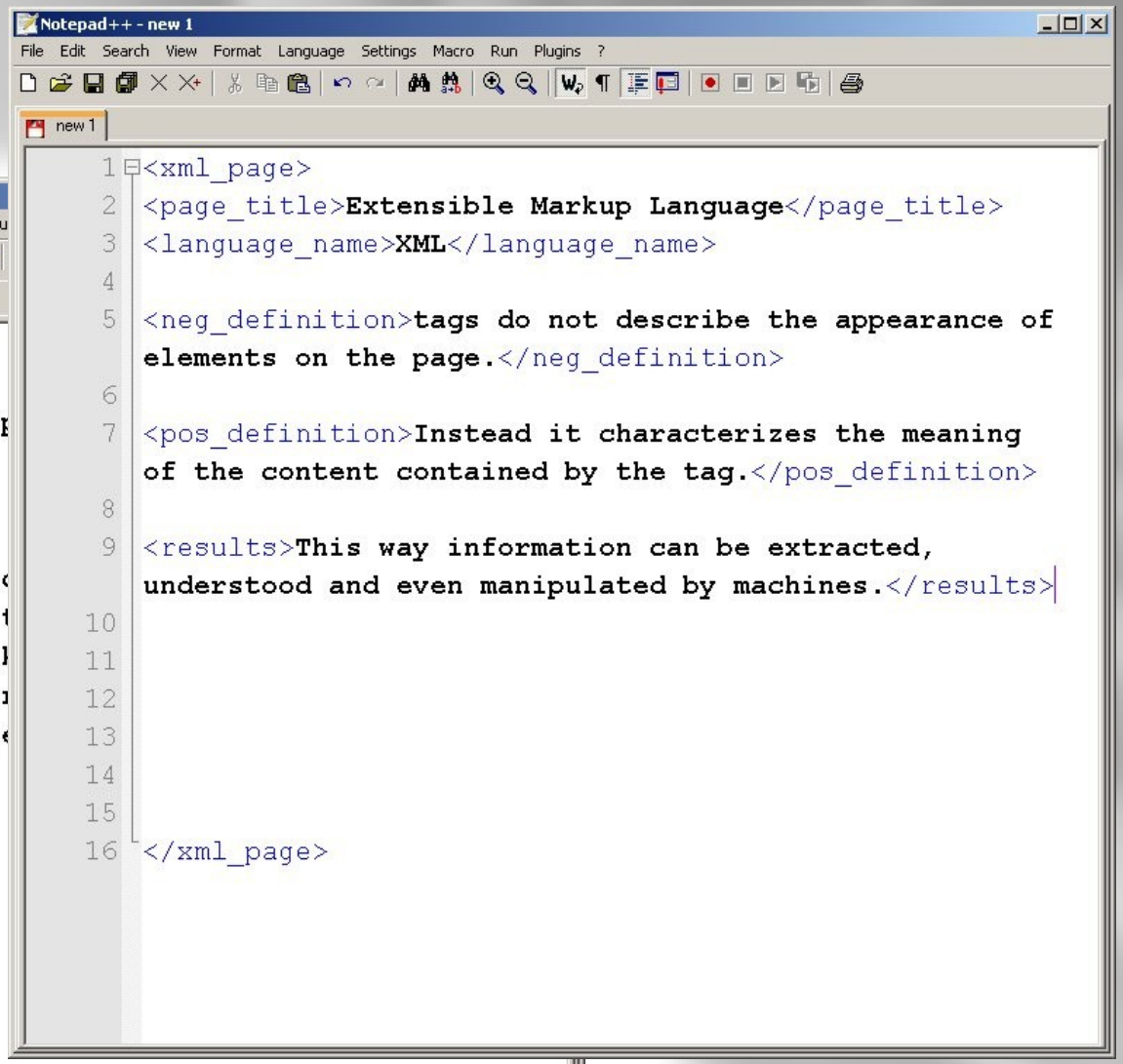

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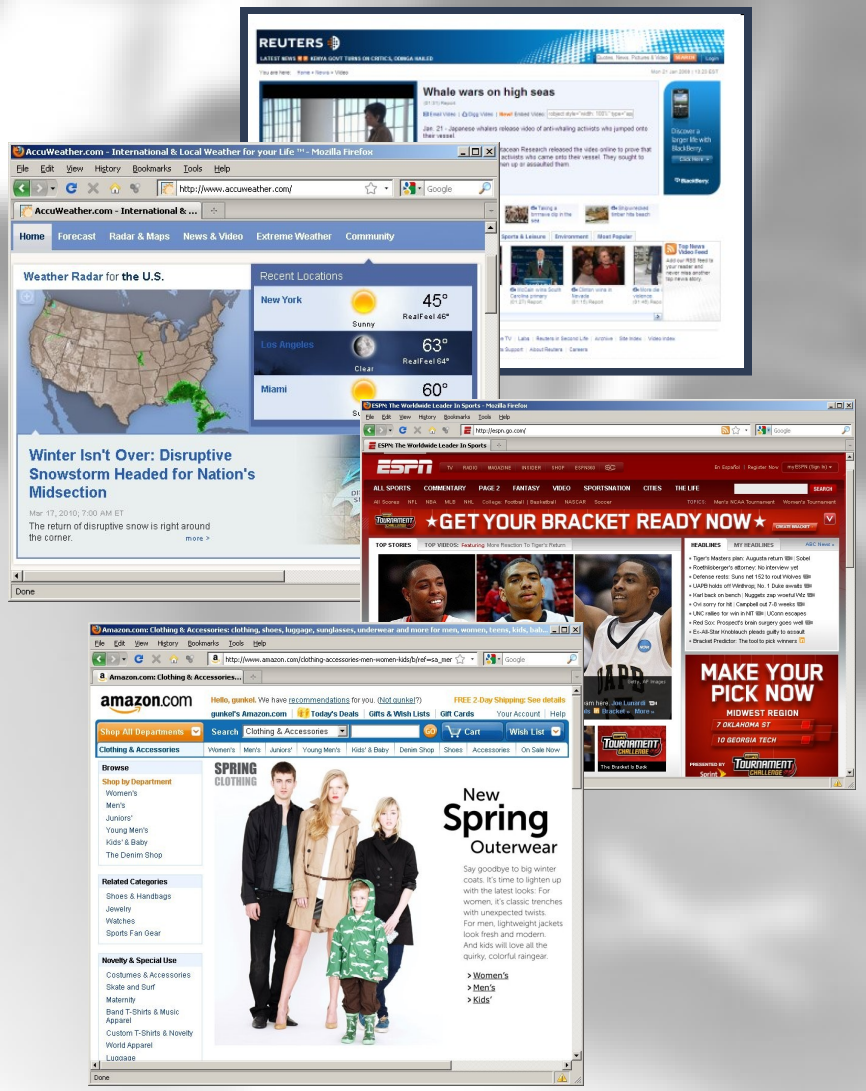

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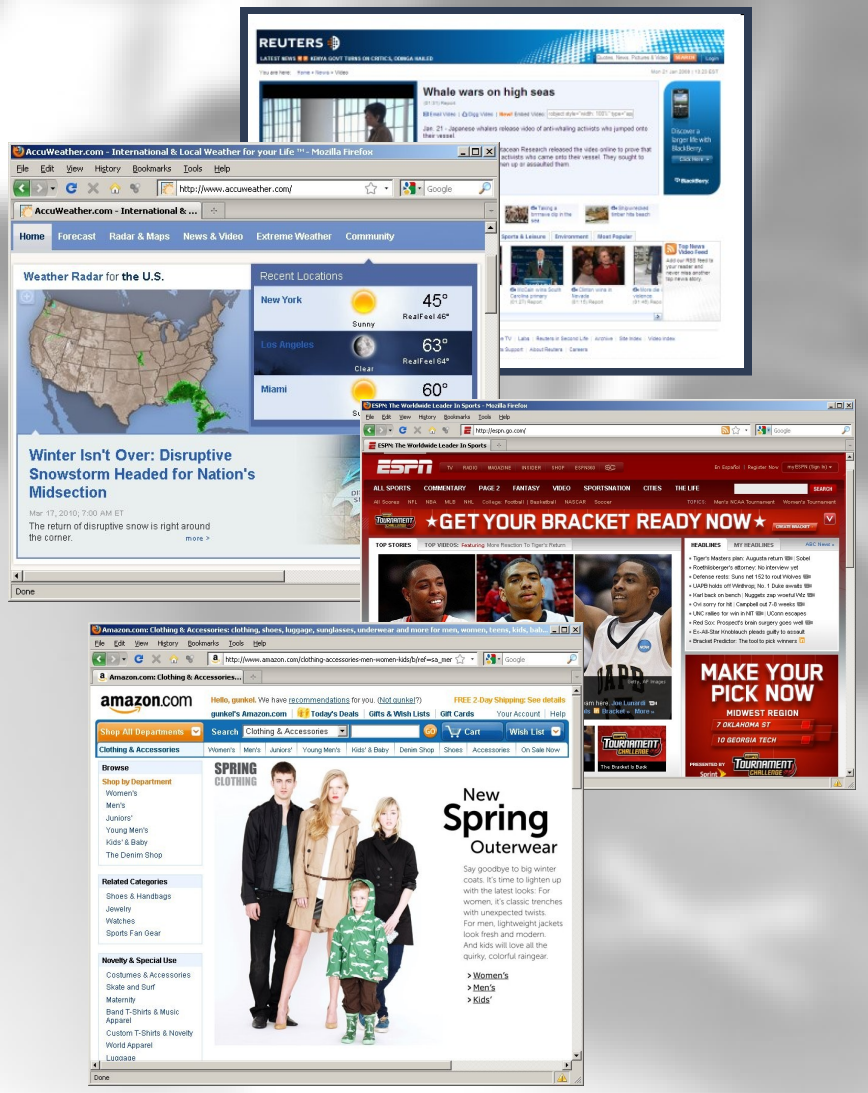
autonomous user agent



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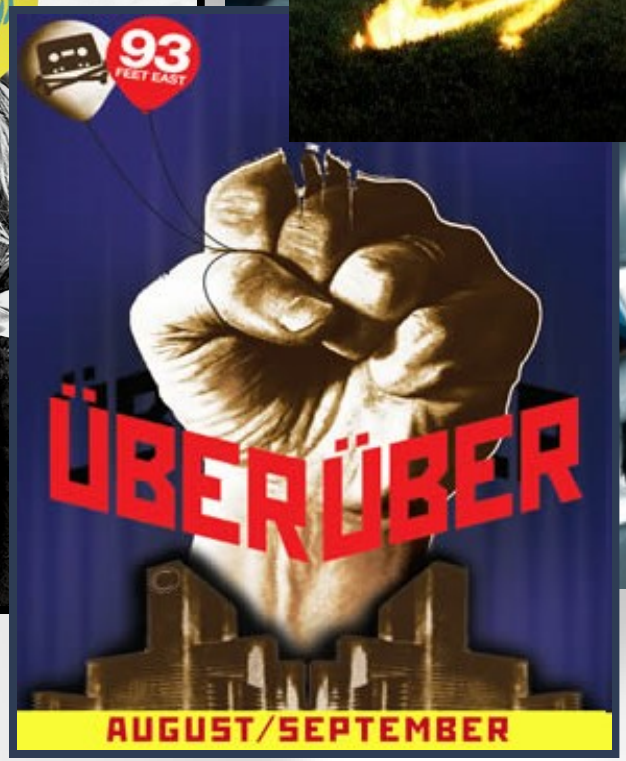

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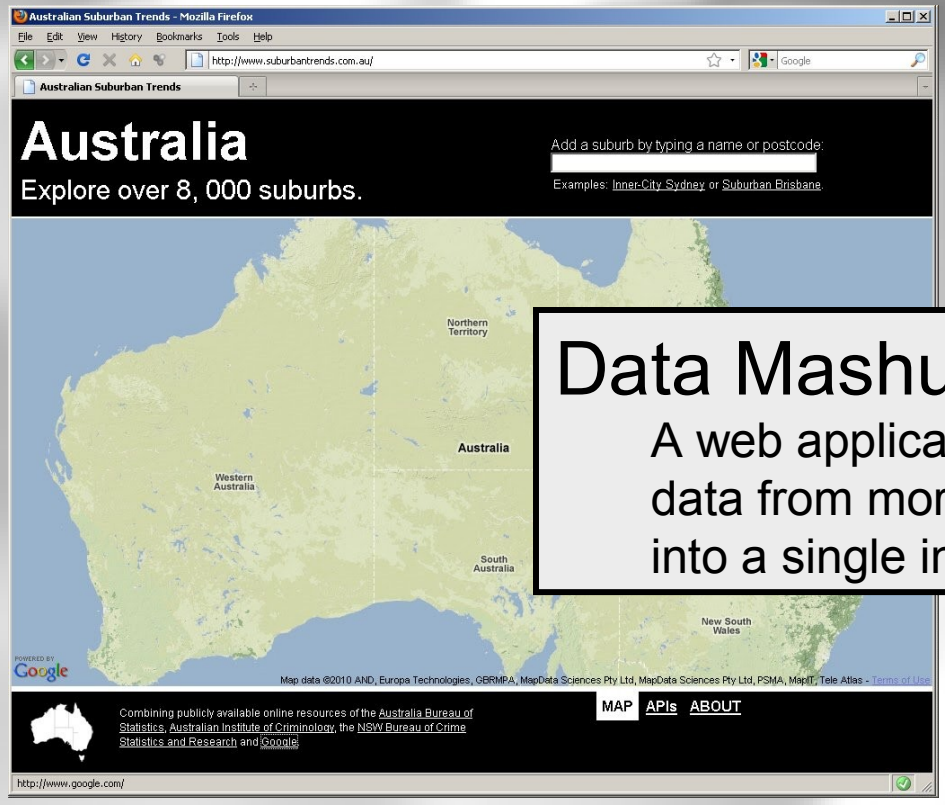

Data Mashups

A web application that combines data from more than one source into a single integrated tool.

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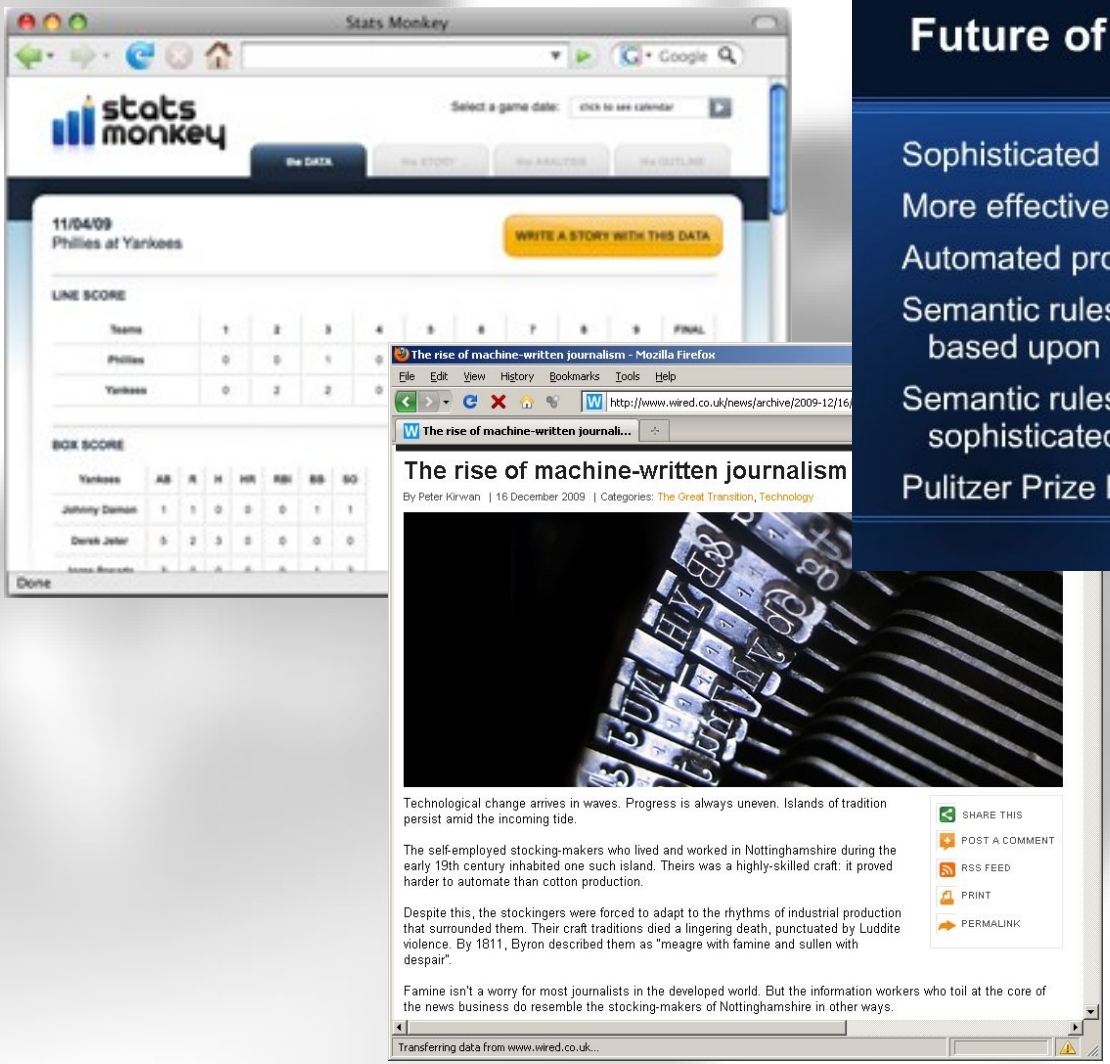

Future of Journalistic Semantics

- Sophisticated inferential analysis
- More effective user agents and avatars
- Automated production of intelligent abstracts
- Semantic rules can launch nuanced applications based upon meaning matching
- Semantic rules engines + inferential analysis = sophisticated composition engines
- Pulitzer Prize by an A.I. by 2030?

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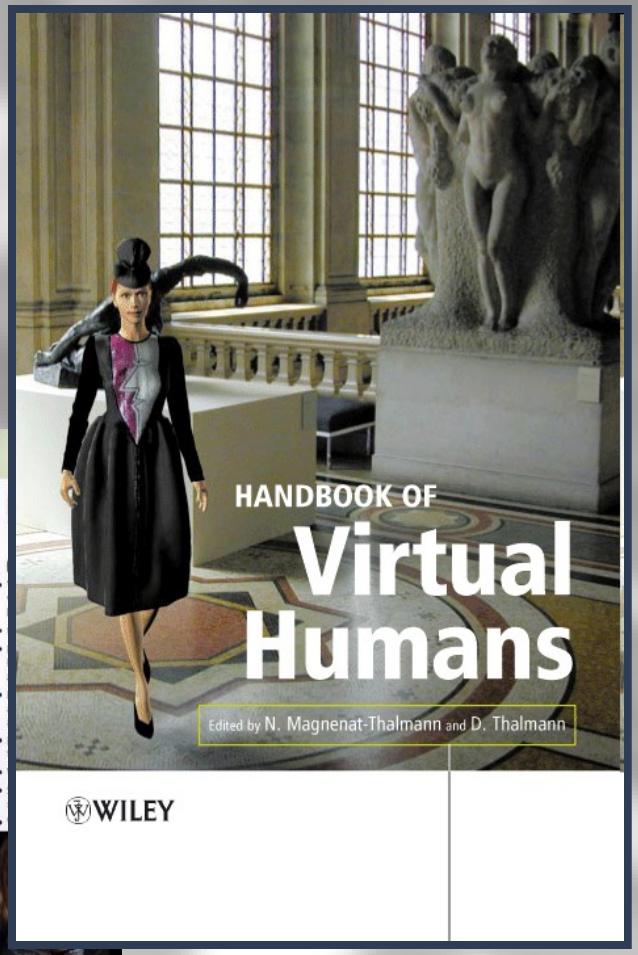

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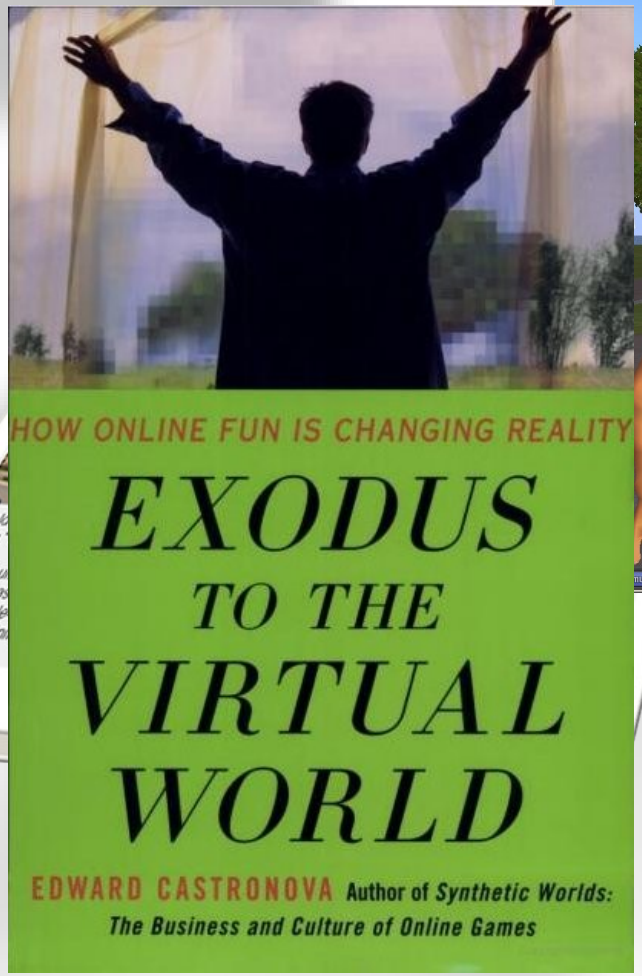

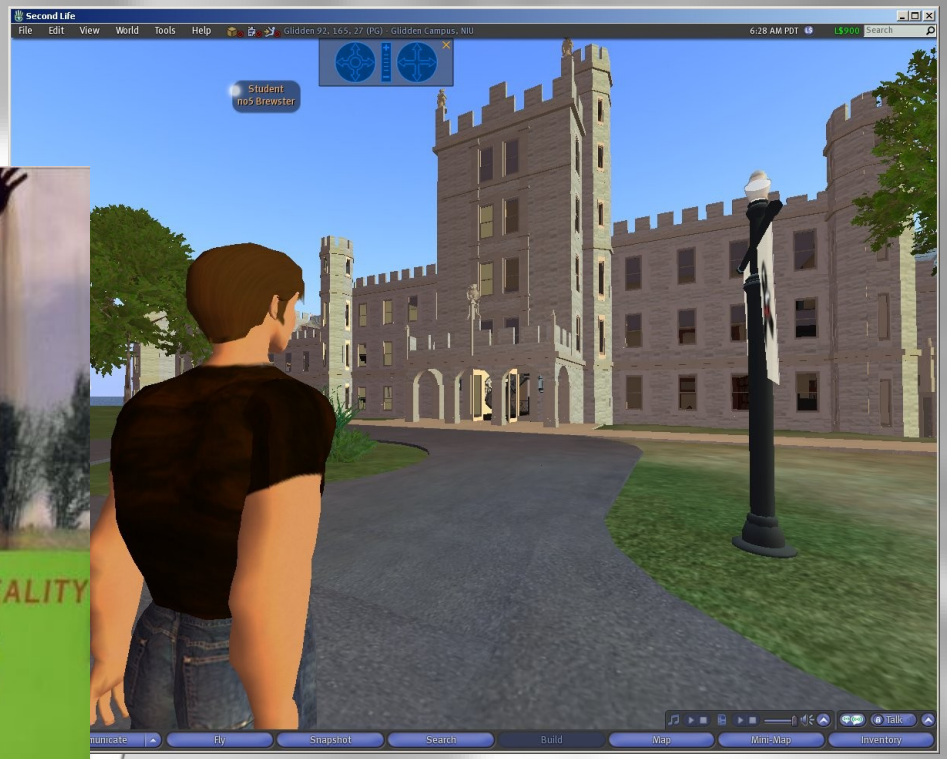

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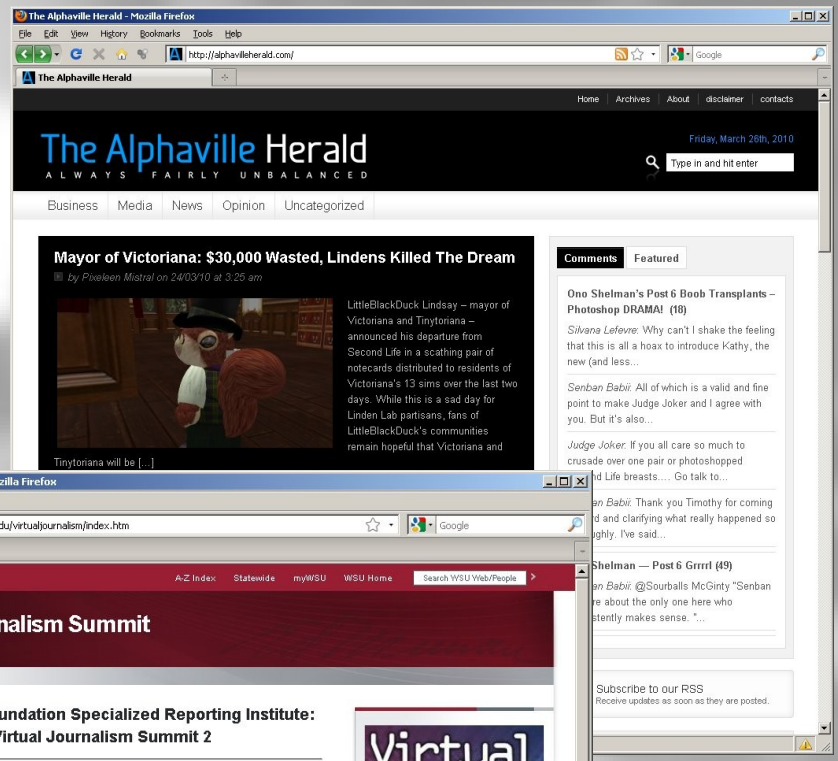
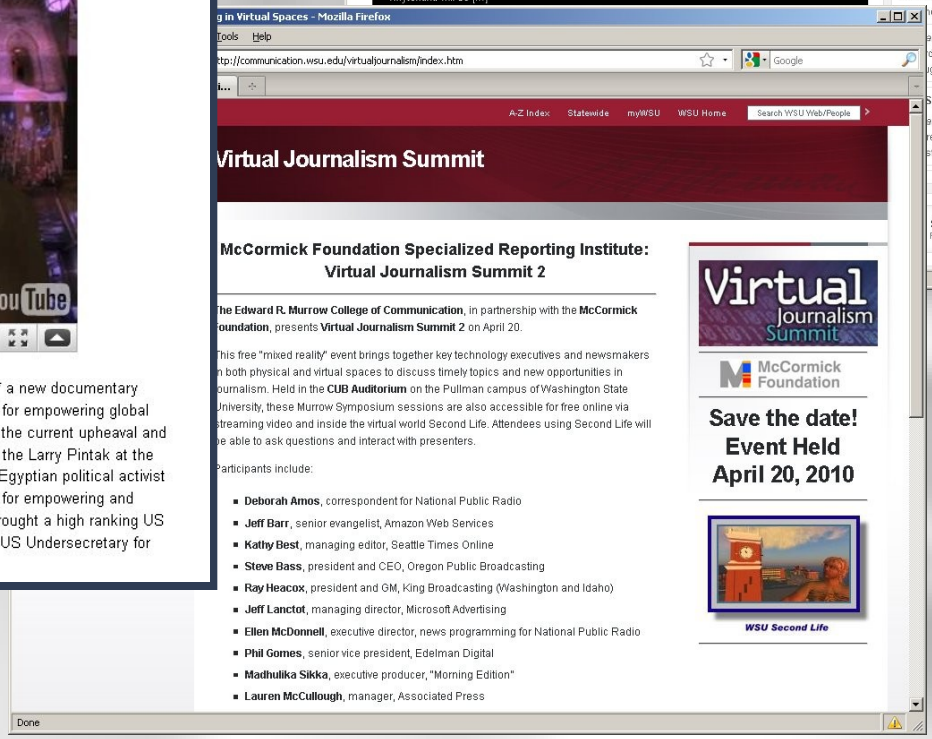
boingboing
A Directory Of Wonderful Things

Teaching journalism with virtual worlds

POSTED BY CORY DOCTOROW, APRIL 6, 2009 10:08 PM | PERMALINK

Joshua Fouts writes, "Rita J. King and I are premiering *today* a new documentary exploring the potential of immersive virtual journalism as a tool for empowering global journalism as the industry continues its transformation amidst the current upheaval and collapse. The documentary comes out of a project we did with the Larry Pintak at the American University in Cairo in which we brought a group of 8 Egyptian political activist bloggers into Second Life to explore the potential of the space for empowering and augmenting their work. We were fortunate that our first effort brought a high ranking US State Department official, James K. Glassman, who was then US Undersecretary for Public Diplomacy. Some interesting issues came up."





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Computer Literacy

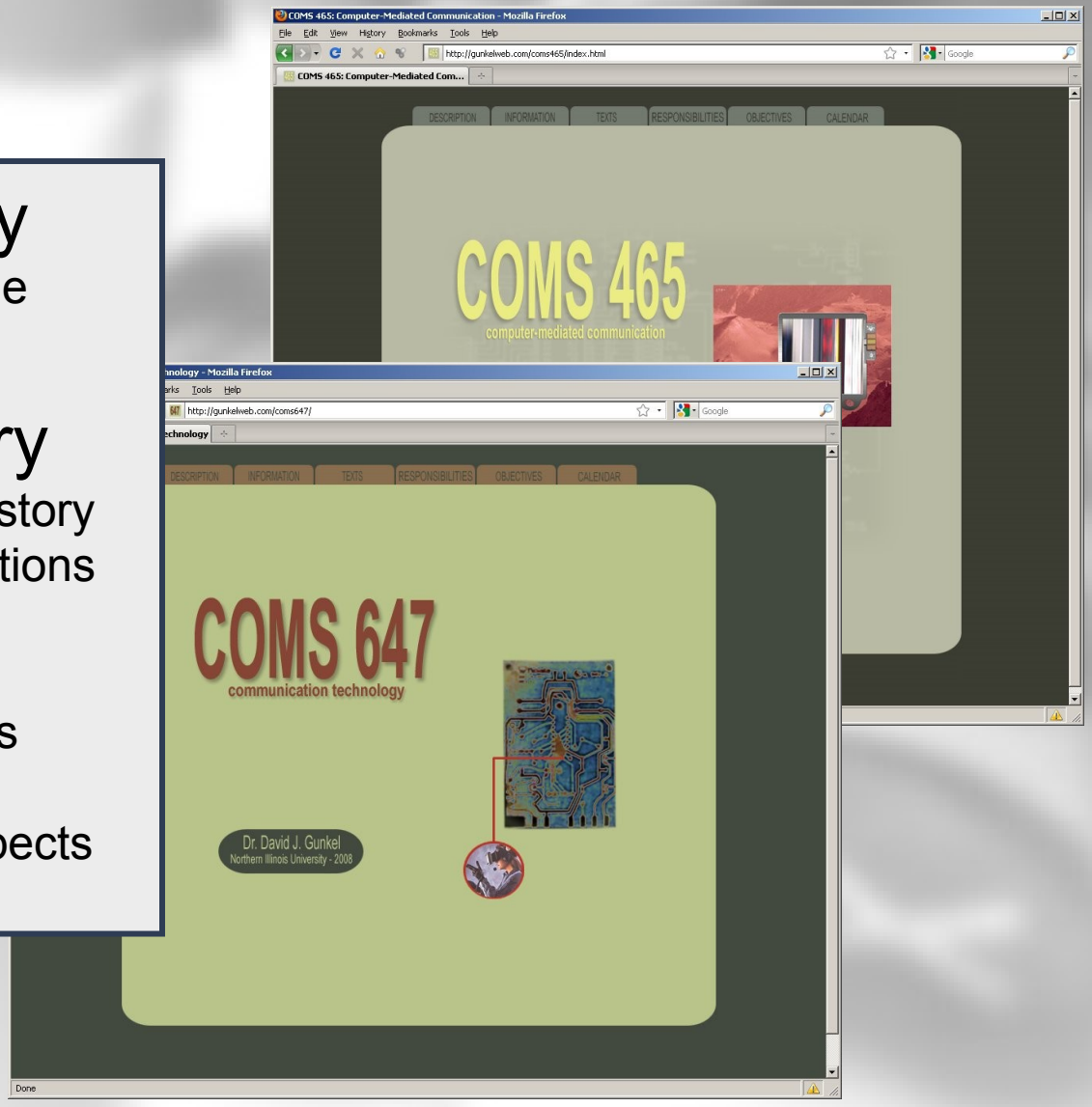
- Demystify the Machine
- Scalable Learning

Theory and History

- Technology/Media History
- Literature and Innovations

Critical Thinking

- Research Approaches
- Evaluation Methods
- Ethics and Social Aspects



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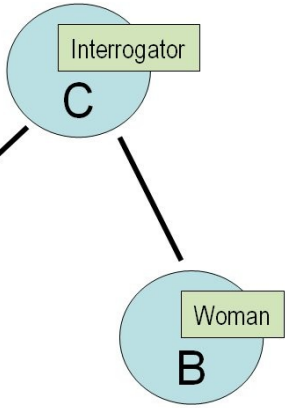
3. Machine Intelligence



Turing Test

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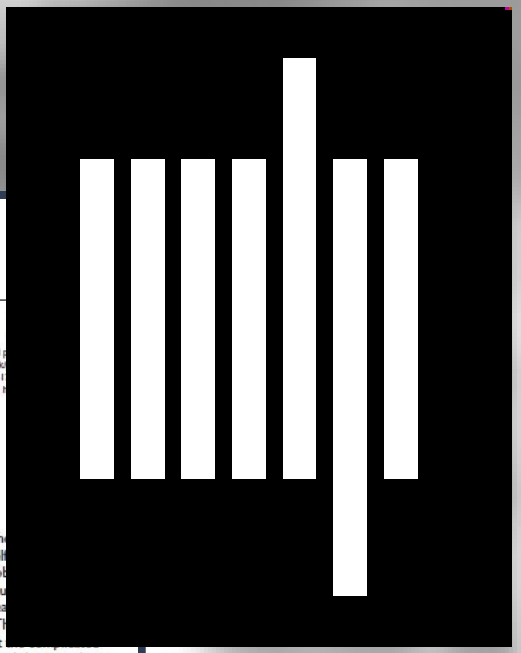
Research



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DOI 10.1007/s10676-007-9137-3

Thinking otherwise: Ethics, technology and other subjects

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E-mail: dgunkel@niu.edu;

Abstract. Ethics is ordinarily understood as being concerned with questions of responsibility for and of an other. This other is more often than not conceived of as another human being and, as such, excludes others – most notably animals and machines. This essay examines the ethics of such exclu divided into three parts. The first part investigates the exclusive anthropocentrism of tradition moral thinking and, following the example of recent innovations in animal rights philosophy, qu mechanisms of such exclusion. Although recent work in animal- and bio-ethics has successfully i strategies for the inclusion of the animal as a legitimate subject of moral consideration, its other, t has remained conspicuously excluded. The second part looks at recent attempts to include these mac in moral thinking and critiques the assumptions, values, and strategies that have been employe various innovations. And the third part proposes a means for thinking otherwise. That is, it int alternative way to consider these other forms of otherness that is not simply reducible to the conce that has structured and limited moral philosophy's own concern with and for others.

Key words: computer ethics, computers-social aspects, Emmanuel Levinas, otherness, philosophy ogy, machine ethics

Introduction

> In addition, we might ask about those ethical calls of the future from "beings" that we cannot now even imagine.[1] – Jeffrey T. Nealon

This essay concerns a question. The question has to do with ethics. And, like so much contemporary work on this subject matter, it is interested in the call from, our response to, and our responsibility for others. However, unlike the capital "O" other, who has taken center stage in recent moral thinking largely due to the influence of Emmanuel Levinas and others, this investigation is concerned with and directed otherwise. It is interested in those others who remain, for reasons that will need to be explicated, excluded from the contemporary and essentially anthropocentric understandings of alterity that have persisted in and been constitutive of moral philosophy. It is, therefore, a question that is not concerned with or limited to the present and the presence of these somewhat familiar Others. It is a question that is oriented to the future, toward other "beings," who we may not now even be able to imagine and who call to us and approach from elsewhere. It is, in short, a question about the future of ethics. And it involves a itself to the possibility of an other who ren mentally and disturbingly otherwise.

An example, might help to illustrate abstract characterization. In a now well- often reproduced *New Yorker* cartoon by P two dogs sit in front of an Internet-connect computer. The one operating the machine companion, "On the Internet, nobody kn dog."[2] The cartoon has often been cited issues of identity and anonymity in comput communication.[3] As Richard Holeton i "the cartoon makes fun of the anonymity

[1] Jeffrey T. Nealon, *Alterity Politics: Ethics and Performative Subjectivity* (Durham, NC: Duke University Press, 1998), 71.

[2] Peter Steiner, "Dog cartoon," *The New Y* 1993): 61.

[3] See for instance, Roger F. Fidler, *Mediamorphosis: Understanding New Media* (Thousand Oaks, CA: Pine Forge Press, 1997); Richard Holeton, ed., *Composing Cyberspace: Identity, Community, and Knowledge in the Electronic Age* (New York: McGraw Hill, 1998); Sara Kiesler, ed., *Culture of the Internet* (Mahwah, NJ: Lawrence Erlbaum Associates, 1997); William J. Mitchell, *City of Bits: Space, Place, and the Infobahn* (Cambridge: MIT Press, 1995); Geoffrey Nunberg, "Prefixed Out," commentary on *Fresh Air*, WHYY radio, 17 May 2002. Transcript available at http://www-csli.stanford.edu/~nunberg/cyber.html; Diana Saco, *Cybering Democracy: Public Space and the Internet* (Minneapolis, MN: University of Minnesota Press, 2002).

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Article. English language. doi: 10.1386/iscc.1.1.53/1

Beyond mediation: thinking the computer otherwise

David J. Gunkel *Northern Illinois University (USA)*

Abstract
Whatever Media Studies 2.0 involves, one thing is certain, there is a need to confront and deal with new technologies, most notably computers and computer networks. Despite the fact that the discipline has largely marginalized these innovations, there has been some effort to incorporate the computer into both the theories and prac at least in the United State computer-mediated commun the computer as a mediu institute a significant para new technologies to existin contests and critiques this tifies its structural limitat the computer that has the radical fashion.

Keywords
communication
computer-mediated communication
media studies

Let's begin at the end, w able to be properly under thing we now read about and that, is neither a new tion, continuation, and c new tool in the arsenal constitutes the end of m computer marks the end often been argued by sch 2001; Bolter and Grusin ticular and paradigmatic controversial or fashionab is in fact not without con of a particular brand of t everything (i.e., post-m appears to be following w lectual *haut couture*. Inste mitment to the study of n media studies.

Article

The real problem: avatars, metaphysics and online social interaction

Reprints and p
sagepub.co.uk/
DOI: 10.11

David J. Gunkel
Northern Illinois University

Abstract
It is often assumed that the problem with 'virtual reality' – the con technological deployments and the apparently oxymoronic phrase itsel understanding, or perhaps misunderstanding, of the virtual. The real prob not with the virtual; it is with the real itself. This article investigates the u but ultimately mistaken and somewhat misguided concept of the rea routinely operationalized in investigations of new media technology. Th of contact for the examination is the avatar. What is at issue here is not structures and articulations of avatar identity but the assumed 'real thing' that is said to be its ultimate cause and referent. In addressing this subject, the article considers three theories of the real, extending from Platonism to the recent innovations of Slavoj Žižek, and investigates their effect on our understanding of computer-generated experience and social interaction.

Keywords
avatar, computer games, computer-mediated communication, computers, MMORPG, philosophy of technology, social aspects, virtual reality, Slavoj Žižek

One of the more compelling and persistent social issues regarding computer-mediated communication (CMC) has to do with user proxies or avatars. The word 'avatar', which is of Sanskrit origin denoting incarnation or the physical embodiment of the divine, has been utilized, at least since Neil Stephenson's *Snow Crash* (2000) and the 'many-player online virtual environment' of LucasFilms *Habitat* (Morningstar and Farmer, 1991: 274), to designate the virtual representative of a user in a text-based multiple user domain (MUD), a massive multiplayer online role playing game (MMORPG), a non-gaming 3D immersive environment like *Second Life*, or a social network like Facebook, MySpace

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Conclusions

1

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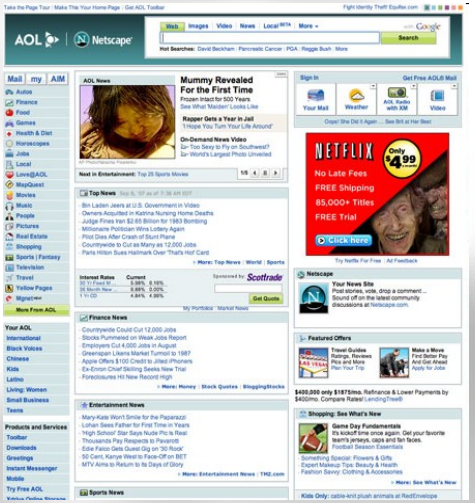

Content
Web of Documents
Read Only
Producer/Consumer

Web 2.0

Community
Web of People
Read / Write
Prosumer

Web 3.0+

Context
Web of Data
3d Immersion
Machine Intelligence

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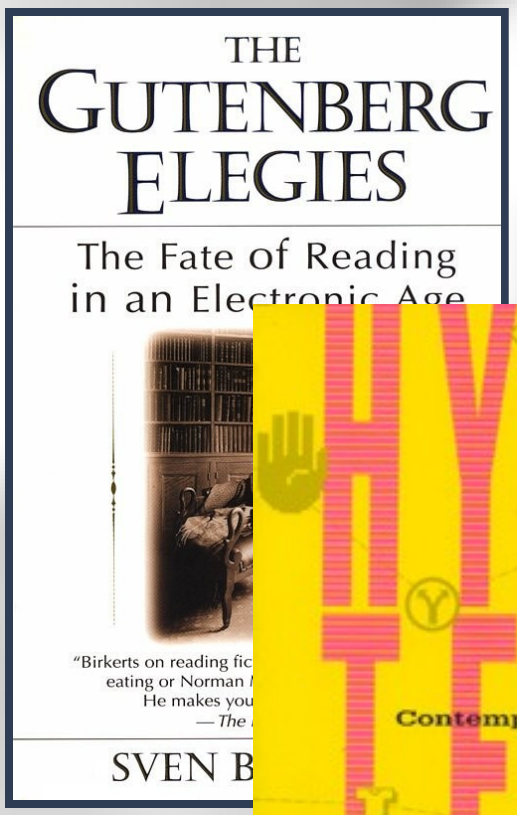
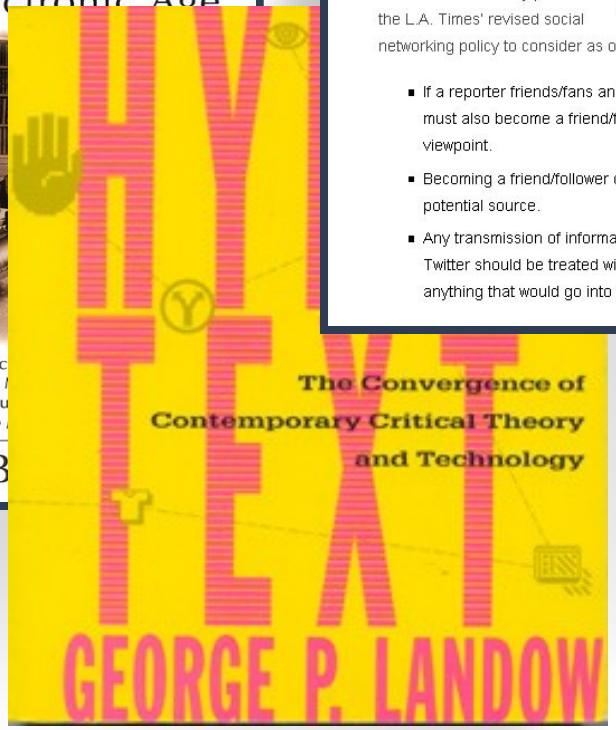
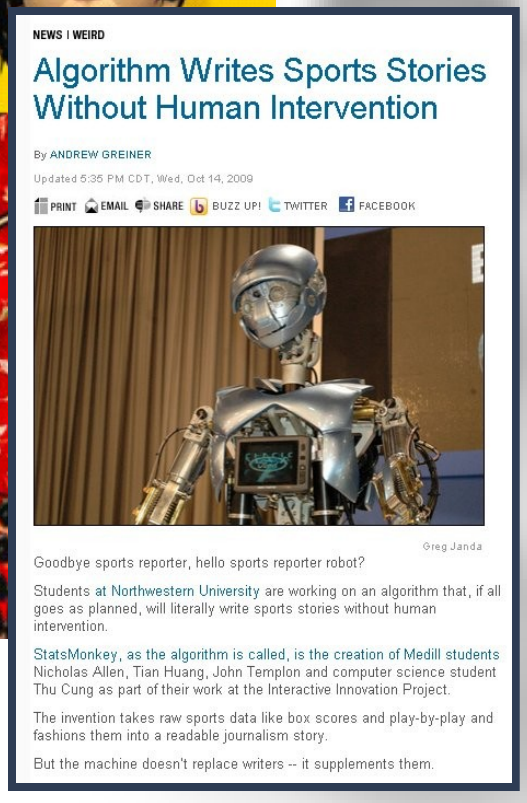
Conclusions

2







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Conclusions

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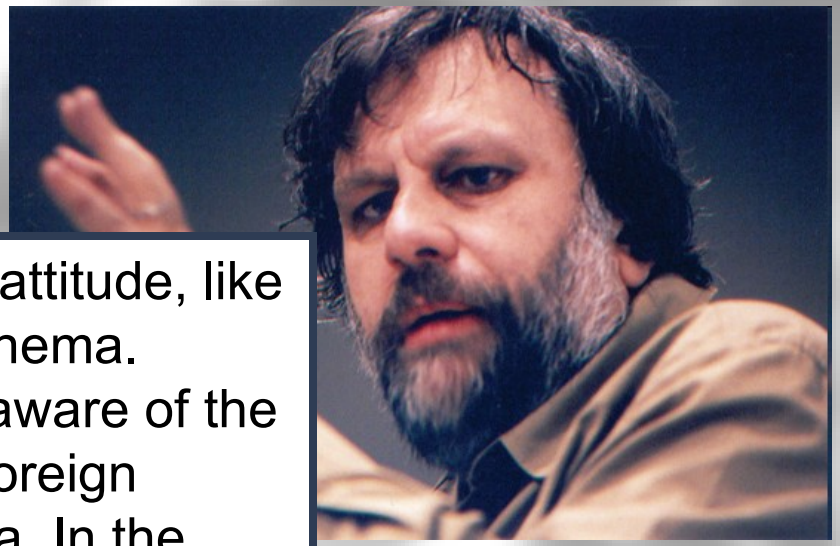

"One should adopt a 'conservative' attitude, like that of Chaplin *vis-à-vis* sound in cinema. Chaplin was far more than usually aware of the traumatic impact of the voice as a foreign intruder on our perception of cinema. In the same way, today's process of transition allows us to perceive what we are losing and what we are gaining—this perception will become impossible the moment we fully embrace, and feel fully at home in, the new technologies."

- Slavoj Žižek

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Conclusions

3

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