

### Library of Congress Cataloging in Publication Data

The encyclopedia of language and linguistics / R. E. Asher, editor-in-chief ; J. M. Y. Simpson, coordinating editor.

P. cm.  
Includes index.

I. Language and languages—Encyclopedias. 2. Linguistics—Encyclopedias. I. Asher, R. E. II. Simpson, J. M. Y.  
P29.E48 1994  
403—dc20

93-37778

### British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library.

ISBN 0-08-035943-4

### Belize: Language Situation

Belize, despite its small size, is the most multilingual and multicultural of the countries in Central America.

The territory of Belize has been inhabited by Mayan-speaking peoples since pre-Columbian times. Precisely which ancient Mayan languages may have been spoken at sites such as Lubantun is a matter of debate, the leading candidates being Cholan and Yucatecan dialects. Although the largest of Belize's Mayan populations speaks Q'eqchi' (Kekchi), these speakers are likely the descendants of immigrants who began arriving from Guatemala in the nineteenth century. About 8,000 Q'eqchi' now live throughout

the Toledo district; in San Antonio village, they are in close contact with Mopan speakers, another Mayan group, and intermarriage is common. Some of the Q'eqchi' can speak Mopan, and Mopan speakers commonly speak Q'eqchi', which is now a lingua franca in rural Toledo, 64 percent of whose inhabitants have Q'eqchi' or Mopan as their mother tongue. There is widespread literacy in both Q'eqchi' and Mopan, and both serve as languages of worship in the Roman Catholic and Protestant churches. Besides San Antonio, Mopan speakers are reported to reside in areas of central Belize; all told, there are probably some 3,000 or more Mopan speakers. A third Mayan language represented in Belize is Yucatec, whose speaker population is reported to be 5,800 in the northern districts, principally Orange Walk. Belize's primary school system may be credited with the fact that all of the younger Belizean Maya can speak English and Belizean Creole. Some of the older Maya can speak Spanish, but many are monolingual.

English, the most widely spoken European language, is the language of government documents, and it is the national standard for school instruction. The English literacy rate is high, and students have good opportunities for continuing instruction through university level. Some English speakers exhibit British traits in both lexis and pronunciation, while others evidence a more American pattern, and this is reflected by the programming of the government's sole radio service. Several English-language weekly newspapers and other periodicals are published by both private and government bodies. Most books in the government and university library collections are written in English. There is no significant domestic book publisher. Access to United States television broadcasts is generally available via satellite and local cable networks.

Despite its official status, few people speak standard English at home or in their communities. The country's lingua franca is Belizean Creole, also known as Creola, the local variant of West Caribbean Creole English. It is the mother tongue of 61 percent of the population; including second-language speakers, it is spoken by 75 percent of Belizeans. As is the case in Jamaica, Belizean Creole exhibits a spoken lectal continuum from 'deep' basilects to acrolects which are varieties of standard English. In a sense, a situation of diglossia exists involving English and Belizean Creole, although the lives of most Belizeans are such that they rarely find themselves to be in social contexts for which use of the high English would be appropriate. Perhaps the only common exception to this rule is writing, and the general perception that standard English is the high form ensures that Creole will generally continue to be unwritten.

Speakers of Garifuna, also known as Black Carib, inhabit the southern coastal areas: Punta Gorda, the Toledo district seat, and Baranco; and the coastal areas of the Stann Creek (Dangriga) district, where they comprise 70 percent of the population. Belize's 15,000 Garifuna are part of the descendants of a St. Vincent Island population which was deported to Roatan Island and the mainland at the end of the eighteenth century, and they continue to maintain contact with Garifuna speakers in Guatemala, Honduras, the United States, and elsewhere. Although Garifuna is taught at the Belize City campus of the University of the West Indies, it is not normally used for communication outside of the Garifuna community. The multilingual Garifuna

commonly speak English, West Caribbean Creole English, and Spanish.

Spanish has 46,000 speakers, primarily in the northern districts. A minority part of the daily government radio broadcast is Spanish-language programming. Spanish is also taught at the Belize City campus of the University of the West Indies. *Plautdietsch*, a Low German variety, is spoken by 5,000 Mennonites. Several other European as well as Asian languages are spoken in Belize, but typically their use is confined to the home. Chinese is increasingly an exception, as former Hong Kong residents continue to settle in Belize City.

### Bibliography

Bolland O N 1986 *Belize. A New Nation in Central America*. Westview Press, Boulder, CO

J. DeChicchio

### Bell, Alexander Graham (1847-1922)

Alexander Graham Bell achieved international prominence on two counts: the first successfully patented invention of the telephone, and a methodology for teaching speech to the deaf based on his father's system of 'Visible Speech.'

Bell was born in Edinburgh, Scotland on March 3, 1847, one of the sons of Alexander Melville Bell (see *Bell, Alexander Melville*). He studied briefly at the Universities of Edinburgh and London, without taking a degree. Like his father, he practiced, for a brief period, as an elocutionist and speech therapist in London. In 1863, he and his father were given a demonstration by Sir Charles Wheatstone of Wolfgang von Kempelen's (see *Kempelen, Wolfgang von*) 'speaking machine'; Graham Bell later constructed his own version. His attention then turned to the question of resonances of vowel sounds, a subject which was later to appear in printed form (1879). Contact with A J Ellis (see *Ellis, Alexander John (né Sharpe)*) introduced him to the work of Hermann von Helmholtz, whose synthesis of vowel sounds by means of electromagnetically driven tuning forks had some bearing on the development of Bell's ideas about telephony and telephony.

His emigration to the USA in 1870 led to contacts, in Boston, with important American scientists and technicians, and he began work on a harmonic multiple telegraph. In the course of this, during 1875-76, he gradually came to see the possibility of transmitting sound electrically by means of a diaphragm which induced electrical vibrations in a neighboring magnetic coil; and thus the telephone was born. His initial device transmitted speech with relatively poor quality; Thomas Edison's design, in 1878, of a carbon transmitter produced considerable improvements. The commercial exploitation of the telephone secured for Bell considerable personal wealth, a good portion of which he distributed to educational institutions.

His wife, Mabel Hubbard, had been totally deaf since the age of five. Bell was to teach her to speak again, using the principles of articulatory phonetics in Alexander Melville Bell's book *Visible Speech*. The success achieved by this method for numerous deaf children and adults led to the founding of various schools for the deaf in North

America and Europe where the Visible Speech method was employed fairly successfully.

Bell's scientific interests extended to genetics (of deaf persons), aviation, and hydrofoils. He was President of the National Geographic Society, and received, in the USA, Scotland, and Germany, various academic and civil awards.

Bell used his considerable intellectual, administrative, and personal qualities in the service of the deaf. Almost all of his publications focus on one or more aspects of how the deaf can be helped, linguistically and educationally, to a better style of life. His *Mechanism of Speech* (1906 and later editions) is the text of lectures he gave on phonetics and the audio-lingual education of the deaf, to which he added his paper from 1879 on vowel theories. He died at his home, Beinn Breagh in Nova Scotia, Canada on August 2, 1922.

### Bibliography

Bell A G 1872 *Visible Speech as a Means of Communicating Articulation to Deaf Mutes*. Gibson Bros, Washington, DC  
Bell A G 1879 Vowel theories. *American Journal of Otology* 1  
Bell A G 1906 *Lectures upon the Mechanism of Speech*. Funk and Wagnalls, New York  
Bruce R V 1973 *Bell: Alexander Graham Bell and the Conquest of Solitude*. Victor Gollancz, London  
Langdon W C 1929 Bell, Alexander Graham. In: Johnson A (ed.) *Dictionary of American Biography*, vol. II, pp. 148-52. Oxford University Press, London and Charles Scribner's Sons, New York

M. K. C. MacMahon

### Bell, Alexander Melville (1819-1905)

Various members of the same Bell family in the nineteenth century were associated with the study of 'vocal physiology.' Bell's father, Alexander, practiced in Edinburgh and London as an elocutionist and speech therapist; his brother David Charles did the same in Dublin; one of his sons, Alexander Graham (see *Bell, Alexander Graham*) achieved equal, if not greater, prominence in this field, especially with the deaf, in the USA.

Melville Bell was born in Edinburgh on March 1, 1819 and worked in that city from 1843 to 1865, thereafter in London (1865-70). Deaths and illness in the family prompted the decision to give up the important position he had achieved as an applied phonetician and to move to Ontario, Canada, where he was able to continue and develop his work (1870-81). Between 1881 and 1905, he lived and worked in Washington, DC, near to his son Alexander Graham Bell. He died there on August 7, 1905.

'Vocal physiology' encompassed descriptive articulatory phonetics, elocution (particularly public speaking), speech therapy, and the audiolingual education of the deaf and hard-of-hearing. Bell's central publication in this area was *Visible Speech: The Science of Universal Alphabets* (1867), the result of nearly 20 years preparatory work. It expounds a general phonetic theory covering phonation, articulation, and voice qualities, with examples drawn from several languages and dialects of English. An iconic notation, logically