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## Medium Theory

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Most of the questions that engage media researchers and popular observers of the media focus only on one dimension of our media environment: the content of media messages. Typical concerns centre on how people (often children) react to what they are exposed to through various media; how institutional, economic, and political factors influence what is and is not conveyed through media; whether media messages accurately reflect various dimensions of reality; how different audiences interpret the same content differently; and so on. These are all very significant concerns, but content issues do not exhaust the universe of questions that could, and should, be asked about the media.

A handful of scholars – mostly from fields other than communications, sociology, and psychology – have tried to call attention to the potential influences of communication technologies in addition to and apart from the content they convey. I use the singular '*medium* theory' to describe this research tradition in order to differentiate it from most other 'media theory'. Medium theory focuses on the particular characteristics of each individual medium or of each particular type of media. Broadly speaking, medium theorists ask: What are the relatively fixed features of each means of communicating and how do these features make the medium physically, psychologically, and socially different from other media and from face-to-face interaction?

Medium theory examines such variables as the senses that are required to attend to the medium, whether the communication is bi-directional or uni-directional, how quickly messages can be disseminated, whether learning how to encode and decode in the medium is difficult or simple, how many people can attend to the same message at the same moment, and so forth. Medium theorists argue that such variables influence the medium's use and its social, political, and psychological impact.

Medium questions are relevant to at least two social levels: the micro, individual-situation level, and the macro, cultural level. On the micro level, medium questions ask how the choice of one medium over another affects a particular situation or interaction (calling someone on the phone versus writing them a letter, for example). On the macro level, medium questions address the ways in which the addition of a new medium to an existing matrix of media may alter social interactions and social structure in general. The most interesting – and most controversial – medium theory deals with the macro level.

The analyses of the medium theorists are often more difficult to test and apply than the results of studies of media content, but they are of significance because they suggest that media are not simply channels for conveying information between two or more environments, but rather shapers of new social environments themselves.

This essay begins with an overview of the perspectives of a number of the 'first generation' of medium theorists. Their theories are then consolidated into a composite, macro view of the evolution of human civilization. Next, I present an outline of my own 'second-generation' medium theory, which attempts to lower the level of abstraction a few notches by articulating principles for the interaction of media environments and social roles. I conclude with a summary of some of the strengths and weaknesses of medium theory relative to a more traditional analysis of media content and of the social forces that shape the content.

### First-generation Medium Theorists

The best known and most controversial medium theorists are two Canadians, Harold Adams Innis and Herbert Marshall McLuhan. Trained as a political economist, Innis adapts the principles of economic monopolies to the study of information monopolies. He argues that one way in which social and political power is wielded is through control over communication media (such as a complex writing system controlled by a special class of priests). Information monopolies can be broken, however, by new media. Innis suggests that the medieval Church's monopoly over religious information, and thereby over salvation, was broken by the printing press. The printing press bypassed the Church's scribes and allowed for the wider availability of the Bible and other religious texts. The same content, the Bible, therefore, had different effects in different media.

Innis argues that elites can more easily control some media than others. A medium that is in short supply or that requires a special encoding or decoding skill has more potential to support the special interests of elite

classes because they have more time and resources to exploit it. On the other hand, a medium that is easily accessible to the average person is more likely to help democratize a culture.

Innis also argues that most media of communication have a 'bias' either towards lasting a long time or towards being moved easily across great distances. He claims that the bias of a culture's dominant medium affects the degree of the culture's stability and conservatism as well as the culture's ability to take over and govern a large territory. 'Time biased' media such as stone hieroglyphics, he argues, lead to relatively small, stable societies because stone carvings last a long time and are rarely revised, and their limited mobility makes them poor means of keeping in touch with distant places. In contrast, messages on light, 'space-biased' papyrus allowed the Romans to maintain a large empire with a centralized government that delegated authority to distant provinces. But papyrus also led to more social change and greater instability. The Romans conquered and administered vast territories, but then their empire collapsed when they lost their supply of papyrus from Egypt.

In his densely written *Empire and Communications* and *The Bias of Communication*, Innis rewrites human history as the history of communication technologies.<sup>1</sup> His overview begins with the cradle of civilization in Mesopotamia and Egypt and ends with the British empire and the Nazis.

Among the people Innis influenced was a literary scholar, Herbert Marshall McLuhan. Extending aspects of Innis's perspective, McLuhan's work adds the notion of 'sensory balance'. He analyses each medium as an extension of one or more of the human senses, limbs, or processes. McLuhan suggests that the use of different technologies affects the organization of the human senses and the structure of the culture. He divides history into three major periods: oral, writing/printing, and electronic. Each period, according to McLuhan, is characterized by its own interplay of the senses and therefore by its own forms of thinking and communicating. McLuhan also suggests that each medium requires its own style of behaviour, so that an intense performance that works well on the 'hot' medium of radio might seem very stiff and wooden on the 'cool' medium of television.<sup>2</sup>

Innis and McLuhan stand alone in terms of the breadth of history and culture they attempt to include within their frameworks. Other medium theorists, however, have looked at various segments of the spectrum of past and present media effects. Walter Ong, whose work influenced and was influenced by McLuhan's, has offered wonderfully rich studies of the shift from orality to literacy. Dimensions of this transition have also been explored by J. C. Carothers, Eric Havelock, Jack Goody and Ian Watt, and A. R. Luria.<sup>3</sup> All these scholars argue that literacy and orality foster very different modes of human consciousness. They describe how the

spread of literacy affects social organization, the social definition of knowledge, the conception of the individual, and even types of mental illness.

The seemingly less dramatic shift from script to print has been explored in detail by H. L. Chaytor and Elizabeth Eisenstein.<sup>4</sup> Chaytor argues that print significantly changed the oral and scribal worlds by altering literary style, creating a new sense of 'authorship' and intellectual property, fostering the growth of nationalistic feelings, and modifying the psychological interaction of words and thought. Eisenstein echoes many of these themes and presents many cogent analyses and an enormous amount of evidence to support the argument (put forward by Innis and McLuhan) that the printing press revolutionized Western Europe by fostering the Reformation and the growth of modern science.

Walter Ong, Edmund Carpenter, Tony Schwartz, and Daniel Boorstin have looked at the ways in which electronic media have altered thinking patterns and social organization.<sup>5</sup> Carpenter and Schwartz are generally McLuhanesque in content, method, and style, but they add many fresh insights and examples. Ong and Boorstin present more traditional scholarly analyses that support McLuhan's basic arguments but also go beyond them. Ong describes the similarities and differences between the 'primary orality' of preliterate societies and the 'secondary orality' that results from the introduction of electronic media into literate societies. He looks at the spiritual, sensory, and psychological significance of the return of 'the word', as a spoken event, in an electronic form. Boorstin describes how new media 'mass-produce the moment', make experience 'repeatable', and join many other recent technological inventions in 'leveling times and places'. He also compares and contrasts political revolutions with technological revolutions and discusses the impact of new technologies, including electronic media, on our conceptions of history, nationality, and progress.

### The History of Civilization from a Medium-Theory Perspective

Each of the medium theorists mentioned above covers different territory, takes a different approach, and reaches somewhat different conclusions. Yet when their arguments and analyses are taken together, a surprisingly consistent and clear image of the interaction of media and culture emerges. Broadly speaking, these theorists' works cohere into a shared image of three phases of civilization matched to three major forms of communicating: the move from traditional oral societies to modern print societies (via a transitional scribal phase), to an electronic global culture.

### *Traditional oral societies*

In oral societies, the preservation of ideas and mores depends upon the living memory of people. A great deal of time and mental energy, therefore, must be spent in memorization and recitation. This form of 'living library' ties people closely to those who live around them. To make memorization possible, ideas are generally put in the form of rhythmic poetry and easily remembered mythic narrative. The oral culture's laws and traditions are conveyed through familiar stories filled with stock phrases and formulaic actions and events.

Oral cultures are 'closed' in two senses. First, since orality requires physical presence, oral cultures have few if any ways of interacting with the thinking of those who do not live with them physically. Second, 'individuality', in the modern sense, is limited. Individual expressions, novel ideas, and complex arguments can find little place in such cultures because they are difficult to remember (even by the persons who come up with them) and almost impossible to pass on to any significant number of others.

Such societies are 'traditional', not only in the sense of comparison with later ones, but also internally. That is, they tend to work hard to conserve what they already have and are. Change is slow because cultural and personal survival depend so heavily on memorizing what is already known and what has already been done and said. Creativity and newness are discouraged as potentially destructive forces.

The closed sphere of the oral community, however, also fosters dimensions of openness and fluidity in terms of social and sensory experience. There are relatively few distinctions in social status and perspective. And the oral world is one of rich involvement with and interplay of all the senses of hearing, sight, smell, taste, and touch.

### *The transitional scribal phase*

Writing begins to break down tribal cohesion and the oral mode of thinking because it offers a way to construct and preserve prose and to encode long strings of connected ideas that would be almost impossible for most people to memorize. The development of writing alters not only dissemination patterns but also the content of what is disseminated. Writing establishes the potential for true 'literature', 'science', and 'philosophy'.

With writing, symbolic communities begin to compete with practical communities. That is, writing allows literate people who live next to each other within the same physical environment to know and experience different things, to have different world views. At the same time, writing

permits people who read the same material to feel connected to each other regardless of the physical distance between them. Writing, therefore, both splinters and unites people in new ways.

But, unlike speech and hearing, writing and reading are not 'natural' means of communicating. They require much learning and rote practice, and they have their full effect only when they are learned at a very young age, when the writing system used is easily mastered by large portions of the population, and when written materials are widely available. The impact of writing, therefore, is uneven until the development of the printing press in the fifteenth century, the spread of schooling, and the corresponding growth of literacy from the sixteenth to the nineteenth centuries. Further, the printing press has more impact on Western cultures than on Eastern cultures because many of the written symbol systems used in the East have too many signs to be learned by large portions of the population and are not easily adaptable to the technology of repeatable type.

### *The rise of modern print culture*

The printing press and the relatively wide availability of printed materials further undermine the importance of the 'local community' in several ways. First, print divides people into separate communication systems. The poor and illiterate remain wholly dependent on oral communication, while the upper classes and growing middle class increasingly withdraw (both literally and metaphorically) to their libraries. For the literate, there is a retreat from the web of community life and extended kinship ties and a move toward greater isolation of the nuclear family.

While the wholly oral nature of community life once bound people into similar experiences and knowledge, reading and writing separate people into different informational worlds. The literate now read and write about things the illiterate cannot hear, speak, or remember, and different readers and writers develop different 'viewpoints' and 'perspectives'.

At the same time as printing creates smaller units of interaction at the expense of the oral community, it also bypasses the local community in the creation of *larger* political, spiritual, and intellectual units. The ability to 'see' on a printed page what were once only spoken folk languages, for example, fosters a sense of unity among all those who use the same language (not just among those who speak it in the same time and place). Conceptions of 'them vs. us' change. Feudal societies based on face-to-face loyalties and oral oaths begin to give way to nation-states and to nationalism based on a shared printed language. Similarly, religious cohesion no longer depends exclusively on shared rituals with those one can see, hear, and touch. The potential for religious unity across great distances, along

with disunity among those in the same place, is fostered by the patterns of sharing holy texts.

In oral societies, words are always *events* – as time-bound as thunder or a scream. Members of an oral culture are enmeshed in the ongoing texture of spoken communication. (Plato – an early booster for writing – wanted to ban the poets from his Republic in order to free citizens from the spell of oral recitation.) But in a print society the word becomes an *object* spatially fixed on a page – that one can stare at and think about. Indeed, literate people often have difficulty thinking of a word without picturing it in written or printed form. Thus ideas move from the world of the aural and temporal to the world of the visual and spatial.

Print, even more than writing, undoes the tribal balance of the senses. The importance of the simultaneous aural surround yields to the dominance of the sequential sense of sight ('seeing it in black on white', 'following your line of thought', 'developing your point of view'). In the circular world of hearing, a person is always at the centre of whatever he or she is experiencing. But the visual, typographic person is, in a sense, always on the edge, an observer, who has time to think before reacting. A listener interrupts a speaker with a response, but a reader must let a writer have his or her 'say' before drafting a reply.

The break from intense, ongoing aural involvement distances people from sound, touch, and direct response and allows people to become more introspective and more individualistic. 'Rationality', which comes to be highly valued, resembles the form of printed type: step-by-step abstract reasoning along a continuous line of uninterrupted thought. From the simultaneous world of sound, literate cultures move toward a one-thing-at-a-time and a one-thing-after-another world. The isolation of stimuli fosters cause-and-effect thinking. Literate thinking diminishes the view of life as a repeating sequence of natural cycles and promotes the view of constant linear change and improvement.

Changes in thinking patterns are echoed by changes in physical settings: habitats evolve, over time, from villages and towns with winding paths to linear streets in grid-like cities. Production of goods moves to the assembly *line*. Modern classrooms are built with chairs bolted to the floors in rows just as letters are fixed on a page. The new physical settings generally discourage informal oral conversation. In short, the mental and physical worlds shift in structure from circles to lines, from the round world of sound to the linear form of typography.

The production of multiple copies of exactly the same text creates new conceptions of literary style, fame, authorship, and intellectual property. The ability to share the same knowledge across wide areas and the continual possibility of adding to, modifying, and correcting texts – without losing parts of them through mistakes in scribal copying – also fosters a

new form of incremental growth of knowledge. In both oral and manuscript cultures, the key intellectual process was one of *preservation*. But with the printing of multiple copies of exactly the same text, there is a new 'safety in numbers' that allows the intellectual challenge to become one of *discovery* and change.

While scholars in a scribal culture spent much of their intellectual careers as in-depth commentators on the relatively few manuscripts available to them, scholars in a print culture shift to comparing and contrasting a wide spectrum of related literature and to contributing their own original work to the wide and rapidly widening stream of ideas.

In these ways, the printing press fosters the rapid growth of scientific inquiry and the rejection of traditional authority. In sixteenth-century Europe, for example, the ready availability of copies of holy texts in native tongues weakens the monopoly over salvation held by the Church and supports the Reformation, and the sudden spurt of cumulative knowledge fuels the Scientific Revolution and the spread of mechanical production.

#### *Global electronic culture*

Ironically, print culture comes to its full power just as the seeds of its destruction are planted. The late nineteenth century sees the drive toward universal literacy, but during the same years the first electronic media begin to be widely used: the telegraph and the telephone herald the future age of radio, television, and beyond. The use of electronic communication, like other media, takes time to develop and ripen before having dramatic, visible impact on social structure in the mid-twentieth century.

Electronic media bring back a key aspect of oral societies: simultaneity of action, perception, and reaction. Sensory experience again becomes a prime form of communicating. Yet the orality of electronic media is far different from the orality of the past. Unlike spoken communication, electronic communication is not subject to the physical limitations of time or space. Electronic messages can be preserved, and they can be experienced simultaneously by large numbers of people regardless of their physical locations.

Once again, the boundary line between 'them' and 'us' shifts, but the result is more diffuse and less predictable. The sense of 'us' is no longer formed solely by face-to-face oral solidarity or by the sharing of similar texts. Electronic media bypass traditional 'literary circles', group associations, and national boundaries and give us a new world view by thrusting us among people who have not read what we have read, have not shared our territory, and may not even speak our language.

While print allows for new ways of sharing knowledge, and

industrialization enables the wide scale sharing of *products*, electronic media tend to foster new types of shared *experience*.

New forms of concrete sensory experience compete with abstract print knowledge. And the word returns in its old form – as an event rather than as an object. But the scale of sharing is far different. Electronic media are like extensions of our sensory apparatus that reach around the planet. Electronic sensors return us to seemingly 'direct' encounters, but on a global scale.

As a result of the widespread use of electronic media, there is a greater sense of personal involvement with those who would otherwise be strangers – or enemies. The seemingly direct experience of distant events by average citizens fosters a decline in print-supported notions of delegated authority, weakening the power of political parties, unions and government bureaucracies. The sharing of experience across nations dilutes the power of the nation state.

While written and printed words emphasize ideas, most electronic media emphasize feeling, appearance, mood. There is a decline in the salience of the straight line – in thinking, in literary narrative, in human-made spaces and organizations. There is a retreat from distant analysis and a dive into emotional and sensory involvement. The major questions are no longer 'Is it true?' 'Is it false?' Instead we more often ask, 'How does it look?' 'How does it feel?'

### Information-system Theory: An Example of Second-generation Medium Theory

One dimension that is missing from the first generation of medium theory is a detailed attempt to link this theoretical perspective with analyses of everyday social interaction. My own medium-theory work involves a reformulation of role theory that can address the influence of media. There is room here only to sketch my model in its broadest outlines. Further, although the theory functions on both the micro and the macro level, I will focus here on the macro level in order to work towards a summary sketch of changes that can act as a sort of template to fit over the phases of civilization described above.

#### *Roles as information networks*

I argue that everyday behaviour is susceptible to change by new media of communication because social roles are inextricably tied into social communication. Social identity does not rest in people, but in a network of social relations. When social networks are altered, social identities will change. In any given social period, roles are shaped as much by *patterns* of

access to social information as by the *content* of information. That is, different cultures and different historical periods are characterized by different role structures not only because of 'who knows what', but also because of 'who knows what about whom' and 'who knows what *compared* to whom'.

Patterns of access to social information are linked to patterns of access to social situations. People of the same status in society generally have access to the same or similar situations and information. People of different social status usually have access to different information and experience. Put differently, distinctions in behaviour, identity, and status are created and supported by separating people into different informational worlds. Patients are kept out of hospital staff meetings, customers stay out of restaurant kitchens, the officers' club is off limits to enlisted personnel, students are usually excluded from faculty meetings. If such distinctions could not be maintained, then the distinctions in identity and behaviour would also begin to blur. Of course, greater and lesser social differentiation is not brought about by a single act of inclusion or exclusion, but by the cumulative contribution of many prior different or similar experiences for different people.

In general, *the more situations and participants are segregated, the greater differentiation in status and behaviour*. Conversely, *the more situations and participants overlap, the less social differentiation in status and behaviour*. Situation segregation supports differences among people of different status by exposing different people to different experiences, by isolating the contexts for one social role from those of another, and by allowing for increased access to what Erving Goffman calls a 'back region': a private 'backstage area' for preparing for, and relaxing from, performances for 'the other'. The more backstage time and space social performers have, the more formal and distinct the onstage role performance can be.

#### *Situations as information-systems*

Although 'situations' are usually thought of in terms of physical locations, I argue that they are in fact 'information-systems'. That is, we often think of a social setting as being a *place* because the physical barriers of walls and distance once largely defined the boundaries of inclusion and exclusion in the communication processes occurring there. But *media* also play a role in defining the boundaries of social situations. In a literate culture, for example, an advice book for parents functions as an isolated 'place' for adult communication that cannot be 'overheard' by young, illiterate children. Conversely, the presence of a television camera can transform a 'private' adult conversation into one that is accessible to children (as happens daily with TV talk shows).

Roles should therefore be thought of as fluid information-networks that are susceptible to restructuring through changes in information-flow patterns, such as those brought on by changes in media use. Different media enhance and reduce the amount of shared experience for different people. Media also alter the extent to which we have a private, backstage area where we can relax from and rehearse for our onstage roles. In general, *media that segregate access to social situations will work to segregate roles; media that blur access to social situations will foster less distinct roles.*

### *The role triad*

The impact of information access patterns becomes clearer when we look at how virtually all social roles can be described in terms of an information-network-sensitive triad of social roles:

#### Group Identity / Socialization / Hierarchy

Group Identity entails roles of affiliation or 'being' (such as male vs. female; professional vs. hard-hat; lawyer vs. doctor). Socialization involves roles of transition or 'becoming' (such as child to adult; medical student to doctor; immigrant to citizen; husband to father). Hierarchy describes roles of authority (such as political leader vs. voter; company president vs. company secretary; officers vs. enlisted personnel).

In everyday reality, the categories are not mutually exclusive. Most of us function in all three simultaneously: identified with a number of groups, at various stages of socialization into new roles, and at some particular rank or ranks within one or more hierarchies. Further, many roles have elements of more than one category. Being a child, for example, involves the issue of socialization, yet the relatively greater power and authority of adults make childhood an issue of hierarchy as well.

At the same time, each category has distinct elements: Group Identity allows for 'separate but equal' relationships, where members of different groups need not necessarily stand in any particular hierarchical or developmental relationship (doctors and lawyers, for example). Socialization is unlike group identity and hierarchy in that it involves expected development into the reference role (while doctors do not become lawyers, and men do not usually become women, all surviving children become adults). And roles of hierarchy depend on a 'separate but unequal' dimension that must appear to rest on inherent superior qualities.

Each role category describes a myriad of roles, but is also represented by a quintessential example, a role that is shared by everyone in the society:

Group Identity – Male vs. Female.  
We are each either male or female.

Socialization – Child to Adult.

We all move from childhood to adulthood.

Hierarchy – Political Leaders and Average Citizens.

We all participate in this relationship of political power.

### *Informational Characteristics of the Role Triad*

Virtually every aspect of every social role can be described in terms of group identity, socialization, and/or hierarchy. Each of these role categories, in turn, can be described in terms of set patterns of access to social information.

Group identity depends upon *shared, but secret* information – that is, information and experience must be shared among group members but remain inaccessible to 'outsiders'. Traditional distinctions between social groups, therefore, are supported by separating people into different informational spheres where they have different experiences, develop different world views, become somewhat mysterious to each other, and where they can 'privately' rehearse for roles of interaction with members of other groups. Socialization involves *staggered access* to the situations and information of the new role or 'destination group'. Every stage of socialization into a new role involves both exposure to, and restriction from, social information. We tell sixth graders things we keep hidden from fifth graders, for example, and we continue to keep hidden from sixth graders things we will tell them as seventh graders.

Hierarchy rests upon *non-reciprocal* access to information, including tight control over performance, and mystification surrounding the need for control. Status is maintained by secrecy and by non-secret information going 'through channels', that is, passing from higher status to lower status individuals rather than the other way around or in no particular pattern.

### *Changes in the role triad*

Changes in the number and type of social information-systems do not obliterate group identity, socialization, and hierarchy, but they change the specific form that each type of role takes in a given social period. The greater the number of distinct information-systems, the greater the number of distinct group identities, stages of socialization, and ranks of hierarchy. The more information-systems interlock, the more group identities, stages of socialization, and ranks of hierarchy blur. If, for example, we always taught fifth, sixth, and seventh graders in the same classroom, we would find it difficult to establish three distinct social identities for the children.

A medium-theory approach to role change suggests that different media are like different types of rooms – rooms that include and exclude people in different ways. The introduction of new media into a culture restructures the social world in the same way as building or removing walls may either isolate people into different groups or unite them into the same environment. Media that segregate situations will foster segregated behavioural patterns. Media that integrate situations will foster integrated behavioural patterns.

As I have detailed elsewhere, print media and electronic media differ along a number of dimensions that interact with the structure of social information networks.<sup>6</sup> In general, print media tend to segregate what people of different ages, sexes, and statuses know relative to each other and about each other, while electronic media, particularly television, tend to integrate the experience and knowledge of different people. Further, television's focus on personal appearance, gesture, and emotion demystifies many roles and emphasizes what is common to all humans. And television and other electronic media are especially potent transformers of roles since electronic media alter the once taken-for-granted relationship between physical place and social place, between *where* one is and what one experiences.

My medium-theory analysis of social roles yields a view of three phases of Group Identity, Socialization, and Hierarchy that is consistent with but adds another dimension to the three phases of culture outlined by the first-generation medium theorists.

### Three Phases of Social Roles

#### *Oral conceptions of Group Identity, Socialization, and Hierarchy*

In oral societies, most of the distinctions that exist in group identities, socialization stages, and hierarchal roles are spatially rooted and supported.<sup>7</sup> Separate huts and activities support separate information-systems and therefore separate roles.

The importance of separate spheres in maintaining social differentiation is made more evident by the relative lack of role distinctions in nomadic oral societies. In nomadic hunter and gatherer societies, the difficulty of maintaining many separate places, or information-systems, for different people tends to involve everyone in everyone else's business. The lack of boundaries leads to relatively egalitarian male/female, child/adult, and leader/follower roles.<sup>8</sup>

Although men and women have some division of labour in hunter and gatherer societies, it is not as sharp as in agricultural and industrial

societies, and doing the work of the opposite sex is not considered shameful or unusual. Because nomadic men cannot separate the public sphere from the domestic one, they cannot establish aura and distance. Women are involved in public decisions, and they play an important role in supporting the family. Men participate in childcare, and both men and women are expected to be gentle, mild-mannered, and non-competitive. The lack of a separate sphere for the nuclear family often leads to community involvement in family disputes.

Through the openness of nomadic life, children are included in most adult activities and are not sharply segregated by age or sex. Play and work often take place in the same sphere and involve similar activities. Sex play among children and adolescents is common. Obedience to adults is emphasized less than self-reliance, and physical punishment of children is rare.

Because leaders in nomadic societies cannot get away from those they lead, leaders cannot hoard information or project a public image sharply different from their private behaviours. Leadership, therefore, is often more of a burden than a privilege. Leaders gain authority by setting the best example, by working harder than everyone else, by sharing more than others. Moreover, since there are no distinct spheres to which one can move as one changes status, nomads have few large-scale or long-term initiation rites.

But much of this changes when nomads settle down. Once they attach themselves to particular places, their social spheres begin to segregate. Household privacy leads to new forms of social differentiation. Women's responsibility for birth and lactation isolates them at home and starts to separate their everyday experience from that of men, who are more involved in a newly developed public sphere. Work becomes more clearly sex-typed and the socialization experiences of boys and girls become much more dissimilar. Spatial segregation also supports the development of a rudimentary hierarchy.

Even in sedentary agricultural societies, however, there is a limit to role segregation. The communication networks of the society remain oral; and, while some segregation is possible, separating what different members of the society know into *many* different oral networks is difficult. In oral societies, isolating children into year-by-year categories, for example, is generally impossible. The more typical distinctions are simply between children and adults, with a single significant rite of passage from childhood to adulthood (especially for boys). These rites are often called 'puberty rites', but they rarely coincide with individual physiological puberty.<sup>9</sup> They are, in fact, information-network rites, in which a whole group of children is given access to the locations and secrets of adults, whose dress and roles they then assume. Similarly, while separate spheres

for men and women support some gender distinctions in knowledge, experience, behaviour, and dress, there is rarely a complex system of division of labour or a splintering of society into many different group identities. Unlike modern societies, there are not many stages or levels of differences among people, and rites of passage are significant but minimal in number.

### *Literate forms of Group Identity, Socialization, and Hierarchy*

In the transitional scribal phase, society develops a split personality. In the Middle Ages, for example, the elites of the nobility and the Church use a monopoly on literacy to foster a starkly hierarchical system, marked by dramatic differences in dress, language, and activity between the literate elites and the illiterate masses. But within the continuing oral societies of village life far fewer distinctions exist.

In pre-print Western Europe, for example, children of illiterate families are treated as 'little adults'. Once past infancy, children dress like adults, work beside adults, go to war with adults, drink in taverns with adults, and sleep in the same beds as adults. What few schools exist (primarily to train clerics) are not segregated by ages. Children are not shielded from birth or death, and they often witness and engage in sex play. Conversely, adults are childlike by modern standards, enjoying games and stories that literate societies associate with children.<sup>10</sup>

Similarly, in pre-print Western Europe men and women share many rights and responsibilities. Women have the right to participate in municipal affairs; to sit on, and testify before, courts; to substitute for incapacitated husbands; and to inherit, as widows, the legal prerogatives of their dead husbands.<sup>11</sup> Peasant dress for men and women is very similar.

But the spread of print supports compartmentalization and specialization. The new emphasis on reading as a source of wisdom and religious salvation widens the gap between those who can read and those who cannot. Further, distinctions in reading abilities come to be seen as tied to 'natural' differences in rank and identity.

The young and illiterate are excluded from all printed communication, and come to seem very 'innocent'. Both 'childhood' and 'adulthood' are invented in Western culture in the sixteenth century, and their spread follows the spread of schooling.<sup>12</sup> All-age roles, behaviours, and dress begin to splinter into separate spheres for people of different ages and reading abilities. Children are increasingly isolated from adults and from children a year or two younger or older. Many topics come to seem unfit for children's ears and eyes.

Classrooms that mix the ages gradually fall into disfavour, and the age-

graded school comes to be seen as the natural means of education. The schools develop a convenient monopoly. They depart from education in oral societies in that they control both knowledge and the skill (reading) that is required to attain it. Every grade of schooling involves revelation of some new information and continued secrecy surrounding other information.

The different levels of reading complexity offer a seemingly natural means of segmenting information – and people. All fields begin to develop 'introductory' texts that must be read before one can go on to 'advanced' texts. Identities splinter into a multitude of separate spheres based on distinct specialties and mastery of field-specific stages of literacy. The new grading of texts serves as a barrier to straying from one field into another. Crossing into a new field demands that one must bear the embarrassment of starting again as a novice and slowly climbing a new ladder of printed knowledge. This contrasts markedly with the oral and scribal approach, which is inherently interdisciplinary and non-graded.

As printing spreads, women are told that only men need to become literate, and men use restricted literacy to enhance their positions relative to women. The earliest feminist movement in Western culture in the sixteenth and seventeenth centuries involves a failed attempt by women to maintain old rights.<sup>13</sup> Women come to be seen as part adult, part child. Elizabethan males express doubts over whether a woman could be considered as a reasoning creature and whether she has a soul.<sup>14</sup> Women are increasingly isolated in the domestic sphere and are increasingly thought to be too weak, irrational, and emotional to deal with activities in the male realm. As late as 1865, doctors warn officials of Vassar, a new college for women, that attempting to educate a woman as if she were a man is dangerous.<sup>15</sup> For many years, women are confined to a primarily oral subculture within a literate, male-dominated society. Moreover, minimally literate women are given the responsibility of caring for the increasingly dependent illiterate children.

Unlike oral societies with oral vows of allegiance, leadership in print societies is organized from a distance and is based on inaccessibility, delegated authority, and tight control over public image. Machiavelli's *The Prince* – written at the start of the print age – is an early 'political public-relations manual'. Training and etiquette manuals are published for people of both sexes and different ages. Indeed, every category of age, sex, and class begins to be increasingly isolated from the information and experience of others.

The development of bounded nation-states with centralized leadership is paralleled on a lower level by the isolation of the nuclear family from the extended community of kin and neighbours. The spread of literacy, with its emphasis on hierarchy and sequence, supports a linear chain of

command, from God-the-Father, through a strong national leader, to a father who is a god to his wife and children.

Separate information-systems foster distinct uses of separate places, with increasingly distinct rules of access to them and distinctions in appropriate behaviour within them. People pass from role to role many times a day and change status through various rites of passage (matriculation, graduation, promotion, marriage, etc.) dozens of times in a lifetime.

Birth, death, mental illness, and celebrations are increasingly removed from the home and put into isolated institutions. The membranes around the hospital, prison, military barracks, factory, and school thicken over several centuries.<sup>16</sup>

The unity and continuity of a print society is far different from the unity of an oral society. The oral society's unity is a 'homogeneous solidarity' that relies on people acting, thinking, and feeling in relatively similar ways. Unity in a print society, however, depends on heterogeneity. The whole world begins to be seen as a machine with distinct parts, distinct types of people, that fit together to make it work. Print society depends on division of labour, separation of social spheres, segmentation of identities by class, occupation, sex, and so forth. People are increasingly separated into distinct places in order to 'homogenize them into groups' – groups with single identities: 'students', 'workers', 'prisoners', 'mentally ill'. The people in these groups are each seen as interchangeable parts. And the distinct identities are subsumed under the larger system of internally consistent, linearly connected, and hierarchically arranged units.<sup>17</sup>

Print leads to an emphasis on stages, levels, and ranks. The world comes to seem naturally layered and segmented. There is a place for everything, and everything is to be in its place. Those who remain illiterate, however, remain at the bottom or outside of this system. They continue to maintain many of the features of oral societies. Ironically, as late as the nineteenth century, the labour of illiterate children helps to feed the growth of a special subculture for the innocent children of the literate classes: publishers hire lower-class children to hand-tint the engravings in the growing number of books for middle-class children.<sup>18</sup>

#### *Electronic conceptions of Group Identity, Socialization, and Hierarchy*

Electronic media begin to be widely used even as the impact of print leads to heightened attempts to isolate social spheres. The 'child savers' of the late nineteenth century try to extend the isolation of the children's sphere to the lower classes. A woman's place is to be in the home. The isolation

of rich from poor, men from women, young from old intensifies, and 'institutions' become more fully isolated spheres for handling each aspect of social life.

But electronic media begin to reverse the trend. The telephone, radio, and television make the boundaries of all social spheres more permeable. One can now 'witness' events without being physically present; one can communicate 'directly' with others without meeting in the same place. As a result, physical structures no longer fully mould social identity. The walls of the family home, for example, no longer wholly isolate the home from the outside community. Family members at home now have access to others and others have access to them. Now, *where* one is has less to do with who one is.

The social information available to the ghetto family now more closely resembles the information available to the middle-class family. Information available to women now more closely resembles information available to men. Formerly distinct groups share more information about society and about each other – information that once distinguished 'insiders' from 'outsiders'. As a result, traditional group bonds are weakened and traditional distinctions among groups become partially blurred. This leads to a pressure to integrate roles and rights even when no clear mechanisms for doing so exist.

The explosion of clashing cultures comes in the mid- to late 1960s, when the first generation to watch television before entering school (the temple of literacy) comes of age. This generation rejects traditional distinctions in roles for young and old, for men and women, and for authorities vs. average citizens. The integration of information networks leads to a demand to integrate physical locations through the civil rights movement, the women's movement, and the children's liberation movement. The tense confrontations of 'The Sixties' become more muted, not when the drive for such integration subsides, but as the 'revolutionary' values and behaviours of the 1960s spread throughout the culture.<sup>19</sup>

The membranes around institutions are thinning. Hospital and prison visiting hours and rights, for example, are expanding, and children are being allowed to visit institutions more freely. Fathers and children, once excluded from births of babies, are now included in what is called the 'family birthing process'. There is a decline in male-only clubs, adult-only restaurants, and dress-specific events and locations.<sup>20</sup>

We still live in and interact in segregated physical locales. But television and other electronic media have broken the age-old connection between *where* we are and what we know and experience. Children may still be sheltered at home, but television now takes them across the globe before parents give them permission to cross the street. Through television, women – once isolated in the domestic sphere – have been exposed to

places and activities men used to tell them they should know nothing about. And while few of us actually travel to see our leaders in the flesh, television now shows us our politicians close up – stammering and stumbling in living colour. Television blurs the line between public and private by bringing the public sphere into the home, and by emphasizing the personal and emotional dimensions of public actions through its intimate close-ups of human faces.

Television has lifted many of the old veils of secrecy between children and adults, men and women, and politicians and average citizens. By blurring 'who knows what about whom' and 'who knows what compared to whom', television has fostered the blurring of social identities, socialization stages, and ranks of hierarchy. The electronic society is characterized by more adultlike children and more childlike adults; more career-oriented women and more family-oriented men; and by leaders who act more like the 'person next door', just as average citizens demand to have more of a say in local, national, and international affairs.

As we move forward, our society also spirals backwards. The middle and upper classes are moving towards the behaviours once associated with the illiterate lower classes. Premarital sex, high illegitimacy rates, 'shacking up', and drug use spread upward through all levels of society. As recently as the early 1970s, differences in teenage sexuality could still be predicted accurately on the basis of race, socio-economic status, religion, and residence. But many of these distinctions have largely disappeared.<sup>21</sup> These changes violate the print industrial society's belief in 'Progress'. Yet they support the view that we are retreating from 'literate forms' and returning to 'oral forms' of behaviour.

The relatively shared information environment fostered by electronic media does not lead to identical behaviours or attitudes. Far from it. While the world is more homogenized on the macro, societal level, the experience on the micro, personal level is the opposite: the individual's world becomes more heterogeneous, a world filled with more variety, more choices. Just as traditional differences among people of different ages, sexes, status, families, neighbourhoods, and nationalities are blurring, people of the same age, sex, status, families, neighbourhoods, and nationalities are becoming less similar to each other.

While the print social order segregated people in their 'special spheres' in order to homogenize individuals into interchangeable elements of a larger social machine, the electronic society integrates all groups into a common sphere with a new recognition of the special needs and idiosyncrasies of individuals. What people share is not identical behaviour, but a common set of options.

But sharing of options is too weak a bond to hold people together. Metaphors aside, one cannot consider the whole country or world as one's

'neighbourhood' or 'village'. Another outcome of the homogenization of information networks, therefore, is the development of many new, more superficial, more shifting groupings that form against the now relatively unified backdrop of common information. People traditionally united and divided into groups that corresponded primarily to social class, ethnicity, race, education type and level, religion, occupation, and neighbourhood. But current groupings also develop on the basis of wearing similar clothes, participating in similar sports, listening to the same type of music, or attending the same class.

Nations evolved from feudal systems of local alliances when local membranes and arteries of communication were superseded by national ones. Now, new arteries and membranes are bypassing nations and fostering the rise of a system of quickly changing, neo-feudal ties and alliances on a global scale. Here, too, there is both unification on the macro level and fragmentation on the micro level. Old boundary lines fade in significance as distinct European countries plan to join into a single economic unit and as once taken-for-granted differences between East and West blur. But new boundary lines are created as earlier unions – Soviet, Yugoslav, Czech/Slovak – splinter.

The above is merely a rough sketch of a medium-theory analysis of role changes. I have explored other aspects of this information-system approach to social behaviour elsewhere.<sup>22</sup> Moreover, this analysis of role change is only one example of second-generation medium theory. Other scholars have expanded this perspective in other ways. Susan Sontag has written about the pervasive role of photography in our culture. Edward Wachtel has explored the impact of technology on art and perception. Paul Levinson has written about technology as an agent of cognitive development and about the impact of computer networks and electronic text. Neil Postman has explored the epistemology of television compared with print. Sherry Turkle and Judith Perrolle have written about the ways in which computers affect what we know, how we behave, and the ways we think about ourselves. Susan Drucker has analysed how the televising of trials dramatically alters the way they are experienced by the culture. Shoshana Zuboff has studied the role of the 'smart machine' in redefining work and power. Ethan Katsh has written about the ways in which electronic media have transformed the legal system. Gary Gumpert and Susan Drucker have explored the ways in which communication technologies alter the nature and the use of public space. Roderick Hart has analysed how television has changed the way politics is conducted and perceived. Medium theory has also played a key role in Alvin Toffler's and James Burke's theories of social change.<sup>23</sup>

### Relative Strengths and Limits of Medium Theory

Unlike content research, the 'effects' that medium theorists look for are generally difficult to demonstrate through 'social-scientific' methods. The recreation of a pre-electronic 'print culture' for observation or experimental manipulation, for example, is virtually impossible. And surveys are not particularly useful in medium theory since the point is often to examine types of structural changes and sources of influence that are out of the awareness of most people. There have been some significant attempts to test aspects of medium theory experimentally and descriptively.<sup>24</sup> For the most part, however, medium theory, especially macro-level medium theory, relies heavily on argument, historical analysis, and large-scale pattern identification. Although the best studies weigh evidence carefully and search for disconfirming as well as confirming examples, most medium theory is not supported by systematic quantitative analyses. For some people, this makes medium theory much more exciting and interesting than traditional content analysis; to others, it makes medium theory frustrating and 'unscientific'.

Just as traditional content approaches tend to obscure important differences among media, medium approaches tend to overlook the significance of content. Generally, medium research is most helpful when looking at broad structural patterns over a long period of time. But medium theory is not terribly useful in short-term analysis of how to use a communication technology and whether and how to regulate it. A parent who is angry about the violent and advertising-saturated programmes his or her children see will find cold comfort in a medium perspective that argues that TV in general weakens the print-supported sphere of innocent childhood and returns us to a world where, to control what children know, parents must either censor their own experience or isolate themselves from their children. Similarly, a woman faced with a daily stream of often demeaning gender images on television may have difficulty focusing on the encouraging medium-theory argument that television, more than print, includes women in many all-male spheres of the culture. Rather than leaving such situations at the medium-theory level, we also need to look at the institutional and economic forces that shape media content. And, if we want to change the current media systems, we need to look at the available political options for doing so.

Medium theorists' focus on the characteristics of media has tended to lead to another weakness. Most medium theory begins with the invention and use of a medium and has tended to ignore the institutions that have important political and economic stakes in the development of some technologies over others. A political and economic system that is inter-

ested in stimulating consumption of goods and ideology, for example, is likely to foster the development of uni-directional mass communication technologies such as broadcast radio and television. Other technologies or similar technologies used differently – such as ham radio or interactive community television – may receive much less support and encouragement. Medium theory has also tended to ignore vast cultural differences that mute and alter the development, use, and perception of various communication technologies.

Although the response is inadequate, some medium theorists would probably counter that those who have focused on the roles of powerful political and economic institutions and on the influence of culture almost always ignore the ways in which the 'chosen' technologies have social consequences apart from those planned and often alter those very institutions and cultures that develop them.

Another common attack on medium theory is that, as a wholly 'deterministic' perspective, it ignores free will and is disproved by the many exceptions to its broad claims. Part of this critique may stem from the fact that medium theorists, in exploring a process that has been largely ignored by mainstream media researchers, have tended to sketch very broad patterns of social change and have not been especially careful in stating qualifications. Certainly, the most useful way to look at medium theory is to think of it not as deterministic, but as a model that deals in general tendencies. Medium theorists suggest that each medium invites, allows, encourages, fosters some human actions while discouraging others. This perspective is no more deterministic than widely accepted analyses of how the paths of rivers and other geographical features have shaped general patterns of human settlement and exchange. Unlike medium theory, such analyses are rarely dismissed as deterministic and are not usually thought of as being disproved by exceptions to the general patterns. Like medium theory, such analyses do not claim to predict precise outcomes (sharing a waterway may lead societies to peaceful trade or to war), but they do argue for a general structural prediction (sharing a waterway is more likely to lead to interaction than being on either side of an imposing mountain range). Indeed, since medium theory deals with human-made 'rivers' and 'mountains', it is inherently less deterministic than analyses of the impact of geographical features. Ultimately, the greatest loss of freedom and control results from ignoring the ways in which the communication pathways and barriers we shape tend to reshape us.

The relative strengths and weaknesses of content and medium perspectives are often most visible when we look to the past. Neither approach in isolation, for example, would have told us the full story of the impact of the spread of printing in the sixteenth and seventeenth

centuries. A content/institutional approach probably would have led researchers to conclude that books had two major influences: (1) the fostering of religion (most early books were religious texts); and (2) the further empowering of central monarchical and religious authorities (who controlled most of what was printed). Yet most analysts would now agree that in the long term the printing press fostered the opposite: the weakening of religion with the growth of science and the decline of monarchs with the development of constitutional systems.

With respect to these long-term consequences, medium theory clearly wins. But one cannot discount the implications of content control over those people who actually lived through the initial years of printing. The medium-theory analysis of the long-term tendencies of printing would give little comfort to the family of William Carter who, after printing a pro-Catholic pamphlet in Protestant-dominated England in 1584, was promptly hanged. Similarly, our current information environment is choked by the way television content is controlled – regardless of the ‘inherent characteristics’ of the medium.

While examples from several centuries ago may be clearer and less controversial than those of the last few years, recent events such as ‘People Power’ in the Philippines, the Tienanmen Square protests in China, the revolutions in Eastern Europe, and the dissolution of the Soviet Union also offer insight into the relative strengths and weaknesses of content and medium approaches.

Conventional wisdom claims that most of these events were not predicted by ‘the experts’. Yet, while it is certainly true that those who have focused on the traditional institutional/content approach could not anticipate such dramatic shifts within cultures where the media content was so tightly controlled, medium theorists have long predicted just such changes.<sup>25</sup>

Electronic media’s inherent disregard for physical boundaries made it difficult for these countries to restrict their citizens’ access to many aspects of Western culture. This gave these populations awareness of what they did not have, as well as awareness of global awareness. Television allowed them to protest not simply for the government forces that faced them in the streets but for the global television audience. And the rapid feedback of electronic technology allowed them to be encouraged by the ongoing global response (televised globally as well as transmitted through telephones and fax machines). The heightened global consciousness of heightened global consciousness encouraged each Eastern European country to wait its turn to enter the global television arena. These events were not simply reported on television; in many ways, they happened in, on, through, and because of television.<sup>26</sup>

Medium theory alone, however, cannot explain why the ‘stories’ we

were told about the Philippines and Eastern Europe were still highly selective or why ‘global television’ does not look to all countries equally. The content of the US coverage of Philippine people power, for example, tended to embrace the century-old narrative of US ‘benevolence’ towards the Philippines, while largely ignoring the sordid aspects of the United States’ ‘pacification’ of the islands and the backing of the Marcos dictatorship.<sup>27</sup> Similarly, while massive TV news coverage was given to the overthrow of Soviet-backed regimes in Eastern Europe, almost no attention was given to the simultaneous dramatic push for democracy in Latin America, where voters in Brazil and Chile – whose populations exceed that of all Eastern Europe – held their first free presidential elections since the United States encouraged brutal military coups in 1964 and 1973 respectively.<sup>28</sup>

The medium-theory view of the unique features of global electronic media gives us tremendous insight into the power and potential of our new technologies. But the content/institutional perspective allows us to observe how the selective use and foci of the global spotlight intersect with issues of power, ideology, economics, and journalistic conventions. We need to study all these things if we are to understand our media world.

Ultimately, medium theory is most helpful when it is used not to supplant content concerns but to add another dimension to our understanding of the media environment. What is needed is a better integration of medium theory with other perspectives.<sup>29</sup>

## Notes

The author wishes to thank Edward Wachtel for his useful comments and suggestions.

- 1 See Harold A. Innis, *The Bias of Communication* (Toronto: University of Toronto Press, 1964); and *Empire and Communications* (Toronto: University of Toronto Press, 1972).
- 2 See e.g. Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: University of Toronto Press, 1962), and *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964).
- 3 J. C. Carothers, ‘Culture, psychiatry, and the written word’, *Psychiatry*, 22 (1959), pp. 307–20; Jack Goody and Ian Watt, ‘The consequences of literacy’, *Comparative Studies in Society and History*, 5 (1963), pp. 304–45; Eric A. Havelock, *Preface to Plato* (Cambridge, Mass.: Harvard University Press, 1963); A. R. Luria, *Cognitive Development: Its Cultural and Social Foundations*, trans. Martin Lopez-Morillas and Lynn Solotaroff, ed. Michael Cole (Cambridge, Mass.: Harvard University Press, 1976); Walter J. Ong, *Ramus, Method, and the Decay of Dialogue* (Cambridge, Mass.: Harvard University Press, 1958); Walter J. Ong, *The Presence of the Word: Some Prolegomena*

- for *Cultural and Religious History* (New Haven, Conn.: Yale University Press, 1967); Walter J. Ong, *Rhetoric, Romance and Culture* (Ithaca, NY: Cornell University Press, 1971); Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (Ithaca, NY: Cornell University Press, 1982). For a collection of case studies on the effects of literacy in traditional societies, see Jack Goody, (ed.), *Literacy in Traditional Societies* (Cambridge: Cambridge University Press, 1968).
- 4 H. J. Chaytor, *From Script to Print: An Introduction to Medieval Vernacular Literature* (1945; rpt. London: Sidgwick & Jackson, 1966); Elizabeth L. Eisenstein, *The Printing Press as an Agent of Change: Communication and Cultural Transformations in Early-Modern Europe*, vols I and II (New York/Cambridge: Cambridge University Press, 1979).
  - 5 Daniel J. Boorstin, *The Americans: The Democratic Experience* (New York: Random House, 1973), pp. 307–410; Daniel J. Boorstin, *The Republic of Technology: Reflections on our Future Community* (New York: Harper & Row, 1978); Edmund Carpenter, *Oh, What a Blow that Phantom Gave Me!* (New York: Holt, Rinehart & Winston, 1973); Edmund Carpenter and Ken Heyman, *They Became What They Beheld* (New York: Outerbridge & Dienstfrey/Ballantine, 1970); Tony Schwartz, *The Responsive Chord* (Garden City, NY: Anchor, 1974); Tony Schwartz, *Media: The Second God* (Garden City, NY: Anchor, 1983); Walter J. Ong, *The Presence of the Word*, pp. 17–110, 259–62, 287–324; Ong, *Interfaces of the Word: Studies in the Evolution of Consciousness and Culture* (Ithaca, NY: Cornell University Press, 1977), pp. 82–91, 305–41; Ong, *Orality and Literacy*, pp. 79–81, 135–8; Tony Schwartz, *The Responsive Chord* (Garden City, NY: Anchor, 1974).
  - 6 Joshua Meyrowitz, *No Sense of Place: The Impact of Electronic Media on Social Behavior* (New York: Oxford University Press, 1985), pp. 69–125.
  - 7 The references within this section are to anthropological and historical sources that document each particular role behaviour described. The overall argument presented in this section – that these behaviours fall into a pattern linked to different dominant forms of communication – is my own and is not necessarily one with which the cited authors would agree.
  - 8 The claims about roles in hunter and gatherer societies in the next few paragraphs are culled from Charlotte G. O'Kelly, *Women and Men in Society* (New York: Van Nostrand, 1980); Patricia Draper, 'Kung women: contrasts in sexual egalitarianism in foraging and sedentary contexts', in Rayna R. Reiter (ed.), *Toward an Anthropology of Women* (New York: Monthly Review Press, 1975), pp. 77–109; Jane C. Goodale, *Tiwi Wives: A Study of the Women of Melville Island, North Australia* (Seattle: University of Washington Press, 1971); Lorna Marshall, *The !Kung of Nyae Nyae* (Cambridge, Mass.: Harvard University Press, 1976); Colin M. Turnbull, *The Forest People* (New York: Simon & Schuster), 1961; Ernestine Friedl, *Women and Men: An Anthropological View* (New York: Holt, Rinehart & Winston, 1975). For an analysis of how our own society now resembles some features of nomadic societies, see my *No Sense of Place*, pp. 315–17.
  - 9 Arnold van Gennep, *The Rites of Passage*, trans. Monika B. Vizedom and

- Gabrielle L. Caffee (Chicago: University of Chicago Press, 1960).
- 10 Philippe Ariès, *Centuries of Childhood: A Social History of Family Life*, trans. Robert Baldick (New York: Vintage, 1962).
  - 11 David Hunt, *Parents and Children in History: The Psychology of Family Life in Early Modern France* (New York: Basic Books, 1970).
  - 12 Ariès, *Centuries of Childhood*; Lawrence Stone, *The Family, Sex, and Marriage in England, 1500–1800* (New York: Harper & Row, 1977). See also, Meyrowitz, *No Sense of Place*, pp. 258–65, for an analysis of the many historical hints to the role of literacy in the development of 'childhood'.
  - 13 Anne Oakley, *Sex, Gender and Society* (New York: Harper & Row, 1972).
  - 14 Stone, *The Family, Sex, and Marriage in England, 1500–1800*, p. 196.
  - 15 Sheila M. Rothman, *Women's Proper Place: A History of Changing Ideals and Practices, 1870 to the Present* (New York: Basic Books, 1978), pp. 26ff.
  - 16 Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Pantheon, 1977).
  - 17 Ibid.
  - 18 John C. Sommerville, *The Rise and Fall of Childhood* (Beverly Hills, Calif.: Sage, 1982), pp. 145 and 160.
  - 19 For documentation of this trend, see Meyrowitz, *No Sense of Place*, pp. 140–3.
  - 20 For a detailing and analysis of all these trends, see Meyrowitz, *No Sense of Place*.
  - 21 Alan Guttmacher Institute, *Teenage Pregnancy: The Problem that Hasn't Gone Away* (New York: Guttmacher Institute, 1981), p. 9.
  - 22 Meyrowitz, *No Sense of Place*; Meyrowitz, 'Media as social contexts', in Ralph Rosnow and Marianthi Georgoudi (eds), *Contextualism and Understanding in Behavioral Science: Implications for Research and Theory*, (New York: Praeger, 1986), pp. 229–50; Meyrowitz, 'The generalized elsewhere', *Critical Studies in Mass Communication*, 6:3 (Sept. 1989), pp. 326–34; Meyrowitz, 'Using contextual analysis to bridge the study of mediated and unmediated behavior', in Brent D. Ruben and Leah A. Lievrouw (eds), *Mediation, Information, and Communication: Information and Behavior*, vol. 3, (New Brunswick, NJ: Transaction Press, 1990), pp. 67–94; Meyrowitz, 'Three worlds of strangers: boundary shifts and changes in "them" vs. "us"', *Annals of the Association of American Geographers*, 80:1 (Mar. 1990), pp. 129–31; Meyrowitz, 'Redefining the situation: extending dramaturgy into a theory of social change and media effects', in Stephen Riggins (ed.), *Beyond Goffman: Studies on Communication, Institution, and Social Interaction* (New York: Mouton de Gruyter, 1990), pp. 65–97.
  - 23 Susan Sontag, *On Photography* (New York: Farrar, Straus & Giroux, 1977); Edward Wachtel, 'The influence of the window on Western art and vision', *The Structurist*, 17/18 (1977/1978), pp. 4–10; Edward Wachtel and Casey Man Kong Lum, 'The influence of Chinese script on painting and poetry', *Et cetera*, 48:3 (Fall 1991), pp. 275–91; Paul Levinson, *Mind at Large: Knowing in the Technological Age* (Greenwich, Conn.: JAI Press, 1988); Levinson, *Electronic Chronicles: Columns of the Changes in our Time* (Tallahassee,

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- 24 See e.g. Stanley Milgram, 'The image freezing machine', in *The Individual in a Social World: Essays and Experiments* (Reading, Mass.: Addison-Wesley, 1977), pp. 339-50; Michael Pfau, 'A channel approach to television influence', *Journal of Broadcasting & Electronic Media*, 34:2 (Spring 1990), pp. 195-214; Michael Pfau and Jong Geun Kang, 'The relationship between media use patterns and the nature of media and message factors in the process of influence', *Southern Communication Journal* (forthcoming); Doris A. Graber, *Processing the News: How People Tame the Information Tide*, 2nd edn (New York: Longman, 1988), pp. 166-74. Turkle and Zuboff's work, cited in note 23, is rich in participant observation, but their real contributions are in their interpretation and analysis.
- 25 More than two decades before the 'surprise' fall of communism, for example, Marshall McLuhan and Quentin Fiore wrote in *War and Peace in the Global Village* (New York: Simon & Schuster, 1968), p. 5, that communism was a thing of the past and that electronic media would 'turn on' the Soviet Union. Here, as elsewhere, McLuhan also wrote of the splintering of nation-states and of 'retribalization'. Similarly, in the mid-1980s, I described how electronic media were limiting the significance of the physical boundaries 'marked by walls, doors, and barbed wire, and enforced by laws, guards, and trained dogs' (*No Sense of Place*, p. 117).
- 26 For a further discussion of this issue see Joshua Meyrowitz, 'The power of television news', *The World & I*, 7:6, (June 1992), pp. 453-73, and Deirdre Boden, 'Reinventing the global village: communication and the revolutions of 1989', (unpublished paper).
- 27 For an excellent history of the US's early role in the Philippines and of the distortions in the US press concerning it, see Leon Wolff, *Little Brown Brother: How the United States Purchased and Pacified the Philippine Islands at the Century's Turn* (Garden City, NY: Doubleday, 1961). For an analysis of the

- US's 20-year alliance with the Marcos dictatorship, see Raymond Bonner, *Waltzing with a Dictator: The Marcoses and the Making of American Policy* (New York: Times Books, 1987).
- 28 For an analysis of this general coverage pattern, but with a focus on print media, see Lawrence Wechsler, 'The media's one and only freedom story', *Columbia Journalism Review* (Mar./Apr. 1990), pp. 25-31.
- 29 As I have argued elsewhere, content approaches and medium approaches should be combined with at least one other approach, media 'grammar' studies, in order to explore the media environment more fully. See Joshua Meyrowitz, 'The questionable reality of media', in John Brockman (ed.), *Ways of Knowing: The Reality Club 3* (New York: Prentice-Hall, 1991), pp. 141-60; Meyrowitz, 'Images of media: hidden ferment - and harmony - in the field', *Journal of Communication*, 43:3 (Summer 1993), pp. 55-66.