



CONCISE ENCYCLOPEDIA OF PRAGMATICS

JACOB L. MEY



CONCISE ENCYCLOPEDIA OF PRAGMATICS

SECOND EDITION

This page intentionally left blank

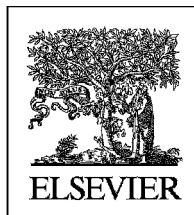
CONCISE ENCYCLOPEDIA OF PRAGMATICS

SECOND EDITION

EDITOR

JACOB L. MEY

University of Southern Denmark
Denmark



Amsterdam Boston Heidelberg London New York Oxford
Paris San Diego San Francisco Singapore Sydney Tokyo

Elsevier Ltd., The Boulevard, Langford Lane, Kidlington, Oxford, OX5 1GB, UK

© 2009 Elsevier Ltd.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publishers.

Permissions may be sought directly from Elsevier's Rights Department in Oxford, UK: phone (+44) 1865 843830; fax (+44) 1865 853333; e-mail permissions@elsevier.com.

*Requests may also be completed online via the homepage
(<http://www.elsevier.com/locate/permissions>).*

First edition 1998

Library of Congress Control Number: 2009925603

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

ISBN 978-0-08-096297-9

09 10 11 12 13 10 9 8 7 6 5 4 3 2 1

This book is printed on acid-free paper
Printed and bound in the UK

Working together to grow
libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

ELSEVIER

BOOK AID
International

Sabre Foundation

PREFACE TO THE SECOND EDITION

There are certain activities in our lives that seem to be endlessly repeating themselves: we witness an apparently endless construction of houses, office buildings, roads and highways, and other infrastructures; there is the preparation and consumption of foodstuffs; there is the daily maintenance of the quarters we live in; there are the recurrent activities governing our use of the markets, small and big; and so on and so forth.

Similarly, writing articles and essays may, for some people, seem to have the same repetitive and perhaps even monotonous character. Still, there is a difference. Writing (or for that matter, all communicative action) is always directed at a person or group of persons; even the most monologic self-expressing poetry always addresses somebody (even though, in extreme cases, the audience is restricted to the poet him-or herself). In addition, the repetitive character of, say, housework may prompt our easy-going consorts to protest against the making of beds or the cleaning of kitchens, with the motivation that ‘beds have to be made again anyway, so why not just let them be’, or: ‘dust is going to happen, so why not just adjust ourselves to a lower than needy standard of cleanliness’. In contrast, activities having to do with communication (in particular, writing) do not only affect the author (the ‘originator’, or *auctor*, with an old-fashioned term), but also, and perhaps to an even higher degree, the ‘end user’: the recipient, in our case, the reader.

But, some reader might object, what has all this to do with the current (concise) encyclopedia of language and linguistics that I am looking at right now? The answer is that encyclopedias, like all works of letters, presuppose our cooperation as readers. In and through the act of reading, we align ourselves with the author whose text we are perusing and with whom we are cooperating. And even though encyclopedias may seem to embody just what the word means: an all-round *paideia* (which is the Greek word for ‘upbringing’), to a cursory observer it may seem that such works only pretend to satisfy an individual’s desire to know a factoid or two, or to delve a little deeper into a certain area of knowledge. What is often overlooked is the interactive feature that is built into the very essence of encyclopedic work, no matter how apparently passive in character on the part of the reader.

It is no secret that many encyclopedias have been the forerunners of revolutions, as I pointed out in the Preface to the first edition of this Concise Encyclopedia. And what I wrote back in 1998 is just as true today as it was then:

The purpose of an Encyclopedia, according to the original (1750–1769) *encyclopédistes*, the French literates and philosophers Denis Diderot and Jean le Rond d’Alembert, is to enlighten the population in order to make them choose the right way of leading their lives, free from the encumbrances of false beliefs and authoritarian doctrines. This apparent innocent and worthy aim had much wider and more profound consequences for society than its proposers could ever have foreseen, as we now know, with the benefit of historical hindsight. Two hundred years after the American, the French, and countless other revolutions, the encyclopedia has become a standard household fixture, and it is hard to imagine, by looking at the impressive, often leather-bound volumes that adorn the bookshelves of better-off households around the planet, how the original ideals of democratizing enlightenment could have had such strong political, even revolutionary side effects. (Mey 1998:xxv)

By the double token of being iterative and revolutionary, encyclopedias, while pretending to codify the knowledge they conserve and propagate, also reflect the societal interaction that is at their base. And this is, finally, why encyclopedias have to be constantly updated and ‘re-cycled’.

The British author Patrick Leigh Fermor describes, in one of his erudite ‘travelogues’, how he, as a young man roaming across the old Hapsburg domain, always found solace in the encyclopedias he discovered in the libraries of the manors and castles to which influential friends had given him introductions. Thus, the traveler found himself “poring over *Meyers Konversationslexikon*” during his stay at a castle in Rumania, while trying to update his knowledge of Central European history (Hungarian and Transylvanian in particular; Leigh Fermor 2005: 101)—in more or less the same way that I, in an earlier period of my life and some twenty years later, helped by *Meyer*, familiarized myself with the beautiful railway stations and city halls that had once adorned cities like Metz and Strasbourg in what had been the (then) German *Reichsland* Elsass-Lothringen. I recall the historic *frisson* I experienced, due in part to the fact that many of those magnificent buildings had long since fallen prey to the combined forces of war and regressive architectural ideologies, posing as progressive notions.

The ‘melancholy of art’, *melanconia dell’arte*, that I perceived contrasted with the urgent need to move on with history, in the same way as it happened for the English author years ago, during a journey through a landscape that was in continuous flux, always on the brink of disappearing into the local and historical horizon, only experienced by ‘being there’, in real life or in the vicarious existence of an encyclopedia, and by moving ahead in an irreversible, and in a way perverse, penetration.

As far as pragmatics is concerned, such a journey provides us with an apt metaphor, both with regard to the landscape traveled and to the various intellectual landmarks and influences encountered there. It seems safe to say that the pragmatic landscape is not only in flux, but that its movements and tendencies have steadily accelerated their courses. Thus, from a humble beginning at the remote outposts of philosophy and linguistic semantics, pragmatics has developed into a vast realm where often conflicting theories and practices reign—just as it was the case for our Brit, traveling the always unruly and undefinable territories that at one time were loosely integrated components of the Austrian-Hungarian *kaiserliche und königliche* twin monarchy, the “*k.u.k. Doppelmonarchie*”, from the years before the Great War. But also, just as it is not only interesting, but useful for us to learn about happenings in those parts in the twilight between the two world wars, and confront them with the situation as it has evolved and especially as it is present to our minds today, so too is it useful, nay necessary, for us to reflect on the developments of our discipline ever since the days of John L. Austin and his burgeoning speech act theory. And in this respect, the new (second, 2006) edition of the mother volume to the present work, the *Encyclopedia of Language and Linguistics* along with its present, concise offshoot, seem to be timely undertakings.

If one were to ask what in particular has changed since those early times, the answer may be that pragmatics has become a ‘discipline’ in its own right, rather than a somewhat ill-defined by-product of other branches of language studies. The notorious ‘wastebasket of semantics’ comes to mind: an expression due to Yehoshua Bar-Hillel, who considered pragmatics more or less as uncharted territory, a bit like those Western expanses in America where a man still could do whatever he wanted to do and get away with it, as no rules or regulations had yet been invented to provide law-based security and establish rule-driven well-formedness. In contrast, we observe a trend towards what could be called a ‘legalization’ of pragmatics, starting in its earlier development and continuing until the present day. Even though it still is too early to speak of a unified scientific discipline (a term which may more properly be applied to other branches of linguistics, such as phonetics or syntax), there is no doubt that pragmatics, as a discipline, has come into its own.

It would be wrong, however, to consider the growth and deployment of pragmatics as a science uniquely as a ‘breaking away’ from older disciplines like semantics or syntax. Rather, the development that led to the rise of pragmatics started as a linguistics-internal movement (inspired by the philosophy of language of the Austinian type), whose ultimate endpoint could not be foreseen (and, as many will say, is still out of sight and reach). Whereas, on the one hand, certain developments in pragmatics may have been triggered by the descriptive aporias and insufficiencies involved in purely semantic or even syntactic ways of considering language, on the other it is equally true that many modern pragmaticists gathered their inspiration from outside the realm of linguistics proper.

The two streams in this development: an ‘intralinguistic’ one, dealing with descriptive and explanatory questions from a linguistics-internal point of view, and an ‘extralinguistic’ one, emphasizing the social character of the language user and the language used, while insisting on the use of language as a defining feature of pragmatics, often seemed to be on a collision course, yet at other times were able to negotiate a peaceful coexistence. In particular, when one looks at some of the recent developments in pragmatics (some of which the present encyclopedia has only just begun to chart), it becomes clear that the two streams, or tendencies, have much to tell one another. Not only does the ‘purely’ syntactic or semantic approach not suffice, when we are

dealing with typical pragmatic phenomena (such as the manipulative or rhetorical uses of language that ever since the Sophists have been the hallmark of a pragmatically oriented study of language); in addition, the internal contradictions that arose from the desire to create a unified matrix, valid for semantic as well as syntactic description (as, e.g., exemplified in ‘Montague grammar’) have led to the acceptance of what some have called a ‘pragmatic intrusion’ into semantics (cf., among others, Levinson 2000: 164 *et pass.*).

For many, the very idea that rules could be given for pragmatic use of language has from the beginning been a *non sequitur*: the creative use of language by the individual in a societal environment could only be circumscribed by the classical, individual-based methods of linguistics, not defined (Mey 2002: 183). Instead, pragmatics has from its very inception promoted the development of society-oriented approaches, that is, approaches that take their point of departure in what is or can be out there, in the social context surrounding us, and then intrapolate these realities and possibilities onto the actual situation in which the language user him- or herself is involved. Such approaches contrast starkly with the well-known efforts by theoretical linguists, traditional sociolinguists, and other social scientists to first define the ‘said’, and then try to figure out what the conditions are that make a particular utterance ‘correct’ or ‘acceptable’.

In all these cases, there is a certain ‘ecological’ principle at work, by which users endeavor to maximize their results with minimal efforts, while respecting their linguistic and social environments. This ‘ecological turn’ has inspired such differing tendencies as, on the one hand, relevance theory, and by what has been called ‘default semantics’ on the other (cf. Jaszczolt 2005 and the article by that name in this volume). Similarly, we have been witness to the rise of ‘optimality theory’ in its various versions—this latter approach is still in its infancy and has not yet reached acceptance in most of the ‘border territories’ (even so, the present work does have an article outlining some notions and possible approaches, cf. the eponymous article presented in the body of this volume).

Other recent developments have resulted in psycholinguistic excursus (or should I say: ‘excursions’, to remain in the traveling metaphor?). Here, one finds a number of articles dealing with developmental aspects of pragmatics (the psycholinguistic view) or approaches that are oriented towards cognitive psychology (as in ‘cognitive pragmatics’). More generally, the cognitive approach itself, originally considered as an extension of epistemic and psychological ways of looking at language use, has come into its own as well, leading to a whole flurry of writings on venerable notions such as metaphor and metonymy, not to forget the return to ‘classical’, speech act-based ideas—first of all the concept of the speech act itself and its conditions, injecting them with new interpretations of the time-honored Searlean and Austinian conditions and restrictive maxims, including further extended notions, such as that of ‘flouting a maxim’ (on which see the article of that name, this volume).

The idea that language belongs, not only to a particular culture or country, but also to the speakers themselves, has gained some momentum in the past decades. Thus, the understanding that not everything linguistic is accessible to everybody at all times, and neither to everybody in the same (legally sanctioned) fashion, has given rise to speculations about accessibility in language, and to what has been called ‘territory of information’; see, e.g., the article on ‘accessibility theory’ in this volume, or the writings of Akio Kamio (1994, 1995, 1997) and recent work by John Heritage (2007). To express one’s condolences, for instance (to take Heritage’s example), presupposes that one has the correct ‘stance’ in regard to the ‘condolee’. More generally, all speech acting on principle belongs to society, and is only derivatively made possible through the language user’s active participation in that society—ideas that have been around ever since the eighties (see Mey 1985), and which have lately come to fruition in my theory of ‘pragmatic acts’ (on which see the article of that name in the current volume; compare also Mey 2008).

The idea that language use and linguistic activities in general (either in the phonetic, syntactic, semantic, or pragmatic realm) obey some kind of ‘law of least effort’ has been fruitfully mined not only by the protagonists of relevance theory, but also in a more general way by the defenders of optimal, rather than maximal, solutions to linguistic problems. What this means is that rather than abiding by some strict rules (like those that allow one to say ‘yes’ or ‘no’ to questions of grammaticality), the thought that an optimal solution often consists in accepting a certain deviation from strict standards has taken hold in the sciences of the human over the past decades.

Early on, the psychologists started to operate with a notion of ‘prototype’, meaning: a concept with fuzzy edges all around; and in pragmatics, the suggestion that conditions are more optimally construed as constraints on the environment than as production rules binding the individual user, has gained considerable popularity. While a fully fledged theory of ‘optimality’ is something that we will have to wait (and work) for (as I remarked above), we may observe, at the interfaces between pragmatics and the other linguistic areas, an ever growing trend towards voluntary collaboration, rather than towards unification under some stringent formal umbrella. Given the newness of such approaches, there are only a few articles in the present volume that reflect this

tendency; had there been more time, and had the selection process been less restricted (viz., practically to the original articles in the fourteen mother volumes of 2006), more current work might have been made available.

One issue still bothers the compiler of the present volume, as it did with regard to its 1998 predecessor. It is an issue familiar to all who have ever tried to produce a conspectus-type, work-oriented overview of some area of knowledge. The dilemma of choosing between an alphabetical sequencing of contributions versus an hierarchical, thematically-based division of the field has bothered dictionary and encyclopedia makers for as long as their works have been around. The great *encyclopédistes* of the 18th century, whom I quoted earlier, opted for a strict alphabetical order; while I am not privy to their motivations, I can imagine that ease of access must have been one of them.

One is reminded of the often occurring situation where an opportunistic, ‘seniority’-based order wins out over a logical one for the simple reason that logics are not universal. Compare the nightmare of those medieval philosophers who tried to capture the whole world under one metaphysical hat; closer to home, one needs only to think of the familiar situation where keys and other important items become practically impossible to find because the owner (often identical with the original depositor) no longer is certain which logic has guided his or her movements while putting away the object in question. Most techniques of object (and knowledge) retrieval operate by a logic of local associations: where did I go first, where from there, and so on. The alphabet provides us with an easy to remember, neutral sequence where everything has its place in a mostly universally accepted order; and this logic is what I have decided to follow also in the present volume.

It has been said by the famous Dr. Samuel Johnson (whose doctoral dignity seems to have been more honorific than acquired by hard work) that “dictionaries are like watches: the worst is better than none and the best cannot be expected to go quite true” (in Mrs. Piozzi’s *Anecdotes of the Late Samuel Johnson*). Applying this dictum to the present work and its generic characteristics, one could say that encyclopedias, despite their recognized usefulness, never will achieve the mandate that is inherent in their title, viz. to give a full conspectus of an entire discipline or area of knowledge, let alone of the human knowledge *in toto*.

But even a more modest effort, as represented by the present, concise work, may be useful in giving us the time of day in more than one sense: not just telling us what is going on, but discuss it (through the voices of the articles’ authors) in an intelligent and accessible fashion. If this should happen in the case of the present work, its compiler may have escaped the common doom of all compilers, embodied in the universal tension between that which is attainable and that which should be attained. And with these reservations in mind, I want to give the book my best wishes on its way to the reading public, and say: *I liber* ‘Book, go forth’! May your travel be as happy, and lead to as many interesting encounters, as was the case for the audacious young Englishman, whose peripeties inspired me while I was writing these lines.

Jacob L. Mey
Austin, Texas
9 February 2009

References

- Heritage, John. 2007. ‘Territories of knowledge, territories of experience: (Not so) empathic moments in interaction’. Keynote speech at the XVth Symposium About Language and Society Austin (SALSA). Austin, Tex., April 14, 2007.
- Kamio, Akio. 1994. ‘The theory of territory of information: The case of Japanese’. *Journal of Pragmatics* 21(1): 67–100.
- Kamio, Akio. 1995. ‘Territory of information in English and Japanese and psychological utterances’. *Journal of Pragmatics* 24(3): 235–264.
- Kamio, Akio. 1997. *Theory of territory of information*. Amsterdam & Philadelphia: John Benjamins. (Pragmatics and Beyond, Vol. 48).
- Leigh Fermor, Patrick. 2006. *Between the woods and the water*. New York: New York Review Books. [1986]
- Levinson, Stephen C. 2000. *Presumptive Meanings*. Cambridge, Mass.: MIT Press.
- Jaszczolt, Katarzyna M. 2005. *Default Semantics: Foundation of a compositional theory of acts of communication*. Oxford: Blackwell.
- Mey, Jacob L. 1985. *Whose language? A study in linguistic pragmatics*. Amsterdam & Philadelphia: John Benjamins.
- Mey, Jacob L. 1998 (ed.). *Concise Encyclopedia of Pragmatics*. Oxford: Elsevier.
- Mey, Jacob L. 2001. *Pragmatics: An introduction*. Oxford: Blackwell. [first ed. 1993]
- Mey, Jacob L. 2008. ‘Impeach or exorcise?’ or, What’s in the common ground? Kecskes, Istvan & Mey, Jacob L. (eds.), *Intention, Common Ground and the Egocentric Speaker-Hearer*. Berlin & New York: Mouton de Gruyter. pp. 255–276.

CONTRIBUTORS

G Altmann

University of York, York, UK

U Ammon

University Duisburg-Essen, Duisburg, Germany

A Anderson

University of Glasgow, Glasgow, UK

M Ariel

Tel Aviv University, Tel Aviv, Israel

M Arseneault

University of Wisconsin-Madison, Madison, WI, USA

I Askehave

Aalborg University, Aalborg, Denmark

S Attardo

Texas A & M University, Commerce, TX, USA

S Baines

Universidade de Brasília, Brasília, Brazil

C Baker

University of Wales, Bangor, North Wales, UK

M Bal

University of Amsterdam, Amsterdam, The Netherlands

F Bargiela-Chiappini

Nottingham Trent University, Nottingham, UK

R Barrett

University of Chicago, Chicago, IL, USA

J Bateman

Bremen University, Bremen, Germany

J Baugh

Washington University, St. Louis, MO, USA

N Baym

University of Kansas, Lawrence, KS, USA

M Bednarek

University of Technology, Sydney, Australia

A Bell

Auckland University of Technology, Auckland, New Zealand

A Bezuidenhout

University of South Carolina, Columbia, SC, USA

T K Bhatia

Syracuse University, Syracuse, NY, USA

D Biber

Northern Arizona University, Flagstaff, AZ, USA

E Borg

University of Reading, Reading, UK

S M Bortoni-Ricardo

University of Brasília, Brasília, Brazil

F M Bosco

University of Torino, Torino, Italy

J Boutonnet

University of Wolverhampton, Wolverhampton, UK

M Brenzinger

University of Cologne, Cologne, Germany

D F Brown

Howard College, Durban, South Africa

G Brown

University of Cambridge, Cambridge, UK

J Brutt-Griffler

State University of New York, Buffalo, NY, USA

W Bublitz

Universität Augsburg, Augsburg, Germany

M Bucholtz

University of California, Santa Barbara, CA, USA

B Busch

University of Vienna, Vienna, Austria

C Caffi

Genoa University, Genoa, Italy & University of Lugano, Switzerland

A Capone

Barcellona, Italy

J Cassell

Northwestern University, Evanston, IL, USA

P Chilton

University of East Anglia, Norwich, UK

T C Christy

University of North Alabama, Florence, AL, USA

P P Chruszczewski

University of Wroclaw, Wroclaw, Poland

H H Clark

Stanford University, Stanford, CA, USA

J Collins

University at Albany, SUNY, Albany, NY, USA

F Cooren

Université de Montréal, Montréal, QC, Canada

J Corbett

University of Glasgow, Glasgow, UK

F Cornish

University of Toulouse-Le Mirail, Toulouse, France

S Coulson

University of California, San Diego, CA, USA

H W Cowles

University of Sussex, Brighton, UK

J Cromdal

Linköping University, Linköping, Sweden

M Cummings

York University, Toronto, Canada

J Cummins

University of Toronto, Toronto, Canada

M Danesi

University of Toronto, Toronto, Canada

B Davies

University of Western Sydney, Bankstown, Australia

R de Cillia

Vienna University, Austria

L De Cuypere

University of Ghent, Ghent, Belgium

W A de Pater

Katholieke Universiteit Leuven, Leuven, Belgium

L Degand

Université catholique de Louvain, Louvain-la-Neuve, Belgium

J Delin

University of Leeds, Leeds, UK

A Deumert

Monash University, Victoria, Australia

P Eckert

Stanford University, Stanford, CA, USA

J Edwards

St Francis Xavier University, Antigonish, NS, Canada

J Engberg

Aarhus School of Business, Aarhus, Denmark

R Engeström

University of Helsinki, Helsinki, Finland

N Fairclough

Lancaster University, Lancaster, UK

J G Fought

Pomona College, Claremont, CA, USA

A Fox

Columbia University, New York, NY, USA

K Fukushima

Kansai Gaidai University, Hirakata, Japan

S Gal

University of Chicago, Chicago, USA

A Garnham

University of Sussex, Brighton, UK

P Garrett

Cardiff University, Cardiff, Wales, UK

P B Garrett

Temple University, Philadelphia, PA, USA

J Gavins

University of Sheffield, Sheffield, UK

M Gernsbacher

University of Wisconsin, Madison, WI, USA

R Gibbs

University of California, Santa Cruz, CA, USA

T P Górski

University of Wroclaw, Wroclaw, Poland

I Gogolin

University of Hamburg

B Gorayska

D Gorter

University of the Basque Country, San Sebastian/Ponostia, Spain

P Graham

University of Waterloo, Canada

S Greco

University of Lugano, Lugano, Switzerland

A K Greenall

Norwegian University of Science and Technology, Trondheim, Norway

K Green

Sheffield Hallam University, Sheffield, UK

L Grenoble

Dartmouth College, Hanover, NH, USA

S Gross

East Tennessee State University, Johnson City, TN, USA

J J Gumperz

University of California, Berkeley, CA, USA

H Haberland

University of Roskilde, Roskilde, Denmark

J Haiman

Macalester College, St. Paul, MN, USA

M A K Halliday**W Hanks**

University of Texas at Austin, Austin, TX, USA

W A Hass

St Peter, MN, USA

J B Haviland

Reed College, Portland, OR, USA

J Hewson

Memorial University of Newfoundland, St. John's, NF, Canada

J H Hill

University of Arizona, Tucson, AZ, USA

E Hinkel

Seattle University, Seattle, WA, USA

J Holmes

Victoria University of Wellington, Wellington, New Zealand

N H Hornberger

University of Pennsylvania, Philadelphia, PA, USA

L F Hye

The University of Hong Kong, Hong Kong, SAR, China

Y Huang

University of Auckland, Auckland, NZ

F M Hult

University of Pennsylvania, Philadelphia, PA, USA

J T Irvine

University of Michigan, Ann Arbor, MI, USA

A Jaffe

California State University, Long Beach, CA, USA

K Jaszczołt

University of Cambridge, Cambridge, UK

A Jaworski

Cardiff University, Cardiff, UK

J E Joseph

University of Edinburgh, Edinburgh, UK

A H Jucker

University of Zurich, Zurich, Switzerland

C Kakava

University of Mary Washington, Fredericksburg, VA, USA

M Kaschak

Florida State University, Tallahassee, FL, USA

I Kecskés

State University of New York, Albany NY, USA

N Kerecuk

London, UK

S Kiesling

University of Pittsburgh, Pittsburgh, PA, USA

C Kinginger

The Pennsylvania State University, University Park, PA, USA

W Koyama

Rikkyo University, Tokyo, Japan

B Kryk-Kastovsky

Adam Mickiewicz University, Poznań, Poland

D Kurzon

University of Haifa, Haifa, Israel

K Kuutti

University of Oulu, Oulu, Finland

M Laforest

Université du Québec à Trois-Rivières, Trois-Rivières, Québec, Canada

R D Lambert

University of Pennsylvania, PA, USA

J Léon

CNRS, Université Paris 7, Paris, France

T van Leeuwen

Cardiff University, Cardiff, UK

T M Lillis

The Open University, Milton Keynes, UK

K Lindblom

Stony Brook University, Stony Brook, NY, USA

M Lotman

University of Tallinn, Tallinn, Estonia & Tartu University, Tartu, Estonia

A Luke

University of Queensland, Brisbane, Australia

J Maat

Universiteit van Amsterdam, Amsterdam, The Netherlands

R Macaulay

Pitzer College, Claremont, California

B MacMahon

Sheffield Hallam University, Sheffield, UK

I Magalhães

Universidade de Brasília, Brasília, Brazil

L Mao

Miami University, Oxford, OH, USA

G Martí

ICREA and Universitat de Barcelona, Barcelona, Spain

L Martín Rojo

Universidad Autonoma de Madrid, Madrid, Spain

H Mazeland

University of Groningen, Groningen, The Netherlands

B McElhinny

University of Toronto, Toronto, Ontario, Canada

A McHoul

Murdoch University, Murdoch, Australia

S McKay

University of Queensland, Brisbane, Australia

D McNeill

University of Chicago, Chicago, IL, USA

J Meibauer

Universität Mainz, Mainz, Germany

L Merlini Barbaresi

University of Pisa, Pisa, Italy

F Merrell

Purdue University, West Lafayette, IN, USA

R Mesthrie

University of Cape Town, Cape Town, South Africa

K-A L Mey

Carmel, Calif, USA

J L Mey

University of Southern Denmark, Odense

G Mininni

University of Bari, Bari, Italy

M Miskovic-Lukovic

Institut für Fremdsprachenphilologien, Oldenburg, Germany

G S Morson

Northwestern University, Evanston, IL, USA

S Muehlmann

University of Toronto, Toronto, Ontario, Canada

J J Murphy

University of California at Davis, Davis, CA, USA

D Musumeci

University of Illinois at Urbana-Champaign, Champaign, IL, USA

P Mühlhäusler

University of Adelaide, Adelaide, Australia

Y Nagashima

Gakushuin University, Tokyo, Japan

B Nerlich

University of Nottingham, Nottingham, UK

M Neț

Bucharest, Romania

N R Norrick

Saarland University, Saarbrücken, Germany

B Norton

University of British Columbia, Vancouver, BC, Canada

S O'Neill

University of Oklahoma, Norman, OK, USA

D Owens

University of Sheffield, Sheffield, UK

W A de Pater

Katholieke Universiteit Leuven, Belgium

T-S Pavlidou

Aristotle University of Thessaloniki, Thessaloniki, Greece

A Pérez Pereiro

Arizona State University, Tempe, AZ, USA

B Pearson

University of Massachusetts, Amherst, MA, USA

A Pennycook

University of Technology, Sydney, Australia

R Phillipson

Copenhagen Business School, Copenhagen, Denmark

G Pianese

Naples, Italy

B Pizziconi

University of London, SOAS, London, UK

A Ponzio

University of Bari, Bari, Italy

K Proost

Institut für Deutsche Sprache, Mannheim, Germany

K Rajagopalan

State University at Campinas, Campinas, Brazil

G S Rattan

University of Toronto, Ontario, Canada

M Reisigl

University of Vienna, Vienna, Austria

E Rigotti

University of Lugano, Lugano, Switzerland

S Romaine

University of Oxford, Oxford, UK

S A Romashko

Russian Academy of Sciences and Moscow State University, Moscow, Russia

X Rosales Sequeiros

University of Greenwich, London, UK

T Sanders

Utrecht University, Utrecht, The Netherlands

J Sanders

Tilburg University, Tilburg, The Netherlands

W Sandler

University of Haifa, Haifa, Israel

T Santos

Humboldt State University, Arcata, CA, USA

S J Savignon

Pennsylvania State University, University Park, PA, USA

K C Schröder

Roskilde University, Roskilde, Denmark

S-H Seong

University of Bonn, Bonn, Germany

J Sidnell

University of Toronto, Toronto, Ontario, Canada

I Signorini

State University of Campinas, Campinas, Brazil

M Silverstein

University of Chicago, Chicago, IL, USA

P Simpson

Queen's University, Belfast, Northern Ireland

R Singh

Université de Montréal, Montreal, Canada

P Skehan

The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong, SAR, China

T Skutnabb-Kangas

Roskilde Universitetscenter, Roskilde, Denmark

J Smith

University of York, York, UK

R W Smith

East Carolina University, Greenville, NC, USA

P Snowdon

University College London, London, UK

R Sornicola

Università di Napoli Federico II, Napoli, Italy

C Spencer

Howard University, Washington, DC, USA

B Spolsky

Jerusalem, Israel

G Steen

Vrije Universiteit, Amsterdam, The Netherlands

D Stein

Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany

J Streeck

University of Texas, Austin, TX, USA

B Street

King's College, London, UK

P Swiggers

Katholieke Universiteit Leuven, Leuven, Belgium

M Talbot

Nottingham Trent University, Nottingham, UK

M Tomasello

Max Planck Institute, Leipzig, Germany

M Toolan

University of Birmingham, Birmingham, UK

M Torrance

Staffordshire University, Stoke-on-Trent, UK

J R Trillo

Universidad Autónoma de Madrid, Madrid, Spain

L van Lier

Monterey Institute of International Studies, Monterey, CA, USA

P de Villiers

Smith College, Northampton, MA, USA

K Wales

University of Leeds, Leeds, UK

W C Watt

University of California, Irvine, CA, USA

Li Wei

Brickbeck College, University of London, London, UK

T Wharton

University College London, London, UK

A Wierzbicka

Australian National University, Canberra, Australia

R B Wilbur

Purdue University, West Lafayette, IN, USA

K Willems

University of Ghent, Ghent, Belgium

J Wilson

University of Ulster at Jordanstown, Newtownabbey, Northern Ireland

R Wodak

Lancaster University, Lancaster, UK

A Wray

Cardiff University, Cardiff, Wales, UK

F Yus

University of Alicante, Alicante, Spain

H Zeevat

University of Amsterdam, Amsterdam,
The Netherlands

U Zeshan

Max Planck Institute for Psycholinguistics, Nijmegen,
The Netherlands

K K Zethsen

Aarhus School of Business, Aarhus, Denmark

ALPHABETICAL LIST OF ARTICLES

Accessibility Theory	Default Semantics
Activity Theory	Deixis and Anaphora: Pragmatic Approaches
Adaptability in Human-Computer Interaction	Dialogism, Bakhtinian
Addressivity	Discourse Anaphora
Anthropology and Pragmatics	Discourse Markers
Applying Pragmatics	Discourse Processing
Austin, John L.	Discourse, Foucauldian Approach
Bakhtin, Mikhail Mikhailovich	Discourse, Narrative and Pragmatic Development
Bilingual Education	Discrimination and Language
Bilingualism	Discursive Practice Theory
Bilingualism and Second Language Learning	Education in a Multilingual Society
Bruner, Jerome Seymour	Educational Linguistics
Bühler, Karl	E-mail, Internet, Chatroom Talk: Pragmatics
Class Language	Emancipatory Linguistics
Classroom Talk	Endangered Languages
Code Switching	Environment and Language
Codes, Elaborated and Restricted	Evolution of Pragmatics
Cognitive Pragmatics	Face
Cognitive Technology	Family Speak
Comics, Pragmatic Aspects of	Fillmore, Charles J.
Communication: Semiotic Approaches	Formulaic Language
Communicative Competence	Foucault, Michel
Communicative Language Teaching	Frege, Friedrich Ludwig Gottlob
Communicative Principle and Communication	Freire, Paulo
Communities of Practice	Gender and Language
Computer Literacy	Gender and Political Discourse
Conspicuity	Genre and Genre Analysis
Constraint, Pragmatic	Genres in Political Discourse
Context and Common Ground	Gesture and Communication
Context, Communicative	Gesture: Sociocultural Analysis
Conversation Analysis	Gestures: Pragmatic Aspects
Conversational Agents: Synthetic	Goffman, Erving
Conversational Analytic Approaches to Culture	Grice, Herbert Paul
Cooperative Principle	Guillaume, Gustave
Critical Applied Linguistics	Habermas, Jürgen
Critical Discourse Analysis	Halliday, Michael Alexander Kirkwood
Cultural and Social Dimension of	Hill, Jane
Spoken Discourse	Historical Pragmatics

- History of Pragmatics
Humor in Language
Humor: Stylistic Approaches
Iconicity
Identity and Language
Identity in Sociocultural Anthropology and Language
Identity: Second Language
Implicature
Indexicality: Theory
Institutional Talk
Interactional Sociolinguistics
Intercultural Pragmatics and Communication
Internet and Language Education
Irony
Irony: Stylistic Approaches
Jakobson, Roman
Language Attitudes
Language Change and Cultural Change
Language Education for Endangered Languages
Language Education: Language Awareness
Language in Computer-Mediated Communication
Language Maintenance and Shift
Language Planning and Policy: Models
Language Policy in Multinational Educational Contexts
Language Politics
Language Socialization
Language Teaching Traditions: Second Language
Languages for Specific Purposes
Languages of Wider Communication
Law and Language: Overview
Legal Pragmatics
Linguistic Anthropology
Linguistic Decolonialization
Linguistic Habitus
Linguistic Rights
Literacy Practices in Sociocultural Perspective
Literary Pragmatics
Literary Theory and Stylistics
Lying, Honesty, and Promising
Marxist Theories of Language
Maxims and Flouting
Media and Language: Overview
Media, Politics and Discourse Interactions
Media: Pragmatics
Medical Communication: Professional-Lay
Metaphor: Philosophical Theories
Metaphor: Psychological Aspects
Metaphor: Stylistic Approaches
Metaphors and Conceptual Blending
Metaphors in Political Discourse
Metapragmatics
Metonymy
Migration and Language
Minorities and Language
Minority Languages: Oppression
Mitigation
Morphopragmatics
Morris, Charles
Multiculturalism and Language
Narrative: Sociolinguistic Research
Narrativity and Voice
Native Speaker
Natural Language Interfaces
Neo-Gricean Pragmatics
Newspeak
Oracy Education
Orality
Ordinary Language Philosophy
Organizational Speech
Participatory Research and Advocacy
Peirce, Charles Sanders
Phonetics and Pragmatics
Politeness
Politeness Strategies as Linguistic Variables
Politics and Language: Overview
Politics of Teaching
Power and Pragmatics
Pragmatic Acts
Pragmatic Determinants of What Is Said
Pragmatic Indexing
Pragmatic Presupposition
Pragmatics and Semantics
Pragmatics of Reading
Pragmatics: Linguistic Imperialism
Pragmatics: Optimality Theory
Pragmatics: Overview
Principles and Rules
Proxemics
Psycholinguistics: History
Psycholinguistics: Overview
Queer Talk
Reading and Multiliteracy
Reference: Psycholinguistic Approach
Reference: Semiotic Theory
Reflexivity
Register: Overview
Relevance Theory
Reported Speech: Pragmatic Aspects
Rhetoric: History
Rhetoric: Semiotic Approaches
Rhetorical Structure Theory
Rhetorical Tropes in Political Discourse
Sacks, Harvey
Sapir, Edward
Scaffolding in Classroom Discourse
Second and Foreign Language Learning and Teaching
Second Language Listening
Semantic Change: the Internet and Text Messaging
Semantics-Pragmatics Boundary

-
- | | |
|---|---------------------------------------|
| Shared Knowledge | Spoken Discourse: Types |
| Sibata, Takesi | Stylistics |
| Sign Language: Overview | Stylistics: Pragmatic Approaches |
| Sign Languages of the World | Syntax–Pragmatics Interface: Overview |
| Sign Languages: Discourse and Pragmatics | Systemic Theory |
| Sign Languages: Semiotic Approaches | Tacit Knowledge |
| Silence | Tannen, Deborah |
| Social Aspects of Pragmatics | Telephone Talk |
| Social Class and Status | Text and Text Analysis |
| Social-Cognitive Basis of Language Development | Text World Theory |
| Socialization | Thetic–Categorical Distinction |
| Socialization: Second Language | Topic and Comment |
| Society and Language: Overview | Translation, Pragmatics |
| Sociolect/Social Class | Traugott, Elizabeth |
| Sociolinguistics and Political Economy | Understanding Spoken Discourse |
| Speech Accommodation Theory and Audience Design | Use Theories of Meaning |
| Speech Act Verbs | Use versus Mention |
| Speech Acts | Voloshinov, Valentin Nikolaevich |
| Speech Acts and Grammar | Vygotskij, Lev Semenovich |
| Speech Acts, Classification and Definition | Whorf, Benjamin Lee |
| Speech Acts, Literal and Nonliteral | Wierzbicka, Anna |
| Speech and Language Community | Wittgenstein, Ludwig Josef Johann |
| Speech and Thought: Representation of | Word and Image |
| | Writing and Cognition |

This page intentionally left blank

A

Accessibility Theory

M Ariel, Tel Aviv University, Tel Aviv, Israel

© 2006 Elsevier Ltd. All rights reserved.

Natural discourse does not start from scratch. Speakers routinely integrate new information with contextual assumptions, roughly, information that they can take for granted, and so they need not assert it (Sperber and Wilson, 1986/1995). Referring to discourse entities, an inherent feature of human interactions, is no different. Although some discourse entities are (treated as) new (*a kiss* in [1]), most are (treated as) identifiable (e.g., *the review*, *Helen*, *her* in [1], and *her heart*, a first-mention, in [2]). Thus, part of the nonasserted material is information about discourse entities that the speaker would like the addressee to retrieve (for citations of SBC [Santa Barbara corpus], see Du Bois *et al.*, 2000, 2003. [...] = a short fragment deleted):

- (1) LORI: when you were reading **the review**,
 you talked about **the affair between**
 Helen and Paul, [...]
 all that happened was,
LINDA: was **a kiss**. [...]
LORI: **He** kissed **her**, (SBC: 023).
- (2) DORIS: they had an autopsy done on her.
 And **her heart**,
 was just hard, (SBC: 001).

Accessibility Theory (Ariel, 1985a, 1985b, 1988a, 1990, 2001), in effect a development of Sanford and Garrod (1981) and Givón (1983) (and see also Chafe, 1994), assumes a logically prior distinction between identifiable/Given entities (coded as definite) and nonidentifiable/Given entities (coded as indefinite). Identifiable entities are ones for which the addressee is assumed to be able to access mental representations (see Du Bois, 1980; Heim, 1982). Accessibility theory seeks to account for the selection and interpretation of all definite referring expressions. The theory does not assume (as fundamental) the first versus subsequent mention distinction, and provides one and the same account for expressions considered referential (e.g., proper names), often used for discourse first-mentions, as well as for expressions considered

anaphoric (e.g., pronouns), often used for subsequent mentions (Ariel, 1990, 1994, 1996). It also does not view references to the speech situation (e.g., by deictics) as special (Ariel, 1998a). All definite referring expressions in all languages are analyzed as accessibility markers, as instructions to the addressee on how to access specific mental representations. In fact, the theory handles other types of Given materials as well, most notably whole propositions (see Ariel, 1985a, 1985b, 1988b).

Using a definite NP, the speaker signals to her addressee to access some mental representation based either on his encyclopedic knowledge, his awareness of the speech situation, or his discourse model of the interaction so far (Clark and Marshall, 1981). The definite referring expression also provides information about the intended entity, which the addressee is to rely on when zeroing in on the intended referent (e.g., *her* is a singular female). This is as far as the definiteness aspect takes us, but speakers can be even more helpful. Mental representations are not equally accessible to us at any given stage of the discourse. Some are highly activated, others are mildly activated, and yet others, although potentially identifiable, are not currently activated at all. Speakers refer to discourse entities at all activation levels. This is where accessibility theory plays a crucial role. It helps the addressee pick the correct mental representation by indicating to him the degree of accessibility with which the mental representation is currently entertained. The claim is that each referring expression specializes for a specific degree of mental accessibility, hence the term *accessibility markers* for referring expressions. On this view, addressees search mental representations not only based on the content of the referring expression, but also based on the degree of accessibility indicated by the speaker.

Since mental accessibility comes in a rich array of degrees, accessibility markers can be graded on a scale of accessibility marking, some indicating very low degrees of mental accessibility, others indicating various intermediate and high degrees of accessibility. The following partially grammaticized (see Ariel, 2001) accessibility marking scale, starting with very

low accessibility markers and ending with extremely high accessibility markers, has been proposed in Ariel (1990), but the list is not intended to be exhaustive:

- (3) Full name + modifier > full name > long definite description > short definite description > last name > first name > distal demonstrative + modifier > proximate demonstrative + modifier > distal demonstrative + NP > proximate demonstrative + NP > distal demonstrative (-NP) > proximate demonstrative (-NP) > stressed pronouns + gesture > stressed pronoun > unstressed pronoun > cliticized pronoun > verbal person agreement markers > zero.

For example, *the affair between Helen and Paul* in (1) is a long definite description. The prediction is that it indicates a mental representation that is not as accessible as the shorter *the review* or *he*. Indeed, *the review* is what the interlocutors have been discussing. But the affair, as such, was not explicitly mentioned in the conversation, and in fact, according to Lori, it's not even clear that there was one. *He* (a pronoun) refers to the highly accessible Paul, who was just mentioned.

Now, the correlations between specific referring expressions and specific degrees of mental accessibility are not arbitrary. This is why (3) is virtually a universal. By and large, the accessibility marking scale is governed by three coding principles: informativity, rigidity, and attenuation. Informativity predicts that more informative expressions be used when the degree of accessibility is relatively low. It is only reasonable for the speaker to provide the addressee with more information if the mental representation is not (highly) activated, so he can better identify the intended entity from among the many he entertains at a low degree of accessibility. Rigidity predicts that a (more) uniquely referring expression (such as a proper name), rather than a relatively nonrigid expression (such as a pronoun), should be used when degree of accessibility is low (cf. *Helen, Paul* with *her, he* in [1]). Finally, attenuation predicts that greater phonological size (including the presence of stress) correlates with lower degrees of accessibility, whereas smaller phonological size correlates with higher degrees of accessibility (cf. definite descriptions vs. pronouns, and even more so with zero).

The three principles overlap to a large extent. Quite often, informative expressions are also relatively rigid and unattenuated. However, this is not invariably so. *The newspaper* and *United States of America* are as informative and rigid as *the paper* and *US(A)*, respectively, but they are not as attenuated. Accordingly, the lower accessibility markers are found in contexts

where a lower degree of accessibility is the case (see Ariel, 2001, *inter alia*). Similarly, in languages with verbal person agreement, there is no difference in the informativity and rigidity between independent pronouns (e.g., Hebrew *ani*, 'I') and the corresponding agreement marker (+*ti* for past tense). But distributional patterns show that the independent pronoun (less attenuated) is used when the speaker is less accessible. Finally, for Western names, it's usually the case that first and last names are equally informative and attenuated, but they are not equally rigid. Last names tend to pick a referent more uniquely than first names (simply because there is a greater variety of last names). Accordingly, Ariel (1990: 45) correlates the two types of names with different textual positions, showing that anaphoric first names mostly find their antecedents within the same paragraph, but last names have three times as many cross-paragraph anaphoric relations. This points to the lower degree of accessibility indicated by last names.

Distance between a previous and a current mention of the entity (recency) is indeed one important factor determining degree of accessibility. Naturally, the longer the time elapsed between the previous and the current reference, the less activated the representation, so that relatively lower accessibility markers are called for. Note that the relationship between the antecedent and the anaphor, their Unity, is not simply measured in number of words (only), but rather, syntactic boundaries (e.g., the clause), textual boundaries (the paragraph, the episode), and pragmatic boundaries (units more vs. less cohesively linked to each other) define the closeness between a potential antecedent and its anaphor, dictating higher or lower accessibility markers depending on how 'distant' the two are from each other. When a discourse entity is inferred based on another, we similarly see differences according to how automatic/stereotypic the inference connecting the two is (cf. *her heart* in [2], which is easily inferred from *her*, given that humans have hearts, with *his sense of character values* based on *his* referring to *Mister Forster* – SBC: 023, where we don't automatically assume that people have a "sense of character values"). Empirical evidence for these Unity claims can be found in Clancy (1980), Sanford and Garrod (1981), Givón (1983), and Ariel (1985a and onward).

Unity features mostly pertain to anaphoric references. Referent salience is important for all types of reference, first-mention referential expressions included. Some discourse entities are inherently more salient: the speaker and addressee (vs. third persons), humans (especially vs. inanimates), and famous personalities (vs. anonymous people). Other discourse entities have a prominent *ad hoc* status, mostly

because they constitute discourse topics. The predictions are then that higher accessibility markers will serve these more salient discourse entities. Competition over the role of intended referent between potential mental representations may, however, lower the degree of accessibility of each, mainly of nontopics. It then calls for lower accessibility markers:

- (4) MARY: What I have to do,
is take off **the distributor wire**,
and splice it_i in with **the fuel pump**
wire.
Because my ... **fuel pump**_j is now
electric, (SBC: 007).

- (5) In the reference, each author is referred to by name and initials. There is a single exception – to avoid the possibility of confusion, first names are always included for **David Payne, Doris Payne, John Payne, Judith Payne** and **Thomas Payne** (Dixon, 1994: xvi–xvii).

In (4), the more topical entity is coreferred to by *it*, the nontopic by an informative lexical NP (*my fuel pump*). In (5), presumably equally accessible entities are all referred to by lower accessibility markers (full names), because they compete with each other (initial + *Payne* is not rigid enough in this context).

It is important to remember, however, that accessibility theory makes claims about correlations between referring expressions and degree of accessibility, measured as a total concept, rather than by any one of its components (e.g., topic, distance, or competition). In other words, the prediction is that accessibility marker selection is determined by weighing together a whole complex of accessibility factors, which together determine what the degree of accessibility of a given discourse entity is at the current stage of the discourse (see Toole, 1996; Ariel, 1999). This is why, for example, even speakers are not invariably referred to by the highest accessibility markers (zero in Hebrew). Although the speaker is a highly salient discourse entity, if she's not topical or if it's competing with another antecedent, it may be referred to by an independent pronoun.

Finally, accessibility theory is universal (see Ariel, 1990: 4.2), although not all languages have exactly the same set of referring expressions, and even when these seem to be identical, they may rate differently for the three coding principles (informativity, rigidity, and attenuation, e.g., cf. English and Japanese pronouns). Provided they are comparable, all referring expressions are predicted to indicate the same relative, though not absolute, degrees of accessibility. Thus, in all languages zeroes indicate a higher degree of accessibility than pronouns, but not all languages

allow cross-sentential zero anaphora. Accessibility theory applies to all genres/registers (see Ariel, in press). In fact, because accessibility related discourse patterns are so common in diverse registers and languages, we can account for various cross-linguistic grammaticization paths. For example, the recurrent creation of verbal person agreement markers for first/second persons, but not for third persons (via the cliticization of the high accessibility markers used for the very salient speaker and addressee; see Ariel, 1998b, 2000), as well as universal constraints on the use of resumptive pronouns (see Ariel, 1999). At the same time, accessibility constraints may be violated to create special pragmatic effects (e.g., *Jamie the old lady* (SBC: 002) is too low an accessibility marker, when used by Jamie's husband in her presence).

See also: Deixis and Anaphora: Pragmatic Approaches.

Bibliography

- Ariel M (1985a). *Givenness marking*. Ph.D. thesis, Tel-Aviv University.
- Ariel M (1985b). 'The discourse functions of Given information.' *Theoretical Linguistics* 12, 99–113.
- Ariel M (1988a). 'Referring and accessibility.' *Journal of Linguistics* 24, 65–87.
- Ariel M (1988b). 'Retrieving propositions from context: why and how.' *Journal of Pragmatics* 12, 567–600.
- Ariel M (1990). *Accessing noun phrase antecedents*. London: Routledge.
- Ariel M (1994). 'Interpreting anaphoric expressions: a cognitive versus a pragmatic approach.' *Journal of Linguistics* 30(1), 3–42.
- Ariel M (1996). 'Referring expressions and the +/– coreference distinction.' In Frerheim T & Gundel J K (eds.) *Reference and referent accessibility*. Amsterdam: John Benjamins. 13–35.
- Ariel M (1998a). 'The linguistic status of the "here and now".' *Cognitive Linguistics* 9, 189–237.
- Ariel M (1998b). 'Three grammaticalization paths for the development of person verbal agreement in Hebrew.' In Koenig J-P (ed.) *Discourse and cognition: bridging the gap*. Stanford: CSLI/Cambridge University Press. 93–111.
- Ariel M (1999). 'Cognitive universals and linguistic conventions: the case of resumptive pronouns.' *Studies in Language* 23, 217–269.
- Ariel M (2000). 'The development of person agreement markers: from pronouns to higher accessibility markers.' In Barlow M & Kemmer S (eds.) *Usage-based models of language*. Stanford: CSLI. 197–260.
- Ariel M (2001). 'Accessibility theory: overview.' In Sanders T, Schilperoord J & Spooren W (eds.) *Text representation: linguistic and psycholinguistic aspects*. Amsterdam: John Benjamins. 27–87.

- Ariel M (In press). 'A grammar in every register? The case of definite descriptions.' In Hedberg N & Zacharsky R (eds.) *Topics in the grammar-pragmatics interface: Papers in honor of Jeanette K Gundel*. Amsterdam: John Benjamins.
- Chafe W L (1994). *Discourse, consciousness, and time: the flow and displacement of conscious experience in speaking and writing*. Chicago: The University of Chicago Press.
- Chafe W L (ed.) (1980). *The pear stories: cognitive, cultural, and linguistic aspects of narrative production*. vol. III of Freedle R (ed.) *Advances in discourse processes*. Norwood, NJ: Ablex.
- Clancy P M (1980). 'Referential choice in English and Japanese narrative discourse.' In Chafe W L (ed.) *The pear stories: cognitive, cultural, and linguistic aspects of narrative production*. Vol. III of Freedle R (ed.) *Advances in discourse processes*. Norwood, NJ: Ablex. 127–202.
- Clark H H & Marshall C (1981). 'Definite reference and mutual knowledge.' In Joshi A K, Webber B L & Sag I A (eds.) *Elements of discourse understanding*. Cambridge: Cambridge University Press. 10–63.
- Dixon R M W (1994). *Ergativity*. Cambridge: Cambridge University Press.
- Du Bois J W (1980). 'Beyond definiteness: the trace of identity in discourse.' In Chafe W L (ed.) *The pear stories: cognitive, cultural, and linguistic aspects of narrative production*. Vol. III of Freedle R (ed.) *Advances in discourse processes*. Norwood, NJ: Ablex. 203–274.
- Du Bois J W, Chafe W L, Meyer C & Thompson S A (2000). *Santa Barbara corpus of spoken American English, part 1*. Philadelphia: Linguistic Data Consortium.
- Du Bois J W, Chafe W L, Meyer C, Thompson S A & Nii M (2003). *Santa Barbara corpus of spoken American English, part 2*. Philadelphia: Linguistic Data Consortium.
- Fretheim T & Gundel J K (eds.) (1996). *Reference and referent accessibility*. Amsterdam: John Benjamins.
- Givón T (ed.) (1983). *Topic continuity in discourse: a quantitative cross-language study*. Amsterdam: John Benjamins.
- Heim I (1982). *The semantics of definite and indefinite noun phrases*. Ph.D. diss., University of Massachusetts.
- Sanford A J & Garrod S C (1981). *Understanding written language*. Chichester: John Wiley and Sons.
- Sperber D & Wilson D (1986/1995). *Relevance*. Oxford: Blackwell.
- Toole J (1996). 'The effect of genre on referential choice.' In Fretheim T & Gundel J K (eds.) *Reference and referent accessibility*. Amsterdam: John Benjamins. 263–290.

Activity Theory

K Kuutti, University of Oulu, Oulu, Finland

R Engeström, University of Helsinki, Helsinki, Finland

© 2006 Elsevier Ltd. All rights reserved.

Cultural-historical activity theory (CHAT) is a school of thought concerning itself with the relation and interaction between humans and their material and social environment. Originally a psychological tradition, it has been expanded into a more general, multidisciplinary approach, which is used (besides in psychology) in semiotics, anthropology, sociology, cognitive science, linguistics, and design research. Thus, it would be more suitable to call it a framework, an approach, or a research program. From another perspective, CHAT is one of the few research traditions in human sciences originating in the former Soviet Union that have been able to gain acceptance in the Western research.

Historical Background

Cultural-historical activity theory, CHAT, originated in attempts by psychologists, as early as the 1920s, to establish a new, Marxist-based approach to

psychology. The foundation of Activity Theory was laid by L. S. Vygotsky during the 1920s and early 1930s. (see Vygotskij, Lev Semenovich.) His work was continued by A. N. Leont'ev and A. R. Lurija, who both developed his ideas further and began to use the term 'activity.' (A good historical review of that development can be found in Leont'ev, 1989.) For a Marxist psychologist, who favors a monistic explanation of human mental processes, the Cartesian mind-body dualism is unacceptable. Thus, the starting point of CHAT is that human thinking has both phylogenetically and ontogenetically emerged and developed in practical action and social interaction in the world; there is no separate mind that could be studied in isolation from these actions; significantly, the individual person is thus not a real unit of the analysis of mind. In any such analysis, the purposefulness of actions must be taken into account, and therefore it is necessary to include a minimal context that makes the actions meaningful for the acting subject. This context, typically a purposeful, social system of actions, is called an activity. Certain general principles within this framework include object orientation; mediation by culturally and historically formed artifacts (tools and signs);

hierarchical structure of activity; and zone of proximal development.

Object Orientation

The most central feature of CHAT is that activities are oriented towards a specific object and that different objects separate activities from each other. In this tradition, the concept of object is complex and loaded. Activities emerge when human needs find a way to be fulfilled in the world. The object here is the entity or state of the world, the transformation of which will hopefully produce the desired outcome. An object has, thus, a double existence: it exists in the world as the material to be transformed by artifactual means and cooperative actions, but also as a projection on to the future—the outcome of the actions. The object is not exactly given beforehand, but it unfolds and concretizes in the interactions with the material and the conditions. Being a constantly reproduced purpose of a collective activity that motivates and defines the horizon of possible goals and actions, the ‘sharedness’ of the object is present only in social relations across time and space, as well as embodied in terms of history. Locally, the sharedness of an object is a process of social construction with divergent views and creative uses of cultural and interactional resources. Activities are thus often multivoiced, and none of the existing perspectives on the object can be defined as right—such a definition can only be given within an activity.

Mediation

The notion of tool mediation is one of the central features of CHAT. Actions are mediated by culturally and historically constituted artifacts, an artifact being defined as something that has been manufactured by a human. Thus, our relation with the world is shaped not only by our personal developmental history and experiences from various interactions, but also by the history of the broader culture we are part of. The world has been concretized in the shape of tools, symbols, and signs that we use in our activities. The world does not appear to us *as such*, uncontaminated, but as a culturally and historically determined object of previous activities. Humans project both these earlier meanings and those that have arisen from the fulfillment of current needs on to their objects; at the same time, they envision the potential results to be achieved. (see *Cognitive Technology*.) Language is an essential part of this toolkit, a tool of tools. According to CHAT, all mediation has both a language side and a material character: symbols and signs, and tools and instruments are all integral

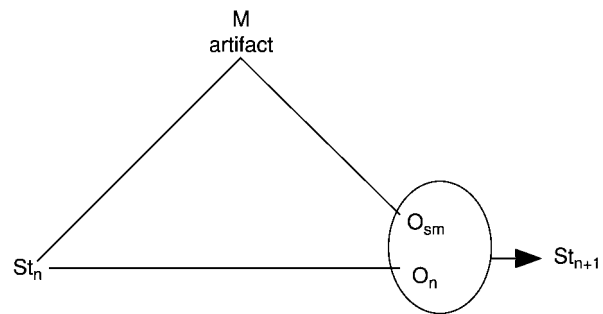


Figure 1 A model of the basic mediational structure. (S) subject, object (O), and medium (M) at the vertices of the triangle indicate the basic constraints of mind. The line S-O represents the ‘natural,’ (unmediated) functions; the line S-M-O represents the functions where interactions between subject and object are mediated by auxiliary means. St_n is the subject’s state of knowledge at time n ; O_{sm} is the object as represented via the medium; O_n , object at time n ; St_{n+1} , emergent new state of the subject’s knowledge at time $n + 1$ (Cole and Engeström, 1993: 5–7). Reprinted from Salomon (1993), *Distributed cognitions*, Figure 1.2, with permission from Cambridge University Press.

parts in the same mediation process. The basic mediational structure is depicted in **Figure 1**.

Thus the foundation of our actions is a continuous synthesis of two versions of the world: one directly given, the other culturally and historically mediated. Their synthesis enables us to plan our actions.

The Socio-Pragmatic Nature of the Sign

Activity Theory has paid much attention to semiotic mediation. Vygotsky’s final work *Thought and Language* (1934) has contributed greatly to the understanding of human mental activity in socio-cultural terms, by assigning a crucial function to language as a psychological tool capable of mediating the development of the mind. Language as a tool calls for the use of artificial stimuli, that is, the use of culturally and historically construed sign systems. Signs serve to control the psyche and behavior of others and the Self, bringing to bear traces of social activities and social relations sedimented in language.

Vygotsky’s socio-genetic approach to thought and language was developed originally in the research tradition of developmental psychology, aiming at understanding the child’s mental growth. Later works of CHAT have continued with semiotic mediation and identity formation by focusing more on language use and utilizing notions such as the internal and external dialogicality of discourse. (see *Addressivity; Dialogism, Bakhtinian; Discourse, Foucauldian Approach; Discourse Processing*.) The interest is here in analyzing language from the viewpoint of sense-making, as it takes place within the contexts of the complex relationship between pragmatic activity and social processes. Sense-making is viewed as an active,

culturally mediated process within and with which the external world is translated into a conceivable world and organized into objects of activities. Social change of language is explored with the help of developmental trends of sense-making through which new elements of meaning come into our social interests without leaving old meanings untouched.

Overall Structure of Activities

According to Leont'ev (1978), activities have a three-level hierarchical structure. Besides the activity level, which is a particular system of actions, and the action level itself, there is a third level, the lowest one, of operations. Operations are former actions that have become automated during personal development, and which are triggered within actions by specific conditions in the situation. Whereas in actions, there are always planning, execution, and control phases, operations are much more condensed, rapid, and smooth. To become skilled in something is to develop a collection of related operations. Operations are not, however, like conditioned reflexes: if the conditions do not fit, the operations return back to the action level.

In the tradition of the founders of CHAT, new forms for depicting activity have been elaborated. The most influential attempt to model an activity is due to Engeström. In his *Learning by expanding*, he aimed at defining a historically and concretely constituted system that has a timespan and internal transformations of its own. The model is presented in Figure 2.

In Figure 2, the model of individual action in Figure 1 has been complemented to depict the

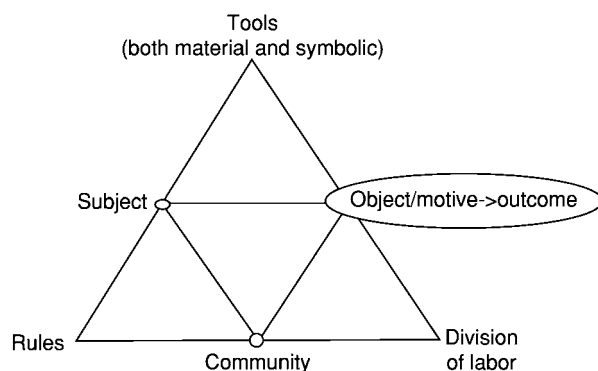


Figure 2 A model of an activity system (based on Engeström, 1987). The initial mediational triangle of individual actions is expanded to cover the social and cooperative dimension of an activity by adding a community sharing the same object and two new mediational relationships: social-cultural ('rules') between the subject and the community, and power/organizing ('division of labor') between the community and the shared object. The model is systemic in the sense that all elements have a relation with each other, but only the three main mediations are shown for the sake of clarity.

collective activity system. The model looks at the activity from the point of view of one actor, the subject, but the fact that subjects are constituted in communities is indicated by the point in the model labeled 'community.' The relations between the subject and the community are mediated, on the one hand, by the groups' full collection of 'tools' (mediating artifacts) and, on the other hand, by 'rules' that specify acceptable interactions between members of the community, and 'division of labor,' the continuously negotiated distribution of tasks, powers, and responsibilities among the participants of the activity system (Cole and Engeström, 1993: 7).

In an activity, the relation between individual actions and the outcome of the whole activity becomes mediated and indirect. Leont'ev (1978) explained the relation between individual actions and collective activity using an example of primitive hunters who, in order to catch a game, separate into two groups: the catchers and bush-beaters, where the latter scare the game in order to make them move towards the former. Against the background of the motive of the hunt—to catch the game to get food and clothing material—the individual actions of the bush-beaters appear to be irrational unless they are put into the larger system of the hunting activity.

Zone of Proximal Development

Activity systems are socially and institutionally composed entities exhibiting internal conflicts which develop through transformations. The characteristic feature of CHAT is the focus on such changes; it studies cognition, including language, as a dynamic, culture-specific, and historically changing phenomenon constituting activity systems. In this context, the zone of proximal development (ZPD) has become Vygotsky's most widely referenced notion. It concerns children's learning processes, and refers to

the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978: 86)

Current activity theoretical studies extend from Vygotsky's dyadic pedagogical outline to potential horizons of different activities that will "mature tomorrow but are currently in an embryonic state." In the tradition of developmental work research, Vygotsky's ZPD indicates in outline the distance between present everyday actions and the historically new forms of the societal activity. In Engeström's model, contradictions in activity systems are "structural misfits within or between activities. The new

forms of activity can be collectively generated as a solution to the double bind potentially embedded in everyday actions.” (Engeström, 1987: 174). Contradictions may not be apparent or obvious, and they often appear as problems and disruptions in the flow of ordinary activities. In CHAT, new challenges of scientific concepts are also actively reflected in the ongoing research. Researchers in the areas of cognition and language studies are participating in the current development of discourse-based concepts.

The International Community

An international CHAT research community has been emerging, beginning from the late 1970s. In the early 1980s, there was a series of Northern European CHAT conferences on education; the first international CHAT conference was held in 1986 in Berlin, where the International Society for Cultural Research and Activity Theory (ISCRAT) was founded. This acronym was also the name used for a series of conferences: in Lahti, Finland, 1990; in Moscow, 1995; in Aarhus, Denmark, 1998; and in Amsterdam, 2002. A couple of these conferences have had their proceedings published as a selection of papers (Engeström *et al.*, 1999; Chaiklin *et al.*, 1998). In 2002, ISCRAT has joined forces with the Society of Socio-Cultural Studies (SSCS), resulting in a new society called International Society for Cultural and Activity Research (ISCAR), whose first joint world conference was held in Seville, Spain, in 2005.

From 1994 on, the CHAT-oriented *Mind, Culture, and Activity. An International Journal* has been published by Lawrence Erlbaum.

See also: Addressivity; Cognitive Technology; Dialogism, Bakhtinian; Discourse, Foucauldian Approach; Discourse Processing; Marxist Theories of Language; Pragmatic Acts; Scaffolding in Classroom Discourse; Vygotskij, Lev Semenovich.

Bibliography

- Chaiklin S, Hedegaard M & Jensen U J (eds.) (1999). *Activity theory and social practice*. Aarhus: Aarhus University Press.
- Cole M (1996). *Cultural psychology*. Cambridge, MA: Harvard University Press.
- Cole M & Engeström Y (1993). ‘A cultural–historical approach to distributed cognition.’ In Salomon G (ed.) *Distributed cognitions. Psychological and educational considerations*. Cambridge: Cambridge University Press. 1–47.
- Engeström Y (1987). *Learning by expanding*. Helsinki: Orienta-Konsultit.
- Engeström Y & Middleton D (eds.) (1996). *Cognition and communication at work*. Cambridge: Cambridge University Press.
- Engeström Y, Miettinen R & Punamäki R-L (eds.) (1999). *Perspectives on Activity Theory*. Cambridge: Cambridge University Press.
- Lektorsky V A (1984). *Subject, object, cognition*. Moscow: Progress Publishers.
- Leont’ev A N (1978). *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice-Hall.
- Leont’ev A N (1989). ‘The problem of activity in the history of Soviet psychology.’ *Soviet psychology* 27(1), 22–39.
- Nardi B (ed.) (1996). *Context and consciousness: Activity Theory and human computer interaction*. Cambridge, MA: MIT Press.
- Valsiner J (2000). *Culture and human development*. London: Sage.
- Van der Veer R & Valsiner J (1991). *Understanding Vygotsky. A quest for synthesis*. Oxford: Blackwell.
- Vygotsky L S (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky L S (1986). *Thought and language* (2nd edn.). Cambridge, MA: MIT Press.
- Wertsch J V (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Wertsch J V (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

Adaptability in Human-Computer Interaction

J L Mey, University of Southern Denmark, Odense, Denmark

© 2006 Elsevier Ltd. All rights reserved.

Introduction

In this article, two main themes will be touched upon: first, I will discuss the general topic of humans’ adaptation to computers as tools, and conversely, how the

computer tool can be adapted to human needs; and second, a particular instance of this adaptive process, in which both humans become (more) literate on and through the computer and computers are becoming more ‘human,’ will be discussed under the label of ‘computer literacy.’ In both cases, emphasis will be placed on the cognitive aspects of the problems, as embodied in the metaphors that are current in this particular discourse.

Adaptation and Adaptability

Adaptation

Earlier views on the computer as a tool (e.g., in human problem solving) have concentrated on the problem of *adaptation*: who or which is going to adapt to whom or which? (For a discussion of ‘adaptability’ vs. ‘adaptivity,’ where the latter is defined as a unilateral coercion on the human to conform to the patterns of behavior imposed by the computer, the former captures the necessity of letting the human decide to which degree, and to what purpose adaptation should be practiced, cf. Mey, 1998.)

Even though such efforts have their rationales in the context of computer modeling as it is usually understood, they do not touch upon the basic problem of adaptation, seen as a dialectic process of integrating two independent but interacting systems, the human and the computer (Mey and Gorayska, 1994). The case is analogous to that of perception; here, neither the senses nor the objects can be said, by themselves and unilaterally, to produce a sensation (e.g., of seeing). Perception is always perception of something, and it is always a perception by and in somebody. In the psychologist James J. Gibson’s words, it is a “circular act of adjustment” (Gibson, 1979): “The activity of perception is not caused, nor is it an act of pure will” (Reed, 1988: 200).

An adaptability approach to computing thus endeavors to integrate two systems:

1. the human user, and
2. the computer tool.

In human-computer interaction, the human neither unilaterally ‘acts’ upon the computer, nor does the computer unilaterally prescribe the human some restricted form of activity. Rather, each system adapts to the other; their functional qualities, taken together, are what makes the use of the computer as a tool possible. In Gibsonian terms, tool making and tool using are tantamount to looking for and exploiting “affordances” (Gibson, 1979). To see this, consider the way our adaptation to, and interaction with, computers is characterized by our use of metaphors (see *Metaphor: Psychological Aspects*).

Computers and Metaphors

Like every other human activity, the use of computers has generated its own set of metaphors. We do our word processing using a ‘mouse,’ ‘scroll’ files up and down, ‘chase’ information on the Internet, get ‘lost’ in cyberspace, or trapped in the ‘mazes’ of the ‘web’; and even if we have no idea what we are doing where in cyberspace, it can always be called ‘surfing.’ It’s as if we were hanging out on the corners of our

computational space – what one could call, using a novel metaphor, our ‘cyber-hood,’ our computerized neighborhood.

Among the various metaphors that currently characterize the computer and its use by humans, that of ‘tool’ has been one of the most pervasive. Just as tools help us execute certain activities better and faster, so too has the computer been considered a tool for performing certain operations (such as bookkeeping, accounting, tallying, registering, archiving, and so on) in a better, more efficient, and especially faster way. Among the attributes of this tool that have attracted most attention are, naturally, the ease with which it ‘falls into’ the human hand and routine; by extension, the computer is not even thought of as a tool any longer: enter the invisible, or ‘transparent’ tool (as I have called it; Mey, 1988), to be preferred over other, more visible and obtrusive kinds of instruments. The computer that adapts itself to the human user becomes an extension of the human body; conversely, the adaptable human user will treat the computer not just as any old tool, but rather as a crutch, a ‘scaffolding’ (in Bruner’s terminology; Bruner, 1983), or even as a prosthesis, as we will see below (see *Scaffolding in Classroom Discourse*).

A Case in Point: The Computer as Prosthesis

It has been well known, ever since the pioneering work of people like Carroll (1991), that the tool we use to perform a particular task not only assists us in doing what we have to do, but also changes our understanding of the task itself and of a host of other things related to the task. It may change the very nature of the task altogether. For instance, to cite a classical case, the vacuum cleaner was originally introduced to alleviate and lessen a housekeeper’s boring chores. In the end, it has increased the workload and made the work itself even more boring, because now it had to be performed more often and to a greater degree of perfection. The tool changes the task, and vice versa, in a never-ending “spiral” (Salomon, 1993).

With regard to computers, the tool has frequently been likened to a prosthesis. In the context of our discussion, this has had some profound effects. A prosthesis, one could say, is simply an augmentation of a human capability (either replacing a lost faculty or extending an existing one). But if we scratch this seemingly innocent surface, a host of hidden assumptions and unexpected problems turn up. First, there is the question of the augmentation itself: how far should we go, or be allowed to go, in the enhancing of the human sensory faculties? Using super-powered lenses and telecameras, we can spy

upon the most intimate happenings in the lives of famous people like the late Princess Diana. But even though the majority of readers of the tabloid press would not be without their daily dose of lurid photo-journalism, everybody agrees in condemning the excesses of the paparazzi when their need for media coverage directly or indirectly harms the celebrities they are pursuing, as it happened in the case of Princess Diana's death. "They are going too far," we hear people say. But what exactly is 'going too far' in what essentially is an adaptation of human goals and values to the possibilities of the tool? And how do we decide what is an acceptable limit for this adaptivity? On the one hand, more knowledge is more power; on the other, 'curiosity killed the cat' (and did irreparable damage to some notable humans and their progeny as well, as the case of Adam and Eve amply illustrates).

The Fragmented Body

The tool metaphor of the computer as a prosthesis carries with it yet another drawback. Since prostheses typically target one particular human capacity for augmentation, we come to think of our capacities as individually 'enhanceable.' There are two aspects to this enhancing: one, we consider only the individual agent, without taking his or her larger societal context into account; and two, we enhance single faculties in the individual, without taking into account the fact that these capacities form a unit, a human whole.

As to the first aspect, the societal character of our capacities, consider the 'paradox of success' that Kaptelinin and Kuutti (1999) have drawn attention to: what succeeds in one context may, by its very success, be expected to be a failure in another, seemingly similar environment. Thus, the very fact that, say, a decision-making computer tool has proven successful in the United States may warn us against trying to introduce it into a Japanese surrounding, where decisions among humans are made in ways that are very different from what is common practice in the U.S. (Kaptelinin and Kuutti, 1999: 152).

The other aspect relates to a currently popular notion of human capacities as being 'modularly replaceable.' Just as we are seeing the beginnings of 'surgical engineering,' in which techniques of replacement have substituted for old-fashioned operation and healing procedures, so we are witness to a trend toward substituting and augmenting not only parts of the body itself (such as is done in heart or kidney transplantation), but entire mental functions. A reasoning chip implanted in our brain relieves us from the headaches of going through the motions of filling in the trivial parts of a mathematical proof or a chain of syllogisms. A chip may replace

a person's worn-out or Alzheimer-affected memory capacities. In general, wetware can be replaced by more sturdy and robust electronic hardware, pre-wired to augment specific mental functions, and even tooled precisely to fit the needs of a particular individual. The potential for prosthetic innovations of this kind is virtually unlimited, up to the point where the whole person may end up being 'retooled' electronically (*see Cognitive Technology*).

The Effects of Adapting

Despite these problems, we are not exactly prepared to shut down our machines in the name of a return to basics, a kind of information-age Ludditism. We will have to live with the computer, even if our adaptation to it, as well as its role as an adaptive prosthesis, carries serious problems, generating side effects some of which were not intended. Here, it is useful to distinguish between primary and secondary effects. To take a well-known example, when Henry Ford wanted to put an automobile in everybody's front yard, the primary effect of this 'automotive revolution' was that people were able to travel farther and in ways not imagined before. But the secondary effects, not foreseen by Ford or anybody else at the time, included our adaptation to this new transportation device: our mind-set changed, the automobile becoming our premier status symbol, our 'escape on wheels,' for some even serving as an extra bedroom. In due course, these secondary effects (including the need to build more and more highways, in the process destroying entire rural and urban environments in the name of transportation, creating a new, 'suburban' life style for millions of people, and so on and so forth) were much more important than the simple primary effects in regard to our modes of transportation. The innovative tool re-creates that which it was only supposed to renew: the prosthetic tail wags the human dog.

Another problem with the prosthesis metaphor, when applied to the computer, is that of augmentation. The prosthetic tool, be it a crutch or a pair of binoculars, augments our motor or visual capacities. The notion of augmenting a human faculty presupposes the existence of something which is not augmented, or 'natural.' The trouble with humans, however, is that 'natural' behavior is a fiction; while we do have certain 'innate' functions (the faculty of speech, the ability to walk upright, and so on), these functions cannot be put to work 'naturally' unless we 'initialize' them, break them in socially and culturally. And in order to do this properly, we need tools. In particular, in any learning situation, we need what Bruner called a 'scaffolding': a total learning environment where

the learner is gradually introduced to the next higher level of competency, all the way relying on the availability of physical and mental ‘crutches’. And the more we enhance our human, culturally bound and socially developed functions, the less we rely on those crutches as external prostheses; we internalize the tools by making them part of ourselves, adapting and incorporating them, as it were, to the point where they are both ‘invisible’ and indispensable.

As an illustration, I will discuss the case of the word processor, thus leading into the second part of this article, which deals with the problems involved in computer literacy.

Computer Literacy

The Word Processor

A word processor is basically a tool for enhanced writing. Starting from the early, primitive off- and online text editors (such as RUNOFF or EDDY), modern word processors (such as the latest editions of Microsoft Word or WordPerfect) are highly sophisticated devices that not only help you write, but actually strive to improve your writing – and not just physically or orthographically. Text editors, for instance, will tell you that a sentence is ill formed or too long, or that a particular concept has not been properly introduced yet.

Computerized functions such as these may facilitate the ways in which we produce texts; on the other hand, the texts we produce are in many ways rather different from those that originated in a noncomputerized environment. Here, I’m not talking only about the outer appearances of a document (by which a draft may look like a final version of an article, and be judged on that count), but rather about the ways we practice formulating our ideas.

For instance, if we know that what we write may be disseminated across an international network, or abstracted in a database that is used by people from different walks of life and contrasting ethnic and cultural backgrounds, we will try to express ourselves in some kind of ‘basic conceptualese,’ shunning the use of metaphors and idiomatic expressions, thus sacrificing style to retrievability of information. As Oracle’s Kelly Wical observed, such automated indexing of documents “will encourage people to write plainly, without metaphors . . . that might confuse search engines. After all, everyone wants people to find what they have written” (Wical, 1996; see also Gorayska, Marsh and Mey, 1999: 105 ff.).

In the following, I will examine some of these effects, and inquire into their desirability and/or inevitability.

Why Computer Literacy?

If literacy (no matter how we interpret this term) has to do with people’s capacities for handling ‘letters’ (Latin: *literae*), then one may ask: What’s so special about the computer that we need to define a special concept called ‘computer literacy’? After all, people have been using the notion of literacy for ages, and there has never been a need to define a special kind of literacy for a particular tool of writing, such as a chisel, brush, or pen. Whereas ‘penmanship’ has become a synonym of ‘high literacy’ (no longer necessarily exercised by means of a pen), nobody has ever felt the need to define ‘typewriter literacy’ in terms other than in number of words per minute: a good (‘literate,’ if you want) typist can do at least 100 words per minute without committing too many errors, whereas a beginner or ‘illiterate’ person only can do 30 or 40 and will have to use a lot of time correcting his or her mistakes. In other words, there must be a difference, but what is it?

Writer and Tool

What makes a difference is in the relationship of the writer to his or her instrument: chisel and hammer, stylus and wax, quill and parchment, pen and paper, keyboard and screen. This relationship has not always been simple and straightforward; in particular, it has been known to influence the very way people write. The ancient Greek scribes who performed their craft in stone didn’t bother to drag all their utensils back to the beginning of the line they just had finished: instead, they let the new line begin where the old one had stopped, only one level lower; thus, the script called *boustrophedon* (literally: ‘the way the [plowing] oxen turn’) came into being, with lines alternating in their direction of writing/reading. The medieval monks who wrote on parchment often tried to ‘recycle’ this precious and hard-to-get material by erasing earlier scripts and overwrite the deleted text, a technique known by the name of *palimpsest*. (By an irony of history, in due course the deleted text often turned out to be more valuable than the overwritten one. Many of the sources for our editions of the classical authors are due to the monks’ parsimonious writing techniques.)

Undoubtedly, the invention of wood (later lead) letter type contributed greatly to the dissemination of written literature; yet, the effects on the scribe were never a matter of reflection. Much later, when the typewriter got naturally to be used for the purposes of office work, personal letters and literary ‘works of art’ still had to be composed by hand, if they were to be of any value. Even in a more practically oriented domain such as that of journalism, it is a known fact that the formidable, in life chief editor

of the Vatican daily *Osservatore Romano*, forbade the use of typewriters in his offices as late as 1948. His journalists had to write all copy by hand and then give it to a typist or typesetter.

The interaction between writer and tool changed dramatically with the advent of the computer. Not only is this writing instrument more perfect than any of its predecessors, but in addition it possesses a great number of qualities enabling people to approach their writing tasks in a different way. Accordingly, 'computer literacy' can be defined as: knowing how to exploit the various new uses to which the 'computer interface' between humans and letters can be put. Let's consider some of these uses.

How (Not) to Use a Computer

Here, I will not discuss the more specialized functions that computer writing has inherited from earlier technologies, merely perfecting but not changing them: bookkeeping and accounting (cf., the use of so-called 'spread sheets'), tabulating, making concordances, automated correspondence, and other office work (e.g., the automatic reminders one gets from one's credit card company or the local utilities services). The truly revolutionary aspect of computer literacy is in the effect it has on the writing process itself, that which earlier was thought of by some as sacrosanct, immune to any kind of mechanical implementation.

One could say that a truly 'computer literate' person is one who composes his or her literary production directly on the computer, without any interference except from the interface itself. This is a bit like composing directly on the piano, except that the keyboard there normally does not retain what has been played on it. In contrast, the conserving function of the computer is precisely what enables writers to enter into a totally new relationship with their tool.

Earlier work, being dependent on the paper medium, had to be meticulously corrected in the text itself, often with great problems of legibility and understanding (scratching or crossing out, 'whiting out,' overwriting, writing in between the lines and in the margins, cutting and pasting, and so on, with multiple versions often canceling out one another, or at least making perhaps better original lines impossible to retrieve). However, the computer allows the text producer to maintain near-complete independence of the material side of writing.

Paper has always been said to be 'patient' in that it did not protest against whatever the author put down on it, suffering great works of art and utterly trivial composition alike to be entered on its impartial

surface. In comparison, the patience that the computer exhibits is not just an inherent quality of the tool: it is transferred to, and located within, the computer 'literate' who knows that Pilate's age-old adage *Quod scripsi, scripsi*, "What I have written, I have written" (John, 19: 22) has been rendered null and void by this new medium. Here, it doesn't matter what is written, for everything can always be reformulated, corrected, transformed, and recycled at the touch of a keystroke or using a few specialized commands. In extreme cases, we even may see the computer generate near-automatic writing (in the sense of the surrealists), with fingers racing across the keyboard and authors failing to realize what's driving them on. Subsequently, the author who checks and goes over the results may often marvel at the 'inventions' that he or she has been guilty of producing, almost without being aware of the process by which they happened.

Perspectives and Dangers

I will conclude this entry by pointing to some of the perspectives that manifest themselves in a considered approach to the problem of adapting to/from the computer/human, especially as they appear in the context of computer literacy. In addition, I will say a few words about the possible dangers involved in the headlong embrace of new technologies (and their implied mental representations and ideologies) just because they are new. First, there is that age-old dilemma (going all the way back to Plato): Is the human just a kind of idealized entity coupled to a material reality ('a mental rider on a material beast of burden')? Or do we conceive of the union of the two in different ways, now that we have better metaphors to deal with these questions (especially the vexing problem of 'which is master': mind over matter or the other way around)?

Mind and Body Conceiving of the computer as a prosthesis may seem to finally resolve that ancient dichotomy: the mind-body split. If anything in the mind can be reproduced on a computer, then we don't need the body at all. Or, vice versa, if the computerized body can take over all our mental functions, why then do we have to deal with a mind?

There are indeed tendencies afoot that seem to advocate this kind of thinking. Some years ago, a book by Andy Clark (1997, frontispiece) proudly announced, in its subtitle, the ability to "put brain, body, and world together again". However, this synthesis is performed strictly on the basis of a computer-as-prosthesis informed philosophy: one describes

the mental functions as (if need be, computerized) modules, united under a common ordering principle or joined loosely in some kind of mental republic, a 'society of mind' à la Minsky (1986), where the different mental functions, conceived of as semi-independent but jointly organized modules, cooperate to form an organized, governing whole.

In Clark's model, the emphasis is on the brain, not the mind, the latter being characterized as a "grab-bag of inner agencies." The "central executive in the brain – the real boss who organizes and integrates the activities" is said to be "gone." Also "[g]one is the neat boundary between the thinker (the bodiless intellectual engine), and the thinker's world." No wonder, then, that replacing this "comfortable image" puts us in front of a number of "puzzling (dare I say metaphysical?) questions" (Clark, 1997: 220–221). Leaving those questions aside in our context, let me briefly explore some possible practical consequences of this 'dementialization,' when seen as involving a decentralization of the individual's capacities.

Mind, Creativity, and Control While the acquisition of computer literacy as a condition for employment does not create much of a difference as compared with earlier situations (except for the extra cost and training it involves), the use of the computer in creative contexts represents a true breakthrough in the relationship of humans to their work, especially as regards their ways of creative production and reproduction. The interesting question here is not what the computer does to our hands, but in what ways it affects our mental ability to shape and reshape, to work out a thought, and then abandon it (but not entirely!). It is also in how it allows us to come back to earlier thoughts and scraps of insights that were jotted down in the creative trance, as it were – perhaps recombining these *disiecta membra* with other pieces of thought, all available at the drop of a keystroke. This qualitative change of our relationship with our creative tools is the true computer revolution; it defines 'computer literacy' as being qualitatively different from earlier, more primitive, creative and cognitive technologies.

The imminent danger of the spread of computer literacy is, of course, that any Tom, Dick or Emma who can handle a keyboard may consider themselves to be geniuses of writing, thus offsetting the positive effect of increased literacy through this reduction of the computer tool to an instrument of and for the inane and mindless. More importantly though, the danger exists that users, because of the apparent naturalness of their relationship to the computer, start considering themselves as natural extensions of the machine, as human tools. Being 'wired' becomes thus

more than a facile metaphor: one has to be plugged into some network, both metaphorically and electronically, to be able to survive in today's 'wired' society. The wireless person just 'isn't there.'

To see this, consider the way most people are wired into the mass media of communication: their lives and thoughts are dictated by the media. Whoever doesn't plug into this immense network of 'infotainment' (information and entertainment), is 'out,' is an 'outsider,' in the strictest sense of the word; outside of the talk of the day at the workplace, outside of the discussions in the press, outside of the newscasts and television reports on current scandals and shootings. An 'insider,' on the other hand, does not (and cannot) realize to what extent the simple presence of thought and feelings, otherwise considered as 'naturally' arising within the mind, is due to his or her 'wiredness,' his or her connection to the networks. It takes the accidental 'black screen' (or some other temporary media deprivation) to make one fathom the depths of one's dependency, the extent of one's being 'hooked up' to the infotainment universe (and as a result, being 'hooked on,' not just 'wired into,' that universe).

'Big Brother' and the Mind's 'Holding Company'

A final issue is of a subtler, less technical, and for that reason all the more threatening, nature; it has to do with the nature of the mental prosthesis that the computer represents. The computer's special features (programs and functions that are distributed throughout the hardware rather than being encapsulated in neat, identifiable blocks of instructions, routines being divided into subroutines to be used independently and/or recursively, and so on) have led some of us to think of the brain as a similarly organized, distributed architecture (like Minsky's "society of mind," mentioned above). In particular, the currently popular 'connectionist' view of mental processing is based on this analogy; the prosthesis metaphor, if applied within this frame of thinking, transforms the individual mental features and functions into a set of independent, yet connected components (what Clark irreverently called a "grab-bag of inner agencies"; 1997: 221). The question is, and the problem remains, how to orchestrate all those brainy agencies into some kind of mental unit(y). For all practical purposes, one could replace the media outlets by some central instrument, have it wired directly into people's heads, and bingo, we're in business: the wired society becomes a frightening reality, with 'Big Brother' embodied in a central 'Holding Company,' a monster computer, controlling and directing our entire lives (cf. Big Brother and the Holding Company, 1968).

One frequently hears computer users employ expressions such as, “The computer is in a bad mood today” or “The computer doesn’t want to cooperate”; one sees irritated users kick their machines, pound their keyboards, or scream at their screens, accusing these devices of lack of cooperation. Such expressions, when they are not caused by either the user’s poor computer literacy, or by a particular hardware or software deficiency, may reflect either a lack of critical awareness of the computer’s properties as an auxiliary tool, or a failure to distinguish between the respective roles of the partners in human-computer interaction and cooperation. The future of human computer interaction lies in the humanizing of the tool, not in the humans’ becoming more tool-oriented and tool-like. And as to adaptation and adaptability, I repeat what I said earlier: the computer tail should never be allowed to wag the user dog.

See also: Activity Theory; Cognitive Technology; Literacy Practices in Sociocultural Perspective; Pragmatics of Reading; Vygotskij, Lev Semenovich.

Bibliography

- Big Brother and the Holding Company (Janis Joplin, vocals, Sam Andrew, guitar, James Gurley, guitar, Peter Albin, bass, Dave Getz, drums) (1982). ‘Farewell song’ (Winterland, San Francisco, April 13, 1968). CBS 32793.
- Bruner J S (1983). *Childstalk: Learning to use language*. New York: Morton.
- Carroll J (ed.) (1991). *Designing interaction: psychology at the human-computer interface*. Cambridge: Cambridge University Press.
- Clark A (1997). *Being there*. Cambridge, MA: Bradford Books.
- Gibson JJ (1977). ‘The theory of affordances.’ In Shaw R & Bransford J (eds.). *Perceiving, acting, and knowing. Towards an ecological psychology*. Hillsdale, NJ: Erlbaum.
- Gibson JJ (1979). *The ecology of visual perception*. Boston: Houghton Mifflin.
- Gorayska B & Mey J L (1996). ‘Of minds and men.’ In Gorayska & Mey (eds.). 1–24.
- Gorayska B & Mey J L (eds.) (1996). *Cognitive technology: in search of a humane interface (Advances in Psychology, vol. 113)*. Amsterdam & New York: North Holland-Elsevier.
- Gorayska B, Marsh J P & Mey J L (1999). ‘Augmentation, mediation, integration?’ In Marsh, Gorayska & Mey (eds.). 105–111.
- Kaptelinin V & Kuutti K (1999). ‘Cognitive tools reconsidered: from augmentation to mediation.’ In Marsh, Gorayska & Mey (eds.). 145–160.
- Marsh J P, Gorayska B & Mey J L (eds.) (1999). *Humane interfaces: questions of method and practice in cognitive technology (Human Factors in Information Technology, Vol. 13)*. Amsterdam: North Holland.
- Mey J L (1988). ‘CAIN and the transparent tool: cognitive science and the human-computer interface (Third Symposium on Human Interface, Osaka 1987).’ *Journal of the Society of Instrument and Control Engineers (SICE-Japan)* 27(1), 247–252 (In Japanese).
- Mey J L (1998). ‘Adaptability.’ In Mey J L (ed.) *Concise encyclopedia of pragmatics*. Oxford: Elsevier. 5–7.
- Mey J L & Gorayska B (1994). ‘Integration in computing: an ecological approach.’ Third International Conference on Systems Integration, São Paulo, Brazil, July 30–August 6, 1994. Los Alamitos, CA: Institute of Electrical and Electronic Engineers.
- Minsky M (1986). *The society of mind*. New York: Simon & Schuster.
- Reed E S (1988). *James J. Gibson and the psychology of perception*. New Haven & London: Yale University Press.
- Salomon G (ed.) (1993). *Distributed cognition: psychological and educational considerations*. Cambridge: Cambridge University Press.
- Wical K (1996). Interview with Steve G. Steinberg in *Wired* magazine (May 1996). 183.

Addressivity

G S Morson, Northwestern University, Evanston, IL, USA

© 2006 Elsevier Ltd. All rights reserved.

‘Addressivity’ (*obrashchennost’*) is a term coined by the Russian scholar Mikhail Bakhtin as part of his critique of traditional linguistics. It figures as well in the thinking of Bakhtin’s colleague, Valentin Voloshinov, and it is helpful in understanding the approach to language and the psyche taken by

Lev Vygotsky (*see* Voloshinov, Valentin Nikolaevich; Vygotskij, Lev Semenovich).

Bakhtin’s work on language is best understood as part of his more general project to rethink the basis of the humanities and social sciences. Initially trained as a literary scholar, Bakhtin sought to reconceive the nature of ethics, psychology, literature, and language in such a way that choice, unpredictability, and open time were properly acknowledged. His work is suffused with the sense that the study of culture cannot be a science in the hard sense, a view that sets

him apart not only from his Marxist contemporaries but also from numerous schools since the 17th century. Because Bakhtin believed that human thought takes place primarily in the form of inner speech, a new understanding of language proved essential to his larger project of humanizing the ‘human sciences.’

Bakhtin reacted to the beginnings of formalist and structuralist linguistics, which he understood as methods of understanding human speech as an instantiation of rules. In this model, the linguist studies the rules, *langue*, and regards individual speech acts, *parole*, as entirely explicable in terms of the rules (see **Principles and Rules**). This model and its attendant assumptions seemed to Bakhtin to exclude not only all that we think of as pragmatics and the social aspects of language but also everything that is truly creative in any dialogue between real people. Bakhtin wanted to formulate an alternative model that treated language, thought, and action as capable of genuine ‘surprisingness’ (see **Conspicuity**).

To this end, Bakhtin distinguished between sentence and utterance. The sentence is a unit of language understood as structuralists do. It does not take place at any specific point in time, and so is repeatable; the same sentence may be spoken on different occasions. The utterance, by contrast, is a specific act of speech that someone says to someone else on a specific occasion, and its meaning depends in part on the occasion. Each occasion is different, and so utterances are never repeatable. The utterance is a historical event and is part of a dialogue. Sentences provide resources for an utterance, but the utterance requires more than the sentence. Linguistics properly conceived should deal with utterances as well as sentences, but so long as language is understood in terms of sentences, we should call the discipline that studies utterances ‘metalinguistics.’

What utterances contain that sentences do not is addressivity. Utterances are constituted by the fact that they are part of a specific dialogic exchange. Addressivity denotes all those aspects of the utterance that make it dialogic in the deepest sense (see **Dialogism, Bakhtinian**). Sentences contain only the potential to mean something, but utterances actually do mean something. In Bakhtin’s terms, sentences have meaning (in Russian, *znachenie*) in the sense of dictionary-and-grammar meaning, but utterances have *smysl* (roughly, sense, or meaning in a real context).

One cannot solve the problem of context by writing a grammar for it. Although one can say many general things about context, no grammar of context could ever fully specify it, because context is as various as human purposes, which are irreducible to a set of

rules. No matter how many helpful rules one may devise, there will always be a ‘surplus’ (*izbytok*). Bakhtin uses the same term, ‘surplus,’ to describe that aspect of human beings that is left over after all conceivable causal explanations have been applied. One’s true selfhood begins where all possible categories and causes have been exhausted. In selfhood, the ‘surplus’ constitutes our humanness, and in utterances it constitutes the manifestation of humanness in language.

Addressivity involves everything that takes the resources of speech – dictionary meanings, grammar, syntax, rules of context – and turns them into an utterance. In practice, Bakhtin’s work involved specifying features of context that were left out by structural linguistics, and so it overlaps strongly with pragmatics. It would be possible to absorb many of Bakhtin’s insights into pragmatics without accepting his view of humanness, indeterminism, and the surplus (see **Pragmatics: Overview**).

Consider, for instance, the telegraphic model of language in which a speaker, intending to convey a message, instantiates the rules of language to produce a sentence. In that model, the message is then sent out through a medium to a listener, who decodes the sentence and so recuperates the original meaning. Speaking is encoding, and listening is subsequent decoding. The first problem with this model, in Bakhtin’s view, is that nothing in this description would change if the listener were asleep, absent, or entirely different. But in real exchanges, the listener does not passively decode. Understanding is an active process in which the listener not only decodes, but also imagines how the utterance is meant to affect him or her, how it responds to past and potential utterances, and how third parties might respond. With all these factors in mind, the listener prepares a response that is revised as the utterance is being heard. Understanding is personal, processual, and active. Because every speaker counts on understanding of an active sort, the listener shapes the utterance from the outset. Speakers formulate their utterances with a specific listener or kind of listener in mind. This anticipation of a listener, which in ordinary speech is often guided by responses we sense as we are speaking, alters the tone, choice of words, and style of each utterance as a work in process.

Except in the purely physiological sense, each utterance is a co-creation of speaker and listener. It is essentially joint property. Bakhtin offers a series of examples, drawn from Dostoevsky’s novels, of utterances whose whole point and stylistic shape would be missed without considering addressivity. In ‘the word with a loophole,’ for instance, the speaker deliberately exaggerates a self-characterization so that, if the response is undesired, the utterance allows

him to pretend after the fact that it was parodic or unserious. The utterance builds into itself future utterances to more than one possible response.

Such utterances are not only common in daily speech, but also figure in our psyche. Because thought largely consists of inner dialogues, our minds are composed of the listeners that inhabit us – our parents or other figures whose responses count for us. We address them when we think, and so our very thought is shaped by imagined anticipated responses. We justify ourselves, or guide our thoughts by what significant internalized others might say. We grow and change as we absorb new listeners or learn to address old ones differently.

Within and without, we live dialogically. Addressivity, the dialogue of inner and outer speech, involves not only the ‘second person’ (the listener) but also what Bakhtin calls the ‘third person.’ In different studies, the term ‘third person’ has two distinct meanings, both of which are essential to addressivity. Sometimes the third person refers to all those who have already spoken about the topic in question. No one speaks about anything as if he or she were Adam, the first to break the silence of the universe. Every topic has been ‘already spoken about’ and the words referring to this topic implicitly ‘remember’ the earlier things said about it and the contexts in which they were said. It is as if words have glue attaching to them the evaluations and meanings of earlier speakers. Thus, when we speak, we implicitly take a stand in relation to those earlier speakers, and our words may be spoken as if with quotation marks, at a distance, with various tones indicating qualification. Some words come already ‘overpopulated’ with earlier utterances. Our speech therefore contains implicit elements of reported speech (direct or indirect discourse) in which the framing utterance takes a stance with respect to the framed one. Such effects may not be visible in the words when viewed as parts of a sentence, but they are nevertheless keenly sensed by speaker and listener. We are in dialogue with our predecessors, and addressivity refers to this historical aspect of utterances as well as to the present speaker-listener relationship. Whether we are considering the second or third person in addressivity, the utterance is shaped by others.

A second sense of ‘third person’ refers to what Bakhtin calls the ‘superaddressee’ (*nadadresat*). We never turn over our whole selves to a listener, because we cannot count on perfect understanding. Each utterance is partially constituted by the projection of an ideal listener, an invisibly present third person who would understand perfectly. We sometimes make the superaddressee visible when, in talking with one person, we gesture, as if to say, ‘would you just listen to him!’ But visible or invisible, the superaddressee is

part of every utterance. The superaddressee may be personified as God or imagined as the voice of history, but strictly speaking it is a constitutive factor of the utterance itself. We implicitly address this perfect listener as well as the real one before us. The superaddressee also figures in our inner speech, where again it may be personified.

The idea of addressivity allows Bakhtin to analyze a series of utterances that may look linguistically or stylistically simple but that are in fact complex when we consider them as part of a dialogue. Imagine a conversation in which one speaker’s voice has been omitted but its intense effects have left their mark on the other speaker’s utterance: some speech is shaped as if that process had taken place, as if it were one part of a tense exchange. Such speech takes ‘sidelong glances’ at the other’s potential answer and may almost seem to cringe in anticipation of a response. Utterances may be ‘double-voiced,’ so that they seem to emerge from two speech centers simultaneously, each commenting on the other and addressing themselves to a third party. In extreme cases, such utterances may bespeak psychological disturbance, as in Dostoevsky. But double-voicedness also appears in simple form in parody. A vast variety of discourses become visible when we consider them from the perspective of addressivity (*see Narrativity and Voice*).

In contrast to such movements as ‘reader reception’ theory, Bakhtin sees the listener’s response as active, not just after an utterance is made, but also while it is being made. Bakhtin is attentive to the formulation of an utterance as a shifting process. An utterance may change in the course of being said – in response to others, to circumstances, or even to the sound of itself. We are ourselves one listener of our speech acts, impersonating potential others. Bakhtin regards a culture’s forms of addressivity as constantly changing in response to circumstances and the creativity of individuals. Some typical forms of addressivity may coalesce into speech genres, and to learn a language involves learning those genres. Speech genres differ from language to language and change over time (*see Genre and Genre Analysis*).

For Bakhtin, the idea that utterances may change as they are being made suggests that addressivity presumes a speaker truly ‘present’ and ethically ‘responsible’ (literally ‘answerable’ in the original Russian) for what he says and a listener present and responsible for how he listens. As speakers and listeners, we choose and may be held accountable for our choices. Nothing is already made or entirely explicable in terms of pre-given codes or prior causes. Thus, the concept of addressivity is closely connected with Bakhtin’s insistence that ethics can never be a mere instantiation of rules; each situation requires real

presence and judgment. In what we do as in what we say, we really accomplish something never done before. Or as Bakhtin liked to say, there is no 'alibi.' These broad implications of addressivity explain why its pragmatic aspects belong to Bakhtin's project of altering 'the human sciences.' He describes human beings as social to the core because even in our psyche we think by dialogue. Conversely, he describes society and language as possessing both surprisingness resulting from the creative aspects of each dialogue and ethical significance resulting from our answerability for each utterance with addressivity.

See also: Conspicuity; Genre and Genre Analysis; Narrativity and Voice; Pragmatics: Overview; Principles and Rules; Voloshinov, Valentin Nikolaevich; Vygotskij, Lev Semenovich.

Bibliography

- Bakhtin M M (1981). *The dialogic imagination: four essays by M. M. Bakhtin*. Emerson C & Holquist M (trans.). Austin: University of Texas Press.
- Bakhtin M M (1984). *Problems of Dostoevsky's poetics*. Emerson C (trans.). Minneapolis: University of Minnesota Press.
- Bakhtin M M (1986). *Speech genres and other late essays*. McGee V (trans.). Austin: University of Texas Press.
- Bakhtin M M (1990). *Art and answerability: early philosophical essays by M. M. Bakhtin*. Liapunov V (trans.). Austin: University of Texas Press.
- Ball A F & Freedman S W (eds.) (2004). *Bakhtinian perspectives on language, literacy, and learning*. New York: Cambridge University Press.
- Bernstein M A (1992). *Bitter carnival: resentment and the abject hero*. Princeton, NJ: Princeton University Press.
- Clark K & Holquist M (1984). *Mikhail Bakhtin*. Cambridge, MA: Harvard University Press.
- Coates R (1998). *Christianity in Bakhtin: God and the exiled author*. Cambridge: Cambridge University Press.
- Emerson C (1997). *The first hundred years of Mikhail Bakhtin*. Princeton, NJ: Princeton University Press.
- Felch S M & Contino P J (2001). *Bakhtin and religion: a feeling for faith*. Evanston, IL: Northwestern University Press.
- Holquist M (1990). *Dialogism: Bakhtin and his world*. London: Routledge.
- Mandelker A (ed.) (1995). *Bakhtin in contexts: across the disciplines*. Evanston, IL: Northwestern University Press.
- Medvedev P N (1985). *The formal method in literary scholarship: a critical introduction to sociological poetics*. Wehrle A J (trans.). Cambridge, MA: Harvard University Press.
- Morson G S (ed.) (1986). *Bakhtin: essays and dialogues on his work*. Chicago: University of Chicago Press.
- Morson G S (1988). 'Prosaics: an approach to the humanities.' *The American Scholar*, Autumn 1988, 515–528.
- Morson G S & Emerson C (eds.) (1989). *Rethinking Bakhtin: extensions and challenges*. Evanston, IL: Northwestern University Press.
- Morson G S & Emerson C (1990). *Mikhail Bakhtin: creation of a prosaics*. Stanford, CA: Stanford University Press.
- Nollan V Z (ed.) (2004). *Bakhtin: ethics and mechanics*. Evanston, IL: Northwestern University Press.
- Todorov T (1984). *Mikhail Bakhtin: the dialogical principle*. Godzich W (trans.). Minneapolis: University of Minnesota Press.
- Voloshinov V N (1973). *Marxism and the philosophy of language*. Matejka L & Titunik I R (trans.). New York: Seminar.
- Voloshinov V N (1987). 'Discourse in life and discourse in poetry.' In Voloshinov V N (ed.) *Freudianism: a critical sketch*. Titunik I R (trans.). Bloomington: Indiana University Press. 93–116.
- Vygotsky L (1986). *Thought and language*. Alex Kozulin (trans.). Cambridge, MA: MIT Press.

Anthropology and Pragmatics

W Koyama, Rikkyo University, Tokyo, Japan

© 2006 Elsevier Ltd. All rights reserved.

Introduction

To see how anthropology and pragmatics are interrelated, we may start with the following observation: pragmatics concerns, first and foremost, actions and events that necessarily take place in context as actual happenings, that is, sociohistorically contextualized

unique happenings. Such happenings, however, may be seen as tokens of virtual regularities such as action types, event types, or even illocutionary types (*see Speech Acts*). Hence, pragmatics may be approached from two different points of departure, either the sociohistoric context or the decontextualized regularities. This condition has given rise to the two distinct scientific traditions dealing with 'what we do' (i.e., our praxis): either the social science of actions and events, such as sociology and anthropology, or the logico-linguistic science of propositionally

centered regularities of speech acts. Both of these trends originated in (neo)Kantian philosophy (see later); they may be characterized as the pragmatic and the semantic tradition, respectively. Note, however, that the term ‘pragmatics’ is, by historical accident, attached to a branch of the semantic tradition. This tradition includes analytic logic, linguistics, and parts of psychology, anthropology, and pragmatics (e.g., ethnoscience, cognitive linguistics, and the theories of speech acts, implicature, and relevance). In contrast, the pragmatic tradition includes the social sciences, sociology, anthropology, critical philosophy, and parts of contemporary pragmatics such as critical discourse analysis and social pragmatics. In the following sections, the genealogies of these two post-Kantian traditions are elucidated, illustrating how linguistic anthropology is related to pragmatics (*see Critical Applied Linguistics; Critical Discourse Analysis; Speech Acts; Implicature; Discourse, Foucauldian Approach; Pragmatics: Overview*).

The Semantic Tradition

Let us start with the semantic tradition, which harkens back to the critical philosophy of Kant (1724–1804), in which the problematic of ‘language’ and ‘meaning’ still lurked behind that of ‘(re)cognition’ and ‘judgment.’ The return-to-Kant movement of the late 19th century included not only the neo-Kantians in the narrow sense, such as Charles Peirce (see below), but also Gottlob Frege (1848–1925), who launched predicate logic and thereby started to reduce the (neo) Kantian problematic of ‘judgment’ and ‘value’ to questions of logical language (*see Peirce, Charles Sanders; Frege, Friedrich Ludwig Gottlob*). In particular, the notion of judgment, especially that of ‘synthetic’ judgment, became eclipsed by the analytic *Satz* (sentence, proposition), which was split into *Kraft* (e.g., assertoric, imperative, interrogative force) and *Sinn* (propositional content); the latter, again, was subdivided into categories and subcategories that could be characterized in formal-linguistic fashion, such as subject, predicate, and so on. Thus was born modern logic (analytic philosophy), to be pursued by Bertrand Russell (1872–1970), Rudolf Carnap (1891–1970), John von Neumann (1903–1957), and others who studied formally encoded meanings outside the context of language use. Such studies, which later came to include work in Artificial Intelligence, became the main staple of 20th-century Anglophone philosophy. This analytic ‘linguistic turn’ (Rorty, 1967) was also taken by the linguists of that period, especially the formalists of the neo-Bloomfieldian and Copenhagen Schools. Like the logicians, they saw the essence of language,

as well as the essence of the science of language, in formal regularities (rules) and clear and distinct analysis, in a decontextualized environment. Eventually, the trends in logic and linguistics converged and gave rise to generative linguistics, led by Noam Chomsky (b. 1928), who learned neo-Bloomfieldian formalism from Zellig Harris (1909–1992) and logico-linguistic derivation from Carnap. Even granted that Carnap was an empiricist, like Charles Morris (see below) and Willard Quine (1908–2000), whereas Chomsky worked in a rationalist paradigm, these philosophers and linguists represented two sides of the same semantic tradition. Subsequently, with the success of what became known as the Chomskyan revolution, the dominance of the semantic tradition in linguistics and its subfields was confirmed in the 1960s.

Yet, this ‘revolution’ was just an evolution of an earlier condition. That is, in tandem with the advocates of ‘unified science’ such as Carnap and Morris, who tried to integrate all kinds of science on the basis of modern formal logic, using the method of modern physics, the neo-Bloomfieldians had elaborated and advanced a linguistic formalism that was meant to replace the humanistic, cosmographic concerns of philology and anthropological linguistics with the investigation into the formal regularities of language and mechanical analytic procedures. Doing this, they successfully turned linguistics into a model human science in the eyes of many. Thus, the semantic tradition evolved from logico-linguistics into the more empirical sciences of anthropology and cognitive psychology. As an instance, consider the mid-20th-century flourishing of ethnoscience, which was characterized by mechanical elicitation procedures, with anthropologists trying to identify the semantic categories of fauna, flora, kinship, color, etc., as emically apperceived by natives and etically described by ‘universal’ semantic categories. Eventually, ethnoscientific studies – such as those of color terms conducted by Berlin and Kay (1969), who were originally inspired by the Saussurean/Hjelmslevian formal-structural analysis – yielded to the more empirically oriented ‘prototype’ semantics developed by Eleanor Rosch and her school in the 1970s (cf., Blount, 1995). Similar empiricist orientations gained acceptance even in logic and linguistics; compare the rise of fuzzy logic (or, more generally, multivalued logic) and generative semantics. The three lines then converged to form cognitive linguistics, pursued by George Lakoff (b. 1941), Ronald Langacker (b. 1942), and their followers. Thus, the birth of an empirical semantic science, i.e., cognitive linguistics, which constitutes a branch of pragmatics today, has its origin in the Fregean analysis of decontextualized propositional content (*Sinn*), which gradually, yet increasingly, became accommodated to

the empirical contexts of referential cognition and language use (*Bedeutung*).

But the Fregean legacy includes more. Recall that Frege reduced judgment to sentence, consisting of not only propositional content, but also force. This notion came to the attention of John Austin (1911–1960), a phenomenologically minded translator of Frege's *œuvre* into English (compare Frege's notions of propositional content vs. force with Austin's notions of constative vs. performative and locution vs. per-illocution) (see Austin, John L.; **Speech Acts and Grammar**). This move led to the emergence of what is often called modern pragmatics, as pursued by John Searle and his followers (formally, this trend can be captured by the expression $F(p)$, where p and F stand for proposition and illocutionary force, respectively). Others, such as H. Paul Grice (cf. 'what is said' vs. 'what is meant') and the post- and neo-Griceans, followed suit (cf. the success of Daniel Sperber and Deirdre Wilson's theory of relevance) (see Grice, Herbert Paul; **Neo-Gricean Pragmatics; Relevance Theory**). Clearly, this post-Fregean trend also belongs to the semantic tradition and constitutes, with cognitive linguistics, its empirical development. Notwithstanding the label 'pragmatics' that is commonly attached to it, this trend is little more than a branch of empirical semantics, inasmuch as it attempts (as do cognitive linguistics and linguistic functionalism) to relate, if not reduce, the meanings encoded in language (i.e., in lexico-grammar: sentence, clause, phrase; words, clitics, and morphemes) to empirical matters such as function, language use, and understanding. This brand of pragmatics thus excludes such contextual phenomena as cannot be transparently related to propositional meanings or grammatical rules; that is, most human practices, which occur contingently and largely independently of linguistically encoded meanings (cf. Mey, 2001).

In this connection, the following three points are worth observing: (1) the grammarians called 'generative semanticists,' such as George Lakoff and James McCawley, found post-Austinean pragmatics useful; (2) Dan Sperber and Deirdre Wilson's (neo)-Gricean relevance theory remains a highly abstract account based on *a priori* assumptions (economy, eufunctionalism, cooperation, and logico-rationalistic computation), while remaining impervious to the contextual and historic contingencies that lie at the heart of matters pragmatic; and finally (3) the current popularity of trends such as relevance theory and cognitive linguistics may be in part due to their eclectic, quasi-pragmatic, and quasi-semantic character, in line with their emergence at the transitional point where contemporary pragmatics is moving from more semantically oriented theories (such as those of speech acts or generative semantics), which are primarily concerned with linguistically encoded

meanings, toward more robustly pragmatic theories, such as social pragmatics and critical discourse analysis, which are primarily concerned with contingent actual happenings in a sociohistorical context (see **Speech Acts; Critical Discourse Analysis; Pragmatics: Overview**).

Thus far, we have seen how the two post-Fregean semantic trends have led to cognitive linguistics and pragmatics. In the following discussions, we follow the genealogy of a nonsemantic, yet truly pragmatic tradition, derived not from Frege, but from other neo-Kantians, such as Peirce, Franz Boas, and Max Weber, and ultimately going back to Kant himself.

The Social-Scientific Tradition of Pragmatics

The genuinely pragmatic tradition, often known as the social sciences, includes anthropology and sociology, the origin of which goes back to Bronislaw Malinowski (1884–1942), Weber (1864–1920), Georg Simmel (1858–1918), Emile Durkheim (1858–1917), Boas (1858–1942), Karl Marx (1818–1883), Alexander Humboldt (1769–1859), and ultimately the Enlightenment philosophers such as the Marquis de Condorcet (1743–1794), Voltaire (1694–1778), and perhaps even the earlier Giambattista Vico (1668–1744). However, the most important figure in the current discussion is Johann Herder (1744–1803), a student of Kant who critically accepted Kant's critical philosophy and, in doing this, launched a metacritique of the latter, especially of its claim to human (and even 'anthropological' – the term is Kant's own) universality. In Herder's view, such alleged universality is no more than an ideology, conditioned by the historic, geographic, and cultural (that is, contextual) factors peculiar to the Idealist philosopher Kant and his times, i.e., the modern era of the German (secularized Lutheran) Enlightenment. Note that the idea of metacritique was already contained in Kant's critical philosophy, which tried to show, at the transcendental (second-order, or meta-) level, the valid limits of all philosophizing, including its own. Herder in turn elaborated on this theme, attacking Kant's claim to universality by appealing to the cultural diversity of the empirical world(s). Since the validity of such a metacritique can be assessed only by actual investigations into the empirical world, Herder's move led to the birth of the modern social sciences, especially in Germany, as attested by the works of Marx, Boas, and Weber, in which various eras and cultures were methodically compared. In so doing, these authors interpretively identified the sociohistoric uniqueness and contingent conditions of particular cultures and periods and demonstrated the historic/cultural limits and relativity of modern western thought and its 'products'

(including the social sciences and their ethnocentric universalism). Such was the underlying theme of Boasian anthropology, to be described shortly, following a brief look at the development of the 'new' science of sociology.

In the 19th century, between Kant's and Durkheim's times, rapid modernization, urban immigration, and capital formation progressed in England, France, and then Germany, leading to the emergence of social problems such as dire poverty, overpopulation in urban environments, and terrifying labor conditions. As the masses came into being in cities, society became a visible entity, to be investigated through demographic, statistical, and analytical means by reformers in the spirit of Henri de Saint-Simon (1760–1825) and scholars such as Auguste Comte (1798–1857) and Durkheim himself, who created a science called 'social physics' (which later became sociology) to measure, analyze, and control (i.e., 'tame') the social problems. Henceforth, sociology would develop around the two axes of Weberian interpretive, historical sociology (see earlier) and Durkheimian functionalist or statistical macrosociology. However, in the Anglophone world, the latter axis was much stronger, compared to the European continent; this can be seen exemplified in the works of British structural functionalism (social anthropology) and in Talcott Parsons's (1902–1979) systemic sociology in the United States. Such was the contextual background of what came to be known, on the one hand, as the sociology of language, practiced by scholars such as Joshua Fishman, Charles Ferguson, and others (cf., Giglioli, 1972), and on the other as, Labovian sociolinguistics the latter squarely belonged to the mainstream Anglophone tradition of structural-functional sociology, giving preference to macro-social facts and regularities over interpretations and microsocial, contingent happenings.

In conflict with the latter tradition, the sociologist Erving Goffman (1922–1982) paved the way for a minute descriptive analysis of the dynamics of discourse at the microsocial level, and thus helped to revive the interpretive sociology of Weber, Simmel, Edward Sapir (1884–1939), G. H. Mead (1863–1931), and the Chicago School of sociology, known for its ethnographic and symbolic-interactional approaches (cf. Blount, 1995). This revival, often called the 'hermeneutic turn,' came to put its mark on various social sciences, including cultural anthropology, where Clifford Geertz (1926–2006), in the mid-1970s, successfully criticized the semantic orientation of ethnoscience (see earlier) for its neglect of interpretation and context. Similarly, in sociology, the phenomenological movement developed in the wake of the German sociologist Alfred Schutz's (1899–1959) works represented a long-awaited

renaissance in ethnomethodology, originally advanced by Harold Garfinkel (b. 1917), who tried to base the entirety of sociology on the microsocial phenomena of lived worlds, especially their everyday interpretations and dynamic contextualization. Yet, the positivist standard of formal rigor and the phobia of interpretive ambiguity in sociology were such that ethnomethodology quickly lost its contextual flexibility, critical reflexivity, and comprehensive scope, and underwent formalization and miniaturization, thus turning into an independent sociological practice, namely, conversation analysis. This school (often thought to be associated with pragmatics) subsequently incorporated some of Goffman's insights and ideas of post-Fregean pragmatics, as evidenced in Penelope Brown and Stephen Levinson's types of conversational activity and theories of polite behavior (considered as face-maximizing rational decision-making). These theories, due to their eclectic nature, enjoyed popular acclaim especially during the transitory phase when modern pragmatics moved from the semantic to the social-scientific tradition, i.e., in the late 1970s and early 1980s (see **Activity Theory; Face; Politeness**).

The preceding discussion outlines a general genealogy of the microsociological theories of pragmatics. Yet, as regards the crux of the social-scientific tradition, which can be said to lie in the exploration of the sociocultural mechanisms by which language contextually indexes power relations, authorities, and identities, it is missing in most of these theories. In contrast, there are Goffman's microsocial analyses of interaction ritual, frame, and symbolic self-presentation later incorporated into the French sociologist Pierre Bourdieu's (1930–2002) macrosocial theory of 'reproduction through habitus,' the field of practice, and symbolic capital. In Britain's class-stratified society, Basil Bernstein (1924–2000) also struggled with this problematic, especially when it came to determining the role that language plays in formal education. These three figures thus anticipated the coming of a truly social-scientific kind of pragmatics, i.e., critical pragmatics, as pursued in the 1980s by social semioticians, by Norman Fairclough and his Lancaster School, and others, such as Mey (1985, 2001), whose works share more and more traits with the paradigm elaborated by the anthropological tradition (see **Codes, Elaborated and Restricted**).

Although the above-mentioned groups have distinct genealogies, networks, and theoretical foci, all of them are nonetheless actively engaged in the social critique of language in education, medicine, and other kinds of controlling social instances; they also share among them many sources of critical inspiration and much theoretical weaponry, including the works of Peirce, Boas, Sapir, Benjamin Whorf, Roman

Jakobson, Dell Hymes, and John Gumperz in North America (see later), as well as the traditions embodied in the writings of Malinowski, J. R. Firth, M. A. K. Halliday, Raymond Williams, E. P. Thompson, and Stuart Hall in Britain; Émile Benveniste, Roland Barthes, Louis Althusser, Jacques Derrida, Michel Foucault, and Gilles Deleuze in France; Marx, Weber, Theodor Adorno, Walter Benjamin, and Jürgen Habermas in Germany; Antonio Gramsci in Italy; and Mikhail Bakhtin and Valentin Voloshinov in the former Soviet Union. All of these traditions can be seen as unified from a social-scientific perspective, focusing on language use as discourse, i.e., language in social context, and seeing pragmatics, located at the core of language, as praxis, involving social conflicts, power struggles, and identity (re)formations (see Austin, John L.; Foucault, Michel). And, if pragmatics is worthless unless it is concerned with contextualized linguistic practice, that is, with what is done by peoples and individuals living in particular societies and particular times – i.e., not just with ‘what is said’ (linguistic meaning), but with ‘what is done’ in a contextually situated, sociohistorical practice – then a genuine pragmatics must be a social science of praxis, of actions and events in culture, society, and history. Such a pragmatics has been emerging since the 1980s; it erases the disciplinary division between linguistic anthropology and pragmatics and enables seeing classic, post-Austinean pragmatics as a transitory phenomenon in the historic drift moving from the semantic tradition, or the logico-linguistics of decontextualized regularities, toward the genuinely pragmatic social science of contextualized actions and events (see **Pragmatic Acts**).

In the following sections, we take a genealogical look at the North American ‘cosmographic’ school of linguistic anthropology, starting with Boas, in order to get a better idea of the social-scientific tradition, where, if the current drift continues, the future of pragmatics lies. We start out with Peirce, the neo-Kantian whose semiotic Pragmati(ci)sm was comprehensive enough to bridge the gap between the Fregean semantic and Boasian anthropological traditions, as witnessed by Jakobson’s (1896–1982) synthesis of the two trends under the rubric of Peircean semiotics (see Jakobson, Roman).

Pragmatics, Pragmati(ci)sm, and the Social Semiotics of Praxis

As is well known, the term ‘pragmatics’ has come from a tradition that is located in between semantics and social science, namely, American Pragmati(ci)sm. In Charles Morris’s (1901–1979) triadic formulation, we speak of syntax (form), semantics (meaning),

and pragmatics (context) – terms that are derived from the semiotic Pragmati(ci)sm of the neo-Kantian Peirce (1839–1914) and thus properly indicate the origin of pragmatics as being located in Kant’s second *Critique*, or more generally, in the latter’s critical philosophy.

Peirce, who shared much with other neo-Kantians (such as the phenomenologists), articulated what he called a semiotic ‘phaneroscopy’ (phenomenology), in which actions and events constitute the basis of knowledge, aesthetics, and historic evolution (teleology). Most importantly, actions and events are signs that point to objects in context, such as agents (stimuli) and experiencers. Therefore, the basic mode of signification is indexicality, which is based on the principle of contextual contiguity; the other empirically oriented mode of signification, iconicity, is based on the principle of contextual similarity between signs and their objects. In addition, there are empirically unmotivated, albeit contextually indexed and/or iconically signaled, kinds of signs, i.e., symbols; these comprise conventional ideas (ideologies) and denotational codes, as they are presupposed by the speech participants involved in actions and events. These three kinds of signs interact with one another to constitute the human cosmology, as it is anchored on the (inter)actions and events taking place at the *hic et nunc* of human activity.

Eventually, this cosmographic theory of signs was adopted by Jakobson, who, in his comprehensive theory of communication (cf., Jakobson, 1990; Lee, 1997), articulated the empirical, indexically anchored universal matrix of grammatical categories and distinctive features, envisioned as the systematic interlocking of symbolic (formal and semantic) *langue* and indexical (phonetic and pragmatic) *parole* (see Jakobson, Roman). The Jakobsonian legacy successfully integrated Peircean semiotics and Boasian linguistic anthropology; it has been the guiding thread of North American linguistic anthropology ever since, from Hymes’s ethnography of speaking all the way to Michael Silverstein’s social semiotics (cf. Blount, 1995). In the beginning, however, there was Boas, to whom we now turn.

The Genealogy of Linguistic Anthropology: The Boasian Cosmographic Tradition

We now try to reconstruct the cosmographic theories due to Boas, Sapir, and Whorf; these early 20th-century theories have become somewhat obscured by the hegemonic dominance of the semantic tradition in linguistics and anthropology, which gained strength in mid-20th century.

As already noted, like Peirce, Boas was a neo-Kantian who had come to understand the human mind in terms of the three processes of similarity, contiguity, and abstraction, in close resemblance with the Peircean triad of iconicity, indexicality, and symbolicity. Unlike Peirce, however, Boas was a social scientist who fought evolutionism and institutionalized racism. In these efforts, he undertook the task of showing the existence of grammatical structures in every known language, especially (Native) American languages, and used his findings to prove the universality of a symbolic “faculty of forming abstract ideas” (Blount, 1995: 26), common to all human beings. In the process, Boas moved on to empirical studies of diverse languages in a universal framework, including hypothetical universal grammar.

Boas came close to discovering the notion of the phoneme, which harkens back, via the German *Völkerpsychologen* such as Heymann Steinthal (1823–1899), to Wilhelm von Humboldt’s (1767–1835) idea of *innere Sprachform* and, ultimately, to Kant’s notion of ‘the inner and formative power of life forms,’ as he articulated it in his third *Critique*. Coming to the cultural, idiographic, or cosmographic sciences (in the sense of Alexander Humboldt) such as geography, anthropology, and linguistics, from a background in nomothetic sciences such as (psycho)physics and experimental psychology (cf., Stocking, 1996: 9–16), Boas was naturally impressed by the diversity of human phenomena he observed in culturally and historically situated contexts. He saw the two kinds of sciences as being connected via the faculty of categorical perception, i.e., the human capacity and tendency to impose categorical forms (such as sound patterns) on empirical substance or diverse unique (idiographic) phenomena (such as phones and sensations). In this, Boas anticipated 20th-century structuralism, phenomenology, and Gestalt psychology, and their practitioners, whose battle-cry against 19th-century positivists’ preoccupation with sensations was precisely ‘the primacy of (categorical) human (ap)perception.’ Moreover, and perhaps more importantly, Boas (as did the later structuralists) maintained that linguistic perceptions were decisively conditioned by the unconscious structure of the mind; moreover, this unconscious structure could, no less importantly, be rigorously investigated using a set of techniques not uncritically adopted from the physical sciences, in what came to be called ‘structural analysis’ (cf., Boas, 1989: 72–77; Sapir, 1949: 166).

Boas understood categorical phonemic perception essentially as a linguistic, structurally and unconsciously conditioned distortion in the conscious perception of phonetic and pragmatic (i.e., empirical) phenomena. In his critique of logico-linguistic reason (of the kind earlier articulated by Herder and

Max Müller (1823–1900), and later by Ludwig Wittgenstein (1889–1951)), Boas made a critical empiricist departure from the Cartesian understanding of the mind, centered around the conscious reflection that rationalists considered to be the key to reality and verity. Boas stressed the value of empirical data (i.e., phonetic representations and unadulterated texts), gathered through fieldwork, as being critically important to his effort to show the relativistic plurality of cultures and the invalidity of the *a priori* armchair theories of Eurocentric universalism and rationalism, especially evolutionism (cf., Stocking, 1982: 195–233, 1996: 215–256).

Boas indeed was able to show that similar processes of rationalization underlay both evolutionist reasoning and what was called the primitive, ‘savage mind’ (cf., Lévi-Strauss, 1962), and hypothesized that such pragmatic processes of conscious rationalization (as opposed to universally valid, logico-semantic reason) were similar across diverse cultures, although their specific contents (which could be empirically investigated through the study of cultural myths and folklore, including modern sciences and philosophy) varied cross-culturally and showed distinct, so-called ‘geniuses’ of peoples. Thus, Boas, as Marx had done before him, understood theoretical reason and consciousness as a veil, or a mirror that produced distorted reflections of empirical phenomena such as cultural practices. For Boas, conscious behaviors distort and change these practices, which are otherwise unconsciously and habitually carried out and historically preserved. It is in this context that Boas underlined the methodological significance of linguistic structure, a largely unconscious phenomenon, which was assumed to provide a crucial key to the historical reconstruction of past practices (see Blount, 1995: 23–26; cf., Sapir, 1949: 432–433; Silverstein, 1979).

It may be useful to further unfold Boas’s argument, in particular as it was later elaborated by Sapir (1949: 26–27, 156). First, both conscious and unconscious elements of the human mind are theorized as essentially reactive in relation to the sociohistorical practices (pragmatics) that are represented by, and give rise to, them. Yet, the agentive awareness (consciousness) of practices is limited, and when human agents act in accordance with such limited and distorted awareness, they precipitate the transformation of these very practices, and history starts unfolding (in Weberian terms, this is the dialectics between conscious ideology, such as Protestant ethic, and actual practice, such as capital formation and labor). On the other hand, the unconscious mind, which comprises linguistic structure, more transparently reflects human practices (at time t_0); but, since practices quickly change, along with consciousness, in a dialectic movement, the unconscious is left

behind (at time t_1), and the correspondence with synchronic practices (at t_1) becomes opaque, even though it remains more transparently related to the diachronically prior practices (at t_0). Therefore, both consciousness and the unconscious (where linguistic structure is mostly located) end up being only opaquely related to synchronic practices. Thus, for Boas and his followers, 'synchronic structure' is both synchronic (inasmuch as it is used 'here and now') and diachronic (inasmuch as it points to past practices). This synchrony is made up of both static and dynamic facets, the former (i.e., linguistic structure) relatively transparently pointing to the past and the latter being 'where the action is' (viz., pragmatics and phonetics); the Weberian dialectic interaction between the two, contingently creates the historic conditions for the structures and actions that are yet to come (see **Phonetics and Pragmatics**). Thus, the discovery of the phoneme (and of linguistic structure in general) was directly linked to the rebuttal of 19th-century neogrammarians' genetico-causal determinism (itself a further derivate of the Newtonian-Laplacean deterministic worldview), according to which the posterior condition is mechanically determined by the anterior, and faultlessly derivable from it. The discovery of synchrony (vs. achrony) also was instrumental in Saussure's discovery of the historic dialectics of *langue* and *parole*, as noted by the dialectician Maurice Merleau-Ponty (1908–1961), who properly stressed the importance of the latter's discovery of *parole* (and, implicitly, of pragmatics).

No less important, given the opacity between structure and practice in the synchronic phase, is the following corollary: from the preceding premises, it deducibly follows that phonetic acts do not transparently match the phonemic categories they correspond to – a mismatch that provides part of the conditions 'distorting' phonemic apperceptions. Similarly, pragmatic acts (say, commands) do not uniquely match grammatical categories (say, the imperative mood, as becomes clear when we study the so-called indirect speech acts) (see **Pragmatic Acts**). In other words, the irreducibility of linguistic structure to pragmatics, a phenomenon that Chomsky sees as having its origin in the human innate faculty of reason, is shown to be deducible as a consequence of historical dialectics, generated by the very limits of consciousness or reason (cf., Sapir, 1949: 100–103). Further, just as phonetic phenomena are misperceived through our unconscious phonemic patterning (which escapes reason), pragmatic practices and referents are often incorrectly apperceived by the native mind due to an unconscious grammatical patterning (that is, due to the language-specific structural pattern found to exist in the morphosyntactic encoding of grammatical categories) (see **Speech Acts and Grammar**).

This is the crux of the argument that has come to be known as the linguistic relativity hypothesis (cf., Blount, 1995: 26–28; Cowan *et al.*, 1986: 455–477; Whorf, 1956: 134–159) (see **Sapir, Edward; Whorf, Benjamin Lee**).

Examining the linguistic relativity hypothesis requires us to undertake empirical studies of linguistic structures and practices across languages and cultures, which again necessitates the hypothetical construction of universal inventories of structurally significant sounds and grammatical categories (as these indeed were presented by Boas (1911)). Clearly, the typological works of Sapir (1921) and Whorf (1956: 87–101) – as well as Jakobson's (1990) theories of distinctive features and verbal categories, which may be marked 'overtly' or 'covertly' (Whorf, 1956: 87–101) in particular languages – were further elaborations of this non-Eurocentric 'universal grammar,' based on emically significant categories in the languages of the world, and suggesting the possible existence of a universal human reality underlying the particular worlds of diverse cultures (cf., Sapir, 1949: 160–166; Whorf, 1956: 147, 207–232).

The basic framework of the Boasian cosmographic tradition, as it was shared by Sapir and Whorf, became the context in which Sapir's twin notions of drift and psychological reality are to be understood. That is, in contradistinction to the neogrammarians' mechanical, genetico-causal 'blind change,' drift, vaguely and holistically perceived as *Sprachgefühl*, refers to historical structural changes caused by the dialectic interaction between structure, language use, nonlinguistic practice, and metalinguistic rationalization. Sapir, a social scientist, understood that ideal patterns (Sapir, 1921: 147; 1949: 23, 83–88, 533–543) in structure were necessarily realized not in their pure forms, but in contextualized and varied, i.e., idio-, dia-, and sociolectal, form-tokens. Some of these variations may become saliently social-indexical and directly involved in the social struggles for cultural hegemonies, as well as in processes of normative rationalizations. In such cases, the interaction between language and society often results in structural changes (cf., Blount, 1995: 513–550). Also, some of the variations may become privileged when language users feel they are being formally correct, that is, actualizing potential regularities implicitly suggested by the synchronic state of language. In such a case, the variations analogically deducible from the structure's dominant pattern may become part of the structure that will arise from the interaction between language and the *Sprachgefühl* of the language users (cf., Sapir, 1921: 147–191; Whorf, 1956: 134–159; Lucy, 1992). (Sapir hypothesized in addition that such analogies were drawn and actually

implemented because of unconscious human strivings for formal beauty; on this, see below.)

Sapir's (1949: 16, 33–60) 'psychological reality' may be similarly reconstructed in the following way. Sapir (1949: 433) started out from the Boasian thesis that linguistic consciousness was opaque to practices, partly because it was influenced by unconscious structural (sound) patterns. This implies, Sapir noted, that there is some transparent linkage between consciousness and 'inner forms' (the sound patterns). Of course, native language users cannot consciously articulate the structure of their language, but they can 'feel,' half- or sub-consciously, such inner forms, which are beyond the realm of phonetic behaviors directly perceived by outsiders of the linguistic community. In other words, native language users (insiders) 'click with' (Sapir, 1949: 48, 159) the linguistic structure at the intersection of their consciousness and unconscious, i.e., at the level of feelings. And such an inarticulate, yet immediately sensed *Sprachgefühl*, and with it, the unconscious structural patterns, are manifested even in overt linguistic behaviors such as the categorical apperceptions of sounds, actions, and referents (cf., Sapir, 1921: 55, 1949: 46–60, 150–159; Whorf, 1956: 134–159). These attested behaviors would remain unexplained if it were not for the phenomenological reality of the phoneme and other form-patterns in the unconscious. Moreover, Sapir noted that allophones of a phoneme often historically developed into different phonemes. In his view, this meant that phonemic inner forms often transparently correspond to the historically reconstructed phonetic (allophonic) behaviors of users in the past (cf., Cowan *et al.*, 1986: 67–106). In this way, the linguistic history of a community was discovered to be alive (phenomenologically, psychologically real, or 'organic') in the *Sprachgefühl* and innermost unconscious of the language users. The individual mind, in short, is communal and historical in its subconscious core. Hence, Sapir noted, there is no need to oppose the individual to the social (collective), to hypostatize a 'super-organic' collectivity existing independently of individuals, or to reify culture or language.

In Sapir's cosmographic theory, the psychological reality had other important implications for the cultural nature of the human mind. That is, unconscious, historical, and communal symbolic forms are ideologically projected onto the chaotic reality of discursive practices, precipitating the chaotic, rhapsodic, and romantic "flux of things into tangible forms, beautiful and sufficient to themselves" (Sapir, 1949: 348), as they are found in poetically structured discursive texts and rituals. In and by themselves,

the symbolic forms constitute an artwork of classicism, often referred to as 'the poetry of grammar,' created by the human striving for an aesthetic totality, *un système où tout se tient* (compare the notion of drift, referred to previously) (cf., Sapir, 1949: 344; Cowan *et al.*, 1986: 455–477; also consider Jakobson's (1990) 'poetic function'). Thus, in Sapir's view, the very regularity of linguistic structure – a regularity necessary in order to operate with decontextualized denotational and cognitive significations – is constituted by our aesthetic, expressive, and ideological strivings for formal completeness. Cognition, aesthetics, emotion, history, society, and the individual are thus intertwined in Sapir's cosmographic theory.

Unfortunately, the inroads made during the 1940s and 1950s by the semantic tradition into the sciences of language almost altogether eclipsed Sapir's cosmographic science, except in the narrow circle of linguistic anthropologists. This process started with the neo-Bloomfieldians, to be followed by the ethnoscientists in anthropology, the Chomskyans in (psycho)linguistics, and the cognitive scientists of diverse obediences, who all operated in this tradition. Nevertheless, Sapir's students, such as Stanley Newman (1905–1984) and Mary Haas (1910–1996), successfully passed the torch to the next generation, whose representatives included John Gumperz and Dell Hymes, who succeeded in firmly integrating the Boasian and Peircean–Jakobsonian (semiotic) approaches (cf., Gumperz and Hymes, 1986). Subsequently, Hymes's theory of communication, called the 'ethnography of speaking,' gained momentum in the 1970s (cf., Bauman and Sherzer, 1974), a decade that saw the hermeneutic (i.e., interpretive, contextual, or (neo-)pragmatic) turn in the social sciences and Anglophone philosophy (as pointed out previously). This turn provided the historic conditions for a revival of the Boasian tradition in contemporary North American linguistic anthropology, locating language squarely at the intersection of history, ideology, and practice (see Blount, 1995; Brenneis and Macaulay, 1996; Duranti, 2001; Kroskrity, 2000; Lee, 1997; Lucy, 1992, 1993; Schieffelin *et al.*, 1998; Silverstein and Urban, 1996). Here, the historic, ideological, and pragmatic aspects of language, including not only grammar, but also (con)textualization, language change and variation, Bakhtinian voicing, standardization, rationalization, modernization, linguistic nationalism and imperialism, language purism, feminism and gender, literalism, and other cultural ideologies and practices, seen in their sociohistoric context, are cosmographically studied in a social-scientific framework. Their discovery of the (re)formations of group identities and

power relations and sociocultural conflicts as happening in, and being constituted by, language as the central element thus converges with the social drift of contemporary critical pragmatics.

See also: Activity Theory; Austin, John L.; Bakhtin, Mikhail Mikhailovich; Critical Applied Linguistics; Critical Discourse Analysis; Discourse, Foucauldian Approach; Foucault, Michel; Frege, Friedrich Ludwig Gottlob; Grice, Herbert Paul; Implicature; Jakobson, Roman; Neo-Gricean Pragmatics; Peirce, Charles Sanders; Phonetics and Pragmatics; Politeness; Pragmatic Acts; Pragmatics: Overview; Relevance Theory; Sapir, Edward; Speech Acts and Grammar; Speech Acts; Whorf, Benjamin Lee.

Bibliography

- Bauman R & Sherzer J (eds.) (1974). *Explorations in the ethnography of speaking*. Cambridge: Cambridge University Press.
- Berlin B & Kay P (1969). *Basic color terms*. Berkeley and Los Angeles: University of California Press.
- Blount B G (ed.) (1995). *Language, culture, and society*, 2nd edn. Prospect Heights, IL: Waveland.
- Boas F (1911). 'Introduction.' In Boas F (ed.) *Handbook of American Indian languages, Part I*. Washington, D.C.: Government Printing Office. 1–83.
- Boas F (1989) [1974]. *A Franz Boas reader*. Stocking G W Jr. (ed.). Chicago: University of Chicago Press.
- Brenneis D & Macaulay R K S (eds.) (1996). *The matrix of language*. Boulder, CO: Westview.
- Brown P & Levinson S C (1987) [1978]. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Cowan W, Foster M K & Koerner K (eds.) (1986). *New perspectives in language, culture, and personality*. Amsterdam: John Benjamins.
- Duranti A (ed.) (2001). *Linguistic anthropology*. Oxford: Blackwell.
- Giglioli P P (ed.) (1972). *Language and social context*. London: Penguin.
- Gumperz J J & Hymes D (eds.) (1986) [1972]. *Directions in sociolinguistics*. Oxford: Basil Blackwell.
- Jakobson R (1990). *On language*. (Waugh L R & Monville-Burston M eds.). Cambridge, MA: Harvard University Press.
- Kroskrity P V (ed.) (2000). *Regimes of language*. Santa Fe, NM: School of American Research Press.
- Lee B (1997). *Talking heads*. Durham, NC: Duke University Press.
- Lévi-Strauss C (1962). *La pensée sauvage*. Paris: Plon [(1966) *The savage mind* (English translation). Chicago: The University of Chicago Press].
- Lucy J A (1992). *Language diversity and thought*. Cambridge: Cambridge University Press.
- Lucy J A (ed.) (1993). *Reflexive language*. Cambridge: Cambridge University Press.
- Mey J L (1985). *Whose language?* Amsterdam and Philadelphia: Benjamins.
- Mey J L (2001). *Pragmatics* (2nd edn.). Oxford: Blackwell.
- Rorty R M (ed.) (1967). *The linguistic turn*. Chicago: University of Chicago Press.
- Sapir E (1921). *Language*. New York: Harcourt Brace & Co.
- Sapir E (1949). *Selected writings of Edward Sapir in language, culture, and personality*. (Mandelbaum D G ed.). Berkeley and Los Angeles: University of California Press.
- Schieffelin B B, Woolard K A & Kroskrity P V (eds.) (1998). *Language ideologies*. Oxford: Oxford University Press.
- Silverstein M (1979). 'Language structure and linguistic ideology.' In Clyne P *et al.* (eds.) *The elements*. Chicago: Chicago Linguistic Society. 193–247.
- Silverstein M & Urban G (eds.) (1996). *Natural histories of discourse*. Chicago: University of Chicago Press.
- Stocking G W Jr. (1982) [1968]. *Race, culture, and evolution*. Chicago: University of Chicago Press.
- Stocking G W Jr. (ed.) (1996). *Volkgeist as method and ethic*. Madison, WI: University of Wisconsin Press.
- Whorf B L (1956). *Language, thought, and reality*. (Carroll J B ed.). Cambridge, MA: MIT Press.

Applying Pragmatics

L F Hoye, The University of Hong Kong, Hong Kong, SAR, China

© 2006 Elsevier Ltd. All rights reserved.

The term 'applying pragmatics' (AP) is coined in this entry in preference to 'applied pragmatics' to signal that AP is a dynamic, user-oriented activity. With a wide and evolving range of applications in the societal context, AP contrasts with the somewhat fossilized term 'applied linguistics', which is primarily associated with (foreign) language learning and

teaching, although it does cover linguistic applications in other areas, such as speech pathology, translation, and lexicography. Applied pragmatics embraces practices rooted in a pragmatic perspective on language users, language use, and contexts of use, where the users and their complex of personal, social, cultural, and ideational contexts are seen as paramount. If pragmatics itself is a 'user-oriented science of language', AP is a problem-solving activity with an emphasis on using pragmatic knowledge critically, imaginatively, and constructively in the real-world context of the 'social struggle', rather than on

rehearsing the tenets of canonical pragmatic theory (Mey, 2001: 308–319).

The relevance of pragmatics for the wider social agenda at the micro- and macro-levels of operation can be attributed in part to a series of developmental and formative tendencies: a concerted reaction to the syntactic formalism of Chomskyan linguistics and the preoccupation with language as system, where the language user and contexts of language use are disenfranchised; a ‘social-critical’ impetus, fueled by the desire to create a socially sensitive practice of language, typified for instance by the work of Basil Bernstein and the critical distinction he drew between restricted and elaborated code; a unique perspective on language as action and speech act theory, initiated by the work of J. L. Austin and the work of ‘ordinary language philosophers’; and a perspective on language as communication rather than on language as grammar, deriving from the ethno-methodological tradition (Mey, 1998: 716) (*see Codes, Elaborated and Restricted; Austin, John L.*).

Levels of Application: Micro- and Macro-processes

Applying pragmatics operates at both the micro- and macro-levels of communication, although this distinction is approximate and more of a labeling convenience, since the two levels interpenetrate and synergize. ‘Micro-pragmatics’ looks at the day-to-day context of communication between individuals and groups situated in their local contexts. At the same time, local practices need to be seen against the societal backgrounds and institutional settings in which they occur (i.e., ‘macro-pragmatics’). Micro- and macro-pragmatics are points in a continuum, each linking to the other and each serving as the focus according to the aim of the enquiry. Verschueren (1999: 220–224) cites Goodwin’s (1994) analysis of the Rodney King trials as a case in point. While being arrested for a traffic violation in Los Angeles, King, an African-American, was subjected to a violent beating by police officers – an event that was filmed by an amateur video photographer and later broadcast on public television to public outrage. The police officers were subsequently put on trial and later acquitted. This led to street riots in Los Angeles and a subsequent retrial. As a communicative event, the courtroom proceedings can only be properly understood in relation to the macro-setting created by the institutional and social contexts in which they took place and through which they were mediated: the particular structure and participant roles and the associated verbal processes typical of the (U.S.) courtroom and a legal/trial setting; the actual and perceived social status of African-Americans within

American society, as embodied by King at the time and subsequently; and the role of community and civil rights leaders and their adoption of the King case as a heuristic to draw attention to racism and police brutality. Thus, transcriptions of the trial process can be initially approached as instances of face-to-face linguistic interaction in a courtroom setting, but as the tale unfolds, the total event and its wide-reaching implications can only be properly understood in terms of how (U.S.) legal institutions reflect, endorse, and perpetuate particular societal practices and values.

Domains of Application: Micro- and Macro-pragmatics

As a perspective rather than a component of a linguistic theory, pragmatics can purposefully be applied in the investigation of all instances of language use, whether at the level of the individual, the group, the institution, or society as a whole, and whether at the level of the sentence/utterance or in relation to extended discourse (Verschueren, 1999: 203; Mey, 1998: 728). With its focus on the sentence/utterance level of discourse, micro-pragmatics is concerned primarily with the local constraints of the immediate context, such as: deixis and the indexing of personal, temporal, and locative features; reference and the textually directive function of anaphora and cataphora; and word order and the sequencing/clustering of particles and their discourse function to modify illocutionary force, to facilitate the management of conversation, or to highlight salient parts in a stretch of discourse (*see Deixis and Anaphora: Pragmatic Approaches; Discourse Anaphora; Discourse Markers*). Yet, rooted as these linguistic features are in the immediate surroundings of an utterance, the link with the world becomes apparent as the focus shifts from the individual to the wider, institutionally and societally driven contexts in which humankind must necessarily operate. To quote Mey (2001: 177):

The world in which people live is a coherent one, in which everything hangs together: none of its phenomena can be explained in isolation.

This is now the domain of macro-pragmatics. Institutional and institutionalized language practices figure prominently on the agenda (and often), where power asymmetries may arise as the result of gender difference, perceived social standing and social privilege, and (lack of) access to power. Typical research areas and domains of application include: medical discourse and the study of language use in doctor-patient interviews, psychoanalysis, and schizophrenic discourse; educational and pedagogical language practices, such as teacher-student interaction, language

acquisition and the development of pragmatic competence, the articulation of language policy in relation to minority language instruction, wording of the learning/teaching curriculum, and, more generally, the sets of attitudes and beliefs propagated through the ‘hidden curriculum’; the language of the workplace and its impact on management-worker relations; the language of the media, especially advertising discourse; the language of politics, government, and ideology, viewed as a force for linguistic manipulation and the engineering of human minds; and intercultural and international communication and the (lack of) understanding of cultural and communicative diversity, where what is pragmatically appropriate in the given context is at issue. In short, macro-pragmatics considers language use in terms of the totality of contexts in which the unique, dynamic, human activity of verbal communication takes place. It takes its cues from a variety of other related disciplines, such as (linguistic) anthropology, sociology, ethnology, and linguistic science itself. (*see Institutional Talk; Media and Language: Overview; Intercultural Pragmatics and Communication; Social Aspects of Pragmatics; Language Politics.*)

Applying Pragmatics and the Language User

Applying pragmatics aims to develop an awareness of the crucial role that language plays in the construction of individual, group, and societal identities and the consequences of these ‘constructed identities’ for individual freedoms and the rights of individuals to participate fully in the communities of which they are a part. Exploration of the macro-context, in relation to which all language activity takes place, is the province of ‘societal pragmatics’, with its unique focus on the users of language and the prevailing conditions under which they use language. Applying pragmatics highlights problems of language use that arise in social contexts where the failure to communicate successfully may lead to social exclusion and disadvantage (*see Social Aspects of Pragmatics*).

The domain of education is often singled out as the main sphere of human activity in which social privilege and access to power are unevenly distributed. Education is mediated and perpetuated through language. Any departure from institutionally identified standards of linguistic behavior is stigmatized and faces sanction. Hence, talk of linguistic oppression may take place, as evidenced, for instance, by the opposition between ‘low’ and ‘high’ prestige dialects. The latter can be associated with the linguistic standards whose observance is dictated for wider use by a minority but dominant class of language user. This language oppression is nothing

less than social control through language. The insights provided by AP enable us to develop an awareness of the insidious effects of language repression while calling for greater transparency in how society deals with the individual’s linguistic behavior in the educational setting (Mey, 1998: 731–732) (*see Power and Pragmatics*).

Societal pragmatics is also concerned with other social contexts in which linguistic repression is at work and where individuals behave unwittingly, in a certain way, on account of an institutionalized power imbalance. Medical discourse and the instance of schizophrenic speech are a further case in point. Schizophrenic speech is associated with abnormal language. Such speech impoverishment represents a loss of humanness, because the ‘nonlanguage’ of the schizophrenic, as it is now defined, has become a symptom rather than a means of communication and thus a target for psychiatric manipulation and intervention. By raising questions about the nature of interactive norms in medical practice, AP can argue the need for informed intervention, where the relationships between humanness, language use, sanity, and institutional power are placed under public scrutiny.

Matters of linguistic diversity and endangered languages are also fertile territory for pragmatic intervention. Language attrition, language loss, and language death are all issues on the pragmatic agenda, where description is seen only as an initial step to corrective action rather than as an end in itself (*see Minorities and Language; Endangered Languages*). Notwithstanding controversies over the global, cultural, political, and historical impact of English on smaller indigenous languages, AP can raise public awareness, help collate data, monitor linguistic policies and practices, seek to influence policymakers, and offer practical and professional support to speech communities actively wishing to preserve their languages. For instance, the Linguistic Society of America records that active intervention in this manner, as opposed to mere description and documentation, has shown highly promising results. Its website records that:

Language loss is [often] far more directly a consequence of intolerance for diversity [than an inevitable result of progress], particularly when practiced by the powerful against the weak.

Applying Pragmatics and the Social Struggle

Applying pragmatics is explicitly concerned with situating the concerns of societal pragmatics in terms of a broad social-political agenda; it is interventionist rather than descriptive in its primary aims. Applying pragmatics is all about doing pragmatics. As a case in

point, Mey (2001: 313–315) cites the success of the linguistic war against sexism and the now mostly abandoned use of generic pronoun *he* as a modest yet significant victory for nonsexist practice. Uprooting the hegemonic *he* is not just linguistic tinkering; it brings about a restructuring of stated social relationships, thereby facilitating gender equality (see **Gender and Language**).

Applying pragmatics shares common concerns with critical linguistics, whose aim is to expose the hidden relationships between social power and language use, against the backdrop of sociopolitical and cultural factors. Case studies include: political discourse, specifically the clichéd rhetoric of Britain's political parties; the language of labor disputes and their documentation in the media; the use of more critically aware pedagogies in (English) second-language teaching; and the characterization of social power as a given or natural phenomenon, legitimized through unquestioning acceptance by the public (see **Media and Language: Overview**).

Applying pragmatics has a crucial, empowering, and emancipatory role to play. It helps us understand the power of language to discriminate indiscriminately across a range of social contexts; it suggests an agenda for pragmatically informed intervention on behalf of the disenfranchised, underprivileged language user; and, last, it seeks to put language in the hands of the language user, wresting linguistic control from those who would undermine and deny the rights and freedoms of the individual (see **Pragmatics: Overview**; **Marxist Theories of Language**).

See also: Austin, John L.; Codes, Elaborated and Restricted; Context and Common Ground; Critical Discourse Analysis; Deixis and Anaphora: Pragmatic Approaches; Discourse Anaphora; Discourse Markers; Educational Linguistics; Endangered Languages; Gender and Language; Institutional Talk; Intercultural Pragmatics and Communication; Language Politics; Linguistic Anthropology; Marxist Theories of Language; Media and Language: Overview; Minorities and Language; Power and Pragmatics; Pragmatics: Overview; Social Aspects of Pragmatics.

Bibliography

- Canagarajah A S (1999). *Resisting linguistic imperialism in English teaching*. Oxford: Oxford University Press.
- Duranti A (ed.) (2004). *A companion to linguistic anthropology*. Oxford: Blackwell.
- Fairclough N (1989). *Language and power*. London: Longman.
- Fairclough N (1995). *Critical discourse analysis*. London: Longman.
- Fairclough N (2000). *New labour, new language*. London: Routledge.
- Garrett P B (2004). 'Language contact and contact languages.' In Duranti A (ed.) *A companion to linguistic anthropology*. Oxford: Blackwell. 46–72.
- Goodwin C (1994). 'Professional vision.' *American Anthropologist* 96, 606–633.
- McKay S L (2002). *Teaching English as an international language: rethinking goals and approaches*. Oxford: Oxford University Press.
- Mey Jacob L (1998). 'Pragmatics.' In Mey J L (ed.) *Concise encyclopedia of pragmatics*. Oxford: Elsevier. 716–737.
- Mey J L (2001). *Pragmatics: an introduction* (2nd edn.). Oxford: Blackwell.
- Mithun M (2004). 'The value of linguistic diversity: viewing other worlds through North American Indian languages.' In Duranti A (ed.) *A companion to linguistic anthropology*. Oxford: Blackwell. 121–140.
- Philips S U (2004). 'Language and social inequality.' In Duranti A (ed.) *A companion to linguistic anthropology*. Oxford: Blackwell. 474–495.
- Rose K R & Kasper G (eds.) (2001). *Pragmatics in language teaching*. Cambridge: Cambridge University Press.
- Verschueren J (1999). *Understanding pragmatics*. London and New York: Arnold.
- Wilce J M (2004). 'Language and madness.' In Duranti A (ed.) *A companion to linguistic anthropology*. Oxford: Blackwell. 414–430.

Relevant Websites

<http://www.lsadc.org/> – Website of the Linguistic Society of America; includes information from the Advisory Committee on Endangered Languages and their Preservation.

Austin, John L.

W A de Pater and P Swiggers, Katholieke Universiteit Leuven, Leuven, Belgium

© 2006 Elsevier Ltd. All rights reserved.

Austin was born on March 26, 1911 in Lancaster. After studying philosophy in Shrewsbury and Oxford,

he became fellow of All Souls College (1933) and later professor in Magdalen College at Oxford University, where he remained until his premature death on February 8, 1960. Although he was 'White's Professor of Moral Philosophy,' Austin is especially known for his contribution to linguistic philosophy and for his very personal use of ordinary language philosophy,

which he applied to fundamental issues such as meaning, free will, knowledge, truth, and other minds.

Austin was averse to theory building; he was fascinated by the analytical method of lexicographers, which he used for the study of how words and phrases are used in statements about reality, in the expression of beliefs and intentions, and in all types of conventional talk. Good examples of his philosophical use of the lexicographical approach can be found in his *Philosophical papers* and in *Sense and sensibilia* (in the latter work the foundations of British logical positivism are subjected to thorough criticism).

Austin's lasting contribution to the philosophy of language and to linguistic theory (especially pragmatics) lies in having initiated what later (through the work of his student John Searle) was to become the theory of speech acts. The starting point was Austin's observation (dating back to the 1940s) that there are two essentially different types of utterances: utterances that say how things are (or say what is the matter), and utterances that, merely by being made, bring about something (a 'new reality'). Austin called the former type 'constative' utterances (*The book is on the table*), and the latter type 'performative' utterances (*I baptize you Charles*). Whereas constative utterances are (primarily) judged on their truth/falsity, performative utterances are judged on their felicity/infelicity: their (non)success depends not on what the world is like (precisely because they bring about a new fact), but on felicity conditions, such as: appropriate context, authority and sincerity of the speaker, and the existence of certain (cultural) conventions. This distinction, which is the starting point of the William James Lectures given at Harvard University in 1955 (on 'Words and Deeds'), posthumously published as *How to Do Things with Words*, was then questioned by Austin himself, and replaced, in the course of the lectures, with a larger view on types of utterances, coupled with (semantic-pragmatic) types of verbs and with types of communicative strategies and effects. The final distinction is then one between acts (it would be better to speak of features of linguistic acts, or of power potentials or forces of acts):

Austin speaks of locutionary act (act *of* saying something, with a particular sense and reference), illocutionary act (performing an act – such as warning or accusing – *in* saying something), and perlocutionary act (the act – such as frightening or offending the interlocutor – achieved *by* saying something). As different people may react differently (some are frightened when being warned, others not), the nexus between the perlocutionary force (as yielding an effect in the hearer) and the two other forces is of a non-conventional nature.

Austin did not organize these ideas into a systematic theory, nor did he live long enough to answer the objections soon made to the published version of his lectures, which shows the evolution in his approach of 'words and deeds' and ends with a number of open questions. Thus it was all the more important that Searle turned Austin's gradually revised approach into a comprehensive speech act theory.

See also: Pragmatics: Overview; Speech Acts.

Bibliography

- Austin J L (1961). *Philosophical papers*. Oxford: Clarendon Press.
- Austin J L (1962). *Sense and sensibilia*. Oxford: Clarendon Press.
- Austin J L (1962). *How to do things with words*. Oxford: Clarendon Press.
- Di Giovanna J J (1989). *Linguistic phenomenology. Philosophical method in J. L. Austin*. New York/Bern/Paris: P. Lang.
- Fann K T (ed.) (1969). *Symposium on J. L. Austin*. London: Routledge & Kegan Paul.
- Furberg M (1971). *Saying and meaning. A main theme in J. L. Austin's philosophy*. Oxford: Blackwell.
- Graham K (1977). *J. L. Austin. A critique of ordinary language philosophy*. Hassocks: Harvester Press.
- Searle J R (1969). *Speech acts*. Cambridge: Cambridge University Press.
- Warnock G (1989). *J. L. Austin*. London: Routledge & Kegan Paul.

B

Bakhtin, Mikhail Mikhailovich

S O'Neill, University of Oklahoma, Norman, OK, USA

© 2006 Elsevier Ltd. All rights reserved.

Mikhail Mikhailovich Bakhtin was born in Orel, Russia, south of Moscow, on November 16, 1895. Coming of age in turbulent times, he attended Saint Petersburg University between 1916 and 1918, dividing his time between classics, literature, and philosophy, while maintaining a keen interest in language outside the classroom. During the 1920s Bakhtin came into contact with Voloshinov and Medvedev, two fellow intellectuals who shared his broad interests in language, politics, dialogue, and literature. Later known as the Bakhtin Circle, these young writers met regularly to discuss the philosophy of language until 1929, when Bakhtin was arrested, detained, and later exiled to Kustanai in 1930. After working as a book-keeper on a collective farm, Bakhtin traveled to Saransk in 1936 to accept a position at the Mordovia Pedagogical Institute, where he taught Russian and world literature until his retirement in 1961. In 1940, Bakhtin submitted his dissertation, *Rabelais and the history of realism*, to the Institute of World Literature in Moscow, for which he was awarded the lesser degree of Candidate of Philological Sciences in 1952, rather than the doctorate. Although Bakhtin was a humble scholar who received little public recognition during his lifetime, his ideas have had an enormous, global impact on the philosophy and sociology of language. Bakhtin died in Moscow, Russia, on March 7, 1975.

Bakhtin is best known for his work on dialogue, a concept he continued to develop over the course of his career. For Bakhtin, dialogue was the central reality of language, a position partly inspired by the Greek philosopher Socrates, who stressed the emergent nature of truth in dialogic exchanges between opposing parties. In Bakhtin's estimation, the most productive exchanges occur between parties that enter into a discussion with contrasting points of view, allowing for change and diversity in society. Bakhtin hinted at this position in his first major publication, *Problems of Dostoevsky's poetics* (1929), in which he praised Dostoevsky for writing 'polyphonic'

novels that represent the many competing voices found in every society. Because these voices resonate with larger systems of thought, such political orientations or even scientific worldviews, Bakhtin maintained that ideology, or perspective, is pervasive in everyday language use.

The political implications of dialogue are greatly expanded in Bakhtin's later writings. In *The dialogic imagination* (1981), he identified two major trends on the ideological plane. One tendency is toward homogeneity, where 'centripetal' forces seek to centralize the perspectives, discourses, or linguistic varieties found in society, reducing diversity and the possibility of change. Taken to an extreme, this monologic tendency leads to the death of dialogue, a fearful possibility that Bakhtin personally experienced under Stalin's regime. Fortunately, other 'centrifugal' forces are at work, destabilizing meaning by promoting diversity within society, whether as competing discourses or contrasting linguistic varieties. Here Bakhtin offered one of his most important concepts, that of 'heteroglossia,' where these competing centripetal and centrifugal forces enter into ongoing conflict, potentially sustaining internal diversity within a speech community, as separate but intermingling genres, registers, sociolects, discourses, and ideologies. In *Rabelais and his world* (1965), Bakhtin offered the telling image of the medieval carnival, where unofficial discourses and genres flourished, subversively contesting the centripetal forces of official hegemony.

See also: Voloshinov, Valentin Nikolaevich.

Bibliography

- Bakhtin M M (1981). *The dialogic imagination: Four essays*. Emerson C & Holquist M (trans.), Holquist M (ed.). Austin: University of Texas Press.
- Bakhtin M M (1984). *Problems of Dostoevsky's poetics*. Emerson C (trans. and ed.). Minneapolis: University of Minnesota Press [Originally published 1929].
- Bakhtin M M (1984). *Rabelais and his world*. Iswolsky H (trans.). Bloomington: Indiana University Press [Originally published 1965].

- Bakhtin M M (1986). *Speech genres and other late essays*. Mc Gee V K (trans.), Emerson C & Holquist M (eds.). Austin: University of Texas Press.
- Bakhtin M M (1990). *Art and answerability: Early philosophical essays*. Liapunov V (trans.), Holquist M & Liapunov V (eds.). Austin: University of Texas press.
- Bakhtin M M (1993). *Toward a philosophy of the act*. Liapunov V & Holquist M (eds.), Liapunov V (trans.). Austin: University of Texas Press.
- Brandist C, Shepherd D & Tihanov G (eds.) (2004). *The Bakhtin circle: In the master's absence*. Manchester: Manchester University Press.
- Clark K & Holquist M (1984). *Mikhail Bakhtin*. Cambridge: Harvard University Press.
- Hirschkop K & Shepherd D (eds.) (2001). *Bakhtin and cultural theory*. Manchester: Manchester University Press.
- Lodge D (1990). *After Bakhtin: Essays on fiction and criticism*. London: Routledge.
- Morris P (ed.) (1994). *The Bakhtin reader: Selected writings of Bakhtin, Medvedev, and Voloshinov*, with a glossary by Graham Roberts. London: Arnold.
- Morson G S (1986). *Bakhtin: Essays and dialogues on his work*. Chicago: University of Chicago Press.
- Morson G S & Emerson C (eds.) (1989). *Rethinking Bakhtin: Extensions and challenges*. Evanston: Northwestern University Press.
- Morson G S & Emerson C (1991). *Mikhail Bakhtin: Creation of a prosaic*. Stanford: Stanford University Press.
- Schultz E A (1990). *Dialogue at the margins: Whorf, Bakhtin, and linguistic relativity*. Madison: The University of Wisconsin Press.
- Vice S (1997). *Introducing Bakhtin*. Manchester: Manchester University Press.

Bilingual Education

C Baker, University of Wales, Bangor, North Wales, UK

© 2006 Elsevier Ltd. All rights reserved.

Introduction

The term bilingual education has multiple meanings, with varying positive and negative associations, and a varied history. Take three cases. First, bilingual education is loosely used to refer to schools attended by bilingual children (e.g., Latinos and Latvians in U.S. schools, Greek and Gujarati children in U.K. schools). However, bilingualism is not fostered in such schools. Rather, the aim is to shift the child rapidly from the home, minority language to the dominant, majority language. Second, the term refers to children who are allowed to use their home language in the classroom for only a short period (e.g., one or two years) until they switch to the majority language (called transitional bilingual education). Third, bilingual education appears a more appropriate label for schools in which students learn through two languages in the classroom. For example, there are dual language schools in the United States that teach students through Spanish for one day and the next day through English. In Europe, there are elite bilingual programs (e.g., Luxembourg, Switzerland) in which children both learn, and learn through two or more prestigious languages (e.g., German, French, English).

Types of Bilingual Education

Given that bilingual education has multiple meanings, some clarity is possible by defining different types of bilingual education. Although Baker (2001) and

Garcia (1997), respectively, define 10 and 14 different types of bilingual education, a threefold categorization is helpful.

1. 'Null' forms of bilingual education bring together bilingual children but with the aim of monolingualism in the majority language. Submersion education is the term used in academic writing for such education, but not by school systems that tend to use the term mainstreaming. Submersion education implies that the child (on immediate entry to school) only experiences the majority language. The child is thrown into a language at the deep end and are expected to sink or swim in the majority language from the first day.
2. 'Weak' forms of bilingual education allow children to use their home language for a temporary period until they can switch totally to the majority language (Carrasquillo and Rodriguez, 2002). Weak forms of bilingual education include structured immersion, withdrawal classes, various forms of sheltered English, transitional bilingual education, and mainstreaming with foreign language teaching. Second language and foreign language teaching in schools occasionally produces competent bilinguals. Generally, such teaching does not result in age-appropriate proficiency in the second or foreign language, nor reaches a level of language that enables learning of curriculum content to occur via that language. Sometimes, a subset of language abilities is developed for instrumental or practical reasons (e.g., travel, trade, cultural awareness).

3. 'Strong' forms of bilingual education aim for each child, irrespective of ability, to achieve bilingualism, biliteracy, and cultural pluralism. Such outcomes are gained mainly through students learning content (e.g., mathematics, social studies) through both languages. Strong forms of bilingual education include U.S. dual language schools, Heritage Language programs, Canadian Immersion, and the European Schools movement. Three of these strong forms of bilingual education will be discussed here, so as to define education that has bilingualism as an educational outcome rather than bilingual children as an input.

Immersion Bilingual Education

Immersion education typically has students from majority language backgrounds (e.g., English homes in Canada; Swedish homes in Finland) and teaches them through another majority or a minority language (e.g., French in Canada). However, there are many variations: first, the age at which a child commences the experience. This may be at the kindergarten or infant stage (early immersion), at 9 to 10 years old (delayed or middle immersion), or at secondary level (late or late-start immersion). Second, the amount of time spent in immersion. Total immersion usually commences with 100% immersion in the second language, reducing after 2 or 3 years to 80% per week for the next 3 or 4 years, finishing junior schooling with approximately 50% immersion in the second language per week. Partial immersion provides close to 50% immersion in the second language throughout infant and junior schooling.

Children in early immersion are usually allowed to use their home language for a year or more for classroom communication. There is no compulsion to speak the second (school) language in the playground or when eating lunch. The child's home language is valued and not disparaged. Such children also start immersion education with relatively homogeneous language skills. This not only simplifies the teacher's task, it also means that students' self-esteem and classroom motivation are not threatened because of some students being linguistically more advanced.

Heritage Language Bilingual Education

Heritage language bilingual education occurs when language minority children use their native, ethnic, home, or heritage language in the school as a medium of instruction and the goal is competence in two languages. Examples include education through, or more often partly through, the medium of Navajo or Spanish in the United States (Francis and Reyhner, 2002), or Basque in Spain (Gardner, 2000),

or aboriginal languages in Australia (Caldwell and Berthold, 1995). In China, since 1979 minority language education has been provided for over 20 minority groups, partly as a way of improving ethnic minority relationships with central government (Blachford, 1997). In the Canadian provinces of Manitoba, British Columbia, Saskatchewan, and Alberta, there are heritage language bilingual education programs. The heritage language is the medium of instruction for about 50% of the day (e.g., Ukrainian, Italian, German, Hebrew, Yiddish, Mandarin Chinese, Arabic, and Polish). Heritage language programs in the United States (see Krashen *et al.*, 1998) and elsewhere vary in structure and content and overlap with the 90:10 model of dual language education (see later). Some of the likely features are described here.

Most of the children come from language minority homes but may be joined by a small number of majority language children whose parents desire bilingualism in their children. Such parents will often have the choice of sending their children to mainstream schools or to heritage language programs. In most cases, the majority language will also be used in the curriculum, ranging from second language lessons to a varying proportion (e.g., 10% to 50%) of the curriculum being taught in the majority language. There is a tendency to teach mathematical, technological, and scientific studies through the majority language, and to use the majority language progressively more across the grades.

Where a minority language is used for a majority of classroom time (e.g., 80% to almost 100%), the justification is that children easily transfer ideas, concepts, skills and knowledge into the majority language. Having taught a child multiplication in Mohawkian, this mathematical concept does not have to be retaught in English. The **justification** given for such programs is also that a minority language is easily lost, a majority language is easily gained. Children tend to be surrounded by the majority language, especially in the teenage years. Thus, bilingualism is achieved by an initial concentration on the minority language at school.

Dual Language Bilingual Education

U.S. dual language (or two-way) bilingual education typically occurs when there is an approximate balance in numbers between language minority and language majority students in the same classroom. Whereas a 50:50 **language balance** often was advised, the majority language can become dominant (e.g., because of its higher prestige value), putting the aim of bilingualism and biliteracy at risk.

Both languages are used for instruction and learning, revealing that the aim is to produce students

who are bilingual, biliterate, and bicultural or multicultural (Lindholm-Leary, 2001). Dual language schools use a non-English language for at least 50% of curriculum time for up to six grades. In each period of instruction, only one language is used, such that students learn a new language mostly via content. Genesee and Gándara (1999) suggest that such schools enhance intergroup communication and cultural awareness. They produce children who, in terms of intergroup relations, are likely to be more tolerant and sensitive. "Contact between members of different groups leads to increased liking and respect for members of the outgroup, including presumably reductions in stereotyping, prejudice, and discrimination" (Genesee and Gándara, 1999: 667).

Some teachers use both languages on different occasions with their students; others just use one language and may be paired and work together closely as a team. The school ethos also will be bilingual by classroom and corridor displays, curriculum resources, announcements, and extracurricular activity using both languages if possible.

A central idea in dual language bilingual schools is language separation and language boundaries. Language boundaries are established in terms of time, curriculum content and teaching. One frequent preference is for each language to be used on alternate days. Alternately, different lessons may use different languages with a regular change over to ensure both languages are used in all curricula areas. The division of time may be in half days, whole days, or alternate weeks. The essential element is the distribution of time to achieve bilingual and biliterate students. Often, a 50:50 balance in use of languages is attempted in early grades, although in some schools, the minority language is given more time (60% to 90% of the available time). In the later years of schooling, there is sometimes a preference for more emphasis on the majority language.

Bilingual Education and Politics

There is no deep understanding of bilingual education except through understanding the politics behind such education. There are varying philosophical and political origins to bilingual education that underpin different models of bilingual education. For example, bilingual education is best understood by reference to national variations (Cummins and Corson, 1998). The contrasting politics of Canada's two language solitudes and South Africa's management of social integration when retaining multilingualism, the ardor of language activists in the Basque Country and the more gentle revolution in Wales, the suppression of Breton in France, and the

historical repression of Native American Indian languages in the United States illustrate that the history and politics of a nation shapes its approach to languages and bilingual education.

The contemporary politics of bilingual education relates to the education of immigrants (e.g., in the United States, the United Kingdom), the preservation of nationalism (e.g., the fate of Breton in France), the devolution of power to regions (e.g., Wales, Catalonia), language revitalization (e.g., Native American Indians, the Maori in New Zealand), internationalism (e.g., the European Schools Movement, bilingual education in Japan), and the emancipatory education of deaf people (e.g., through bilingual education in a sign language and a majority language – see Baker and Jones, 1998). The varying politics of immigrant assimilation and political integration, economic protectionism and global trade, institutionalized racism and equality of opportunity, and recent debates about peace and terrorism can make bilingual education as much about politics as about education. Bilingual education also has become associated with political debates about dominance and control by elites, questions about social order, and the perceived potential subversiveness of language minorities (Garcia, 2002; Tollefson, 2002).

In Macedonia (Tankersley, 2001), China (Zhou, 2001), the United States (Wiese and Garcia, 2001), and the South Pacific (Lotherton, 1998), bilingual education also can be positively located within attempts to effect social, cultural, economic, or political change, particularly in strengthening the weak, empowering the powerless, and invigorating those most susceptible. This is illustrated by Tankersley (2001). Contextualized within the recent ethnic conflict in the Balkans, she examines a Macedonian/Albanian dual language program. The program demonstrated success in aiding community rebuilding after the war and the growth of cross-ethnic friendships. The research shows the potential for bilingual education program to develop students' respect for different languages and cultures, and help to resolve ethnic conflict. However, because the Macedonian language was connected with greater power and prestige, obtaining an equal balance of languages in the classroom was complex.

The importance of a historical perspective on bilingual education as politics is provided by Wiese and Garcia (2001) through an analysis of the U.S. Bilingual Education Act from 1968 to the present. The changing U.S. ideologies in minority language civil liberties, equality of educational opportunity, assimilation, and multiculturalism become translated into legislation and tested in litigation. Most recently, the No Child Left Behind Act of 2001 placed an

emphasis on accountability and testing. Whereas Title V authorizes programs for Native Indian, Native Hawaiian and Alaskan Native Education, Title III requires testing in English for most language minority students. All states are required to monitor the progress of some 3.68 million U.S. language minority students in meeting their English proficiency and academic objectives. The paradox is that the No Child Left Behind Act of 2001 followed the September 11 terrorist attacks. In the aftermath of the attacks, politicians, the press, and the public lamented the lack of language and cultural skills in U.S. intelligence and defense. It also seems possible that peace and harmony between religions and regions would be aided by producing bilinguals who appreciate the diversity that is possibly intrinsic in bilingualism and biculturalism.

Research and analysis of Proposition 227 in California has led to it being one of the most profiled examples of power and politics governing bilingual education (Stritikus, 2001; Crawford, 2004). In effect, Proposition 227 aimed at outlawing bilingual education in California. Proposition 227 was passed in a public ballot by a margin of 61% to 39%. Analysis of the voting and subsequent surveys found that Latinos were clearly against the proposition but, nevertheless, bilingual education became virtually illegal.

The importance of bilingual education for minority language literacy development and biliteracy has become a major recent theme (e.g., Martin-Jones and Jones, 2000; Hornberger, 2003). Using contexts of classroom, home, and community, such literacy research tends to be less concerned with teaching and learning methodology and more focused on, for example, the relationship between asymmetrical power relations and literacy practices that reproduce social inequalities and competing discourses about what counts as literacy. Current biliteracy research suggests that language policies and practices in education are struggles over power and authority, equity and marginalization, legitimacy and social order, symbolic domination and identities, social categorization, and social hierarchization. Any consideration about who should speak what language, how, when, and where is essentially about what counts as legitimate language and who has dominance and control. Hence, those in power who legitimate the current social order regulate access to linguistic norms and linguistic resources to preserve their power and position.

However cogent and coherent are the philosophical and pedagogic foundations for bilingualism, biliteracy, and biculturalism, however strong are the educational arguments for bilingual education,

and however strong are the arguments for the preservation of vanishing languages in the world, it is the politics of power, status, assimilation, and social order that can refute bilingual education so swiftly. However, bilingual education is typically a necessary, and sometimes an essential condition for the preservation of language species in the world. Where there is a shortfall in minority language reproduction in the family, then language production at school is essential in education to retain or increase the number and density of minority language speakers. From preschool bilingual education to adult language learning (e.g., in Ulpanim), bilingual education has a possible contemporary function not only to educate but also for minority language transmission.

Language Revitalization through Bilingual Education

Bilingual education is sometimes a component of national or regional language planning that varyingly attempts to assimilate indigenous and immigrant minorities, or integrate newcomers or minority groups (e.g., U.S., U.K.). On other occasions, bilingual education is a major plank in language revitalization and language reversal (e.g., among Native American Indians, the Sámi in Scandinavia, and the Maori in New Zealand).

The growing interest in endangered and dying languages has recently provided a further *raison d'être* to bilingual education. The predicted demise of many or most of the world's languages has created a momentum for language planning (Littlebear, 1999; Nettle and Romaine, 2000; Skutnabb-Kangas, 2000; Spolsky, 2004). For a minority language to survive, it has to produce new speakers, mostly via family language transmission and the education system (including adult language learning). Language planners tend to believe that bilingual education is an important means of language maintenance, language revitalization and reversing language shift, for example, among Native American Indians (Bia and McCarty, 2002; Francis and Reyhner, 2002; House, 2002), Ecuadorians (King, 2001), and the Basques (Gardner, 2000). Language acquisition planning via bilingual education becomes essential for language revival but insufficient by itself.

Nevertheless, bilingual education cannot gain its rational solely from language restoration or maintenance. It requires research to demonstrate underlying educational advantages (e.g., raising student achievement, increasing employment opportunities). There is sometimes over-optimism among language planners about what can be expected from and delivered by bilingual education in revitalizing a language.

Although bilingual education has an important role in language reproduction, and without bilingual education a minority language may not be able to survive except through intense religious usage, bilingual education cannot deliver language maintenance by itself.

The Advantages of 'Strong' Forms of Bilingual Education

Support for bilingual education tends to circle around eight interacting advantages of bilingual education that are claimed for students. There also are societal benefits that already have been alluded to in the above discussion of politics and bilingual education and will be briefly mentioned later. This section concentrates on the individual advantages.

First, bilingual education typically enables both languages to reach higher levels of competency. This potentially enables children to engage in wider communication across generations, regions, and cultural groups (Cummins, 2000). Second, bilingual education ideally develops a broader enculturation, a more sensitive view of different creeds and cultures. Bilingual education will usually deepen an engagement with the cultures associated with the languages, fostering a sympathetic understanding of differences, and, at its best, avoids the tight compartmentalization of racism and stereotyping. Third, strong forms of bilingual education frequently leads to biliteracy (see Hornberger, 2003). Accessing literacy practices in two or more languages adds more functions to a language (e.g., using in employment), widening the choice of literature for enjoyment, giving more opportunities for understanding different perspectives and viewpoints, and leading to a deeper understanding of history and heritage, of traditions and territory (Tse, 2001).

Fourth, research on dual language schools, Canadian immersion education, and heritage language education suggest that curriculum achievement is increased through content learning occurring via dual language curriculum strategies (Cummins, 2000; Tse, 2001). This is returned to later in this article. Fifth, plentiful research suggests that children with two well-developed languages share cognitive benefits (Bialystok, 2001). Such thinking advantages include being more creative because of their dual language systems (Baker, 2001), being more sensitive in communication as they may be interpersonally aware, for example, when needing to codeswitch, and tend to be more introspective of their languages (metalinguistic advantages – see Bialystok, 2001). Sixth, children's self-esteem may be raised in bilingual education for minority language students (Cummins, 2000). The opposite is when a child's home language is replaced by the majority language. Then, the child

itself, the parents and relatives, and not least the child's community may appear as inadequate and disparaged by the school system. When the home language is used in school, then children may feel themselves, their home, family, and community to be accepted, thus maintaining or raising their self-esteem.

Seventh, bilingual education may aid the establishment of a more secure identity at a local, regional, and national level. Sharing Welsh, Maori, or Native American Indian identity may be enhanced by the heritage language and culture being celebrated and honored in the classroom. Developing a Korean-American, Bengali-British, or Greek-Australian identity can be much aided by strong forms of bilingual education, and challenged or even negated by weak forms. Eighth, in some regions (e.g., Catalonia, Scandinavia) there are economic advantages for having experienced bilingual (or trilingual) education. Being bilingual can be important to secure employment in many public services and particularly when there is a customer interface requiring switching effortlessly between two or more languages. To secure a job as a teacher, to work in the mass media, to work in local government and increasingly in the civil service in countries such as Canada, Wales, and the Basque Country, bilingualism has become important. Thus, bilingual education is increasingly seen as delivering relatively more marketable employees than monolingual education (Dutcher, 1995; Tse, 2001).

To this list may be added the potential societal, ethnic group, or community benefits of bilingual education (May, 2001; Peyton *et al.*, 2001; Stroud, 2001; Tse, 2001) such as continuity of heritage, cultural vitality, empowered and informed citizenship, raising school and state achievement standards, social and economic inclusion, social relationships and networking, ethnic group self-determination, and distinctiveness. This is well illustrated by Feuerverger (2001) in an ethnography of a village (Neve Shalom/Wahat Al-Salam) in Israel, where Jews and Palestinians attempt to live together harmoniously and cooperatively, maintaining respect for the culture, identity, and languages of each group. This is partly attempted by two schools, an elementary school and the 'School for Peace,' which create bilingual Hebrew-Arabic bilinguals.

The Effectiveness of Bilingual Education

Research support for bilingual education is relatively robust (Baker, 2001) although there has been much political challenge to this in the United States (Crawford, 2004). Perhaps the strongest research support for bilingual education derives from

evaluations of immersion education, particularly from Canada since the 1960s (Johnstone, 2002). There is plentiful research from the United States since the 1960s (see Baker, 2001, for a review).

Evaluations of the effectiveness of dual language schools indicate relative success. One of the most wide-ranging evaluations of dual language schools is by Lindholm-Leary (2001). She analyzed teacher attributes, teacher talk, parental involvement and satisfaction, as well as student outcomes (using 4854 students) in different program types. These programs included Transitional Bilingual Education, English-Only, the 90:10 Dual Language Model, and the 50:50 Dual Language Model. The measured outcomes included Spanish and English language proficiency, academic achievement and attitudes of the students. Socioeconomic background and other student characteristics were taken into account in reporting results. Among a wealth of findings, Lindholm-Leary (2001) found that

- students who had 10% or 20% of their instruction in English scored as well on English proficiency as those in English-only programs and as well as those in 50:50 dual language (DL) programs;
- Spanish proficiency was higher in 90:10 than 50:50 (DL) programs. Students tended to develop higher levels of bilingual proficiency in the 90:10 than the 50:50 DL program;
- for Spanish-speaking students, no difference in English language proficiency was found between the 90:10 and 50:50 DL programs. However, DL students outperformed transitional bilingual education (TBE) students in English by the Grade 6;
- students in both the 90:10 and 50:50 DL programs were performing about 10 points higher in reading achievement than the Californian state average for English-speaking students educated in English-only programs;
- higher levels of bilingual proficiency were associated with higher levels of reading achievement;
- on Mathematics tests, DL students performed on average 10 points higher on Californian norms for English-speaking students educated only in English. There was a lack of difference in the scores of 90:10 and 50:50 DL students;
- DL students tended to reveal very positive attitudes toward their DL programs, teachers, classroom environment and the learning process.

Thomas and Collier's (2002) Final Report on their 1985 to 2001 database of 210,054 minority language students' academic achievement in eight different models of education indicates that: schooling in the home language has a much greater effect on achievement than socioeconomic status; late immigrants whose early education was in their

home language outperformed early immigrants schooled in English only; enrichment (heritage language) 90:10 programs and dual language programs (50:50) were the most academically successful for English L2 students and had the lowest dropout rates; the strongest predictor of L2 student achievement is the amount of formal L1 schooling with the more L1 schooling, the higher the L2 achievement; the highest quality ESL content programs reduce about half of the total achievement gap between those in enrichment or dual language programs and those without any bilingual support.

However, the reasons why research finds bilingual education linked with higher achievement are neither simple nor straightforward (August and Hakuta, 1997). There is likely to be a complex equation between such academic success and factors such as the support of the home (e.g., in encouraging literacy development), the devotion and dedication of teachers in school, children feeling their minority language is accepted and their self-esteem thus supported, and the positive relationship between bilingual education and cognitive development. Laosa (2000) reveals that school characteristics such as the quality and ratio of teachers per student, the teacher's credentials, and fragmentation of instruction are potentially influential in student achievement. That is, particular models of bilingual education interact with a host of student, teacher, curriculum, and environmental variables in complex ways to influence student outcomes. It cannot be assumed that bilingual education, *per se*, results in higher attainment across the curriculum. There are many interacting variables that will underlie such success with no simple recipes for guaranteed success.

The English Language and Bilingual Education

The paradox of English in bilingual education is illustrated by the research of Valdés (2001). English language learning policies enacted in schools can deny access to the language and knowledge that would empower U.S. immigrant children. Valdés (2001) shows that, separately and cumulatively, there are complex interacting classroom factors that frequently work against a student's second language development, achievement, employment, citizen rights and opportunities, and self-esteem. Such factors include a lack of regular, purposeful, and developing interactions with native speakers, impoverished second language interactions with teachers on a staff-student ratio of over 1:30, passive learning and 'tight discipline' strategies, mixed language competence classes working to a low common denominator, subject matter kept simplistic as the second language

is insufficiently developed, and teachers' concerns with 'flawed language' forms rather than communication: "Placing blame is not simple. Structures of dominance in society interact with educational structures and educational ideologies as well as with teachers' expectations and with students' perspectives about options and opportunities" (Valdés, 2001: 4).

The 'English language dominance' dangers for bilingual education also are found in access to Information Communications Technology (ICT) for language minority students. ICT is often dominated by the English language. This relates to current debates about the place of the English language in bilingual education in the context of the internationalization of English and its growing worldwide prominence as a second language rather than a mother tongue (Graddol and Meinhof, 1999). In contrast, there are potential opportunities to support the future of minority languages in education through ICT such as e-books, machine translation, voice recognition, WebTV, international e-mailing, and text messaging (Skourtou, 2002).

The Limitations of Bilingual Education

Although bilingual education has an increasing number of international supporters, it is not without some political critics, especially in the United States – see Cummins (2000) for a review. This has been considered earlier. There also are limitations to the pedagogical view of bilingual education. Bilingual education is no absolute guarantee of effective schooling. It is ingenuous to imagine that employing two or more languages in the school curriculum automatically leads to a raising of achievement, more effective schooling, or a more child-centered education. In reality, the languages of the school are but part of an extensive matrix of variables that interact in complex ways to make schooling more or less effective. Among bilingual schools in every country, there is often a mixture of the outstanding and the ordinary, those in an upward spiral of enhancing their quality, and those that depend on past glories rather than current successes. The school effectiveness research movement has located many of the important factors that make such schools more or less effective (August and Hakuta, 1997). Bilingual education is only one ingredient among many.

Another limitation of the pedagogical perspective on bilingual education is the nature and use of language learned at school. Canadian research suggests that the language register of formal (e.g., immersion) education does not necessarily prepare children for language use outside the school (Cummins, 2000). The language of the curriculum is increasingly complex and specialized. The vernacular of the peer group and the lingo of the

street is different. Canadian children from English-speaking homes who have been to immersion schools and learnt through the medium of French and English sometimes report difficulty in communicating appropriately with French speakers in local communities. Local French speakers can find such students' French too formal, awkward, or even inappropriate.

A further concern about bilingual education is that language learning may stop at the school gates. The minority language may be effectively transmitted and competently learned in the classroom. Once outside the school gates, children may switch into the majority language for reasons of status, acceptance by peers, and inclusiveness in peer relations (that is, the majority language is often the 'common denominator' language). Thus, the danger of bilingual education in a minority language is that the language becomes a language of school but not of play; a language of the content delivery of the curriculum but not of peer culture. Extending a minority language learnt at school to use in the community over the teenage and adulthood years is something that is difficult to engineer, difficult to plan, but nevertheless vital if that language is to live outside the school gates.

See also: Language Policy in Multinational Educational Contexts.

Bibliography

- August D & Hakuta K (1997). *Improving schooling for language-minority children*. Washington, DC: National Academy Press.
- Baker C (2001). *Foundations of bilingual education and bilingualism* (3rd edn.). Clevedon: Multilingual Matters.
- Baker C & Jones S P (1998). *Encyclopedia of bilingualism and bilingual education*. Clevedon: Multilingual Matters.
- Bia F & McCarty T L (2002). *A place to be Navajo: Rough Rock and the struggle for self-determination in indigenous schooling*. Mahwah, NJ: Lawrence Erlbaum.
- Bialystok E (2001). *Bilingualism in development: Language literacy and cognition*. Cambridge: Cambridge University Press.
- Blachford D R (1997). 'Bilingual education in China.' In Cummins J & Corson D (eds.) *Bilingual education*. Volume 5 of the *Encyclopedia of language and education*. Dordrecht: Kluwer. 157–165.
- Caldwell J & Berthold M (1995). 'Aspects of bilingual education in Australia.' In Jones B M & Ghuman P S (eds.) *Bilingualism, education and identity*. Cardiff: University of Wales Press. 189–212.
- Carrasquillo A L & Rodriguez V (2002). *Language minority students in the mainstream classroom* (2nd edn.). Clevedon: Multilingual Matters.
- Crawford J (2004). *Educating English learners: Language diversity in the classroom*. Los Angeles: Bilingual Educational Services.

- Cummins J (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon: Multilingual Matters.
- Cummins J & Corson D (eds.) (1997). *Bilingual education*. Volume 5 of the *Encyclopedia of language and education*. Dordrecht: Kluwer.
- Dutcher N (1995). *The use of first and second languages in education: a review of international experience*. Washington, DC: World Bank.
- Feuerverger G (2001). *Oasis of dreams: teaching and learning peace in a Jewish-Palestinian village in Israel*. New York: RoutledgeFalmer.
- Francis N & Reyhner J (2002). *Language and literacy teaching for indigenous education*. Clevedon: Multilingual Matters.
- Garcia E E (2002). 'Bilingualism and schooling in the United States.' *International Journal of the Sociology of Language* 155–156, 1–92.
- Garcia O (1997). 'Bilingual education.' In Coulmas F (ed.) *The handbook of sociolinguistics*. Oxford: Blackwell. 405–420.
- Gardner N (2000). *Basque in education in the Basque autonomous community*. Vitoria-Gasteiz: Eusko Jaurlaritzaren Argitalpen Zerbitzu Nagusia.
- Genesee F & Gándara P (1999). 'Bilingual education programs: A cross-national perspective.' *Journal of Social Issues* 55, 665–685.
- Graddol D & Meinhof U H (eds.) (1999). *English in a changing world AILA review 13*. Oxford: Catchline (The English Trading Company).
- Hornberger N H (ed.) (2003). *Continua of biliteracy: An ecological framework for educational policy, research, and practice in multilingual settings*. Clevedon: Multilingual Matters.
- House D (2002). *Language shift among the Navajos*. Tuscon: University of Arizona Press.
- Johnstone R (2002). *Immersion in a second or additional language at school: A review of the international research*. Stirling (Scotland): Scottish Centre for Information on Language Teaching.
- King K A (2001). *Language revitalization: Processes and prospects*. Clevedon: Multilingual Matters.
- Krashen S, Tse L & McQuillan J (1998). *Heritage language development*. Culver City, CA: Language Education Associates.
- Laosa L M (2000). *Non-language characteristics of instructional services for language minority students*. Washington, DC: National Clearinghouse for Bilingual Education.
- Lindholm-Leary K J (2001). *Dual language education*. Clevedon: Multilingual Matters.
- Littlebear R (1999). 'Some rare and radical ideas for keeping indigenous languages alive.' In Reyhner J et al. (eds.) *Revitalizing indigenous languages*. Flagstaff, AZ: Northern Arizona University. 1–5.
- Lotherington H (1998). 'Trends and tensions in post-colonial language education in the South Pacific.' *International Journal of Bilingual Education and Bilingualism* 1, 65–75.
- Martin-Jones M & Jones K (2000). *Multilingual literacies: Reading and writing different worlds*. Amsterdam/Philadelphia: John Benjamins.
- May S (2001). *Language and minority rights: Ethnicity, nationalism and the politics of language*. London: Longman.
- Nettle D & Romaine S (2000). *Vanishing voices: The extinction of the world's languages*. Oxford: Oxford University Press.
- Peyton J K, Ranard D A & McGinnis S (2001). 'Charting a new course: heritage language education in the United States.' In Peyton J K, Ranard D A & McGinnis S (eds.) *Heritage languages in America: Preserving a national resource*. McHenry, IL: Delta Systems. 3–28.
- Skourtou E (2002). 'Connecting Greek and Canadian Schools through an internet-based sister-class network.' *International Journal of Bilingual Education and Bilingualism* 5, 85–95.
- Skutnabb-Kangas T (2000). *Linguistic genocide in education—or worldwide diversity and human rights?* London: Erlbaum.
- Spolsky B (2004). *Language policy*. Cambridge: Cambridge University Press.
- Stritikus T T (2001). 'From personal to political: proposition 227, literacy instruction, and the individual qualities of teachers.' *International Journal of Bilingual Education and Bilingualism* 4, 291–309.
- Stroud C (2001). 'African mother-tongue programmes and the politics of language: linguistic citizenship versus linguistic human rights.' *Journal of Multilingual and Multicultural Development* 22, 339–355.
- Tankersley D (2001). 'Bombs or bilingual programmes?: dual language immersion, transformative education and community building in Macedonia.' *International Journal of Bilingual Education and Bilingualism* 4, 107–124.
- Thomas W P & Collier V P (2002). *A national study of school effectiveness for language minority students' long-term academic achievement. Final report*. Washington, DC: Center for Research on Education, Diversity & Excellence.
- Tollefson J (ed.) (2002). *Language policies in education: Critical readings*. Mahwah, PA: Lawrence Erlbaum Associates.
- Tse L (2001). *"Why don't they learn English?" Separating fact from fallacy in the U.S. language debate*. New York: Teachers College Press.
- Valdés G (2001). *Learning and not learning English: Latino students in American schools*. New York: Teachers College Press.
- Wiese A-M & Garcia E E (2001). 'The Bilingual Education Act: language minority students and US federal educational policy.' *International Journal of Bilingual Education and Bilingualism* 4, 229–248.
- Zhou M (2001). 'The politics of bilingual education and educational levels in ethnic minority communities in China.' *International Journal of Bilingual Education and Bilingualism* 4, 125–149.

Bilingualism

Li Wei, Birkbeck College, University of London, London, UK

© 2006 Elsevier Ltd. All rights reserved.

What Is Bilingualism?

Bilingualism is a product of extensive language contact (i.e., contacts between people who speak different languages). There are many reasons for speakers of different languages to get into contact with one another. Some do so out of their own choosing, whereas others are forced by circumstances. Among the frequently cited factors that contribute to language contact are education, modern technology, economy, religion and culture, political or military acts, and natural disasters. One does not have to move to a different place to be in contact with people speaking a different language. There are plenty of opportunities for language contact in the same country, the same community, the same neighborhood, or even the same family.

However, although language contact is a necessary condition for bilingualism at the societal level, it does not automatically lead to bilingualism at the individual level. For example, Belgium, Canada, Finland, India, Luxembourg, Paraguay, and Singapore, to name but a few countries, are bi- or multilingual, but the degree or extent of bilingualism among the residents of these countries varies significantly. There are large numbers of bilingual or multilingual individuals in Luxembourg, Paraguay, and Singapore, but considerably fewer in the other officially bi- or multilingual countries. Mackey (1962) claims that there are actually fewer bilingual people in bilingual countries than there are in the so-called 'unilingual' ones, because the main concerns of bi- or multilingual states are often the maintenance and use of two or more languages in the same nation, rather than the promotion of bilingualism among their citizens. It is therefore important to distinguish bilingualism as a social or societal phenomenon from bilingualism as an individual phenomenon.

Who Is Bilingual?

People who are brought up in a society in which monolingualism and uniculturalism are promoted as the normal way of life often think that bilingualism is only for a few, 'special' people. In fact, one in three of the world's population routinely uses two or more languages for work, family life, and leisure. There are even more people who make irregular use of languages other than their native one; for example,

many people have learned foreign languages at school and only occasionally use them for specific purposes. If we count these people as bilinguals, then monolingual speakers would be a tiny minority in the world today.

Yet the question of who is and who is not a bilingual is more difficult to answer than it first appears. Baker and Prys Jones (1998: 2) suggest that in defining a bilingual person, we may wish to consider the following questions:

- Should bilingualism be measured by how fluent people are in two languages?
- Should bilinguals be only those people who have equal competence in both languages?
- Is language proficiency the only criterion for assessing bilingualism, or should the use of two languages also be considered?
- Most people would define a bilingual as a person who can speak two languages. What about a person who can understand a second language perfectly but cannot speak it? What about a person who can speak a language but is not literate in it? What about an individual who cannot speak or understand speech in a second language but can read and write it? Should these categories of people be considered bilingual?
- Should self-perception and self-categorization be considered in defining who is bilingual?
- Are there different degrees of bilingualism that can vary over time and with circumstances? For instance, a person may learn a minority language as a child at home and then later acquire another, majority language in the community or at school. Over time, the second language may become the stronger or dominant language. If that person moves away from the neighborhood or area in which the minority language is spoken or loses contact with those who speak it, he or she may lose fluency in the minority language. Should bilingualism therefore be a relative term?

The word 'bilingual' primarily describes someone with the possession of two languages. It can, however, also be taken to include the many people in the world who have varying degrees of proficiency in and interchangeably use three, four or even more languages. In many countries of Africa and Asia, several languages coexist and large sections of the population speak three or more languages. Individual multilingualism in these countries is a fact of life. Many people speak one or more local or ethnic languages, as well as another indigenous language which has become the medium of communication between different ethnic

groups or speech communities. Such individuals may also speak a foreign language – such as English, French or Spanish – which has been introduced into the community during the process of colonization. This latter language is often the language of education, bureaucracy and privilege.

Multilingualism can also be the possession of individuals who do not live within a multilingual country or speech community. Families can be trilingual when the husband and wife each speak a different language as well as the common language of the place of residence. People with sufficient social and educational advantages can learn a second, third, or fourth language at school or university; at work; or in their leisure time. In many continental European countries, children learn two languages at school – such as English, German, or French – as well as being fluent in their home language – such as Danish, Dutch, or Luxembourgish.

It is important to recognize that a multilingual speaker uses different languages for different purposes and does not typically possess the same level or type of proficiency in each language. In Morocco, for instance, a native speaker of Berber may also be fluent in colloquial Moroccan Arabic but not literate in either of these languages. This Berber speaker will be educated in Modern Standard Arabic and use that language for writing and formal purposes. Classical Arabic is the language of the mosque, used for prayers and reading the Qur'an. Many Moroccans also have some knowledge of French, the former colonial language.

Theoretical Issues in Bilingualism Research

Chomsky (1986) defined three basic questions for modern linguistics:

- i. What constitutes knowledge of language?
- ii. How is knowledge of language acquired?
- iii. How is knowledge of language put to use?

For bilingualism research, these questions can be rephrased to take in knowledge of more than one language (see also Cook, 1993):

- i. What is the nature of language, or grammar, in the bilingual person's mind, and how do two systems of language knowledge coexist and interact?
- ii. How is more than one grammatical system acquired, either simultaneously or sequentially? In what aspects does bilingual language acquisition differ from unilingual language acquisition?

- iii. How is the knowledge of two or more languages used by the same speaker in bilingual speech production?

Taking the acquisition question first, earlier observers of bilingual children concentrated on documenting the stages of their language development. Volterra and Taeschner (1978), for example, proposed a three-stage model of early bilingual development. According to this model, the child initially possesses one lexical system composed of lexical items from both languages. In stage two, the child distinguishes two separate lexical codes but has one syntactic system at his or her disposal. Only when stage three is reached do the two linguistic codes become entirely separate. Volterra and Taeschner's model gave rise to what is now known as the 'unitary language system hypothesis.' In its strongest version, the hypothesis supposes that the bilingual child has one single language system that they use for processing both of their languages in the repertoire.

In the 1980s, the unitary language system hypothesis came under intense scrutiny; for instance, by Meisel (1989) and Genesee (1989). They argue that there is no conclusive evidence to support the existence of an initial undifferentiated language system, and they also point out certain methodological inconsistencies in the three-stage model. The phenomenon of language mixing, for instance, can be interpreted as a sign of two developing systems existing side by side, rather than as evidence of one fused system. Meisel's and Genesee's studies led to an alternative hypothesis, known as the 'separate development hypothesis' or 'independent development hypothesis.' More recently, researchers have investigated the possibility that different aspects of language (e.g., phonology, vocabulary, syntax, pragmatics) of the bilingual child's language systems may develop at different rates (e.g., Li and Zhu, 2001). Care needs to be taken in interpreting research evidence using children at different developmental stages.

Although the 'one-versus-two-systems' debate (i.e., whether bilingual children have an initially differentiated or undifferentiated linguistic system) continues to attract new empirical studies, a more interesting question has emerged regarding the nature of bilingual development. More specifically, is bilingual acquisition the same as monolingual acquisition? Theoretically, separate development is possible without there being any similarity with monolingual acquisition. Most researchers argue that bilingual children's language development is, by and large, the same as that of monolingual children. In very general terms, both bilingual and monolingual children go through an initial babbling stage, followed by the

one-word stage, the two-word stage, the multiword stage, and the multclause stage. At the morpho-syntactic level, a number of studies have reported similarities rather than differences between bilingual and monolingual acquisition. Garcia (1983), for example, compared the use of English morpheme categories by English monolingual children and bilingual children acquiring English and Spanish simultaneously and found no systematic difference at all. Pfaff and Savas (1988) found that their 4-year-old Turkish/German subject made the same errors in Turkish case marking as reported in the literature on monolingual Turkish children. Muller's (1990) study of two French/German children indicates that their use of subject-verb agreement and finite verb placement in both languages is virtually identical to that of comparable monolingual children. De Houwer (1990) found that her Dutch/English bilingual subject, Kate, used exactly the same word orders in Dutch as monolingual Dutch-speaking children, both in terms of types and in proportional use. Furthermore, De Houwer found in Kate parallels to monolingual children for both Dutch and English in a range of structures, such as nonfinite verb placement, preposed elements in affirmative sentences, clause types, sentence types, conjunctions, and question inversion.

Nevertheless, one needs to be careful in the kinds of conclusions one draws from such evidence. Similarities between bilingual and monolingual acquisition do not mean that the two languages a bilingual child is acquiring develop in the same way or at the same speed, or that the two languages a bilingual child is acquiring do not influence and interact with each other. Paradis and Genesee (1996), for example, found that although the 2–3-year-old French–English bilingual children they studied displayed patterns that characterize the performance of monolingual children acquiring these languages separately, and they acquired these patterns within the same age range as monolingual children, they used finite verb forms earlier in French than in English; used subject pronouns in French exclusively with finite verbs, but subject pronouns in English with both finite and nonfinite verbs, in accordance with the status of subject pronouns in French as clitics (or agreement markers) but full NPs in English; and placed verbal negatives after lexical verbs in French (e.g., 'n'aime pas') but before lexical verbs in English ('do not like'). Further evidence of cross-linguistic influence has been reported by Dopke (1992), for example, in her study of German–English bilingual children in Australia. These children tended to overgeneralize the VO word order of English to German, which instantiates both VO and OV word orders, depending on the clausal structure of the utterance. Dopke suggests

that children learning English and German simultaneously are prone to overgeneralize SVO word order in their German because the VO order is reinforced on the surface of both the German and the English input they hear.

Most of the studies that have examined cross-linguistic influences in bilingual acquisition focus on morphosyntactic features. One area that has hitherto been underexplored is the interface between phonetics and phonology in bilingual acquisition. Although most people seem to believe that the onset of speech in the case of bilingual children is more or less the same as for monolingual children, there are indications that bilingual children seem to develop differently from monolingual children in the following three aspects: the overall rate of occurrence of developmental speech errors, the types of speech errors and the quality of sounds (Zhu and Dodd, 2005). For example, studies on Cantonese/English (Holm and Dodd), Putonghua/Cantonese (So and Leung), Welsh/English (Ball *et al.*), Spanish/English (Yavas and Goldstein), and Punjabi/English (Stow and Pert) (also in Zhu and Dodd, 2006) bilingual children seem to indicate that bilingual children tend to make not only more speech errors but also different types of speech errors compared with monolingual children of the same age. These speech errors would be considered atypical if they had occurred in the speech of monolingual children. Moreover, although bilingual children seem to be able to acquire monolingual-like competence at the phonemic level, there are qualitative differences at the phonetic level in terms of production. For example, using instrumental analysis, Khattab (also in Zhu and Dodd, 2006) finds that although Arabic–English bilingual children have similar patterns of production and use of VOT, /l/, and /r/ in some respects to those of monolinguals from each language, they also show differences that are intricately related to age, input, and language context. These studies and others are reported in Zhu and Dodd (2005).

There is one area in which bilingual children clearly differ from monolingual children; namely, code-mixing. Studies show that bilingual children mix elements from both languages in the same utterance as soon as they can produce two-word utterances. Researchers generally agree that bilingual children's mixing is highly structured and grammatically constrained, although there is no consensus on the nature of the specific constraints that organize their mixing. Vihman (1985), who studied her own son Raivo, who acquired English and Estonian simultaneously, argued, for example, that the language mixing by bilingual children is qualitatively different from that of more mature bilinguals. She invoked as evidence for this claim the fact that young bilingual children

indicate a propensity to mix function words over contentives (e.g., nouns, verbs, adjectives) – a type of mixing that is rare in older bilingual mixing. However, Lanza's (1997) study, although finding similar patterns in the mixing produced by her two Norwegian–English bilingual subjects, argued that children's mixing is qualitatively the same as that of adults; their relatively greater degree of mixing of function words is evidence of what Lanza called 'dominance' of one language over another rather than of a substantial difference from bilingual adults' mixing. Both Vihman's and Lanza's, as well as other studies of children's mixing, show that bilingual children mix their languages in accordance with constraints that operate on adult mixing. The operation of constraints based on surface features of grammar, such as word order, is evident from the two-word/two-morpheme stage onward, and the operation of constraints based on abstract notions of grammatical knowledge is most evident in bilingual children once they demonstrate such knowledge overtly (e.g., verb tense and agreement markings), usually around two years and 6 months of age and older. As Genesee (2002) points out, these findings indicate that in addition to the linguistic competence needed to formulate correct monolingual strings, bilingual children have the added capacity to coordinate their two languages in accordance with the grammatical constraints of both languages during mixing. Although these studies provide further evidence for the separate development, or two-systems, argument, they also indicate that there are both quantitative and qualitative differences between bilingual acquisition and monolingual acquisition.

Another area of interest in acquisitional studies of bilingual children is the role of input and social context in the rate and order of language acquisition. Earlier assumptions were that the bilingual child would have half, or less, of the normal input in each of their two languages, compared with the monolingual child. More careful examinations of bilingual children show considerable variations in the quantity and quality of input, interactional styles of the parents, and environmental policies and attitudes toward bilingualism. On the basis of Harding and Riley's work (1986), Romaine (1995) distinguished six types of early-childhood bilingualism according to the native language of the parents, the language of the community at large, and the parents' strategy in speaking to the child.

Type 1: One person, one language.

- Parents: The parents have different native languages, with each having some degree of competence in the other's language.

- Community: The language of one of the parents is the dominant language of the community.
- Strategy: The parents each speak their own language to the child from birth.

Type 2: Nondominant Home Language/One Language, One Environment

- Parents: The parents have different native languages.
- Community: The language of one of the parents is the dominant language of the community.
- Strategy: Both parents speak the nondominant language to the child, who is fully exposed to the dominant language only when outside the home, and in particular in nursery school.

Type 3: Nondominant Home Language without Community Support

- Parents: The parents share the same native languages.
- Community: The dominant language is not that of the parents.
- Strategy: The parents speak their own language to the child.

Type 4: Double Nondominant Home Language without Community Support

- Parents: The parents have different native languages.
- Community: The dominant language is different from either of the parents.
- Strategy: The parents each speak their own language to the child from birth.

Type 5: Nonnative Parents

- Parents: The parents share the same native language.
- Community: The dominant language is the same as that of the parents.
- Strategy: One of the parents always addresses the child in a language that is not his or her native language.

Type 6: Mixed Languages

- Parents: The parents are bilingual.
- Community: Sectors of community may also be bilingual.
- Strategy: Parents code-switch and mix languages.

The three headings Romaine used to classify the six types of childhood bilingualism – the languages of the parents, the sociolinguistic situation of the community, and the discourse strategies of the parents and other immediate carers – are critical factors not only in the process of bilingual acquisition but also in