To discuss the likely impact of technology on literacy in a Pacific society, this paper first provides a brief history of literacy in the South Pacific, then considers the language-in-education policies, and finally examines technology's likely impact on the current rates and levels of literacy. The paper finds that the uses of literacy in the South Pacific have been limited—largely confined to the reading of religious texts. It also finds that the language-in-education policies have evolved from almost the exclusive use of the vernacular in the eastern part of the South Pacific to an increasing use of English in the formal educational system. The paper highlights the fact that literacy levels in the South Pacific countries may not be very high and pinpoints the reasons why. The picture that emerges is of societies that are largely print-deficient in the rural areas, with printed matter available in urban areas but with no social practice of leisure reading or reading for development of knowledge. The paper delineates the strong presence of television in the South Pacific and discusses some of the major concerns about its presence, noting that the IEA reading study did not find reading displaced by television, since reading was not common anyway, but did find television viewing an entrenched feature of daily life in the South Pacific. Includes seven notes; contains 35 references. (NKA)
INTRODUCTION

In order to discuss the likely impact of technology on literacy in a Pacific society it is necessary first to discuss the paths of literacy development in the Pacific states characterized by small land masses interspersed amidst vast expanses of the ocean, thus creating marked disparities between parts of the same nation. This paper looks at the history of literacy in the South Pacific, the language-in-education policies and then discusses the likely impact of technology on the current rates and levels of literacy.

A BRIEF HISTORY OF LITERACY IN THE SOUTH PACIFIC

Literacy in the South Pacific, particularly in the eastern part, has a common historical beginnings. The change occurred from a non-literate oral culture to one that was introduced to literacy, initially, for the prime purpose of reading the Bible and other religious writings. A description of the introduction of literacy in any one country of the South Pacific would have parallels in other countries in the region.

Fiji, regarded as the meeting place of Melanesia and Polynesia, saw the first missionaries in 1835. Their mission was to convert Fijians to Christianity and one of their major weapons towards this end was literacy. They were specifically charged to "draw up a comprehensive statement respecting the character of the language, and the difference between it and other Polynesian dialects, the principles on which you have settled its grammatical form, and the rules by which you have been guided in translating into it the word of God" (Cargill letters, 18 June 1839, quoted in Schutz, 1972, p.2). The first missionaries in fact arrived from the neighboring island Kingdom of Tonga where Christianity and its concomitant literacy (in the Tongan language) had been introduced some few years earlier. Literacy practices of one type or another
have therefore existed in countries such as Fiji, Tonga and Western Samoa for over 150 years and in other countries of the South Pacific for over 100 years.

While basic literacy levels in the eastern part of the South Pacific are high, literacy in the western part of the South Pacific, in Vanuatu and Solomon Islands, is considerably less universal. The reasons for this are both historical and linguistic. The missionary activities in Solomon Island, for example, took a different turn from that in the eastern part of the Pacific for at least three reasons: the diversity of languages, the climate and the indigenous Melanesian social structure which was more fragmented and egalitarian (Whiteman, 1983). Historically, therefore, these two countries have not had the same sort of educational opportunities prior to their independence. In Solomon Islands, for example, until recently less than half the children of school age went to an elementary school (Tyron, 1988). While Vanuatu has been a good deal more fortunate in that respect, there is nevertheless a high dropout rate and the paucity of junior high schools ensures that for many children education terminates after the elementary school. Linguisitically, these two countries are quite diverse. In Solomon Islands there are 62 distinct languages while Vanuatu with its even smaller population has 104 distinct languages (Lynch, 1984). The number of speakers varies a great deal across those languages and for many of these languages an orthography has yet to be devised. In the light of such linguistic diversity and their past political history, development of a more universal literacy has been limited has tended to be in a metropolitan language such as English and French.

The main agencies for the spread of literacy in these countries have initially been the Christian churches, with the government educational system eventually taking over this function. The literate use of language for critical, aesthetic, organizational and recreational purposes (Heath, 1980) has been confined within the four walls of the classroom for the greater part of the school population, especially the rural population. Reading materials in the vernacular are limited and those in English are expensive and the range available limited for economic reasons.

The uses of literacy have been limited because only some functions of literacy have been incorporated into the social structures of these societies (cf. Street, 1984, 1993), largely uncritical reading of religious texts. Fifty years after the introduction of literacy into Fiji, for example, the use of writing for certain functions was not an established practice as the following quote shows: (2)

> While he [a chief] might offend the qase [the older folks, those in traditional authority] in Natewa bay (sic) by sending for their youths to build houses for him at Somosomo by letter in the European fashion, not by word of the accredited matanivanua [diplomat] as etiquette dictated..... (Blythe to Colonial Secretary, 23 September 1881, FCSO 81/1913, quoted in Scarr, 1980, p. 96, emphases added.)

Literacy was developed for limited purposes, largely for reading. Clammer (1976, p. 164) cites from the report of a commission appointed to investigate certain alleged errors in the 1880 census of the population: "We remember them [births and deaths], some of us by writing, but others do not write them down." And a quote from scribe who kept returns of births and deaths in books: "There are some village teachers that cannot write. Those that cannot write use pieces of reed for the purpose of reckoning up the births and deaths that occur in their villages. They can read, although they cannot write" (emphasis added).

**LANGUAGE-IN-EDUCATION**

The language-in-education policies have evolved from almost the exclusive use of the vernacular in the eastern part of the South Pacific to an increasing use of the English language in the formal educational system. Once again Fiji will be used as an exemplar and differences in other countries will be noted.

With the arrival of the missionaries in Fiji in 1835, formal schooling was introduced into a society where learning previously had been integrated into the everyday life of the people and where particular types of learning were the prerogative of particular groups within a tribe. One learned to become a fisherman by going fishing with the fishermen and learning from the actual practice of fishing. One learned to be a canoe builder by working with canoe builders. In traditional education was "practical, vocational and was concerned largely in maintaining the status quo" (Bole,
The initial educational emphasis was on the teaching of reading in the Fijian language for which a Romanised alphabet had been devised, to which later some teaching of elementary numeracy was added. The prime focus remained the teaching of reading in order to read the Bible and other religious writing (see Mangubhai, 1984, 1994 for further details).

However, there was not just one variety of Fijian language throughout the group of islands, and as the missionaries spread to other major islands the economics of printing forced a choice of one of the Fijian languages (or communalects) as the main literary medium (Geraghty, 1984). The choice was most judicious on the part of the missionaries. The seat of the most powerful “state” at that time was the small island of Bau, so the Bauan dialect was chosen. (3) Moreover, this language was similar to the “Standard Fijian” which was the existing language of diplomacy. Hence the Bauan Language was “objectified”; the written form became a standard against which language could be judged as correct or incorrect. It became an objective yardstick.

However, this very process of objectification of one of the Fijian dialects is not without an irony that springs from the way the written word is viewed by a society that has moved into a literate state (cf the attitude of educated English in the nineteenth century to the English used in the James II version of the Bible). This language, which subsequently appeared in books and became the literary standard for the Fijian society, was, according to linguist Geraghty (1984, p.35), different in a number of ways from the actual language of Bau...What had become the literary Fijian was, quite simply Fijian as the missionaries spoke it; and they seem to have spoken it rather poorly for a number of reasons. Paramount among these is that they were under pressure, both from their superiors and from Fijian converts, to learn the language and produce translations quickly.

This particular codification of a spoken language into a written form still has a powerful influence over the Fijian people with regard to what is acceptable or not acceptable in print. (4)

The Wesleyan Methodist Church, to which the first missionaries belonged, soon established village schools run by pastor-teachers who underwent a rudimentary form of teacher training. By the time Fiji was ceded to Great Britain in 1874 and became a crown colony, reading was widespread enough for the first Governor of Fiji in 1874 to comment upon it. Over 50 years later, Mann (1935, p.13) was to say that due "almost entirely to the efforts of the missions, most adult Fijians can read and write their own language." For 50 years after Fiji had become a British crown colony the churches, Methodist and Catholic, the latter having arrived in Fiji a decade later than the former, continued to play a leading role in the education of the Fijian people. The Methodist Church emphasized the use of the Fijian language in their schools but the Catholic schools, as far back as the 1890s, had begun to teach some English. The introduction of some English into the school curriculum, and the colonial government’s policies after 1916 when it established a Department of Education, was to change the emphasis of language used in education settings dramatically in the 1900s.

After 1879 the racial composition of the country also underwent a dramatic change. The colonial government brought in Indians from the subcontinent of India to work on the sugar cane plantations. By the time this indentured labor system was abolished in 1920, over 60,000 indentured laborers had been brought to Fiji, many of whom elected not to return to India (Lal, 1983, 1994). With natural increase and some further migration from India, the country rapidly became multiethnic and multilingual, with the present composition being about half Fijians and just under half Indo-Fijians.

By the middle of 1930s the Methodist Church had relinquished control of most of the elementary schools to the government. The use of Fijian as the medium of instruction thereafter became less widespread; a new policy was implemented whereby the medium of instruction for the first three years was to be the vernacular language, Fijian or Hindi, but thereafter to be replaced by English. (5) This ensured the predominance of English in the education system right to the present time, even after political independence in 1970.

Likewise the mission schools in Solomon Islands, for example, taught mainly in the local languages but the varying quality of education in the mission village schools (Boutilier, 1978, cited by Watson-Gegeo and Gegeo (1992) led the colonial administration to attempt to establish government schools but this did not occur until after World War II, for financial reasons. In contrast to Fiji which took over most of the Methodist Mission schools in 1930s
Mangubhai, 1984), the Solomon Islands government did not take control of the mission schools until 1974, just before the country achieved independence (Watson-Gegeo and Gegeo, 1992). While the school participation rate in the eastern countries has been high, particularly at the primary level, this cannot be said for Solomon Islands where half the population over thirty years of age has not attended school (Gannicott and McGavin, 1990).

The levels of literacy in the two parts of the Pacific have also been different. To a large extent this has arisen out of the multiplicity of languages in countries like Vanuatu and Solomon Islands. The initial language of instruction in these countries is in English or French whereas in Fiji it is a vernacular for the first three years and in Tonga and Samoa, Tongan and Samoan until Grade 6. While a pidgin is a lingua franca in both Solomon Islands and Vanuatu, it is not officially used in education. (6)

While reports in UNESCO documents (Statistical Yearbook, 1994) continue to show high levels of literacy in comparison to many developing regions of the world, the question 'Literacy for what?' would suggest that there is a substantial portion of the school population that may not be able to cope with their school reading adequately. Elley and Mangubhai (1979) conducted a survey of reading comprehension in English at Grade 6 and found that about 25 per cent of the population was unable to read or read with sufficient understanding passages about 100 words long. In addition, it was found that rural children performed considerably poorly than urban children, a situation found in other contexts also (Ladefoged, Glick and Criper, 1968; Williams, 1981). A similar situation was reported by Elley and Achal (1981). Gannicott (1993c) cites a study by Platt (1988) in Tonga in which 42 government schools were surveyed and learning difficulties of varying proportions were found in 15-25 per cent students in 11 schools, 25-30 per cent in 17 schools and more than 30 per cent in 14 schools. Gannicott claimed that similar problems were likely to be found in Western Samoa. A large part of the difficulties have arisen from the paucity of educational materials in these schools. A UNESCO-sponsored Regional Workshop on Youth and Adults with Limited Literacy Skills in 1988 discussed the hidden illiteracy in South Pacific countries. Discussion at the workshop highlighted the fact that the levels of literacy amongst many was not sufficiently high to cope with the daily demands of literate behavior required in urban environments.

HOW IS TECHNOLOGY LIKELY TO IMPACT UPON THE SOUTH PACIFIC SOCIETIES, ESPECIALLY WITH REGARDS TO LITERACY?

The foregoing discussion has highlighted the fact that literacy levels in the South Pacific countries may not be very high. There are a number of reasons for this discussed in Elley and Mangubhai (1979, 1983), Gannicott (1993a, b, c) and the UNESCO workshop. Many of these reasons relate to the paucity of reading materials in schools, the poor educational base from which teachers are trained (in some countries until recently, trainees were recruited after the completion of Grade 9), the unavailability of complete sets of class textbooks and so on. Another key factor that contributes to the development of basic literacy rates is the limited extent to which literate behaviors of the type required to be successful in educational contexts have become embedded in the cultures of the South Pacific.

While there has been no systematic study of the kind or types of uses of literacy in Fiji, or in any of the other island states in the South Pacific, the amount of print available in the environment, the availability of electricity, working patterns of farmers in the rural areas, the transportation facilities, social institutions and values allow one to infer the range of literacy uses in the societies. People in urban areas are surrounded by print, mostly in English: notices, signs, advertisements, newspapers, magazines, books and so forth. By contrast, the rural dwellers, particularly on the smaller islands, are in a relatively print-free environment, except for materials such as posters, government notices, the occasional advertisement or two in the local store and whatever books they may have at home. The latter are more likely to be religious, and written generally in the vernacular languages.

The picture that emerges is of societies that are largely print-deficient in the rural areas. In the urban areas there is more printed matter available but the practice of reading for leisure or for development of knowledge in a particular area is not widespread because it does not seem to have been incorporated into the social practices of the societies. The practice of reading for leisure by young adults in the village context is frequently seen as a sign of laziness, of trying to get out of duties that need to be carried out either in the garden for boys or in the kitchen for girls.
THE INTRODUCTION OF TV INTO THE SOUTH PACIFIC SOCIETIES

Unlike developed countries where television was introduced first and the more widespread use of videos followed, the development in the South Pacific was in reverse: videos have been in use since the late 70s (Plange, 1993) and are a very marked feature of urban life. Lack of electricity and video outlets in the rural areas has ensured that this remained largely an urban phenomenon. One exception to this has been American Samoa which has had American television for many years and to which Western Samoan people could tune in also.

In those countries where television is now available, it is broadcast for a limited period each day. In Fiji, for example, it is broadcast from late afternoon to early evening during the weekdays and from mid-day during the weekends (Lotherington-Woloszyn, 1995a). Apart from the local news which is controlled by the government, the programs are the normal fare on New Zealand television. In a survey conducted in the urban and peri-urban area in Fiji, Lotherington-Woloszyn (1995b) found that the seven most favorite programs were the Fiji National News, Shortland Street, ITN World News, followed by Sesame Street, Lois and Clark, The Commish and Fresh Prince of Bel Air. A large part of the surveyed population was watching between one half and two hours of television, with about 14 per cent watching three or more hours.

Already there are concerns expressed about the content of the programs which is foreign to the culture of the islands (PIM, December, 1994). There is a concern that this powerful medium will have a marked impact on the lifestyles of the people. As one government official in the same issue of Pacific Islands Monthly pointed out, advertisements on TV were sending wrong messages to rural people: they were extolling the advantages of urban lifestyles.

While concerns have been voiced regarding the portrayal of foreign values on the television, many of which, incidentally, are also portrayed on videos that have hitherto and continue to be rented, relatively little has been said about the likely effect of more widespread TV on literacy. Lotherington-Woloszyn (1995a), while pointing out the foreignness of the content of Sesame Street, says that TV appears to be frequently used as a baby-sitter for young children. She suggests that there may be some positive effects in terms of exposure to the standard English language (UK and USA varieties) though it is too soon to say what the effects will be. To try to gauge the possible effects of the introduction of TV into the South Pacific, it is necessary to turn to research that has been conducted in those countries where TV has been a common feature for many years now.

Neuman (1991) summarizes four major putative effects of television:

1. TV takes time away from other activities, especially reading (displacement).
2. TV has influenced the way people learn.
3. TV affects school related behaviors, in that, students become accustomed to short-term gratification.
4. TV stimulates interest.

Of these four effects, only the first one will be discussed in this paper.

Neuman (1991) evaluates research related to the first claimed effect and finds that displacement does occur but only with those items that cannot compete with the television. Cartoons, for example, replace comic reading but do not replace book reading. She claims that book reading serves a different function that is not fulfilled by the television and therefore it is not displaced. With regard to reading in free time, she claims that research shows that there "was not much reading before television, and there is not much reading today" (p. 57). She cites the NAEP 84 report which shows a steady decline in the number of students from 9 year-olds to 17 year-olds who report daily reading for leisure. The decline does not occur because the 17-year olds are devoting more time to television viewing. On the contrary, the 17-year olds spend fewer hours in daily TV viewing.

In the recent IIEA study on reading literacy, heavy TV viewing by nine year olds was found to correlate negatively with reading scores for the following countries: the United States, Switzerland, Belgium, France and Western Germany. By contrast, there were five countries which were on average moderate viewers - up to three and half hours - which were associated with higher reading performance: Finland, Italy, Norway, Portugal and Sweden. A possible explanation for
this is that foreign films are frequently shown on their television channels and often with subtitles in the local language, a finding that seems to be corroborated by Neuman and Kostinen (1992), who found an advantage for captioned TV programs over non-captioned.

The research findings above show that the impact of television on literacy is not as straightforward as might be thought. Research discussed by Neuman suggests that there is little displacement of reading by television. The IEA study seems to suggest that heavy daily viewing is correlated with poorer performance in reading comprehension. However, these are not contradictory findings. The notion of displacement presupposes that there is an existing activity that can be displaced. It is quite likely the heavy viewers who did poorly in the IEA study were not readers and that TV viewing might have displaced some other activity, such as 'hanging around with friends'. In other words, reduced TV viewing for such a group would not necessarily lead to a better performance in reading.

In the South Pacific, leisure reading is not a very strong feature in the societies so that the introduction of television cannot displace this activity. However, television viewing can become a much more easily entrenched feature of Pacific life because viewing can become a social event in which all members of the family can share, unlike leisure reading which is generally a very individual activity. If the countries can have control over programming -- at the moment they do not -- it is possible to use television to disseminate appropriate information to the population that will enrich their lives and not necessarily cultivate values that are inimical to their present values. The broadcast of programs that are based on books can be exploited by schools in order to encourage students to read them also in attempts to inculcate the habit of reading.

The size of the countries in the South Pacific and their limited economies, however, make it unlikely in the near future that TV will play a major role as a medium for dissemination of information that is more attuned to the Pacific way of life. The viability of TV will depend upon revenues derived from local advertising and as in other countries, programming will be driven by audience numbers and less by any educational impact it might have.

The introduction of TV will also exacerbate the differences between urban and rural communities, particularly those communities on small islands at a distance from a major island. Just as rural communities are print-poor at the moment, so they are likely to be TV-poor, thus providing another reason for the drift towards the urban areas.

It is possible as Lotherington-Woloszyn (1995a) suggests that TV will provide viewers of good models of English, thus having a beneficial effect upon the development of the second language. But it is too soon to tell.

FOOTNOTES


2. See, however, Spolsky et al. (1983), who have suggested that in the monolingual Kingdom of Tonga there was a more varied use of literacy because, amongst other reasons, it "was found to be useful by traditionally influential members of the community, that is to say, by the King and the nobles he chose to help him govern". Back

3. Geraghty (1984) has in fact argued that it was not quite the Bauan language but the missionaries chose to call it that, a tactical foresight that served their purpose well. Back

4. In the early 1970's, for example, a collection of short stories written in a more colloquial Fijian was published, but it received a very cool reception from the leaders of opinion in the Fijian society because amongst other reasons it did not use the "literary" Fijian, the language for the Fijian Bible. Racule (personal communication, 1994), the Director of Curriculum Development Unit in the Ministry of Education, suggests that there is beginning to be a change in the type of language that is regarded as 'legitimate' in print, especially in books. The Fijian attitude is undergoing a change and more colloquial, modern Fijian is beginning to be acceptable in printed books and printed stories. Back

5. Such a policy was facilitated by the monoracial character of most of the elementary schools, a situation that has
historic, political, sociological and geographical roots, and these largely separate school systems have continued to the present day. Back

6. Part of the reason for the non-use of the pidgin is the attitude towards it of some senior educators. The writer in a discussion with the Director of Education in the early 1980's was told when the topic of the possible use of pidgin in the early primary grades was raised that it could not be used in the educational system because it was a 'broken language'. Back

7. A notable exception being Clammer's study, cited above. Back

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