

Media Aesthetics

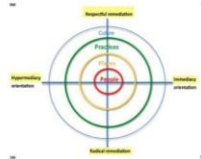
# 01 Introduction to New Media

# 01: Introduction: Digital transformation

- **“New” in New Media:**
  - 1) Newness: variants : new model of cars
  - 2) Digital transformation : work, lifestyle, identity, culture, economics, politics, global affairs, forms of social interaction: beyond the devices (Marc Prensky 2001)
- **“What’s new for society about the new media?”** (Sonia Livingstone 1999)
- **“Remediation, refashioned older media”** (Jay David Bolter and Richard Grusin 2000)

## Bolter & Grusin

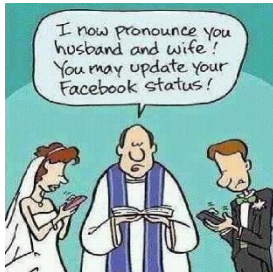
- **Remediation** refers to how new, digital media refashion and reform older media – changing structure and outcome of practice
- **Hypermediacy** = aims at enhancing the user’s awareness of the mediation/the media
- **Immediacy** = aims at diminishing the user’s awareness of the mediation/the media



- **The history of media technologies**

- 1) WWW as new media and recorded sound: the phonograph 1887, mass popularity of radio 1920s: 'media and their publics coevolved' : internet 1990 and 1940s, computers and information stored and shared through the use of computers: engaging a widening cross-section of publics (Lisa Gitelman 2006)
- 2) electric technologies 19th C and utopian promise: street lighting and the elimination of urban poverty: textual community: mass press (journals, public lectures and articles) the time by elites (Carolyn Marvin 1988)
- 3) hacker culture: challenging authority/mastery of computers as elite cadre

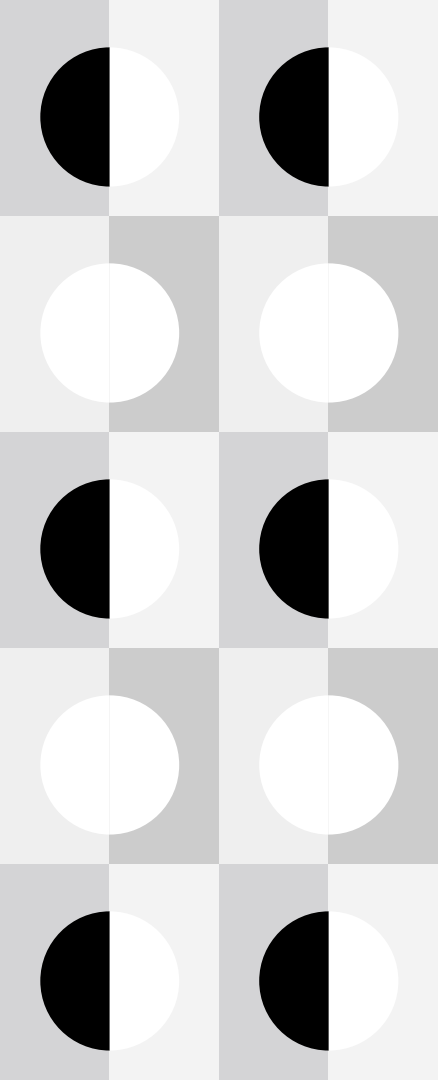
- Whether and how **technology can act as factors in wider social change**, be already embedded in a **social context**
  - 1) printing-literature, gunpowder-warfare, the magnet (compass)-navigating (Francis Bacon 1620, [\*Novum Organum\*](#))
  - 2) Internet as revolution since Gutenberg, the key to the re-creation of a humane community, digital sublime of free citizen, counter-cultural idealism as hacker culture and free market capitalism, WIRED's 'a fusion of free minds and free markets'



# 02: New media and digital convergence

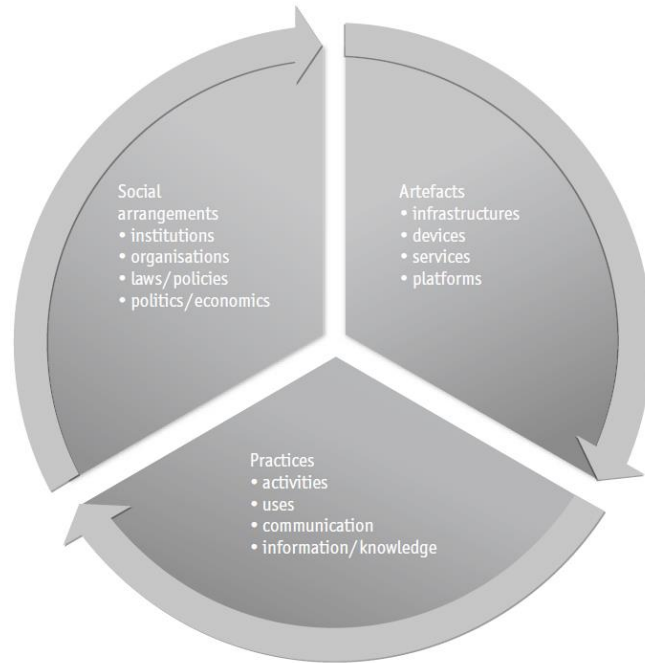
- New media involved the historical trajectories of computing and communications technologies converging... the translation of all existing media into numerical data accessible through computers (Lev Manovich 2002)  
: **overestimating it, while underestimating the continuing narrative and storytelling dimensions of media.**
- Three Cs of computing (digital media and information), communication (networks, artefacts and practices), content (media and information) (Trevor Barr 2000)
- Convergence as 'a historically open-ended migration of communicative practices across diverse material technologies and social institutions' (Karl Bruhn Jensen 2010)

- Media convergence as ‘the process whereby new technologies are accommodated by existing media and communication industries and cultures.’ Also, an ideological dimension of takeovers and mergers (Tim Dwyer 2010)
- Convergence as a cultural and not simply a technological phenomenon. A cultural shift in consumers and media content’ (Henry Jenkins 2006)
- Meikle and Young (2011)’s 4 dimension of media convergence
  - 1) technological: around networked digital media platforms
  - 2) industrial: digital-based companies, Google, Apple, Microsoft, space/content
  - 3) social: social media, Facebook, Twitter, YouTube, content sharing, peer-to-peer communication, large-scale distribution of user-created content
  - 4) textual: re-use and remixing, transmedia across multiple media platforms



- 2 other key elements
  - 1) the rise of user-created content: convergence of media producers and consumers
  - 2) policy convergence: as laws, policies and regulations have to be rethought
- Lievrouw and Livingstone (2005)'s approaching elements
  - 1) the artefacts or devices: to communicate
  - 2) the communication activities and practices: to develop and use these devices
  - 3) the social arrangements and organizations: that form around these devices and practices

FIGURE 1.1 ► CONSTITUENT ELEMENTS OF NEW MEDIA



Source: derived from Lievrouw and Livingstone 2005



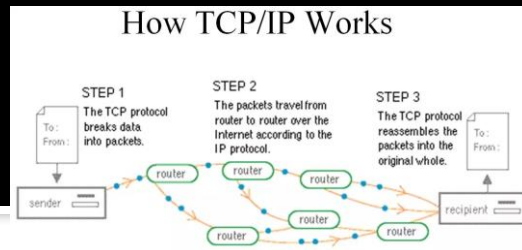
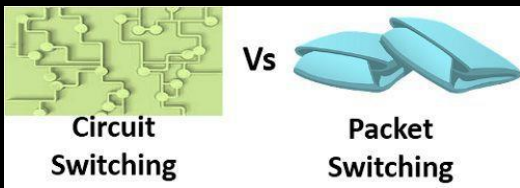
# 03: Internet history and culture

- In the technical and scientific communities as early as the 1960s.
- The internet's early development was that academics were not expected to transfer their knowledge to industry.
- Computer scientists were the first users of their own inventions.
- **Academic work and culture**
  - 1) promotion of interaction and cooperation: geographically dispersed, generally knew each other as colleagues through conferences and collaborative activities
  - 2) an emphasis on meritocracy and competition among a community of formal equals
  - 3) flow freely among this community and debates should remain open, not closed
  - 4) the need for tools, technologies and processes that promote collaboration, given the complexities of computer software development
  - 5) primarily based on university campuses as a world apart from the rest of society



- On the History

- 1) The US military in the Cold War, and ARPA (Advanced Research Projects Agency) in 1958 after the Soviets' Sputnik satellite: the demands of the military (Hafner & Lyon 1996, Leiner et al. 2003, Hassan 2004, Ryan 2010)
- 2) As being a techno-meritocratic one in academic protocols of shared pursuit of science, peer review and sharing research findings than in military service, with university centers in MIT, Harvard and Stanford. (Castells 2001): 'flat organization, a collegial community, interdisciplinary cooperation' not the corporate and military forms of hierarchy, bureaucracy, specialization and loyalty to authority figures. (Flichy 2007)



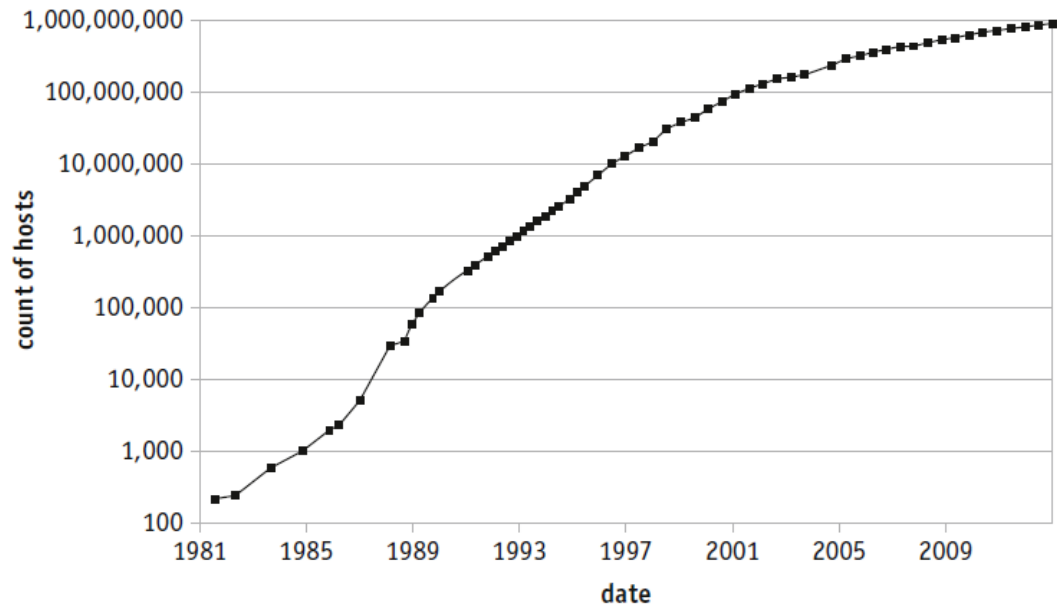
- On the **history of technical** developments
  - 1) Packet switching: broken down into smaller packets, could be re-routed, asynchronous, overcome the limitations of the telephone system, a decentralized network with no single point: ARPA, 1960s: ARPANET, 1969 with long-distance computer network in US, public demonstration of [email], 1972 by ARPANET
  - 2) a common set of networking protocols, TCP/IP (Transmission Control Protocol/Internet Protocol): LANs into WAN, 1974: quasi-privatization of ARPANET in 1983
  - 3) World Wide Web in 1990s: anything being connected with anything, CERN 1991: changes the communications capabilities of the Internet: NCSA's Mosaic, 1992 the first Web browser: Netscape 1994: Microsoft office software suite Internet Explorer 1995: growth of internet users worldwide
    1. Multimedia capability
    2. Hypertext principles: linking, search engines Yahoo!, Google: vast and easy-to-use databases
    3. HTTP, HTML: platform-independent interconnection between websites, writing source code: producers as well as consumers of content, Blogger and WordPress
- Measuring: 2012, internet users: 34.3 % of the world's population/Internet hosts worldwide or the number of sites

**TABLE 1.1** ► ESTIMATED NUMBER OF INTERNET USERS WORLDWIDE 1995–2012 (SELECTED YEARS)

Year	Estimated no. of internet users	Global population	Internet users as % of population	Rate of growth (%)
1995	30.6 million	5.674 billion	0.53	
2000	361 million	6.07 billion	5.6	1179
2006	1.076 billion	6.5 billion	16.6	298
2012	2.405 billion	7.017 billion	34.3	223

Source: Internet World Stats 2012a; Flew 2002, 2008

**FIGURE 1.2** ► INTERNET HOSTS WORLDWIDE, 1981–2012



Source: Internet Systems Consortium 2012

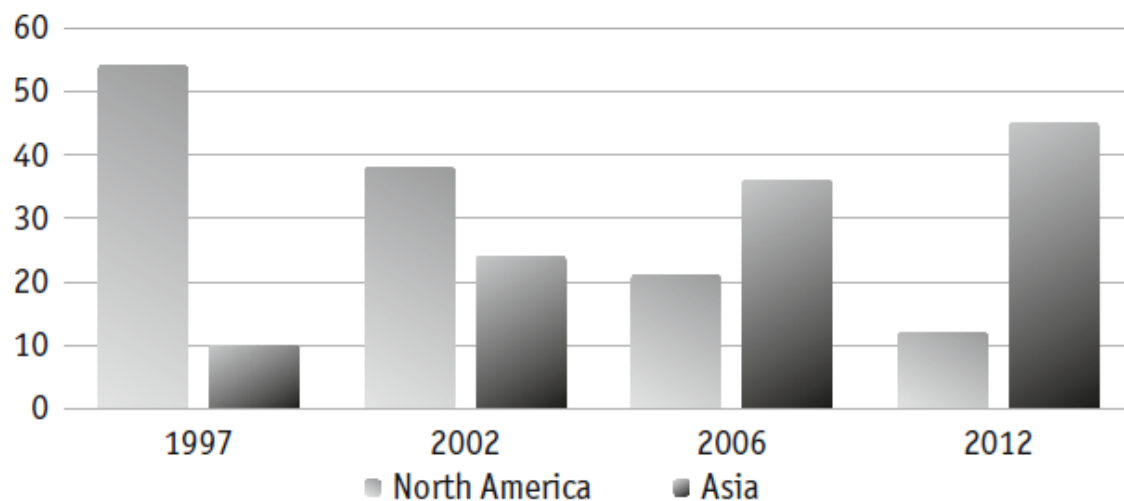
# Case study: The Global Internet

TABLE 1.2 ► WORLD INTERNET USAGE AND POPULATION STATISTICS, AS AT 30 JUNE 2012

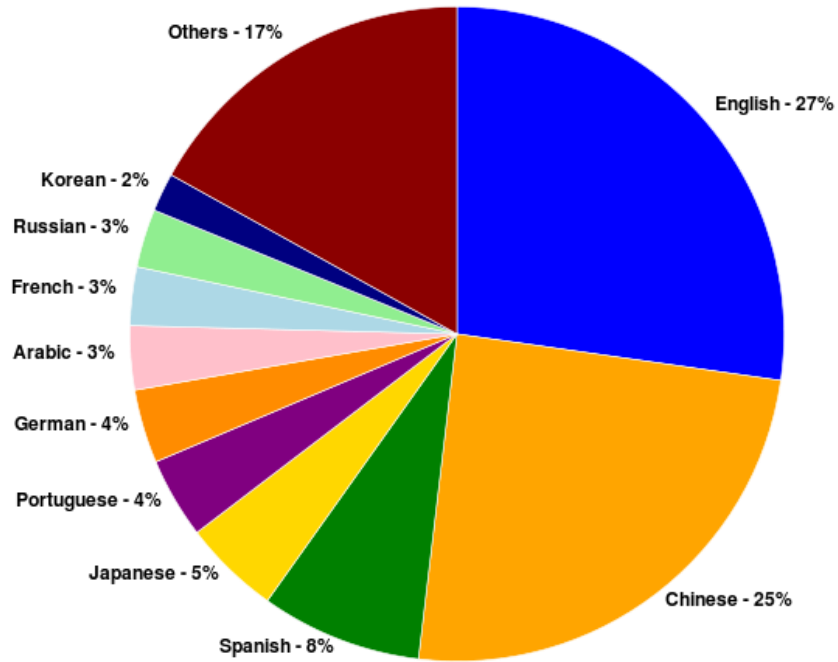
World regions	Population (million)	Internet users, 2012 (million)	% of population	Internet users, 31 Dec 2000 (million)	Growth 2000–12 (%)	Users as % of total
Africa	1,073.3	167.3	15.6	4.5	3,606.7	7.0
Asia	3,922.1	1,076.7	27.5	114.3	641.9	44.8
Europe	820.9	518.5	63.2	105.1	393.4	21.5
Middle East	223.6	90	40.2	3.3	2,639.9	3.7
North America	348.2	273.8	78.6	108.1	153.3	11.4
Latin America / Caribbean	593.7	254.9	42.9	18.1	1,310.8	10.6
Oceania/Australia	35.9	24.2	67.6	7.6	218.7	1.0
WORLD TOTAL	7,107.8	2,405.5	34.3	361	566.4	100

Source: Internet World Stats 2012a

**FIGURE 1.3** ► **PERCENTAGE OF WORLD INTERNET USERS, 1997–2012, NORTH AMERICA AND ASIA COMPARED**



Sources: Flew 2005a, 2008; World Internet Stats 2012a

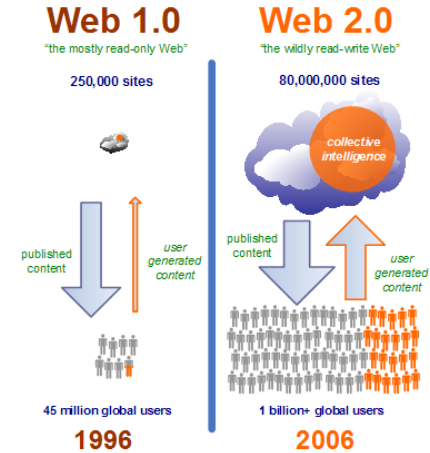


["Number of Internet Users by Language"](#), *Internet World Stats*, Miniwatts Marketing Group, 31 May 2011, accessed 22 April 2012



# 04: Web 2.0 and social media

- Between 1990s and the 2000s, the concept of Web 2.0 and development of social media
- **Web 2.0**: in 2003 by Tim O'Reilly: the business revolution in the computer industry: harness network effects, harnessing collective intelligence
  - \* network effects: 'when the utility of using a product or technology becomes larger as its network grows in size' :MS office software, Facebook
  - \*\* Facebook, eBay, YouTube, Twitter, Spotify, LinkedIn, Wikipedia



- **Core elements of Web 2.0**

- 1) delivery of services over the Web: rather than software for accessing the Web. MS the archetypal Web 1.0 company, Google the standard bearer for Web 2.0: ongoing use of the service
- 2) the ability to harness collective intelligence: connecting all elements of the network rather than its most profitable core users. the 'long tail', user contributions
- 3) the data inside: tracking and predicting of user behaviours. Privacy concerns. New value-added services: linking Google Maps to online reviewing sites, TripAdvisor and Yelp
- 4) open source development practices: user community, beta test new software and services, active engagement
- 5) lightweight business models: harness collective intelligence and the 'wisdom of crowds': linking to other online resources at low costs: Google News, de facto news service

- **Why Web 2.0 is caught up?**

- 1) Collective intelligence (Steven Levy 1997): participation, interactivity, collaborative learning, social networking
- 2) the fastest growing websites of the 2000s were based on Web.2.0 principles: Wikipedia, YouTube, Blogger and WordPress, Instagram, Pinterest, Facebook, Google+, Twitter

# 05: Assessing social media

- Web 2.0 associated with the transformation of society, business and culture
- A new 'age of participation': empower the prepared firm and destroy those that fail to adjust
- **Wikinomics**
  - 1) openness: from outside the organization
  - 2) peering: open, horizontal networks
  - 3) sharing: less proprietary approaches to intellectual property, computing power, network bandwidth, content, scientific knowledge
  - 4) acting globally

— **Critics [on Social Media]**

- 1) people would lose a capacity for 'deep reading' and critical reflection: rapid sampling
- 2) the cult of the amateur
- 3) digital maoism: efface individual creativity, generating an intellectual race to the bottom
- 4) cyber-utopianism and internet-centrism: losing sight of the dark side of such development (information control, manipulation of new media space, propensity to view all political and social change through the prism of the internet and new media technologies)
- 5) cyberbole: the exaggerated depiction (hyperbole) of the capacities of cyber-technologies: "... since the capture of fire"

- **Gaps** between the rhetoric and the realities of social media
  - 1) the blurring of distinctions between types of users and forms of participation
  - 2) the right to ownership and re-use of content
  - 3) use of the content of others without rights or attribution
  - 4) free labour of users
  - 5) how the metadata created through their participation, and be on-sold to third parties: considerable privacy implications

### Connecting data graphs with intelligent process



# Conclusion

- [Internet Society](#)
- [Internet World Stats](#)