Part I

On Being a Literate Society: Conceptual and Historical Perspectives on Literacy

Chapter 1

Conceptualizing Literacy as a Personal Skill and as a Social Practice

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The eighteenth-century Enlightenment provided the West with a legacy of hope, hope for the perfectibility of mankind and the perfectibility of social institutions. Behind both was the concept of progress. As the route to progress, the Enlightenment put a new emphasis on mass public education, a program made feasible by the relative availability of printed books and the universalizable knowledge books were assumed to contain. Access to that knowledge was through literacy and literacy along with schooling became the touchstones of the Enlightenment policy in the West. Philosophers of the Enlightenment, including Vico (1744), Condorcet (1802), and Rousseau (1754–91), provided a theory for the evolutionary views of culture, views which came into common use through such eighteenth-century writers as the philosopher Thomas Astle, who wrote, "The noblest acquisition of mankind is speech, and the most useful art is writing. The first eminently distinguishes man from the brute creation; the second, from uncivilized savages" (1784, p. 1). Of course, we now recognize such beliefs as hopelessly eurocentric, but the notion of human perfectibility, and the importance of literacy and education in its achievement, remain as strong today as in the eighteenth century.

There is simply no doubt that writing and literacy play an increasingly important role in the mental and social lives of people in modern bureaucratic societies, and that a legitimate aspiration of peoples everywhere is the right of access to the written word and to those institutional structures premised on writing and record keeping, on format and formula.

But when the significance of literacy to modern bureaucratic societies is put this way, it suggests that the developing countries of Africa, Asia, and Latin America, need only adopt such practices to become, well, like us. As many of the chapters of this volume point out, this assumption is both incorrect and in many

cases harmful. Further, a number of Western historians and social scientists including Katz (1968), Gee (1990), Graff (1986), and Street (1984) point out that traditional encomiums to literacy as well as most psychological theories of literacy invite and sustain the inference that literacy and schooling were the *causes* of progressive cognitive and social change. Because literacy and schooling were seen as the causes or engines of social change, then the obvious means to producing psychological and social change was through imposing literacy and schooling on the ignorant and illiterate. The personal and social aspirations, interests, competencies and traditions of the learners could be ignored and overwritten by imposing literate standards and literate practices on them. More importantly, developing nonliterate cultures could be advanced by imposing on them the literate practices and literate institutions of the developed West, originally in the form of colonization. As the chapters of this volume make clear, these inferences are no longer seen as warranted; indeed such practices are now widely recognized as oppressive.

Theories of literacy advanced by Goody (1968; 1986), Havelock (1982), Ong (1982), Eisenstein (1979), and Olson (1994) examined in considerable detail the various roles that writing and literacy have played in the evolution of the dominant institutions in the West including law, science, religion, literature, economics, and politics, and indirectly in the evolution of a particular form of rationality, embedded in the elaborate bureaucratic procedures employed in the construction and evaluation of knowledge. Olson (1994, p. 282) concluded his treatment by claiming that "Our modern conception of the world and our modern conception of ourselves are, we may say, by-products of the invention of a world on paper." Critics such as Street (1984) and Prinsloo and Breier (1996) have criticized these theories for their lack of attention to context of use, proposing rather a "practice" theory of literacy more attentive to the activity of subjects in particular social and institutional contexts, a view first suggested by Scribner and Cole (1981). Triebel (chapter 2 below) contrasts these types of theory in considerable detail, referring to the former as "philosophical" and the latter as "practice" models.

What has become clear through these debates and what articulates a theme that runs through the present volume is that one must distinguish between "consequences of literacy" and the "uses and implications of literacy," or as we shall say, between *causal* and *instrumental* conceptions of literacy. Earlier theories were less sensitive to this distinction, allowing their findings to be used to justify "literacy policy," that is, the imposition of literacy onto people as a means of producing psychological and social change in them. What our new understanding requires is that we move away from the causal talk about what literacy does to people and towards the instrumental talk about what people do or can do with literacy. It is to put the learner and the social context at the center of the topic and to see the technology in an instrumental or functional role. It was the failure to clearly make that distinction that justified to some extent the charge of "technological determinism" leveled at such theories. Whether valid or not, it remains clear that not only theorists, but also policy-makers and the general public have uncritically adopted Enlightenment assumptions about the causal efficacy of literacy in social and psychological change. Indeed, even UNESCO, the most culturally sensitive of all institutions, had at an earlier period adopted the causal model, namely, that making everyone literate would produce valued social and personal goals. Triebel (chapter 2 below) suggests that two assumptions are most in need of revision, namely, that literacy generates social change, and that script changes mind. Literacy must come to be seen less as cause and more as instrument.

Nonetheless, one must not underestimate the instrumental role that literacy may play in psychological and social change in some cultural and institutional contexts. It will not do to simply revert to the credo that there are no "primitive" languages, minds, or cultures and hence to ignore the uses and implications of literacy altogether. Indeed, considerable research, including that reported herein, has been directed to examining the varied roles that literacy has played and can play in various cultural contexts. Such research allows us to revise our beliefs about the implications of literacy without downplaying its significance for either minds or societies. In this introductory chapter, we shall review seven of these issues while focusing particularly on two of them, pedagogy of literacy and literacy and social development.

The Evolution of Scripts

First, scripts as technologies were thought, ever since the Enlightenment, to have evolved from simple picture writing, through word scripts, to syllabaries and culminating in the alphabet (Gelb, 1963). On this view, non-alphabetic writing systems were seen as primitive and unsuitable for intellectual functions. However, it is now widely agreed that writing systems evolved, not in the direction of an ideal script, but rather in response to borrowing a script from one language for which it was reasonably suited to represent another language for which it was not. The product of the borrowing was, in several cases, the development of a writing system which could be taken as representing a more phonological level of the linguistic form (Sampson, 1985; Olson, 1994). Different scripts represent events and languages in different ways, thereby accomplishing different functions (Boone & Mignolo, 1994). Moreover, even children in the process of acquiring an alphabetic script explore alternative notions of how a script "represents" (Ferreiro & Teberosky, 1982). This is not to minimize the vast range of uses that the alphabet has come to serve, but rather to abandon the oft-assumed cultural superiority that earlier evolutionary theories sustained.

The Origins of Literate Societies

Second, historical studies (Clanchy, 1993; Lloyd, 1979; Thomas, 1989, and chapter 4 below) have shown that literacy played a less causal role in the development of modern forms of law, science, and government than has sometimes

been assumed. Rather, literacy came gradually to play an instrumental role in preserving information and later in accumulating it. Only gradually did institutions come to bear the marks of a "document culture." Classical Greek society did indeed possess a writing system but its use was limited both to particular functions and to a small set of individuals. Many of the functions we now see as essentially literate, functions such as formulating laws, practicing democracy, constructing essentially modern forms of knowledge and argument, were carried out by essentially oral procedures (Thomas, chapter 4 below). Literacy came to subserve these functions but it did not bring them into existence. When recruited for a function such as law, it transformed the process in often unanticipated ways; written contracts, for example, coming to have more authority than oral ones even if, at the outset, the opposite was true (Clanchy, 1993; Johns, 1998).

Colonialism had a more complex impact on the colonized cultures. In some cases, such as the Philippines, Africa, and Central America, existing indigenous scripts were summarily replaced by Roman scripts, rendering significant parts of the population illiterate in the new script. At the same time the imposed scripts brought with them bureaucratic structures including organization of knowledge, economy, and law which, while instrumental to nation building, were often detrimental to indigenous culture. In other regions such as sub-Saharan Africa there was no previous literate tradition and the colonial language and colonial bureaucratic structures tended to be propagated, not only for reasons of monopolizing power, but also because the colonial language was adopted as a national language as a compromise between competing indigenous languages.

The Oral–Literate Distinction

Third, classical studies of the relation between literacy and orality (Finnegan, 1988) and developmental studies of the relation between oral and written language have found that rather than these being categorically different modes, there is a close interaction between the two. Carruthers (1990) found that in the late medieval period some of the most literate, Thomas Aquinas among them, were also the most gifted at oral memory and unprompted speech. This is not to deny the evolution and importance of more specialized written forms or registers tailored to the specific requirements of mathematics, logic, science, or literature (Kittay, 1991; Illich, 1993), but rather to say that literacy is built upon a strong oral tradition (see Doronila, chapter 13 below) and thrives only if a living oral culture sustains it (see Thomas, chapter 4 below).

Writing and Rationality

Fourth, the psychological studies designed to show the lack of logical powers in nonliterate subjects have come in for criticism and reinterpretation. Lévy-Bruhl (1926) attempted to explain the variety of cultural practices anthropologists

described in terms of the psychological processes of nonliterate people, a form of explanation now seen as questionable (Moscovici, 1993). Luria (1976), on the basis of evidence collected in the 1930s in a remote section of Siberia, had found that nonliterate subjects often failed to solve syllogisms that were readily solved by schooled subjects. From this he, like Lévy-Bruhl, inferred that they were unable to reason strictly logically. For example, when told: "In the far North, where there is snow, all bears are white. Novaya Zemla is in the far north, what color are the bears there?" Subjects tended to reply that they had never been there so they did not know; literate subjects reported simply "White." Scribner and Cole (1981) repeated such experiments within a pretend format and found the subjects completely capable of drawing the appropriate inference. They concluded that not literacy, but rather a particular style of schooled talk, talk designed to provide reasons, was the source of the difficulty. It was that type of "schooled" talk that subjects lacked.

Olson (1994) interpreted these results quite differently, noting that the nonliterates lacked a certain orientation to language, which he described as an unwillingness to "confine interpretation to the text," a strategy associated with reading and interpreting written texts in literate, bureaucratic societies and consequently taught in certain literate environments including schools. The ability to make inferences that we would judge as logically valid is universal (as writers from Locke to Goody have noted). What is associated with the evolution of the literary tradition in the West, and passed on through schooling, is a particular orientation to language, an orientation greatly aided by, indeed sponsored by, writing, namely, an orientation to such linguistic entities as phonemes, words, and sentences and their counterparts, word meaning and sentence meaning. Thus, it is necessary to distinguish reasoning skills, generally, from a textual orientation. People may improve their reasoning skills through involvement in the knowledge institutions of the culture. Literacy may, of course, play an instrumental role in such reasoning but it does not bring reasoning into existence. Thus Bernardo, Domingo, and Peña (1996) have shown that the reasoning abilities of nonliterate adults in several Filipino communities were not essentially different from their more urbanized and schooled compatriots. What literacy adds is access to the specialized knowledge and bureaucratic structures of modern bureaucratic societies. An instrumental role that literacy may play is perhaps seen in the use of literacy by Freire (1972) as encouraging the development of vernacular, local literacies to promote "consciencization," that is, to help people use literacy for personal and social enlightenment, to reflect on their experience, and to see themselves as agents in their own lives rather than passively accepting the roles assigned to them by others.

Folk versus Bureaucratic Knowledge

Fifth, on the classical view, positive knowledge developed only by sacrificing what Francis Bacon called "the idols of the tribe," the common knowledge held

as valid by ordinary people. The dichotomy between science and superstition like that between myth and history, marked one form of knowledge, scientific knowledge, as valid; the other, folk knowledge, as "ancient error." In modern bureaucratic societies, knowledge is taken to be the product of particular specialized methods and is accumulated archivally in books and records and a professional elite. Access to that knowledge is dependent upon the development of specialized competence and the assignment of professional rank. Clearly, such a view disparages all local knowledge and expertise by relegating it to the category of "folk knowledge." However, folk knowledge is often valid - aspirin, for example, was not invented by Bayer but is a traditional or "folk" medicine and it is the knowledge that people have and trust. Doronila (1996) examined the relation between traditional forms and literate forms of knowledge in several Filipino communities and found that in some cases literate knowledge drove out traditional knowledge, leaving local populations feeling ignorant. In other contexts, literacy was assimilated to traditional ways of knowing and greatly enhanced and generalized those forms of competence that were already in place. Indeed, when seen as functionally relevant, indigenous literacy was easily acquired. Rather than simply eradicating local knowledge or overwriting it with the official knowledge of the dominant society, it must be acknowledged and employed as the basis of all further learning and development (Chi, 1992; diSessa, 1996; Robins, 1996, p. 127; see also Prinsloo & Breier, 1996).

Literacy and Learning to Read

Sixth, the classical view of learning to read saw the text as a map to be decoded. As Clanchy (personal communication) has noted, methods of teaching reading were first worked out for the teaching of a foreign language, Latin. Learning to read was a matter of teaching a code, letters and sounds, by means of which one could construct first syllables, then words, and finally full utterances in a foreign language. Only then could one become concerned with the textual meaning. Skill and drill methods copy this method unreflectively, ignoring to an important extent the fact that modern learners, unlike medieval ones, already know the language they are learning to read. Exploiting and reordering this "oral" knowledge is central to all modern theories of reading. Learning to read has come to be seen as relying on something that learners bring or fail to bring to the reading process. What the learner brings is much discussed in the literature (see Adams, 1990) but can be summarized by saying that the child has to bring his own meanings, understandings, perceptions, and knowledge to the encounter. In addition, the child has to bring a new consciousness to the implicit properties of his or her own language. To learn to read is to find entities in the print that the learner can recognize in their own speech. First, they find words that are recognized as known, later they find letter sounds that they can recognize in their own speech sounds. Throughout, the learner has to find in the print, meanings and ideas that he or she can recognize; hence, the emphasis on meaning and understanding in all modern pedagogical theories. One implication is the importance of first acquiring literacy in one's own language even if one is to subsequently also acquire literacy in a national standard language.

Additional insight into learning is provided by considering how adults learn and fail to learn to read and write. The mass literacy campaigns of the 1950s and 1960s that directly attempted to transplant literate skills, often in a foreign language, to members of an essentially oral culture, are now judged to have been largely a failure (see Triebel, chapter 2 below). They failed, presumably, because there was no reason to learn; literacy provided access neither to knowledge, literature, power, nor employment. Furthermore, literacy training did not involve the creation of literate institutions such as forms of government, economics, science, or literature in which developing literacy could play a significant role. On the other hand, adult literacy programs tended to succeed when they exploited an indigenous language (Fagerberg-Diallo, chapter 9 below) when the literacy being acquired had some functional role in the community (Doronila, 1996; and chapter 13 below), and when becoming a reader provided the learner with a new identity, namely, "one who reads" (see Fagerberg-Diallo, chapter 9).

The same may be true for children. Pedagogy, as mentioned, has traditionally focused on the mechanics of reading and writing. However, this focus has tended to lead to the neglect of those factors highlighted in the studies of adults, namely, that the learner has to see both what is going on in reading and why one would bother. This is part of the motivation for the "whole language" movement which places the mechanics of reading second to the uses and enjoyment of reading in the hope of making more beginners part of the "reading community" (Smith, 1994). Reading is important to the extent that it connects a reader with his or her own language and culture; if it fails to do this it will often be resisted or ignored. Consequently, when it is ignored, it is inappropriate to blame failure on the learner; it is a failure to find relevance.

The mechanics of learning, nonetheless, cannot be ignored. First, writing systems do relate or map on to speech in more or less direct ways. If children lack the oral competence with the language represented they will fail to grasp a fundamental fact about reading; to read is to see how what one says relates to the orthographic form presented. Consequently, learning to read is relatively easy if one is learning to read the language one already speaks (E. Goody, chapter 10 below).

Writing systems relate to speech and knowledge in quite different ways, ways which learners must sort out in the process of learning to read and write. First, for some types of writing, learners have to come to realize that graphic signs relate to language rather than to meanings or things. Further, for alphabets, they have to learn to analyze their speech into discriminable constituents represented by letters and words. Neither of these is automatic and many beginning readers are frustrated in their attempts because of a failure to grasp just what written marks represent. It is not merely that they must see that marks bear or relate to meaning, for the simple reason that most writing systems represent not meaning

directly but the linguistic expression of meaning. Successful pedagogies, for this reason, find it useful to first make written transcriptions of the learner's own spoken utterances, thereby indicating how writing relates to words. And secondly, they encourage learners to "invent spellings" so they learn to interrogate their own pronunciation in order to discover in their speech the sounds which may be represented by written letters (Olson, 1996). Such activities are designed to foster knowledge about, or awareness of, one's own language – its sentences, words and sounds. Much of this metalinguistic knowledge is acquired in the course of learning to read, but it must be acquired if the learner is to see how the orthography works and if one is to become a skilled reader. Further, this linguistic awareness fosters the ability to think about the language and its properties, sentences, and statements, rather than thinking about things represented in those statements. It is this awareness which becomes the focus of prescriptive grammars and formal logic and which is at the basis of what we think of as "the standard language," the language of bureaucratic institutions (Lucy, 1993).

Although literacy can and has developed without national and institutional support, it tends towards universality only with publicly funded schooling. Literacy and schooling are essentially coterminous in modern societies. Overwhelmingly and unsurprisingly, the data show that literacy levels in a nation are closely tied to years of schooling (Statistics Canada, 1995). However, it should be noted that such statistics make a number of assumptions in their assessments. In using a universal and standard measurement, such statistics overlook more specialized and local forms of literacy (Barton, 1994; Levine, 1998). Schooling for children usually assumes a particular definition of literacy and a particular methodology for teaching it. Although calls for reform emphasize the importance of context and function, the literacy acquired in school tends to involve a general and transferable form of competence, reading and writing ability, which is then applied and elaborated in the acquisition of particular content domains. Nonetheless, learning to read and write is greatly fostered if children learn not only the "skills" but discover the utility of literacy in their day-to-day activities and, more importantly, recognize the significance of literacy for participation in the institutions of the larger society.

An important factor in a child's acquisition of literacy is the literate practices of the parents, a factor which has led to many attempts to persuade parents to read to their children, perhaps as bedtime stories. The school, though important, is not sufficient to guarantee literate competence; a literate environment is an important contributing factor. Part of the significance of adult literacy is the important role that adult literates can play in the literate development of their children; and, indeed, that provides the motivation for many adults to learn to read – the desire to read to their children.

All of these factors are amplified considerably in the growth or lack of growth of literacy in developing countries. Teachers may have a naive and inappropriate conception of just what literacy is, a conception which often leads to simple rote learning. Second, adults may provide little intellectual support for the acquisition of literacy in their children. Motivational support is often high, however. Bloch (1998) discovered that even in a tiny, remote rural village in Madagascar in which literacy had little or no functional significance, everyone, educated or not, was "absolutely convinced of the value of schooling and literacy" (p. 8). But the ability to turn that motivation into practical occasions for learning is limited by both resources and knowledge.

To achieve a high level of literate competence requires both sophisticated knowledge and sustained effort. Without parental support, learning is difficult. Without adequate resources for schools, such as teachers, and reading and writing materials, and without obvious and tangible rewards for sustained study, it is unlikely that literacy programs will have notable social impact. However, it is also the case that literate parents, in particular, have literate aspirations for their children, and that may have a bootstrapping effect over generations.

Literacy and Social Development

Seventh, and finally, literacy and social development. In the conventional view, literacy is taken as a central, causal factor in complex social organization and democratic forms of government. Writing is seen as essential to the formation of large social groups such as cities, states, or empires. Indeed, the earliest writing systems may be traced back to the formation of cities and the needs for inventories of goods, increased specialization of social roles, and other aspects of social management and social control of larger-scale societies. Further, it is an obvious fact that writing plays a central role in modern, bureaucratic societies in the formation of law and government, the advance of science, the production of literature, and more recently in the use of information technology. But whereas it is often assumed that literacy is the cause of such development, it is now clear that it rather plays an instrumental role. That is, writing does not create the idea of rules and laws, but through writing, the rules and laws may be public and universally applicable; writing does not create knowledge, but through writing and printing, knowledge can take the form of an archival tradition; writing does not create "literature," but writing can extend the range of exploration of the imagination in new and distinctive ways. Every society has, by definition, some social organization, some rules and traditions for the management of knowledge and power. Literacy is useful to those societies to the extent that it can make explicit, public, manageable, and achievable the goals and purposes of those social institutions.

Some forms of social organization, for example those involved in the management of debt, cannot be easily carried on without writing, computing, and written records. To supply this need, colonial powers often simply imposed the institutional forms borrowed from the "fatherland," disregarding the indigenous forms of social organization and social exchange already in place. The alternative is to "bureaucratize" existing social exchanges and social relations by

incorporating literate practices into them, a theme of the present volume. While direct democracy can flourish without writing (see Thomas, chapter 4 below), large-scale social organizations depend upon written records, explicit procedures, and formal institutions responsible for carrying out those social functions. While literacy is relevant to participation in such functions as elections, for example, not everyone has to be a reader in order to be a voter (Prinsloo & Robins, 1996). The problem, much examined in this volume, is accommodating these two sets of concerns, the need to acknowledge existing language, knowledge, practices, and organizations in a society and the need, at least for some aspects of social development, to develop highly literate, bureaucratic national institutions and the competence to fully participate in them.

We should not forget, either, the middle ground, the role that literacy plays in local practices of employment, family, identity, schooling, and communication. These are important because they promise to provide the most fertile ground for the first and most important step towards the making of a literate society. Consequently, it is important to acknowledge the role of indigenous language, knowledge, and social organization in the acquisition of literacy. Literacy training in the language of the nation-state is often literacy in a second language with which learners have no competence; it advances a conception of knowledge which is out of step with traditional knowledge; and it assumes rules of power and authority discrepant from local understanding. Such training condemns a majority of children to failure. Goody (chapter 10 below) points out that in rural Ghana in the school she studied, the number of children enrolling in the first year, was some 130 whereas that had dropped off to some dozen by the sixth year. López, Prah, and Akoha (chapters 11, 7, and 8) all report similar failure rates for teaching literacy in the national rather than the indigenous language. On the other hand, studies by Fagerberg-Diallo and Doronila (chapters 9 and 13) show the conditions for success of indigenous programs of literacy in places as diverse as Latin America, Africa, and the Philippines.

In order to understand and participate in the modern world it is increasingly obvious that one must have access to writing and other notational systems. Speech is what allows the growth of local culture but writing is critical to the functioning of complex bureaucratic societies. Writing is not confined to the alphabet, and knowledge is not confined to that in books. Writing is important to the extent that it finds a place in the personal and social life of individuals. To understand how writing relates to social development we must broaden our understanding of the many forms and functions of writing and reading, and examine the factors associated with its teaching and learning.

To understand the role of literacy in society it is never sufficient to consider only the interests, goals, and activities of individuals. A literate society is not made by turning everyone into readers and writers. Something more is required, namely, the invention or development of literate institutions, what with Elwert (chapter 3 below) we may call "societal literacy." In the simplest case, there is no point in being able to write and read a contract if there are not, in place, legal institutions for guaranteeing the interpretation and enforcement of such contracts. Such institutions are conveniently thought of as bureaucratic structures – courts, banks, universities, and the like. These institutions also include the host of conventional, mechanical rules and procedures for carrying out the variety of social functions we sometimes describe as "infrastructure." All cultures have procedures for dealing with routine events such as birth, marriage, death, trade, war, etc. What literate institutions do is to make these and other procedures, so far as possible, purely mechanical, such that they can be carried out "objectively" by specialists without regard to the individuals who carry them out or the local contexts in which they occur. A contract may be written by one scribe and interpreted by another without loss of knowledge or meaning. Further, these activities are carried out within clearly defined structures of authority. Only those authorized have the right to determine the innocence or guilt of an individual or to decide whether a claim is valid or invalid. Science is one such institution; law another. Both have rules, norms, and procedures and the authority and power to enforce and maintain them. Schools, too, are such institutions. They have the means and the power not only to educate but the authority to say if one passes or fails, and ultimately to say if one is literate or illiterate.

Societies become literate by creating opportunities for people to see how literacy can be instrumental in their lives. But they become "literate societies" only when a significant majority of the people come to use their literacy in the context of the powerful institutions of the society. These two are different but not incompatible. The challenge is to find ways of mediating the relations between them. In these ways, we may contribute to a coherent picture of the roles of literacy in contemporary culture and offer some new directions for research and public policy.

Conclusions

The study of literacy inherits from the study of language a distinction between structure and use, semantics and pragmatics. Both are needed for an understanding of the cognitive and social implications of literacy. The problem is working out the details of the relation between them, and then extrapolating from this understanding useful suggestions for public policy. We shall conclude with a summary of those suggestions:

1. Literacy is not the solution to a host of social ills including poverty, malnutrition, and unemployment. It is not, in most cases, even relevant to the solution of those problems, and to blame those problems on illiteracy deflects attention from the more basic social causes such as political oppression, injustice, political and economic disenfranchisement, that is, the lack of political representation, and sometimes absence of needed land reform. Participatory democracy is impossible without a sharing of wealth and resources.

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- 2. The direct imposition of a foreign literacy on an indigenous, traditional culture dramatically undermines both the existing social organization and modes of thought. Proposed change must respect existing forms of social organization, local knowledge, and local language, and build on rather than replace them.
- It does not follow that literacy should play no role in social development and 3. cultural change. Literacy can play an enormously transformative role in a society by providing a means for the development of the specialized forms of competence and specialized social roles that are useful in local activities and practices as documented in several chapters in this volume (Doronila; López; Fagerberg-Diallo). Furthermore, these more specialized competencies are essential to the functioning of a bureaucratic, literate society in two ways. First, they are essential to the establishment of the explicit processes, including rules and procedures, as well as principled means for the formation and interpretation of records and documents required for the development of bureaucratic institutions such as law, government, science, and economics. Secondly, they are essential if people are to play a role in these institutions, as opposed to being manipulated by them. Institutional structures and specialized competencies are mutually sustaining (see Elwert, chapter 3 below).
- 4. While literacy is a useful skill, it is useful only if it is tied to the literate resources of a society. These resources range from purely technical matters to higher-level social structures, and include:
 - a) a suitable orthography as defined by the functions it is to serve (see Coulmas, chapter 6 below).
 - b) an orthography which reflects the oral competence of the readers; learning to read a language they do not speak fluently often consigns the vast majority of the learners to failure and early withdrawal (see Prah, Doronila, and Goody, chapters 7, 13, and 10 below, but see Coulmas's chapter 6 and Burnaby, 1998 for counterexamples).
 - c) a suitable pedagogy, including pedagogical materials, which allows the reader to understand how the script serves the learner both as a reader and as a writer (see Goody, chapter 10 below). Even then, literacy programs for children as provided by the school tend to have limited effects unless supported by parents or other adults. But it is also a truism that literate parents want their children to become literate. Hence, even limited acquisition can multiply over generations. Many nonliterate adults seek help in learning to read and write just so they can help their children learn. Adult education has, at least in many cases, reoriented itself by distinguishing child education from adult education programs and by attempting to meet the needs and demands of the learners rather than prescribing and imposing some generic solution. Similarly, traditional pedagogies based on classroom lessons are now seen as inappropriate and are being replaced with study groups and cooperative learning (Prinsloo & Breier, 1996; Boyarin, 1992).

- d) a rich array of reading materials to meet both functional and literary interests. It is not uncommon for the only written materials to be those provided by government or other institutions that want to convey specialized information. Readers are unlikely to invest the effort required to learn to read merely to have contact with official information. Consequently, the establishment of authors, publishers, and distributors of written materials, designed to meet the needs and interests of readers, is essential if literacy is to be self-sustaining (Fagerberg-Diallo, chapter 9 below).
- e) institutional contexts, including large-scale social institutions, in which reading and writing can play a role of perceived significance, and thereby provide a social and economic return that compensates for the years of study and learning required.
- f) communities or institutions to which access is given by virtue of being literate so that learners are socially empowered by their participation.

As can be seen, literacy is important, but it is important because of the instrumental roles reading and writing can play in the planning and execution of functions perceived as significant by the newly literate themselves, rather than as being seen as important by those who would impose literacy policy and literacy standards on them. The contributions to this volume show just how literacy, while not the solution to the world's evils, can play an important instrumental role in social development.

The mass adult literacy programs which flourished in the 1960s attempted to induct nonliterates more or less on the model of a religious or military campaign. These programs had extremely low return and are now seen as a failure. Literacy, unlike mass immunization, cannot simply be imposed on adults. Quality public education for children, on the other hand, is now recognized as a human right, and it is the responsibility of governments everywhere to see that this opportunity is provided. Education is not to be identified with literacy, although here too literacy should be seen as an important instrument of both knowledge and social organization.

Policy formation is the deliberate attempt to achieve at least some of the goals we identify with the Enlightenment, the improvement if not the perfectibility of people and their institutions. What role does literacy play in the deliberate attempt to change a traditional society into a bureaucratic one? Perhaps we must resist the temptation to make a deliberate attempt to produce such a general change. On the other hand, governments and other agencies can none-theless support the efforts of individuals, cultures, and subcultures to pursue those social changes they recognize as essential to their goals of justice and empowerment. It is here that literacy and literacy programs may play an important role (see Jung & Ouane, chapter 16 below).

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