

VOLUME EIGHT

# ENCYCLOPEDIA OF LANGUAGE & LINGUISTICS

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## SECOND EDITION

EDITOR-IN-CHIEF  
**KEITH BROWN**

CO-ORDINATING EDITORS  
ANNE H. ANDERSON  
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# ENCYCLOPEDIA OF LANGUAGE & LINGUISTICS

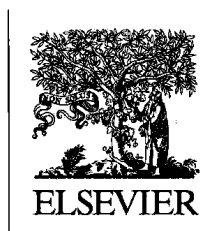
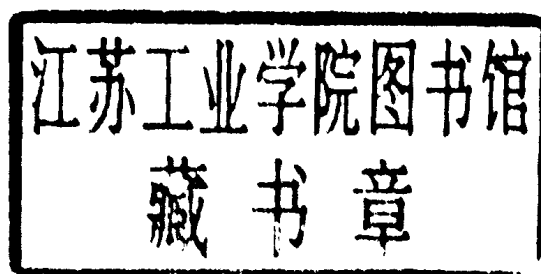
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SECOND EDITION

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# GUIDE TO USE OF THE ENCYCLOPEDIA

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## Structure of the Encyclopedia

The material in the Encyclopedia is arranged as a series of articles in alphabetical order. To help you realize the full potential of the material in the Encyclopedia we have provided several features to help you find the topic of your choice: an Alphabetical list of Articles, a Subject Classification, Cross-References and a Subject Index.

### 1. Alphabetical List of Articles

Your first point of reference will probably be the alphabetical list of articles. It provides a full alphabetical listing of all articles in the order they appear within the work. This list appears at the front of each volume, and will provide you with both the volume number and the page number of the article.

Alternatively, you may choose to browse through the work using the alphabetical order of the articles as your guide. To assist you in identifying your location within the Encyclopedia, a running head line indicates the current article.

You will also find 'dummy entries' for certain languages for which alternative language names exist within the alphabetical list of articles and body text.

For example, if you were attempting to locate material on the *Apalachee* language via the contents list, you would find the following:

Apalachee *See* Muskogean Languages.

The dummy entry directs you to the *Muskogean Languages* article.

If you were trying to locate the material by browsing through the text and you looked up *Apalachee*, you would find the following information provided in the dummy entry:

<b>Apalachee</b> <i>See:</i> Muskogean Languages.
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### 2. Subject Classification

The subject classification is intended for use as a thematic guide to the contents of the Encyclopedia. It is divided by subject areas into 36 sections; most sections are further subdivided where appropriate. The sections and subdivisions appear alphabetically, as do the articles within each section. For quick reference, a list of the section headings and subheadings is provided at the start of the subject classification.

Every article in the encyclopedia is listed under at least one section, and a large number are also listed under one or more additional relevant sections. Biographical entries are an exception to this policy; they are listed only under biographies. Except for a very few cases, repeat entries have been avoided within sections, and a given



article will appear only in the most appropriate subdivisions. Again, biographical entries are the main exception, with many linguists appearing in several subdivisions within biographies.

As explained in the introduction to the Encyclopedia, practical considerations necessitate that, of living linguists, only the older generation receive biographical entries. Those for members of the Encyclopedia's Honorary Editorial Advisory Board and Executive Editorial Board appear separately in Volume 1 and are not listed in the classified list of entries.

### **3. Cross-References**

All of the articles in the Encyclopedia have been extensively cross-referenced. The cross-references, which appear at the end of each article, serve three different functions. For example, at the end of *Norwegian* article, cross-references are used:

1. to indicate if a topic is discussed in greater detail elsewhere

Norwegian

*See also:* Aasen, Ivar Andreas (1813–1896); Danish; Inflection and Derivation; Language/Dialect Contact; Language and Dialect: Linguistic Varieties; Morphological Typology; Norway: Language Situation; Norse and Icelandic; Scandinavian Lexicography; Subjects and the Extended Projection Principle; Swedish.

2. to draw the reader's attention to parallel discussions in other articles

Norwegian

*See also:* Aasen, Ivar Andreas (1813–1896); Danish; Inflection and Derivation; Language/Dialect Contact; Language and Dialect: Linguistic Varieties; Morphological Typology, Norway: Language Situation; Norse and Icelandic; Scandinavian Lexicography; Subjects and the Extended Projection Principle; Swedish.

3. to indicate material that broadens the discussion

Norwegian

*See also:* Aasen, Ivar Andreas (1813–1896); Danish; Inflection and Derivation; Language/Dialect Contact; Language and Dialect: Linguistic Varieties; Morphological Typology; Norway: Language Situation; Norse and Icelandic; Scandinavian Lexicography; Subjects and the Extended Projection Principle; Swedish.

### **4. Subject Index**

The index provides you with the page number where the material is located, and the index entries differentiate between material that is an entire article, part of an article, or data presented in a figure or table. Detailed notes are provided on the opening page of the index.

### **Other End Matter**

In addition to the articles that form the main body of the Encyclopedia, there are 176 Ethnologue maps; a full list of contributors with contributor names, affiliations, and article titles; a List of Languages, and a Glossary. All of these appear in the last volume of the Encyclopedia.

# ALPHABETICAL LIST OF ARTICLES

## VOLUME 8

---

Note: Readers are urged to use the comprehensive name and subject indexes and the Classified List of Entries extensively, since the contents presented here represent only the broad framework of the *Encyclopedia*.

- Melanchthon, Philipp (1497–1560)  
Melanesian Religions  
Mel'čuk, Igor Aleksandrovic (b. 1932)  
Memes  
Mencken, Henry Louis (1880–1956)  
Menéndez Pidal, Ramón (1869–1968)  
Mentalese  
Meringer, Rudolf (1859–1931)  
Meronymy  
Mesoamerica: Scripts  
Mesopotamian Cuneiform Script  
Metalanguage versus Object Language  
Metaphor and Conceptual Blending  
Metaphor: Philosophical Theories  
Metaphor: Psychological Aspects  
Metaphor: Stylistic Approaches  
Metaphors in English, French, and Spanish Medical  
    Written Discourse  
Metaphors in Political Discourse  
Metaphors, Grammatical  
Metaphysics, Substitution *Salva Veritate* and the  
    Slingshot Argument  
Metapragmatics  
Metasemiosis and Metapragmatics  
Metathesis  
Metatypy  
Meter  
Metonymy  
Metrical Phonology  
Mexico: Language Situation  
Meyer, Kuno Edward (1858–1919)  
Meyer-Lübke, Wilhelm (1861–1936)  
Michif  
Micronesia, Federated States: Language Situation  
Microparametric Variation  
Middle English Dictionaries  
Midway Islands: Language Situation  
Migration and Language  
Migration and Language Planning  
Mikasuki *See* Muskogean Languages  
Miklosich, Franc (1813–1891)  
Mill, John Stuart (1806–1873)  
Miller, George (b. 1920)  
Milroy, Lesley  
Min *See* Chinese  
Mind Style  
Minimalism  
Minorities and Language  
Minority Languages: Education  
Minority Languages: Oppression  
Miskito *See* Misumalpan  
Missionary Linguistics  
Misumalpan  
Mitchif *See* Michif  
Mitigation  
Miwokan *See* Hokan Languages  
Mixed Categories  
Mixe-Zoquean Languages  
Mobilian Jargon  
Modal Logic  
Modality Issues in Signed and Spoken Language  
Modern Greek *See* Greek, Modern  
Modern Hebrew *See* Hebrew, Israeli  
Modern Linguistics: 1800 to the Present Day  
Modes of Participation and Democratization in the  
    Internet

- Modularity  
 Modularity of Mind and Language  
 Moldova: Language Situation  
 Möller, Hermann (1850–1923)  
 Moluccan Languages *See* Malukan Languages  
 Mon  
 Monaco: Language Situation  
 Mongol *See* Mongolic Languages  
 Mongolia: Language Situation  
 Mongolic Languages  
 Mon-Khmer Languages  
 Monotonicity and Generalized Quantifiers  
 Montague Semantics  
 Montague, Richard (1931–1971)  
 Montanus, Petrus (ca. 1594–1638)  
 Montserrat: Language Situation  
 Mood and Modality in Grammar  
 Mood, Clause Types, and Illocutionary Force  
 Morgenstierne, Georg (1892–1978)  
 Morocco: Language Situation  
 Morpheme  
 Morphological Change, Paradigm Leveling and Analogy  
 Morphological Typology  
 Morphological Universals  
 Morphologization  
 Morphology and Language Processing  
 Morphology in Parallel Distributed Processing  
 Morphology in Pidgins and Creoles  
 Morphology: Optimality Theory  
 Morphology: Overview  
 Morphophonemics  
 Morphopragmatics  
 Morphotactics  
 Morpurgo Davies, Anna (b. 1937)  
 Morris, Charles (1901–1979)  
 Morris, Charles: Theory of the Sign  
 Morrobalama  
 Mother Tongue Education: Nonstandard Language  
 Mother Tongue Education: Standard Language  
 Motivation and Attitudes in Second Language Learning  
 Motoori, Haruniwa (1763–1828)  
 Motoori, Norinaga (1730–1801)  
 Mounin, Georges (1910–1993)  
 Mozambique: Language Situation  
 Mufwene, Salikoko (b. 1947)  
 Mukařovský, Jan (1891–1975)  
 Mulcaster, Richard (1532–1611)  
 Mulder, Johannes W. Franciscus (b. 1919)  
 Müller, Friedrich Max (1823–1900)  
 Multiculturalism and Language  
 Multilingualism: Pragmatic Aspects  
 Multimodal Interaction with Computers  
 Multimodality and the Language of Politics  
 Multivalued Logics  
 Munda Languages  
 Munro, Pamela  
 Murayama Shichirô (1908–1993)  
 Murray, Alexander (1775–1813)  
 Murray, James A. H. (1837–1915)  
 Murray, Lindley (1745–1826)  
 Musical Semiotics  
 Muskogean Languages  
 Muskogee *See* Creek  
 Muslim/Islamic Language Education in Pakistan and India  
 Myanmar *See* Burmese; Burma: Language Situation  
 Myth  
 Mythologies in Pop Culture  
 Myths about Language  
 Nadeljaev, Vladimir Mikhailovich (1912–1985)  
 Na–Dene Languages  
 Naert, Pierre (1916–1971)  
 Nāgojibhaṭṭa (d. 1755)  
 Nahuatl  
 Nakoda/Nakoda *See* Lakota  
 Named Entity Extraction  
 Names and Proverbs: Religious Significance  
 Namibia: Language Situation  
 Nanjio, Bunyiu (1849–1927)  
 Napoli, Donna Jo (b. 1948)  
 Narrative and Discourse Impairments  
 Narrative: Cognitive Approaches  
 Narrative: Linguistic and Structural Theories  
 Narrative: Sociolinguistic Research  
 Narrativity and Voice  
 Narratology, Feminist  
 Nationalism and Linguistics  
 Native Speaker  
 Natural Kind Terms  
 Natural Language Interfaces  
 Natural Language Processing: Overview  
 Natural Language Processing: System Evaluation  
 Natural Language Understanding, Automatic  
 Natural Morphology  
 Natural Phonology  
 Natural Semantic Metalanguage  
 Natural versus Nonnatural Meaning  
 Naturalism  
 Nauru: Language Situation  
 Navajo  
 Navarro, Tomás (1884–1979)  
 Nebrija, Antonio de (1444?–1522)  
 Negation  
 Negation: Philosophical Aspects  
 Negation: Semantic Aspects  
 Nenets  
 Neoclassical Compounding

- Neogrammarians  
 Neo-Gricean Pragmatics  
 Neologisms  
 Nepal: Language Situation  
 Nepali  
 Netherlands Antilles: Language Situation  
 Netherlands: Language Situation  
 Neurolinguistics from the Middle Ages to the  
   Pre-modern Era  
 Neutralization  
 New Caledonia: Language Situation  
 New Religious Movements  
 New Zealand: Language Situation  
 New Zealand Lexicography  
 Newman, Paul (b. 1937)  
 News Language  
 Newspeak  
 Ngan'gi  
 Nicaragua: Language Situation  
 Nicknames  
 Nida, Eugene Albert (b. 1914)  
 Niger: Language Situation  
 Niger-Congo Languages  
 Nigeria: Language Situation  
 Nikolaeva, T. M. (b. 1933)  
 Nilo-Saharan Languages  
 Nishida, Tatsuo (b. 1928)  
 Niue: Language Situation  
 Niuean  
 Nivkh  
 Noghay *See* Turkic Languages  
 Nöldeke, Theodor (1836–1930)  
 Nominalism  
 Nominalization  
 NonAustronesian Languages of Melanesia *See*  
   Papuan Languages  
 Nonhuman Primate Communication  
 Nonmanual Structures in Sign Language  
 Nonmonotonic Inference  
 Nonmorphological Word Formation  
 Nonnative Speaker Teachers  
 Nonstandard Language Use  
 Nonverbal Communication  
 Nonverbal Predication  
 Nootka *See* Nuuchahnulth  
 Noreen, Adolf Gotthard (1854–1925)  
 Norfolk Island: Language Situation  
 Normativity  
 Norms and Correctness  
 Norse and Icelandic  
 North Mariana Islands: Language Situation  
 North Philippine Languages  
 Norway: Language Situation  
 Norwegian  
 Noun Phrases  
 Nouns  
 Number  
 Numbers: Calculation  
 Numerals  
 Numerical Notation  
 Nuuchahnulth  
 Nyanja

## Melanchthon, Philipp (1497–1560)

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A leading humanist scholar and a reformer at the side of Martin Luther, Melanchthon drew up the Confession of Augsburg and was the author of textbooks for all disciplines known in his time, from theology to physics. For reforming the curricula of university and higher education, he was acclaimed the Praeceptor Germaniae.

Born at Bretten on February 16, 1497, Melanchthon studied under his uncle Johannes Reuchlin until 1509; at the University of Heidelberg until 1512; and at the University of Tübingen until 1514. In 1518, he was appointed professor of Greek at the University of Wittenberg, where he taught for 42 years, until his death on April 19, 1560.

As regards the language sciences, Melanchthon was recognized by Desiderius Erasmus as early as 1518 for his Greek grammar, which was followed by a Latin grammar (Melanchthon, 1834–1860, vol. 20, pp. 3–179, 193–336). In his dialectic (Melanchthon, 1834–1860, vol. 13, pp. 507–702), he combined into a new methodical unity Cicero's doxastic Topic, the Stoic notion of systema, and the Aristotelian theory of demonstration. The relation between humanist and traditional logic during the Renaissance is a central issue with respect to the impact of Melanchthon's logic. Like many humanist logicians of his time, Melanchthon took a disruptive and destructive stance against traditional treatments of logic, achieving the result of discarding the more technical aspects of medieval logic while shifting the center of attention to nondeductive inferences, good arguments (in the sense of arguments that can be counted on to win in debate), and the problematic nature of arguments' validity (Jardine, 1988). In his rhetoric (Melanchthon, 1834–1860, vol. 13, pp. 27–506), Melanchthon

developed two complementary oppositions: on the one hand, that between a persuasive, eloquent mode of expression as against an arid, uninspired, and technical machinery; on the other hand, an adequate, rhetorical analysis of a text, treating it as a coherent whole as against the medieval approach, which chops a text into inarticulate little pieces, tearing it apart in order to proceed to a formal interpretation of the fourfold significance of an argument (Meerhoff, 1994).

"Prudent men have discovered through experience that nothing is more difficult than to speak clearly and distinctly about a given subject" (Melanchthon, 2000): Melanchthon's concept of an integration of philosophical grammar, dialectic, and rhetoric was in fact revolutionary, insofar as the invention becomes consciously subordinated to the philosophical claims of searching for truth (Schanze, 1983).

*See also:* Luther, Martin (1483–1546); Reformation, Northern European; Reuchlin, Johann (1455–1522).

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## Melanesian Religions

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Melanesia is a region of the Southwest Pacific which stretches from Irian Jaya in the west through Papua New Guinea, the Solomon Islands, Vanuatu, and New Caledonia, as far east as Fiji. In 2004, its population

numbered about eight million. Melanesians speak some 1200 languages, or, according to some estimates, one-quarter of the world's languages. These languages belong to two different groups, Austronesian and non-Austronesian (also called Papuan). The area is home to a number of pidgins, some based in English and others in French. There were trading languages in use in Melanesia prior to European contact,

and plantations and missions furthered their development as lingua francas. Melanesians live in small-scale societies, some of which are patrilineal and others matrilineal. They occupy varied habitats, including coral atolls, rainforests, and high mountain valleys, and their religious traditions embody their relationships to these environments. Most Melanesians are subsistence horticulturalists who supplement a diet of tubers and green vegetables with game or fish and keep pigs for ceremonial purposes. A few are primarily hunters and gatherers, while, over the course of time since first colonial contact, some have become town-dwellers who depend on wage labor for their sustenance. A desire to maintain life-giving relationships pervades the manner in which people interact with other people, with gods and spirits, and with the environment. Fertility – in the sense of the maximization of life force – is the major focus of the traditional religions and also of the Melanesian styles of Christianity and the new religious movements that have developed in the region.

### People and Spirits

Traditional Melanesian societies conceived of the cosmos as a number of linked places inhabited by communities of various kinds. For the Kewa of the New Guinea highlands, for example, the cosmos included the distant world of the sky people, forests inhabited by various kinds of spirits, settlements of ghosts reached by taking paths through the forest, and settlements of human beings. Various terms – gods or deities, culture heroes, ancestors or ghosts, land spirits – have been used by anthropologists and historians of religion to approximate the indigenous names of the nonhuman inhabitants of Melanesian worlds. In local languages, they are often designated as people – sky people, forest people, cave people, cannibal people, and so on. The spirit beings are invisible under ordinary circumstances, but they have an existence parallel to that of human beings who will be referred to as the settlement or village people. In each local world, the particular inhabitants need to be understood in relation to the others with whom they interact. Morality which is based in kin relationships and local community includes appropriate behavior toward spirits and their habitats.

Culture heroes and gods are more significant in mythology than in everyday religious practice. Culture heroes, those mythic persons who gave rise to the physical and social world, are said to have shaped mountains and planted trees and to have instituted marriage and exchange relationships. Brother heroes, such as Kilibob and Manup in the myths of the Madang area of New Guinea, typically portray

contrasting ways of life and behavior. Spirits responsible for creation and regulation of the world have been designated gods in the accounts of some ethnographers. The dead dwell in a settlement separate from that of the living – under the ground, in the sea, in the sky – to which they travel after death. They may return when invited on ritual occasions or when they deem it necessary to visit the settlements of their living relatives. At death, rituals mark the transition from life in the domain of the living to life in the domain of the ghosts. Traditional mortuary customs vary from burial in the family house to exposure on platforms in the forest to burial at sea. Following colonial and missionary contact, it became usual for bodies of the dead to be buried in cemeteries or at individual burial sites. After burial, further rituals sustain and nourish the relationship between living human beings and the dead. Traditionally, there were rituals for individual ghosts and others for the ghosts collectively; some families and communities maintain these celebrations. Such rituals involve the killing of marsupials and/or pigs and the sharing of food between living and dead. They also include speeches, singing, and dancing. The presence of ghosts invited to festivals is signified by the use of masks, drums, and flutes. People appeal to their own dead relatives for assistance in times of need. When the ancestors as a group are invited to participate in ceremonies, carved figures and masks may be produced to represent them. In some communities, masks and carvings are saved in a cult house, while in others they are discarded after the ceremonies when the ancestors are said to have returned to their own settlement.

Land spirits inhabit forests, grasslands, mountains, and swamps. Some are imagined as the inhabitants of particular trees or caves; others are construed as tricksters, monsters, or ogres, at least capricious, and potentially malevolent. People perform rituals and/or observe taboos when venturing into dangerous and isolated places where spirits are said to shoot arrows of affliction into trespassers and to trip up those who disturb them. Before making a change to their environment, such as felling a tree, people will placate spirits with gifts and politely entreat them to move to another place.

### Oral Traditions and Ritual

Melanesian religious traditions are transmitted in the give and take of everyday conversation and work. They are also embodied in the metaphoric processes of storytelling and ritual. Oral traditions tell of the relationship of a community to a particular landscape. Stories narrate the exploits of known people, of mythic ancestors, and of gods and culture heroes. Narratives of events that took place in particular places serve to

transmit a system of land tenure. They also point to places of power where people should perform rituals. Traditionally, songs were composed for courting, for funerals, and for other occasions in personal and communal life. Word taboo and name taboo are practiced as means of protecting relationships, and in some areas religious argots are employed, as, for example, the special languages employed during the pandanus harvest in the Southern Highlands of Papua New Guinea (Franklin, 1972; Franklin and Stefaniw, 1992).

There are rituals for weather, gardening, childraising, attracting members of the opposite sex, hunting, fishing, pig husbandry, trade, warfare, and healing. Full-time ritual officiants are rare, but a variety of healers, mediums, and other practitioners devote part of their time to ritual practice, and everyone practices some rituals. Melanesians are competent gardeners with knowledge of plants and soils and seasons, but they are dependent on the weather and are at the mercy of insect pests. They express their desires for their gardens and their commitment to the work of gardening in spells and ritual. Garden spells invite the sun and rain to visit the garden and seek to cast out insects and disease. Prohibiting sex during the growing period or expecting a couple to have sexual relations in their new garden confirms the pervasiveness of fertility in all of life and the responsibility of humans to manage powerful relationships. Taboos regulate contact with persons, animals, foods, objects, and places; some clans have a taboo against consuming an animal associated with the clan.

Rituals are employed to encourage health and well-being of humans and to send away the forces which inhibit a good life. If a person is sick, a ghost, a land spirit, or a sorcerer or witch is blamed. Healers usually combine the works of healing and sorcery. They are engaged to divine the causes of illness, to prescribe remedies, which may be herbal or ritual or a combination of the two, and to carry out sorcery and counter-sorcery.

Many Melanesian societies have practiced initiation for boys and some for girls. However, following colonial contact and missionization, traditional initiation declined. In male initiation, boys are taken away from their mothers and secluded under the direction of senior men for weeks or months. Typically, they are required to observe food taboos, are instructed in ritual behavior, are taught songs and told stories. They may undergo scarification, tattooing, and incision of the foreskin. In many societies, boys are introduced to sacred flutes or bullroarers, which men use to produce the voices of the spirits. In some areas, introduction to the male cult and first participation in warfare is what makes a boy into a man, whereas in others an elaborate system of graded initiation is followed.

Rituals for females are usually linked to first menstruation and to marriage. As with boys, there are foods that girls should eat and foods they should avoid in order to develop the appropriate gender identity. Melanesian marriage rituals, most of which involve several stages, include the exchange of valuables between the families of bride and groom. Women generally have a repertoire of rituals and taboos to ensure the health and well-being of their children, their gardens, and the pigs entrusted to their care. These may be imparted to girls in a ritual context or learned in daily life. In many parts of Melanesia, a woman is expected to avoid her husband and members of his blood line at the time of menstruation. She will not prepare food for him lest her blood contaminate it and prove polluting or weakening to him.

Ritual is important in renewing social structures. In parts of Melanesia with hereditary chiefs (e.g., Fiji, New Caledonia, and the Trobriand Islands), first fruits ceremonies celebrate the people's relationship to a particular crop such as yams and also summarize the structure of the society. Yams are eaten in turn by priest, chief, men, women, and children, and exchanges of yams take place between individuals and lineages. The pattern of eating and exchanges mirrors the pattern of the society. Similarly, in the highlands of New Guinea, where leadership is not hereditary, ritual exchange in events such as the large-scale killing of pigs and transactions of pork and shells provides opportunity for renewal of community and cosmos.

### Religious Change

Oral histories suggest that prior to colonial contact, which began in some areas in the late 19th century but did not reach other areas until after World War II, considerable change occurred in Melanesian religions. For example, cults were imported from one area to another. One may speculate that events such as the arrival of pigs from Asia some 5000 to 6000 years ago and the introduction of the sweet potato from South America some 300 to 400 years ago changed both the economic and symbolic life of Melanesian communities. In the colonial period, as Melanesians were recruited for labor in mines, plantations, offices, and factories, workers came in contact with the traditions of groups that differed from their own. In this period, Christianity in a variety of denominations began to be introduced to the region. The original colonial powers in the region (Germany, Britain, France, The Netherlands) saw missions as their allies in the spread of civilization. The people of Irian Jaya experienced the Dutch and later the Indonesians as colonial masters. Christianity was introduced in the Dutch period and Islam under Indonesian rule.

From the late 19th century, Protestant and Catholic missions entered Melanesia and became heavily involved in the work of health and education. Biblical stories and Christian rituals were assumed by those to whom the first missionaries preached to work in ways similar to indigenous myth and ritual. Melanesian Christians find commonalities in the themes of indigenous myths and biblical narratives, and students in the region's theological colleges will typically write their B.Div. theses on the relationship of indigenous and biblical texts. Some understand the Christian God as a fuller revelation of an indigenous god or spirit. Various Melanesian languages were employed as mission lingua francas, among them Kate, Yabim, Dobu, Kuanua, Motu, Suau, Wedau, Toaripi, Gedaged, Gogadola, Boiken, and Kiwai (McElhanon, 1979). Missionaries and, later, members of the Summer Institute of Linguistics studied indigenous languages and translated the Bible into them. The popular newspaper *Wantok*, in Tok Pisin, which was started by Catholic missionaries, and the publications of Kristen Pres, an agency of the Lutheran Church, point to the role of the churches in promoting the written word.

Religious movements in which participants await the arrival of an abundance of goods or anticipate a social utopia, were reported following colonial contact, and from the mid-1940s came to be known as 'cargo cults,' a term which may say as much about the colonial observers as about the Melanesian cultists. The movements probably had continuity with wealth rituals and exchange activities that were part of precolonial Melanesia. Taking elements from indigenous religions and from Christianity, they sought to attain a lifestyle characterized by wealth and good relationships. While classic cargo cults have waned in Melanesia, a plethora of religious movements and new churches continue to respond to changing circumstances and to communicate desires for Melanesian forms of religion. At the beginning of the 21st century, most Melanesians were Christians, with the style of Christianity depending on the nature of local traditions and the teachings and practices of the denomination which sent missionaries to the area. The ongoing conversation of Christianity and indigenous traditions is exemplified in the work of Melanesian writers such as Esau Tuza, Bernard Narokobi, and Simeon Namunu who advocate Melanesian forms of Christianity which build on indigenous understandings (Trompf, 1987), but there are also examples of the rejection of indigenous traditions in order to follow Christian ways (Robbins, 2004).

*See also:* Bible Translation into Lesser-Known Languages; New Religious Movements; Papua New Guinea: Language Situation; Papuan Languages; Pidgins and

Creoles: Overview; Religion and Literacy; Religion: Overview; Religious Language; Ritual and Religious Language; Taboo; Tok Pisin.

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## Mel'čuk, Igor Aleksandrovic (b. 1932)

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Igor A. Mel'čuk is well known for his Meaning-Text Theory, which nowadays is developing into a leading model in computational linguistics. He has also made significant contributions to morphology with the five volumes of his *Cours de Morphologie Générale* (1993–2000), and to computational lexicology with the four volumes of his *Dictionnaire explicatif et combinatoire du français contemporain. Recherches lexico-sémantiques* (1984–1999). It is notable that his main theoretical insights were already present in his early works as a pioneer of early machine translation in the Soviet Union in the 1950s, and of the design of a semantic intermediary language method for machine translation.

Mel'čuk was born in 1932 in Odessa, which was then part of the Soviet Union. He was trained in Spanish and graduated in French in 1956 at the Faculty of Philology at Moscow University. At the instigation of mathematician A. A. Ljapunov (1911–1973), who directed the Steklov Mathematical Institute of the Russian Academy of Sciences in Moscow (MIAN), he worked on an algorithm translation from French into Russian with Ol'ga Kulagina. At that time, he was participating in the seminars on machine translation organized by Viktor Jul'evic Rozenveig (1911–1998), where he met Aleksandr K. Žolkovskij (b. 1937) and Juri D. Apres'jan (b. 1930). He began a Ph.D. on Tocharian languages supervised by the comparatist Vjaceslav V. Ivanov (b. 1929), but in 1957 Ivanov and Mel'čuk were dismissed from their post at the university after having supported the Nobel Prize writer Boris L. Pasternak (1890–1960). He then got a position at the Institute of Linguistics of the Academy of Sciences in Moscow until his emigration from the U.S.S.R. in 1977. In August 1975, he wrote a letter to *The New York Times* supporting physicist Andrej Sakharov and biophysicist Sergej Kovalev, and helped the dissidents Jurij Orlov and Anatolij Scaranskij. He was thus fired from the Institute of Linguistics, became a 'social parasite,' and eventually succeeded in leaving the U.S.S.R. in May 1977. Since September 1977, he has been a lecturer at the Linguistics and Translation Department of the University of Montreal.

It was during this early period that Mel'čuk laid the foundations of his main theoretical and practical achievements: semantic synthesis and the meaning text theory with Žolkovskij, lexicography and semantics with the first drafts of the *Explanatory*

*combinatory dictionary* with Apresjan and Žolkovskij, *Dependency syntax* with Nikolaj V. Pertsov (b. 1944), and finally his morphological work stemming from his treatment of grammatical meanings in machine translation.

As a pioneer in machine translation, the originality of Mel'čuk's work lay in his concern with synthesis and the transfer of meaning from one language to another, while most American researchers were focused on morphological and syntactical analysis. In the context of the strong Russian tradition of multilingualism, he took the specific properties of languages into account and the constraints they impose on translation. Thus, Mel'čuk (1958) noted that word order, which was considered identical for every language, was different in Hungarian; this led him to plan an intermediary language for machine translation. This project was a semantic representation language, closely connected to Ivanov's protolanguage (Mel'čuk, 1960). It was based on a conception of languages as global systems – not separable into levels – for which a semantic theory must account. In the process of translation, grammatical meanings – a notion borrowed from Boas via Jakobson (1959) – are not identical from one language to another. Most morphosyntactical features, which are specific to each language and useful in the process of analysis, are no longer needed in the translation stage. On the contrary, what are needed are grammatical indicators of lexical meanings, used for lexical reference (i.e., tenses and modes of verbs). Therefore, the intermediary language is not designed as a grammar, but comprises both syntactic connections to stock syntactic meanings, and words in a dictionary to stock lexical meanings. Thus the intermediary language constituted a real semantic formalism resting on lexical functions and dependence grammar, which forshadowed Mel'čuk's meaning-text model. Besides, it led to the project of registering the grammar of natural languages in dictionaries to carry out natural language generation (Mel'čuk *et al.*, 1984–1999). Mel'čuk's interest for morphology dates back from this early research too (Mel'čuk, 1993–2000). The Meaning-Text Theory was proposed by Mel'čuk and Žolkovskij (1967, 1970) as a framework for describing natural language as a multilevel correspondence between meaning and text, organized from meaning to text – that is, towards synthesis – to model the speaker's comprehension. Between meaning (the semantic level) and text (the phonetic level), there are two more levels, morphological and syntactic. Syntactic relations are represented by dependency trees (Tesnière, 1959) where nodes are