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Multimedia and Communication Curricula: The Medium vs. the Message

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Abstract: *Multimedia technology is restructuring the field of communication in various ways. The prevalent nature of this new media invites flexibility which can make communication curricula accommodate a wide range of competencies including technical competency. I have argued in this paper that multimedia, much like printing, radio, television and film, is mainly the means whereby content is delivered. Central to multimedia are content and effects. Content requires perspective which can then be reproduced in texts and images, while effects involves assessment of the influence of multimedia on society and culture. As such, multimedia needs to be approached from a mass communication perspective which preserves the identity of the field and provides a vital link between theory and practical application.*

The inherent dichotomy of medium and message in the field of communication is an old issue which, in our opinion, cannot be satisfactorily resolved even with the arrival of multimedia technology. The reason for this is the intermediary position that the field retains between communication media (the content) and communication technology (the medium). This is an old inquiry which questions whether the field of communication produces intellectually endowed communicators with profound theoretical knowledge of culture, society and history, or technicians of communication who are equipped with the practical skills necessary to transmit a message via technologies of communication. The answer to this question is not clear. This controversy has recently resurfaced and has led some communication educators like Robert McChesney to postulate that the rise of recent technologies of communication such as the Internet and

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the Information Superhighway may "place the future of communication research and education in US universities in jeopardy." He adds that these developments "demand a restructuring or at least a rethinking of the very field of communication." [1]

Multimedia technology has many key dimensions—economic, social, cultural, technological, global etc. However, I have specifically chosen to examine recent trends in communication curricula and how some journalism educators and schools of communication around the world are trying to cope with developments in multimedia technology.

Multimedia is a term for "any content that combines text, sound, graphics, and video."[2] This definition can be viewed, from a mass communication perspective, as a description of a medium which targets many of our senses (vision, hearing, etc.). The development of multimedia seems to have restored, what McLuhan termed a long time ago, as the balance in our "sense-ratio." The issue, however, is not so much related to our sense perceptions as it is to this new wave of interactive communication which has transformed the way people communicate, behave and conduct their business. It is not just that multimedia accelerates the process of transmitting data documents and images; the new media provide unprecedented accessibility and create a social cyberspace environment characterized by new communication phenomena such as newsgroup communication, virtual communities etc.

This controversial dichotomy is reflected both in the attitudes of journalism educators and communication curricula across the globe, particularly in the US. Educators in communication do not have the same macro-level outlook regarding how to deal with such developments, particularly when the discipline of communication has historically been viewed as weak in theory.

The recent report of the Freedom Forum in the US, *Winds of Change*, suggests that the recent technological development such as the multimedia revolution "has spread fear and confusion amongst the ranks of journalism educators. Many do not know which way to turn."[3]

Educators in communication seem to have at least two conceptions as to how to adapt communication curricula to a multimedia environment. The report mentioned above states that:

> For some educators, the new multimedia herald the arrival of truly converged media, not only a distribution mix of audio, video and

> text, but also a combination mix of journalism, public relations, advertising and entertainment, with distinguished characteristics of each somewhat blurred ... For other educators and most journalists, the new media herald new ways to distribute messages, but with the same need as always for the practitioners and the public to know the difference between what is journalism and what is not.[4]

The report suggests that many schools agree that multimedia teaching should take place, but no clear vision is advanced as to how it should be done, i.e., whether classes would be taught by teams of faculty members, each one an expert in a different medium or whether faculty should be retrained so that each faculty member would become proficient in teaching how to prepare a story for all media, etc.

The confusion that the report refers to is, in our view, a kind of struggle of adaptation associated with any new medium of communication. Historically, the invention of the printing press, radio, film and TV raised similar questions. Early courses in the field, such as printing offered by Kansas State College as early as 1873, were technical. Later, it was realized that journalists and communicators, in general, need solid intellectual grounding in order to function in a complex socio-political environment. As technology keeps changing and market pressures increases, communication curricula gradually yield to these requirements and pressures. Robert McChesney argues that "nowhere are these pressures more apparent than in communication... . The pressures are doubly strong to link up communication research and education to the masters of the corporate communication order, and to opt for what Paul Lazarsfeld termed "the administrative" rather than "the critical" path for scholarship." [5]

So far, no other McLuhan has emerged to advocate a "media-determinism" perspective and suggest that the medium is still the message. However, there are as many enthusiasts of this new technology as there are skeptics. Journalism educators fall somewhere in between these polarities.

Many journalism educators still subscribe to mainstream journalism. Ronald McDonald of the College of Communication, Boston University says, "we embrace new technology [i.e.,] multimedia [but] we believe journalism must be taught separately, not become part of a communications mishmash; a programme that jumbles together all aspects of the communications and media worlds....Journalism is special, it stands alone and is different, with vital role and proud

history—and we are committed to teaching it as a separate discipline."[6]

A number of communication scholars seem to adopt an integrative approach. John J. Schulz, of the Department of Mass Communication, Advertising, and Public Relations, Boston University states that, "our programmes focus on the vital link between theory—which can be applied to many problems and issues—and practical application, which develops professionalism." He adds that "we stress the very things the people in industry tell us they most need from new graduates: a broad-based education coupled with clear thinking, concise writing and effective speaking skills."[7] Similarly, McDonald says that "a good journalist is characterized not only by technical and professional skills, but also by intellectual breadth and curiosity about the world." He adds that their TV programme is "built upon a solid foundation of liberal arts and requires production of creative work, study of business practices of the industry, and the study of both critical and social aspects of television."[8]

The University of Missouri School of Journalism, an old well-reputed institution, also seems to adhere to this integrative approach. The programme emphasizes the importance of a "strong liberal education blended with pragmatic learning experiences." Specifically, the programme emphasizes "the critical thinking skills demanded by journalism and related occupations. [the] media operations—a daily newspaper, magazine, commercial TV station and public radio station—challenge and deepen those skills in a professional environment." [9]

Recent Trends in Communication Curricula

Many departments of communication seek to harness technology for appropriate use in communication and help prospective communicators become comfortable with digital media. We can identify many recent trends concerning academic efforts to adapt communication curricula to the new communication technologies. These include:

New Courses. The Faculty of Communications of the University of Western Ontario has introduced a special course simply called *Multimedia*. The course description states that "students will be expected to learn software systems that incorporate text, graphics, still and full-motion video as well as journalistic techniques such as writing and research with the end objective to produce a multimedia

presentation."[10]

The Graduate School of Media and Governance of Keio University in Japan offers a new course called Cyber-Gaming. The topics of the course include: Cyberspace, Virtual Community, Cybercafe, Cyburban Gaming, Multimedia and Edutainment, Media and Game Culture, Design of Gaming Space, Academic Association on Network, etc. In the course description it is acknowledged that it is difficult to define the meaning of a "game"; a game is said to be characterized by elements such as rules, players, strategy, spade, scores, punishment, fiction, fantasy, play, competition, discovery, and surprise.[11]

The Walter Cronkite School of Journalism and Telecommunication at Arizona State University offers a graduate course on multimedia called: *Cable Television and Telecommunication Systems*, while the rest of the programme still subscribes to main stream journalism education with courses such as Communication Theories and Process, News Writing and Reporting, Public Relations Techniques, Mass Media and Society, Political Communication, International Communication, etc.[12]

The Department of Journalism of the University of North Texas offers a classic course called *Microcomputer Applications in Journalism*. The course content includes on-line data applications for reporting, advertising, public relations and publications, journalistic applications of project management, telecommunications and database publishing.[13]

The Annenberg School for Communication of the University of Southern California offers a variety of courses on multimedia both at the undergraduate and the graduate levels. These courses include Introduction to Communication Technology, Communication in the Virtual Group, The Culture of the New Media, Information Management, Social Dynamics of Communication Technologies, Virtual Groups and Organizations, The Arts and New Media, Communication Law and New Technologies, Communication Technologies, Telephone -Data-Video Telecommunication Systems, etc. The content of these courses includes assessment of the impact of these new communication technologies (cultural, social, political and economic), examination of the issues and implications of these technologies, study of the basics or principles of multimedia and the technological concepts of multimedia. Course content also includes consideration of the legal dimensions of multimedia, including computer regulations.

The courses in question put special emphasis on the effect of multimedia on society and culture. This concern, which dominates communication research of mass media, has now been transferred to the multimedia. Although research on such effects and the methods to be used for such research are relatively new, the direction such processes of inquiry are taking is, in our view, encouraging and puts multimedia in line with a mass communication perspective. The courses also address the basic issues of multimedia such as communication processes, information maintenance, privacy and access, artificial intelligence, virtual communities, virtual reality, etc. The technical dimension of these courses embraces both the basics of multimedia as computer communication networks, audio and video interactive technologies, etc., and the technological concepts such as frequency, electricity modulation, digital conversion, video telecommunication systems, etc.

The Columbia School of Journalism offers *Basic New Media, Advanced New Media* and *Exploring New Media*. These courses explore the conceptual background of the new media and provide hands-on experience with the tools that create digital multimedia titles. This experience includes digital image editing, World Wide Web site creation, and interactive site design. The courses also provide ways to explain complex social issues using advanced new media tools like animation, guided chats, reader-customized stories, and interactive 3D. Students learn how to produce their own web-pages explaining issues of their own choosing.[14]

*New Curricula.*The School of Design and Media (UK) offers a Master's Degree in Hypermedia Studies. The programme is designed to incorporate hypermedia philosophy in all its dimensions. The theory modules cover the history of convergence, contemporary debates in hypermedia and digital artisanship. The practical modules include study of interactive media design, virtual communities and specialist training in advanced hypermedia design skills for the Net, CD-ROM, 3D modeling and virtual space.[15]

Center for the New Media. The Center for the New Media of Columbia University offers a *New Media Workshop* in which students learn to report and create stories using multimedia tools and techniques. The Center also offers a course called *Exploring New Media*. This course provides students with a conceptual map of the new media landscape. Students review the latest technological trends and demonstrations as well as the cultural and commercial impact of

new media. The course is conducted through a series of special guest visits, lectures and demonstrations. Furthermore, students are expected to view new media as a BEAT and "develop a sense of the scope, depth and limits of news coverage of new media technology, as well as the prospects for the future of new media."[16] Similarly, the School of Design and Media in the UK has established a Hypermedia Research Center. The Center has been carrying out theoretical and practical work in digital technologies.[17]

Multimedia Laboratory. The Center for the New Media of Columbia University has established a *News Laboratory* which facilitates collaboration among various components of the new media industry. Students come from different disciplines: Journalism, Engineering, Computer Science, Business, International and Public Affairs, and Education. In the laboratory, they all work to develop and test new media applications for journalism and story telling and also see what the next generation of news-room technology is likely to be and how it is likely to affect the way they work. Students from other fields work on applications appropriate to their related fields of study (e.g., a student in business may develop a business plan for a content-based search engine for the World Wide Web).[18]

Joint Venture. Most recently, the Journalism School at Missouri entered into a long-range partnership in media technology with International Business Machines Corp. and gained more than $2 million's worth of the latest IBM computers and related hardware and software. In the wake of this new effort, the school has established the National Institute on Computer-Assisted Reporting.[19]

Communication Classes on Websites. The University of Wisconsin at Stevens Point offers communication classes of the WWW both On-Campus and Off-Campus. These courses include Film History (1940-Present), Global Communication and the Information Age, Interpersonal Communication on the Internet, Technology and Leadership, Desktop Publishing, and Creative Problem Solving.[20]

Academic Communication Sites on the Internet. Most schools of Communication around the globe have established an extensive presence on the Internet. Most of these are US schools, but there are others from Europe, Asia, South America and Africa. These websites provide a healthy amount of educational resources for students and lecturers. A recent survey by the Institute for Learning Technologies (ILT) of Columbia shows that most colleges in the US are already

connected to the Internet. Although most of the information that a WWW site provides already exists in published form, WWW is yet another source of information through which an institution may contact potential contributors, prospective students, new faculty, etc. The survey revealed that few academic institutions use hypermedia qualities that are the basics of multimedia technology such as photos, mail-to feature, clickable maps, and online applications.[21]

Academic communication sites around the world consist of major US institutions of communication such as the highly-reputed Graduate School of Journalism of Columbia University, School of Journalism of Northwestern University, the Graduate School of Journalism of the University of California at Berkeley, School of Journalism of the University of Missouri, The Annenberg School of Communication of the University of Southern California, etc. The sites also include those of institutions outside the US such as the Graduate School of Journalism of the University of Western Ontario in Canada, the Graduate School of Media and Governance of Keio University in Japan, the Center for Media Resources in Hong Kong etc.[22]

Research and Conceptual Analysis of Multimedia. Recently, important and stimulating theoretical work on multimedia has appeared. This particular academic effort involves a variety of valuable references.[23] Such materials can provide theoretical support for teaching multimedia from a mass communication perspective.

These trends suggest that many approaches can be developed for incorporating multimedia in communication curricula. Most departments of communication, particularly in the US, seem to be somewhat reluctant to engage strenuously in developing areas of specialization in multimedia. Most of these departments prefer to offer only few courses on multimedia. The exception to this general tendency is the Annenberg School for Communication of the University of Southern California which offers a variety of courses on multimedia, both at the undergraduate and the graduate levels, and the School of Design and Media in UK which offers a Master's degree in Hypermedia Studies. Many universities opt for a macro-level approach by creating independent multimedia centers or laboratories which can be utilized by many related disciplines, including communication. Still, many departments of communication adopt the wait-and-see attitude to make sure that the move they make is in the right direction. It is probably too early to conceive of a field of inquiry, within the field of communication, which focuses only on multimedia in the way that

there are fields which focus solely on Print Media, Broadcasting or Film. While the technological rationale is energetically present, the content of such specialization has to be developed through research and accumulation of knowledge. It is probably very suitable to include multimedia within Broadcasting and thus have a new field called Broadcasting and Multimedia. After all, the two basic elements of multimedia, audio and video, are also the essence of broadcasting. Meanwhile, it is most appropriate to start multimedia programmes at the graduate level for the reason that students at this level are expected to have the intellectual background necessary for using multimedia within a particular theoretical perspective. In addition to this, multimedia, as a new branch of inquiry, requires empirical research which can be better conducted at this level and for which knowledge can be generated at the undergraduate level of education in communication.

Theoretical Propositions

Recent trends show that multimedia technology is gradually affecting the nature of communication curricula. The following are some conceptual propositions on how the inherently dynamic relationship between the field of communication and communication technologies needs to be supervised and structured.

Priority of Content over Medium. Communication as a field of inquiry rests on both theoretical foundations and practical considerations. The practical aspect, however, should not overshadow the conceptual fundamentals which make this discipline a science of human society. The challenge of this discipline is not only how to reconcile content with technology but also how to adapt content to the requirements of communication technologies. Content provides perspective through which the communicator can understand his role, culture and mission. This perspective has its origin in history, culture and belief systems. That is, the communicator needs intellectual ability, or what can be called ethical competence, to handle and process the ever-changing social and technological environment. Technology is an efficient way (both in terms of time and cost) to deliver content. It is imperative that today's communicators be conversant with communication technologies in order to master their environment and energetically face the challenges of the future. However, the acquisition of techniques needs to be within a cultural framework which provides perspective. Without perspective, the role of the communicator is

reduced to certain applied formulae that may not survive the constant process of change in the socio-technical milieu.

CC Need to Preserve Character. Communication as a discipline has been overwhelmed by recent technologies of communication. Many communication curricula are gearing toward the technical component of communication as a result of technological requirements and pressures. Some writers such as Robert McChesney postulate that technologies, which he labels "the capitalist communication sector" will probably "lead to the demise of communication as a viable discipline." He argues that this technical-market trend "takes communication away from what Innis ... termed the 'university tradition,' a source of honest, independent inquiry."[26] These pressures in the Muslim context are yet to be felt due to the underdeveloped information-technology sector, but the ingredient of such pressures are there as these technologies become prevalent and global. As such, there is an urgent need to develop a constructive perspective which can integrate technology into communication curricula without compromising the theoretical and cultural assumptions which make this field a distinguished discipline in the social sciences. The field of communication, in our view, needs to deal with communication technologies from a mass communication perspective. That is, the emphasis needs to be on the content and effect of these technologies. The first dimension (the content) involves the use of production techniques such as video and multimedia production to shape and mould content initiated within a perspective. The second dimension involves research on multimedia end-users and the effect of multimedia content on different social categories, including those of virtual communities.

Technology Needs to be Effectively Incorporated. The future of the field is closely tied to communication technologies. As technology develops, communication curricula need to remain flexible and incorporate the new demands of communication technologies. At the practical level, this necessitates continuing education (practice sessions and workshops) for communication educators and close association with the market sector. This training is necessary as the process of communicating, informing and educating is mostly medicated by technical skills. It is apparent that many communication scholars shy away from this technical experience and view such encounters as reducing the intellectual role played by the communication educator in building and shaping the minds of a new

generation of journalists and communicators. Nonetheless, communication educators seem to have no choice but to be friends with these technologies.

The incorporation of multimedia in communication curricula requires theoretical and methodological considerations. This requires, in our opinion, a particular conception which views multimedia as mass communication. This is certainly the case with the internet, for example. The subject matter of communication educators would be the varying content of the internet, virtual communities, the end-users of the internet and their socio-demographic characteristics, the implications of the internet for power control, the extension of the public sphere, opportunities for developing societies, etc. The internet has its technical fundamentals. However, it would be quite unwise to stretch the field of communication well beyond its subject matter and venture, without perspective, into areas of other related technical disciplines such as Computer Science, Engineering and Information Technology (IT), etc. The accumulated experience of teaching Broadcasting and Film shows this inherent exigency. Schools of communication have been given to training graduates who communicate effectively through these media rather than producing technicians who fashion media content in certain ways. The new media, however, pose more challenges than the traditional media in terms of content, scope and complexity.

The New Media Require an Interdisciplinary Approach. Clearly, the incorporation of communication technologies into the discipline of communication extends the interdisciplinary nature of the field beyond the traditional borrowing between communication and the human sciences to borrowing between communication and technical sciences such as computer science, engineering and IT. For this, there is a need to understand the language of these sciences. The same expectation applies to those in computer sciences. The recent process of convergence of broadcasting and telecommunication will certainly have implications for the field of communication and other related fields.

CC Need to be Critically Responsive. The market is an efficient domain in which the validity of outputs can be measured and appreciated. Communication curricula due to the nature of the discipline, have been more responsive to the needs of the market than most other sciences. However, it is a frequent complaint that communication graduates lack relevant training and practical exposure.

This criticism is to be given special consideration even though the case is always made that communication curricula provide broad knowledge adaptable to different and changing situations.

Multimedia and CC in the Muslim World

Communication curricula in many Muslim countries still lag behind in terms of keeping up with technological developments. Most departments of communication do not offer courses on multimedia. Many of these departments are not equipped with multimedia labs and do not have a presence on the Internet. The are few exceptions to this rule. The Department of Mass Communication, Kuwait University, offers a course called New Media Technology. The Department is equipped with many labs including a Digital Media Lab and has a Homepage which provides links to Arabic newspapers and magazines, to other similar institutions, and to CNN Interactive, Communication World (University of Texas), Communication schools on the Web, Entertainment Weekly Online, ESPNET SportsZone, International News Flow Study, Kuwait TV Channel 2, Time Magazine, The World Lecture Hall, etc.[24] The Department of Mass Communications of King Abdul Aziz University, Saudi Arabia, offers one course on communication technology and its presence on the Internet is via the university's Homepage.[25] The Department of Communication of the International Islamic University Malaysia is probably the second in the Muslim world to seek a multimedia lab. The multimedia environment in the country greatly favors and facilitates such development. Malaysia is probably the first Muslim country to develop an ambitious programme to use multimedia technology in business, education and development. The programme, called the Multimedia Super Corridor (MSC), will support all sorts of multimedia and information technology with video conferencing functions and complete automation.

Conclusion

Communication Curricula must be contributive to excellence in the field and need to be imbued with an educational vision that endures. This vision is to be combined with technical skills that enable graduates to participate constructively and effectively in the emerging communication environment. Multimedia is another technological development which adds particular challenges to the field of communication. The challenge involves developing content which

reflects a cultural orientation and developing the skills required by this technology. Multimedia are actually carriers. They are means, much like printing, radio and TV, whereby content is provided; they are not an end in themselves.

As such, multimedia need to be treated as mass media. A mass communication perspective would focus on the same issues that characterized mass media such as newspapers, radio, television and films. The multimedia are essentially a synthesis of the previous mass media. This approach will enhance the character of the field of communication and make cultural, social and economic contributions through constant close scrutiny of multimedia effects on society at large.

Communication curricula in the Muslim context need to have this kind of energetic commitment to the new demands of multimedia. This commitment, however, is to be exercised within a cultural framework which preserves the identity of the content. Multimedia offers many opportunities for creative production and participation. Multimedia and computer networks provide the infrastructure for intercultural communication on a large scale; many cultures have the opportunity to contribute to this interactive cyberspace and not be excluded or have to suffer being eclipsed by a global culture. This historical opportunity is to be seized with new perspective to prevent a throw-back to the history of the previous mass media in which the content was mostly the product of the Western media industry. The constructive use of multimedia can, hopefully, reduce many stereotypes associated with way the Muslim society and culture is projected in the world media and, in addition, may create a certain balance in the international flow of information.

Notes

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