

Current Issues in Linguistic Theory

Language and Ideology

Volume 1: Theoretical cognitive approaches

EDITED BY

René Dirven

Bruce Hawkins

Esra Sandikcioglu

LANGUAGE AND IDEOLOGY

VOL. I

AMSTERDAM STUDIES IN THE THEORY AND
HISTORY OF LINGUISTIC SCIENCE

General Editor
E. F. KONRAD KOERNER
(University of Ottawa)

Series IV – CURRENT ISSUES IN LINGUISTIC THEORY

Advisory Editorial Board

Raimo Anttila (Los Angeles); Lyle Campbell (Christchurch, N.Z.)
Sheila Embleton (Toronto); John E. Joseph (Edinburgh)
Manfred Krifka (Berlin); Hans-Heinrich Lieb (Berlin)
E. Wyn Roberts (Vancouver, B.C.); Hans-Jürgen Sasse (Köln)

Volume 204

René Dirven, Bruce Hawkins and Esra Sandikcioglu (eds.)

Language and Ideology
Volume I: Theoretical cognitive approaches

LANGUAGE AND IDEOLOGY

VOLUME I: THEORETICAL
COGNITIVE APPROACHES

Edited by

RENÉ DIRVEN

University of Duisburg

BRUCE HAWKINS

Illinois State University

ESRA SANDIKCIOGLU

University of Duisburg

JOHN BENJAMINS PUBLISHING COMPANY
AMSTERDAM/PHILADELPHIA



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences — Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

Library of Congress Cataloging-in-Publication Data

Language and ideology / edited by René Dirven, Bruce Hawkins, Esra Sandikcioglu.

p. cm. -- (Amsterdam studies in the theory and history of linguistic science. Series IV, Current issues in linguistic theory, ISSN 0304-0763 ; v. 204)

Includes bibliographical references and index.

1. Language and languages--Philosophy. 2. Ideology. 3. Cognitive grammar. I. Dirven, René. II. Hawkins, Bruce Wayne, 1954-. III. Sandikcioglu, Esra. IV. Series.

P106.L314 2000

401--dc21

00-052965

Vol. I ISBN 90 272 3711 5 (Eur.) / 1 55619 730 6 (US)

CIP

© 2001 – John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. • P.O.Box 75577 • 1070 AN Amsterdam • The Netherlands

John Benjamins North America • P.O.Box 27519 • Philadelphia PA 19118-0519 • USA

Table of Contents

Incorporating Tensions: On the treatment of ideology in cognitive linguistics <i>Bruce Hawkins</i>	1
Language and Ideology: An interview with George Lakoff <i>Roberta Pires de Oliveira</i>	23
Pragmatism, Ideology and Embodiment: William James and the philosophical foundations of cognitive linguistics <i>Tim Rohrer</i>	49
Does Cognitive Linguistics Live up to its Name? <i>Bert Peeters</i>	83
Ideological Ground and Relevant Interpretation in a Cognitive Semantics <i>Peter Grundy and Yan Jiang</i>	107
Linguistic Dilemmas of Afrocentricity: The diaspora experience <i>Ali A. Mazrui and Alamin M. Mazrui</i>	141
Age/Gender Morphemes Inherit the Biases of their Underlying Dimensions <i>Harry Howard</i>	165
How Pervasive are Sexist Ideologies in Grammar? <i>Tore Nessel</i>	197
Cognitive Linguistics and the Marxist Approach to Ideology <i>Peter E. Jones</i>	227

Linguistics and Ideology in 19th and 20th Century Studies of Language <i>E. F. K. Koerner</i>	253
Cultural and Conceptual Relativism, Universalism and the Politics of Linguistics: Dilemmas of a would-be progressive linguistics <i>Christopher Hutton</i>	277
Index	297

Incorporating Tensions

On the Treatment of Ideology in Cognitive Linguistics

Bruce Hawkins

Illinois State University

Tension is an inevitable fact of human life. Tensions arise repeatedly in our professional lives as we encounter pragmatic circumstances which interfere with the realisation of our plans, ambitions and dreams. Tensions mount in our social lives as well, when acquaintances, friends and even loved ones fall short of our expectations for them. And in our most private moments, tensions may become almost overwhelming as we reflect on the differences between who we are and who we want to be. No matter where we go or what we do, we are guaranteed to encounter tension because human life is full of tension.

Tension is clearly among the most uncomfortable of human experiences. As a result, the most common response to tension is probably avoidance. The extreme discomfort of tension drives some of us to try to escape from it by ingesting drugs or alcohol or by engaging in some other form of self-abusive behaviour. Some among us are even driven by the tensions inherent in human life to attempt to take, and all too often succeed in taking our own lives. Most of us, however, learn to direct our lives productively in pursuit of acceptable measures of creature comfort while also attending to something we may call happiness or spiritual fulfilment. These are clearly important goals in themselves, but they undoubtedly constitute also viable means of escaping from short-term and long-term tensions.

It is important for us all to recognise that avoidance is not the only way to deal with tension. Tension can be engaged productively in ways that lead not to destructive behaviours but rather to growth. We see this productive

engagement of tension when a unified group of workers negotiates acceptable working arrangements with an employer whose primary concerns are to maximise profits and minimise costs. We see productive engagement of tension when a young woman convinces her boyfriend that she can sincerely love him without expressing her love for him through sexual intimacy. And we experience productive engagement of tension whenever we struggle successfully to make sense of something that has puzzled us, plagued us, or even haunted us.

This introduction highlights the experience of tension, because tension really lies at the heart of any study of ideology and our purpose in this volume is to introduce all researchers and linguists in general, and cognitive linguists in particular, to ideology as a relevant domain of linguistic inquiry. The disciplined study of ideology arises, at least in part, from the human experience of tension. Ideology is one of those human resources which, like language, generally remain outside the scope of human attention or reflection. Like language, an object of inquiry with which linguists are much more familiar, ideology is a phenomenon that humans experience every day, possibly even every waking hour, but generally pay no reflective attention to until problems arise. Most often, the problem is a matter of conflict arising from distinct ideologies having come into contact. Such circumstances lead directly to tensions, which in turn lead to efforts to resolve the tensions. These are the circumstances under which our attention becomes riveted on the phenomenon of ideology itself.

This volume presents a selected set of papers originally drafted for a theme session on “Language and Ideology”¹ at the 6th International Cognitive Linguistics Conference (ICLC 6) in Stockholm, Sweden. In effect, this volume constitutes an invitation to the reader to engage in disciplined reflection on language-related experiences of tension. We want linguists to recognise the practical utility of the disciplinary resources of cognitive linguistics for the study of the relationship between ideology and language. Furthermore, we want to invite cognitive linguists to apply their analytic skills and creativity in the search for useful insights into ideology and into the tensions that arise from ideological differences.

1. The participants in this theme session are indebted to René Dirven and Esra Sandikcioglu for their efforts in conceptualising, planning and organising the session.

At this initial juncture, it is important to acknowledge that this volume will undoubtedly raise more questions than it answers, and we not only accept this but recognise that it is entirely appropriate for a work of this kind. Our goal is not to close the book on the study of language and ideology. Quite to the contrary, we see our main purpose as being to open a discourse, ultimately cross-disciplinary in nature, on language and ideology. We hope that this discourse will continue productively for years. In our collective experience, cognitive linguistics has always proven to be open to explorations of language-related phenomena that other linguistic theories simply define outside their domain of inquiry.

With this volume, we invite cognitive linguists to welcome the study of ideology into the domain of inquiry for cognitive linguistics. In effect, this is an invitation for cognitive linguists to incorporate tension productively into their vision of language and its relation to human experience. The challenge we pose for cognitive linguists is really that of embracing tension. To respond to our invitation, cognitive linguists must acknowledge the tensions of everyday life, embrace them within the domain of inquiry of cognitive linguistics and, ultimately, seek to contribute to understanding not only the tensions themselves but also productive ways to deal with those tensions.

1. The incorporative spirit of cognitive linguistics

There is an incorporative spirit in cognitive linguistics (hereafter, CL) that sets it apart from many other contemporary approaches to linguistic theory. Critics of CL might see in this incorporative spirit a significant problem. Some might claim that it reflects an inability to define the domain of inquiry for linguistic theory in a sufficiently rigorous manner. Others might suggest that this incorporative spirit reflects an imperialist tendency among some of the major proponents of CL. To a certain degree at least, these may be valid concerns and proponents of CL would be wise to keep them in mind as they pursue their research interests within the incorporative (and, therefore, ever-changing) framework of CL. However, it is quite unlikely that many proponents of CL would abandon the framework just because of these concerns. The reason for this is that the incorporative spirit that pervades scholarship in CL reflects, more than anything else, a firmly held professional commitment

to examine, understand, and explain the entirety of the phenomenon we experience as human language.

The incorporative spirit of CL is readily apparent to almost anyone who has attended an International Cognitive Linguistics Conference or who may have surveyed the CL research in some other way. However, seldom (if ever) has the incorporative spirit of CL been articulated as explicitly and succinctly as it is in two brief passages quoted in this volume from two of the leading proponents of CL. When asked by Roberta Pires de Oliveira about the dynamic force unifying scholarship in CL, George Lakoff (Pires de Oliveira, This volume: 27) notes that it is

a passion for studying all of language from a cognitive perspective, a genuine feeling of mutual respect, a realisation that no one person is going to be able to think about everything or get everything right, and a commitment to building a co-operative and open scientific community.

In responding to Bert Peeters' critique of the self-proclaimed status of CL as a legitimately *cognitive* science, Ron Langacker (Peeters, This volume: 97) notes that

There has to be a large quantity of work that is specifically linguistic in nature, work that is specifically psychological or neurological, and work that tries to bring these together in one way or another. All are legitimate and important, requiring their own expertise, and they should all be welcomed for their contribution to what is an immense overall investigatory enterprise.

The incorporative spirit of CL is important to those of us who have contributed to this volume (and its companion volume, *Language and Ideology. Volume II: Descriptive Cognitive Approaches*) because it encourages us to believe that we can effect growth in CL such that it can incorporate questions and concerns about how language relates to ideology. Ideology has not been a focal concern for many linguists in recent years, at least in their disciplined reflections on human language. This is as true of proponents of CL, who tend to acknowledge the actual vastness of the domain of linguistic inquiry, as it is of proponents of other theoretical approaches in linguistics which pursue research agendas that may be considerably narrower. But linguists would be comfortable exercising their reflective and analytical skills on ideology if they were to endeavour to do so. After all, there are a number of significant ways in which ideology is akin to language. In this regard, let us turn our attention first to language.

Language is a resource that human beings use every day to make sense of their experiences and to facilitate productive interaction with each other. The average human being seems to be happiest with language when s/he can use it effectively and reasonably effortlessly to accomplish certain personal and/or social goals. For most human beings, stopping to think about language is a rather unpleasant activity that is most often engaged only when there has been some breakdown in the utility of language. As a result, the average human being generally fails to recognise and appreciate the intricacies and complexities of the various systems which human languages comprise. Linguists, on the other hand, study this resource that we call human language with the same fascination that drives an astronomer to gaze almost endlessly into the heavens and with the same passion that results in piles of crumpled up false starts at the feet of the poet in search of ever more powerful expressions of deep human emotions. The fact that most humans appeal regularly to language without stopping to think about it or appreciate it only enhances the linguist's fascination. Indeed, this fact is focal in raising the linguist's suspicion that language is not just a tool that humans use, but that it is, in certain significant ways, an integral part of human nature.

Now, let us consider ideology. As with language, human beings interact with ideology on a daily basis without stopping to think about it. Furthermore, ideology tends to become the focus of human attention only in problematic situations. In the case of ideology, these problems are often a matter of tensions that arise when people working from different ideological systems disagree in their perceptions of and behaviours toward particular experiences. At this point, the most profound similarity between language and ideology begins to come into focus. In considering issues such as Whorf's Linguistic Relativity Hypothesis, linguists have grown accustomed to seeing language as an organisational system which mediates the interactions of human beings with the world around them. Most scholars who attempt to study ideology and its effects on people would probably not balk at a characterisation of ideology also as an organisational system which mediates the interactions of human beings with the world around them. Indeed, the following passage (from the introductory chapter in *Language as Ideology*) suggests quite strongly that Hodge and Kress (1993: 6) would agree with this assertion:

... language, typically, is immersed in the ongoing life of a society, as the practical consciousness of that society. This consciousness is inevitably a partial and false consciousness. We can call it ideology, defining 'ideology' as a systematic body of ideas, organized from a particular point of view. Ideology is thus a subsuming category which includes sciences and metaphysics, as well as political ideologies of various kinds, without implying anything about their status and reliability as guides to reality.

And so, we reach a point at which we are faced with the fundamental question "What is the relationship between language and ideology?"

In a way, this question is a driving influence behind each paper in this volume. However, the reader must not expect this set of papers to answer the question as I have posed it. Indeed, one thing that the reader will definitely find in this volume is evidence that the question I have posed is actually somewhat ill-formed. That is, the question above suggests that there is a single, unitary relationship between language and ideology to be discovered and explained. However, the papers presented here indicate clearly that language and ideology interact in a number of different ways.

2. Tension and ideology

With the purpose of this volume being to encourage other linguists to join us in the pursuit of knowledge about the varied relationships that language bears to ideology, it is not sufficient for us simply to pique the reader's interest in this particular domain of linguistic inquiry. Precisely because this particular domain of inquiry is largely unfamiliar to most contemporary linguists, it is also incumbent upon us to provide interested readers with at least two key resources needed to begin engaging ideology as an object of linguistic inquiry. Minimally, we must suggest how the reader can go about looking for this unfamiliar object of study and how to recognise it once it has been encountered. In other words, we need to introduce a reasonably reliable discovery procedure for ideology and a reasonably satisfactory preliminary characterisation of ideology.

Let us begin with the less challenging of the two tasks: introducing a practical discovery procedure for ideology. It isn't easy to go looking for ideologies, but the problem is not really that ideologies are hard to find. Indeed, the problem is quite the opposite. That is, ideologies are so ubiquitous,

so omnipresent that they are incredibly easy to overlook. There may be a number of useful ways to resolve the problem of overlooking ideologies, but at this juncture, I can suggest only one. The key to the approach I will suggest lies in the co-occurrence relationship that we have already recognised between tension and ideology. While we may not perceive the ideological systems that impact on our daily lives, it is generally quite difficult to ignore the tensions brought on by the impact of ideology. Thus, the perception of tension can be considered a reasonably viable candidate for the discovery procedure we need.

Before we can be satisfied with perception of tension as our discovery procedure for ideology, however, we must seriously consider how reliable tension is as an indicator of ideological differences. It is undoubtedly true that not all tensions arise as a result of ideological differences. Some tensions may arise from imminent danger brought on by a natural disaster, as would be the case if a person were to find him/herself directly in the path of a rapidly moving tornado. Other tensions can arise from chemical imbalances in the brain, as in cases of abnormally high serotonin re-uptake. I suggest, however, that it is reasonably safe to conclude that many (if not most or all) of the tensions that arise in interpersonal and social settings are the result of ideological differences. Furthermore, it is probably also true that most circumstances involving ideological differences will result in some perceivable experience of tension. Thus, while perception of tension is not, by any means, a failsafe indicator of ideologies at work, it can definitely be considered reasonably reliable. In other words, when our intention is to study ideology in any way, we can set out in search of the human experience of tension. Especially if the perceived tension appears to be attributable to interpersonal or social variables in the particular situation, it is reasonable to hypothesise that the tensions perceived arise from ideological differences.

At this point, we can begin developing the preliminary characterisation of ideology that any scholar will need in order to successfully identify this focal phenomenon. Given the observation that tensions can arise as the overt manifestation of ideological differences, it seems reasonable to begin our quest for a satisfactory working characterisation of “ideology” by considering what it is about ideology that can give rise to tensions. We have seen that tension can arise from imminent danger or from chemical imbalances. Tensions can also arise whenever an experience is not consistent with a person’s expectation for that experience. I suggest that such tensions are

quite often (but not always) the result of ideological differences. When a person's expectations for the experience are driven by one ideological system and the actual nature of the experience is shaped, controlled or otherwise determined by a different ideological system, the experience is almost guaranteed to cause tension for the person whose expectations are violated. We can begin, then, with the characterisation of ideology as a system of ideas that shape experiences and/or expectations for experiences.

While this may appear to be a quick and dirty characterisation of "ideology", the unfortunate fact is that there appears to be no clear consensus on exactly what ideology is. In this regard, the introductory section of E. F. K. Koerner's contribution to this volume ("Linguistics and ideology in the study of language") provides a brief but useful overview of the problem. Koerner notes that the term "ideology" seems to have become quite fashionable in linguistics, but few of the scholars who invoke the term seem to take the trouble to clarify what they intend the word to mean. Koerner informs us that the French term 'idéologie' originally referred to "nothing more than a theory of ideas." In contemporary discourses, the most common application of the term "ideology" appeals to the Marxist sense, which Koerner characterises as "a false consciousness that is contradicted by the reality found in everyday material life" (p. 254).

The only paper in this volume which explicitly appeals to Marxist theory is Peter E. Jones' "Cognitive linguistics and the Marxist approach to ideology." Therein, Jones characterises the Marxist perspective on ideology as:

the reflection in ideas of the material interests of a ruling class, a reflection in which the outward appearances of the economic forms expressing those interests are seen and presented in mystified fashion as naturalised, as the product of 'human nature' (in our genes, perhaps), as eternally valid, universal 'civilised values' (p. 236).

Jones also tells us that "[a]n ideological view, such as bourgeois ideology, is a view of society from the standpoint of a particular social class acting in accordance with its own interests" (p. 235).

Undoubtedly, this Marxist perspective on ideology will seem rather foreign to most cognitive linguists. More easily comprehended will be a pair of characterisations offered by George Lakoff in the interview conducted by Roberta Pires de Oliveira. First, Lakoff notes that "[i]deologies tell you what is right and wrong and hence are comprised to a

considerable extent by moral conceptual systems. Moral systems do not arise from ideologies; they are a part of what constitutes ideologies” (p. 34). Later, Lakoff offers a more direct characterisation of “ideology” from the perspective of a cognitive scientist:

Any ideology is a conceptual system of a particular kind, including a moral system. However, ideologies have both conscious and unconscious aspects. If you ask someone with a political ideology what she believes, she will give a list of beliefs and perhaps some generalisations. A cognitive linguist, looking at what she says, will most likely pick out unconscious frames and metaphors lying behind her conscious beliefs. To me, that is the interesting part of ideologies — the hidden, unconscious part. It is there that cognitive linguists have a contribution to make (p. 37).

At this point, some might be inclined to begin weighing each characterisation presented above against the others. Our analytic instincts might lead us to examine the differences between these characterisations so as to determine whether they are reconcilable. I want to caution the reader against falling into such a trap at this preliminary point. It is unnecessary for our present purposes. Recall that our sole purpose for considering characterisations of ideology at this preliminary juncture is to help the reader recognise the phenomenon when s/he encounters it. From this perspective, it is not necessary for us to diagnose or reconcile any significant differences that might exist between the variant characterisations of “ideology.” It is only necessary that these characterisation be available and possibly useful to us in our attempts to recognise ideologies at work.

Recall also that our ultimate goal in this volume is to open a cross-disciplinary discourse on the varied relationships that language bears to ideology. Given this goal, disciplinary differences of perspective are to be expected and must be respected. Consequently, we must remember to control all discipline-based instincts to dismiss perspectives which may seem difficult to reconcile within systems of understanding with which we have become comfortable. The problem we face, in this regard, is indeed an ideological problem. We must not allow ideological differences (in the form of distinct disciplinary approaches or understandings) to obscure our attempts to understand ideology itself. Indeed, we must celebrate such differences and reflect carefully on them.

3. Tensions abound

In discussing the conventionalised metaphorical concept ARGUMENT IS WAR, Lakoff and Johnson (1980: 4–5) briefly entertain an alternative that merits our serious consideration in trying to establish a viable frame for cross-disciplinary discourse on language and ideology.

Imagine a culture where an argument is viewed as a dance, the participants are seen as performers, and the goal is to perform in a balanced and aesthetically pleasing way. In such a culture, people would view arguments differently, experience them differently, and talk about them differently.

In effect, our objective in this volume is to acknowledge discursive tensions and engage them productively in a co-operative dynamic like that of a dance rather than in the combative, oppositional manner of war. Such a tone is effectively set for this volume in Roberta Pires de Oliveira's interview with George Lakoff. The interview is really a careful, polite textual dance between two scholars who manifest different ideological commitments in the scholarly perspectives on language and ideology. Pires de Oliveira and Lakoff really view language differently, and they seem to view ideology differently, as well. These differences are, at least in part, a function of their different disciplinary perspectives on these phenomena. In this regard, this paper provides a perfect point of entrance into this volume. It demonstrates the value of engaging in serious, disciplinary reflection on tensions and incorporating those reflections in a linguistic theory. There are numerous junctures throughout the interview where Lakoff and Pires de Oliveira are at odds. They engage this tension by engaging each other respectfully and they ultimately arrive at a very important consensus. They agree that "describing our common metaphors is not only a way of making ourselves aware of ideologies, but also a way of combating them." (p. 42)

There is a significant tension deriving from basing oneself firmly in a particular disciplinary tradition while engaging in discourse with a scholar from a different disciplinary tradition. Lakoff repeatedly feels compelled to remind Pires de Oliveira of his commitment to science and to linguistics as a cognitive science. Lakoff makes it clear that he views language as a cognitive system, while Pires de Oliveira repeatedly reveals her commitment to seeing language as a social institution. Pires de Oliveira's perspective may be unfamiliar to many cognitive linguists, but it is quite familiar to contemporary

scholars in the humanities. Pires de Oliveira repeatedly reveals that she is more firmly based in a critical perspective on language. She does so in drawing Lakoff's annoyance with the suggestion that cognitive linguistics pays insufficient attention to historical analyses of relevant linguistic-semantic phenomena. Another manifestation of this same problem arises when Pires de Oliveira interprets as prescriptive statements that Lakoff intends as purely descriptive.

Despite the obvious tensions, the Lakoff/Pires de Oliveira discourse neither breaks down nor degenerates into all-too-common forms of academic name-calling. To be sure, there are points at which Lakoff enters into a mode of academic dismissiveness that is antithetical to the co-operative engagement that we are seeking here. This is apparent in his response to Max Black, claiming to "have no interest in what Black was doing" (p. 24) as well as in his dismissive categorisation of Anna Wierzbicka: "I do not consider her a cognitive linguist at all" (p. 29). But these are rare departures from the incorporative tone that Lakoff endorses throughout the majority of this interview. Indeed, in characterising his own intellectual commitments, Lakoff notes that "I am always trying to integrate everything within CL" (p. 25). Most recently, Lakoff has been expressing this commitment through development of what he calls the Neural Theory of Language. In this regard, Lakoff explicitly expresses his hope that "the Neural Theory of Grammar will be a unifying force, since it will provide a common vocabulary for all the different strands" of CL (p. 27).

In "Pragmatism, ideology and embodiment: William James and the philosophical foundations of cognitive linguistics", Tim Rohrer proposes to solidify the philosophical foundations of CL by adopting a pragmatic centred philosophy inspired by the work of William James. Rohrer does not call into question the embodied realism foundations of CL (cf. Lakoff and Johnson 1980, 1999; Lakoff 1987; Johnson 1987), which consistently set CL apart from traditional linguistic theories grounded in objectivist assumptions about reality and truth and the Aristotelian model of classical category structure. Rohrer's intention, rather, is clearly to bolster the CL challenge to these more traditional linguistic theories by arguing for an integration between embodied realism and James' pragmatic approach.

Rohrer opens his paper by calling attention, in a prefatory note, to a distinction that is important for us to bear in mind as we explore ways to incorporate the study of ideology into our work in cognitive linguistics. "Put

in a pithy nutshell, this is the distinction between thinking about the cognitive linguistics of ideology on one hand and the ideology of cognitive linguistics on the other" (p. 49). Rohrer's focus in this paper is on the latter. He argues "that cognitive linguistics could do no better than adopting James' definition of the pragmatic method as its ideological motto" (p. 77). This leads to Rohrer's ultimate conclusion that his pragmatic centred philosophy should become a fundamental plank in the ideology of cognitive linguistics.

Rohrer's argument requires him to discuss at some length the pragmatic method that William James introduced into the discourse of metaphysics. It is in this discussion that the focal dimension of tension in this paper is found. It arises most concretely in James' account of a rather heated disagreement that he was asked to resolve. The disagreement concerned an apparently simple matter of how to characterise a spatial relationship involving a squirrel, a man, and a tree which the squirrel carefully and strategically keeps between itself and the man, no matter which way the latter moves. The focal question in the disagreement was whether or not the man can be said to go around the squirrel.

James used discussion of this incident to introduce the pragmatic method that has inspired Rohrer's proposal. Rohrer's discussion of the incident calls attention to the role of frames of reference in structuring human discourse. When interlocutors share a frame of reference, mutual understanding is facilitated. However, tensions can arise when interlocutors appeal to distinct frames of reference in conceptualising and describing a particular experience. James notes that this is precisely what happens in the squirrel episode. One interpretation, grounded in a *geocentric* frame of reference, yields the conclusion that the man goes around the squirrel by passing from north of the squirrel to east then south then west of the squirrel before again reaching a point north of the squirrel. In contrast, a different interpretation with the squirrel as the focal object recognises that the man never passes from in front of the squirrel around one side to behind the squirrel and then around the other side to in front of the squirrel again. This *object-centred* frame of reference leads to the conclusion that the man did not go around the squirrel.

As is the case with Lakoff and Johnson's theory of conceptual metaphor, the frames of reference problem from James illustrates how the communicative and social aspects of language are often deeply intertwined with cognition and problem-solving. Rohrer shows how linguistic data on

frames of reference can be synthesised with evidence on problem-solving from cognitive psychology, cognitive anthropology, neurology and neurosciences. This synthesis can lead not only to new lines of research within cognitive linguistics but also new hypotheses within sister disciplines to linguistics — something which Rohrer underscores by emphasising that cognitive linguistics should be both a speaking and a listening member of the family of disciplines known collectively as cognitive science. He develops a multi-levelled theoretic framework as a philosophically principled approach to integrating the evidence from cognitive linguistics with evidence from other disciplines within cognitive science. Because this theoretic framework has an emphasis on encompassing both disciplines (such as anthropology) that typically view language as primarily a communicative and social institution as well as those others which view language as a matter of cognition and/or neural activity, it aims squarely to assuage one of the tensions in the Lakoff interview with Pires de Oliveira. Thus, Rohrer's real concern is to offer a principled manner whereby these disciplines may be put into dialogues that yield new insights — and insights which can serve to advance not only an academic discipline, but often some pragmatic human good.

In raising and exploring the question “Does Cognitive Linguistics live up to its name?” Bert Peeters brings into focus a number of relevant dimensions of tension. For many adherents and students of cognitive linguistics, perhaps the most salient dimension of tension is the one Peeters brings on simply by raising the question. We learn very early on that this was not unintended. “I do realise that [this question] ... is likely to raise many eyebrows. Those who are twitching should recall that the Cognitive Linguistics movement as we know it today was born out of polemical opposition to Chomskyan linguistics. Cognitive Linguists, therefore, ought to be able to handle a bit of polemical opposition directed at themselves” (p. 85).

In effect, Peeters wants cognitive linguists to recognise and acknowledge that they have been embroiled in an ideological battle since even before the term “cognitive linguistics” was applied to the work that now parades behind that banner. Anyone who might doubt the truth of this claim needs only to consult Langacker 1982, which must be acknowledged as one of the most important precursors of the cognitive linguistics movement. In that paper's introductory section, entitled “Orientation”, Langacker introduces what was then called “Space Grammar” by carefully articulating seven

crucial dimensions of difference between “the Transformational Archetype” and “the Space Grammar Alternative”.

Peeters’ ultimate purpose in this paper is not to make cognitive linguists uncomfortable with the label they have applied to themselves. Rather, his purpose is really to call attention to another relevant dimension of tension in this situation: that existing between the label “cognitive linguistics” and the array of work that constitutes the conventional referent of that term. Noting that work in cognitive linguistics is not really integrated in or even well recognised by the cognitive science community at large, Peeters suggests that cognitive linguists (at least *some* cognitive linguists) must embrace (and ultimately conduct) more scientific work of the sort that truly merits the descriptor “cognitive.” Peeters suggests that the label “cognitive linguistics” may have become a linguistic weapon in an ideological battle against Chomskyan linguistics. “In other words, what had been ... a collocation like any other one [i.e., “cognitive linguistics”], gained the status of a proper name, an ideological label rather than a purely descriptive one, chosen in order to gain legitimacy, and to outdo other cognitivists” (p. 91). In this regard, Peeters notes that adherents to the Transformational Archetype “have more than once expressed their annoyance regarding what they see as the ‘misappropriation’ of the term by Cognitive Linguists” (p. 84). Peeters concludes by noting that “Cognitive Linguists must combat the widespread feeling out there that all they are good at is prototype theory, conceptual metaphor, blending and other such phenomena (i.e. psychological reality). The best way to combat that feeling is by shifting attention to other (neuro-cognitive) issues, but without neglecting the (analytical) work that has rightly turned Cognitive Linguistics into a force to be reckoned with” (p. 103).

While the papers by Rohrer and Peeters focus primarily on the ideology of cognitive linguistics, Peter Grundy and Yan Jiang focus squarely on the cognitive linguistics of ideology. In “Ideological ground and relevant interpretation in a cognitive semantics”, Grundy and Jiang examine the role that ideology plays in the meaning derived from a particular text. Their analysis focuses on the interpretation of President Clinton’s statement, “Even Presidents have private lives”, made during an address broadcast on American television a few hours after his 18 August 1998 grand jury testimony on the Monica Lewinsky affair. While this statement does not articulate explicitly an ideological position, Grundy and Jiang claim that its interpretation is determined relative to an ideological position which is an implicit part

of the grounding context. Grundy and Jiang recognise that the grounding context relative to which any text is interpreted has a significant ideological dimension, and they “show how the figure/ground gestalt enables discourse to be interpreted in relation to the background ideological context in which it occurs” (p. 107).

In constructing their argument, Grundy and Jiang adopt Fauconnier’s mental spaces framework of semantic analysis. They suggest that the assertion “Presidents have private lives” amounts to a linguistic figure in Focus space. The impact of “even” is to create a Viewpoint space which includes, crucially, a scale of privacy with public figures like the President at the low-privacy extreme and anonymous private citizens at the opposite extreme. They ultimately conclude “that mental space constructions neatly allow for the construction of linguistic figure in Focus space and contextual ground in Viewpoint space. In doing this, we demonstrate how mental space representations are uniquely able to represent in a single account phenomena treated counter-intuitively (and certainly non-cognitively) as either semantic or pragmatic in other theories” (p. 137).

Tension abounds in the pragmatic context which gave rise to Clinton’s “Even Presidents have private lives”. The Starr legal team was probing into the private life of a sitting President for information which would at least prove embarrassing to the President and could ruin not only his Presidency but also his marriage. Observers of Clinton’s televised address clearly recognised that the President was also on the attack — against a special prosecutor that he perceived to be overstepping his bounds in order to conduct a witch-hunt. The privacy scale that Grundy and Jiang posit introduces another dimension of tension that Clinton may have been experiencing. This tension derives from anyone’s need for a private life. While those of us with lives at the high-privacy extreme may sometimes experience tension from not being noticed for our accomplishments, we generally appreciate being able to close the door on public scrutiny. Those at the low-privacy extreme suffer from being noticed even when they would prefer not to be. This applies not only to public figures like President Clinton and Michael Jordan, but also to people like Richard Jewell, Susan Smith, and Darva Conger who suddenly find themselves cast into the bright lights of public scrutiny. The tensions brought on by low-privacy existence are especially obvious in these cases.

In “Linguistic dilemmas of Afrocentricity: the diaspora experience”, Ali A. Mazrui and Alamin M. Mazrui develop further *the cognitive linguistics of*

ideology by exploring questions concerning the role that the English language has played and continues to play in the evolution and dissemination of two ideologies of race consciousness: Afrocentricity and Pan-Africanism. “Afrocentricity is a view of the world which puts Africa at the centre of global concerns and idealises its role in human affairs Pan-Africanism, on the other hand, is a doctrine or movement which believes in the common destiny of African peoples and seeks to unite them politically, economically and culturally. Whereas Afrocentricity regards Africa as a cultural complex in the widest sense of the word and is inspired by the idiom of Black dignity, Pan-Africanism sees the continent primarily as a political entity and its idiom draws heavily on the spirit of solidarity” (p. 143).

Tensions come powerfully to the fore in this paper. Underlying the Mazruis’ work, of course, is the fundamental dimension of racist tension brought on by centuries of European colonialism in Africa and the concomitant systematic oppression of people of African descent. The Mazruis’ focus in this paper, however, is not on the history of victimisation, but rather on the role of Afrocentric and Pan-African ideologies in efforts “to restore the pride and confidence of Black people in their own African heritage” (p. 157). The most central dimension of tension in this paper is a function of the fact that English has become both a powerfully negative and a powerfully positive instrument in the development of Pan-African unity. Historically, English has been the primary linguistic instrument of African oppression. However, the Mazruis note that “[e]ven as they seek to transform it, ... English has continued to serve as the main medium of Afrocentric counter-discourse” (p. 148).

The Mazruis examine the reappropriation of both English and Kiswahili in efforts to forge an idiom that will enhance Pan-African unity while it combats “a heritage of metaphors and imagery ... that has invested Black identity with negative meanings and undervalued their place in world history” (p. 142). The Mazruis acknowledge that this results in an “uneasy balance between English and Kiswahili” and conclude that this linguistic tension poses for Afrocentrists and Pan-Africanists the challenge of continuing to work toward a truly independent discourse.

Harry Howard’s contribution to this volume provides one concrete example of how a linguist can respond to Bert Peeters’ call for a truly *cognitive* linguistics. In “Age/gender morphemes inherit the biases of their underlying dimensions”, Howard analyses the conceptual foundations upon

which social biases and prejudices are built. He offers a neurologically inspired theory of the manifestation of biases in the morpho-lexical coding of age/gender contrasts in English, Spanish and, presumably, other languages. Howard ultimately forwards the hypothesis that “there is something about the child’s cognitive system that leads it to expect to find the linguistic system — if not the cultural system — to be biased towards men” (p. 187). In effect, Howard’s paper raises the nature-nurture issue with respect to the development of the value systems we recognise as ideologies. His work gives a clear picture of the development of conceptual hierarchies which are of crucial importance in the construction of ideological value systems. Howard suggests that inherent markedness relations set the cognitive stage for well-documented social biases. “In terms of language acquisition, the claim is that the unmarked nature of ADULT and MASCULINE on the corresponding dimensions of AGE and GENDER facilitates the acquisition of the morphemes that show age/gender bias in this direction” (p. 165).

There is a fascinating layering of tensions that emerges from Howard’s paper. Most apparent from the outset are the social tensions that inevitably arise from any form of bias. Presumably, Howard’s work is motivated, at least in part, by the need to explain the sources of such social tensions. In hypothesising that the human nervous system is partly responsible by imposing already biased representations on certain dimensions of human experience, including age and gender differences, Howard brings some deeper levels of tension into focus. First, there is the tension arising from the fact that the representations are not iconic (or homomorphic) with the experiences they represent. The strategic choice of the term “imposing” to describe how the mind comes to associate representations with corresponding experiences clearly reveals that there is a relevant dimension of cognitive tension in any representation relationship. In his closing discussion, Howard acknowledges yet another level of tension that he expects to arise from the reader’s negative response to his central claim. He predicts that “the reader may be tempted to come away from this paper with a feeling of pessimism about the possibility of ever achieving a bias-free society, since bias appears to be an inescapable ingredient of human cognition” (p. 192).

In his contribution to this volume, Tore Nessel poses the question “How pervasive are sexist ideologies in grammar?” Nessel’s approach to answering this question involves a meticulous cognitive linguistic analysis of the semantic structure of the Russian *a*-declension noun class. Nessel sets the

stage for his analysis by first dismissing the traditional assumption that “inflectional classes are purely grammatical entities devoid of semantic structure” (p. 197). Nessel’s semantic analysis of this noun class takes the form of a radial category which comprises three key schemata which he refers to as (1) the [FAMILIARITY] schema; (2) the [MARGINALITY] schema; and (3) the [NON-PROTOTYPICALITY] schema. Nessel’s discussion clearly reveals that the sexist myths of *women as the second sex*, *woman as Madonna and whore*, and *woman’s place is in the home* play pivotal roles in the structure of this radial category.

Like that of Howard, Nessel’s work seems to be driven by concerns about the tensions that arise from biased representations of women and men. In elaborating his analysis, Nessel calls attention to a significant source of the tension brought on by ideologies: the role of conceptual hierarchies in imposing positive and negative evaluations on experience. Appealing to a scalar construct quite similar in significant ways to the one posited by Grundy and Jiang, Nessel shows how such hierarchies become resources for conventionalising negative evaluations of female-oriented experiences. Ultimately, Nessel’s discussion leads us to conclude that sexism in language is clearly not only extremely pervasive as current research shows again and again, but also much more deeply entrenched than previous research has indicated.

In “Cognitive linguistics and the Marxist approach to ideology”, Peter Jones explores the possibilities for and difficulties of establishing a cross-disciplinary discourse through which CL and Marxist critical theory could jointly contribute to growth in our understanding of ideology and its varied interactions with language. Jones’ point of departure for this exploration is the claim that “the identification, analysis, and critique of the ideological requires a social theory (explicit or implicit) within which the complex interconnections between ideas (or ‘discourse’ in more fashionable recent parlance) and other aspects of social practice within the social whole can be understood” (p. 227). This assertion leads Jones to pose a series of questions about cognitive linguistics: “where does Cognitive Linguistics stand on the question of social theory? What is the relationship between the social theory (or theories) espoused by CL and Marxism? And what if CL and Marxist social theory conflict? Does that mean that there is no basis for dialogue between these two theoretical systems?” (p. 227).

The central question that Jones confronts in this paper is “what social theory informs cognitive linguistic treatments of ideology?” (p. 237).

In addressing this question, Jones offers a rather long, carefully articulated discussion (resulting from rigorous reviews from readers and editors and energetic revisions by the author.) It is in this discussion that most readers will encounter the focal dimension of tension in this paper. Jones applies the critical theorists' methodology of rereading to construct inferentially the social theory implicit in CL. The interpretation that Jones arrives at through this process clearly reflects the materialist frame of reference characteristic of the Marxist approach to ideology. I predict that some cognitive linguists will respond with a pre-emptive dismissiveness. This is precisely the response that I got from a small handful of colleagues at ICLC 4 in Albuquerque immediately after I delivered a paper entitled "The social dimension of a cognitive grammar" (cf. Liebert, Redeker and Waugh 1997: 21–36).

But there are a number of good reasons to conclude that a dismissive response would be an inappropriate response. First, there is the general goal of this volume to open up a respectful cross-disciplinary discourse on issues of language and ideology. Jones repeatedly indicates that he is trying to engage exactly such a discourse. Second, it must be noted that the discursive tension Jones brings to the reader grounded in CL is a direct result of the frame of reference problem raised in Rohrer's paper. That is, while Jones grounds his discussion in a materialist frame of reference, cognitive linguists are generally not familiar with this frame of reference and will appeal, instead, to a frame of reference which attends (almost?) exclusively to cognitive dimensions of human language. Finally, and most directly to the point of Jones' work, it is not difficult to construct a good argument for why CL indeed needs a social theory. If, for example, we accept the plausibility of the ideological ground that Grundy and Jiang posit, we will ultimately recognise the need for a social theory. Relevant dimensions of the ideological ground can only be explained with reference to a social theory. This is precisely what Jones is proffering amid the discursive tensions. It behooves cognitive linguists to engage those tensions and begin exploring the nature of the social theory needed to explain the ideological ground and other linguistically significant social variables.

Very early on in "Linguistics and ideology in the study of language", E. F. K. Koerner explicitly calls attention to a significant factor that distinguishes his paper from all other contributions to this volume (with the possible exception of Peeters). "I am not talking about *language* and ideology, but about *linguistics* and ideology, i.e., my focus is not on the use

or abuse of language in the promotion of particular ideas or actions, but on specific, conscious or subconscious underpinnings of arguments made or maintained within the science of language, i.e., the field of linguistics, which is often presumed to be guided only by value-free scientific principles in the search of truth" (p. 254).

Koerner demonstrates that linguistics always has been conducted in particular pragmatic sociopolitical contexts, and ideological factors within those contexts can and do have impact on the course of linguistic inquiry. He provides three distinct illustrations of ideology in linguistics: (1) mother tongue studies; (2) linguistic typology; and (3) the search for the original Indo-European homeland. He does not focus on contemporary theories such as generative linguistics and cognitive linguistics, but warns that these too may not be as objective and value free as proponents want them to be.

Although political tensions clearly come to the fore in Koerner's discussion, the focal tension in this paper is that between the value free ideal of science and the pragmatic realities which can compromise this ideal in particular instances of linguistic inquiry. As Koerner notes in closing, "the field must learn to accept that linguistics, past and present, has never been 'value free', but has often been subject to a variety of external influences and opinions, not all of them beneficial to either the discipline itself or the society that sustains it. In the final analysis, it comes to a matter of *prise de conscience* and of intellectual honesty and responsibility that linguists must become aware of the possible uses and abuses to which their research posture and their findings have been and could be put" (p. 269).

Christopher M. Hutton closes out this volume with a wide-ranging tour de force which examines, from a number of perspectives, the reductionist tension inherent in language. Hutton opens "Cultural and conceptual relativism, universalism and the politics of linguistics" with Whorf's 'empty drum' example, which he uses adeptly in "illustrat[ing] how the linguistic 'map' is much simpler than the 'territory'...." (p. 278). Whorf observed that the reductive image created by the fuzzy descriptor "empty" leads to behaviours that are not dangerous of liquids, but very dangerous of gases, and can have catastrophic consequences. From there, Hutton moves on to a set of observations which should remind cognitive linguists of the contributions of General Semantics in providing therapeutic awareness of how language constructs the world for us. One example cited by Hutton is the powerfully constraining reductionism of common generalising definitional statements such as "John

is a criminal". General Semanticists have argued for more directly individualising descriptive statements like "John committed the crime of theft".

Probably the most powerful plank in Hutton's argument highlights an underlying tension, similar to that driving the paper by Mazrui and Mazrui, between native American cultures seeking to maintain or re-establish their legitimacy and a Eurocentric ideology that has systematically defined them as primitives and savages. Hutton counters these oppressive definitions by arguing that non-Western languages, ranging from Hopi to Chinese, are less susceptible to the reductionist tensions of language than is Standard Average European. He points out that English (and Western languages in general) construct a dualistic world while native American and Eastern languages tend more toward multivalued representations of the world. Hutton ultimately concludes that "[t]he history of modern linguistics ... is coextensive with that of high colonialism and inextricably tied to it. Linguistics as a mapping enterprise can be seen as no less an expression of the obsession of the colonial power/knowledge nexus than imperial geography, anthropology and law. From this point of view, linguistic analysis is intrinsically invasive and transforming in the encounter with 'the other'" (p. 291).

Hutton's discussion provides an effective means of rounding out the treatment of language and ideology in this volume. First, it helps the reader understand what Hodge and Kress had in mind when they gave their book the title *Language as Ideology*. The organisational systems of language constitute an ideology which shapes our interactions with the world around and within us. Second, and possibly more importantly, Hutton really helps call attention to the need for cognitive linguists not to be silent on issues relating to ideology. In the middle of the paper, Hutton critically examines the analysis presented in Lakoff 1996 and takes that as representative of the CL position on ideological issues. My response to this was much the same as to Jones' inferential construction of a social theory for CL. We definitely need to be careful in ascribing to CL in general the ideological characteristics apparent in Lakoff's work (or that of any individual scholar in cognitive linguistics). But cognitive linguists must recognise that they will remain susceptible to such possibly problematic interpretations of the ideology of CL as long as any individual proponent remains the only voice on ideological issues. This is the basis of our invitation in this volume to incorporate tensions into the domain of inquiry for CL. By doing so, cognitive linguists

will be able to acknowledge, reflect on and ultimately explain ideology as a relevant variable in any comprehensive linguistic theory.

In conclusion, also speaking on behalf of my co-editors and organisers of the theme session on “Language and Ideology”, I extend our deepest thanks to those whose help was invaluable to us both in preparing the theme session and the proceedings. We are highly indebted to the international panel of anonymous reviewers who have provided criticisms and suggestions in their area of expertise. We would like to express our gratitude in particular to: Antonio Barcelona, Per Aage Brandt, Francisco J. Ruiz de Mendoza, Peter Grundy, Bruce Hawkins, Harry Howard, Christopher Hutton, David Kronenfeld, Pamela Morgan, Martin Pütz, Tim Rohrer, Lewis Sego, John Taylor, Ruth Wodak. We would also like to express our gratitude to Harry Howard for designing and maintaining a website including the theme session abstracts and papers. We are especially grateful to Birgit Smieja, whose diligence and productivity have gone way beyond formatting. Finally, we would like to thank Anke de Looper from John Benjamins Publishers for her immediate and efficient answers to all possible little and bigger problems.

References

- Hodge, Robert and Kress, Gunther. 1993. *Language as Ideology* (2nd edition). London: Routledge.
- Johnson, Mark. 1987. *The Body in the Mind: The bodily basis of meaning, imagination, and reason*. Chicago: The University of Chicago Press.
- Lakoff, George. 1987. *Women, Fire and Dangerous Things*. Chicago: The University of Chicago Press.
- . 1996. *Moral Politics: What conservatives know that Liberals don't*. Chicago: The University of Chicago Press.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors We Live by*. Chicago: The University of Chicago Press.
- . 1999. *Philosophy in the Flesh: The embodied mind and its challenge to western thought*. Chicago: University of Chicago Press.
- Langacker, Ronald W. 1982. “Space Grammar, analysability, and the English passive”. *Language* 58: 22–80.
- Liebert, Wolf-Andreas, Redeker, Gisela and Waugh, Linda (eds). 1997. *Discourse and Perspective in Cognitive Linguistics*. Amsterdam and Philadelphia: John Benjamins.

Language and Ideology

An interview with George Lakoff

Roberta Pires de Oliveira

Universidade Federal de Santa Catarina, Brazil

1. Preface

This is a second interview with George Lakoff, whom we thank for the opportunity of clarifying some issues concerning the theme “language and ideology”, which was not the focus of our first interview. This new interview started with René Dirven’s suggestion of a re-edition of the 1998 interview, reformulated in such a way that the theme of the present book, “language and ideology”, would be highlighted. However, going through it, I realised the need for deeper explanations. Meanwhile the contributors to this volume read it, and some of them contributed topics to this new interview, sending me their own doubts and comments. Some Brazilian researchers have also contributed in the same way. Thus, the present interview brings together many voices. Some relevant fragments of the 1998 interview are here republished as a guide to the reader, since they are the background of the present interview. The new questions were answered by e-mail. Perhaps a face-to-face dialogue would have been better, but e-mails turned out to be the only possible vehicle of communication.

My gratitude to all those who have helped. My special acknowledgement to René Dirven, without whom this new interview would not be, to Esra Sandikcioglu, who was my link with the other participants, and to Robson de Souza Bittencourt, who provided support at all steps of this new interview. The organisation, and the final form are my own responsibility.

To George Lakoff, I want to express my deepest gratitude for agreeing to be interviewed and for his democratic way of being. I also want to express my apologies to him for my stubbornness at certain points in the interview.

2. Lakoff's contribution to the cognitive paradigm

R: When *Metaphors We Live By* (Lakoff and Johnson 1980) appeared, there was a favourable environment for the study of metaphor. Ortony's first edition of *Metaphor and Thought* was published in 1979. The philosophical rebirth of metaphor may, however, be drawn back to I. A. Richards (1936) and Max Black (1962, first published 1954) in the 50s. To what extent does cognitive semantics owe to the whole atmosphere which emerged from the refutation of the Logical Positivist approach to metaphor?

L: I had read Black and I had no interest in what Black was doing. Black had accepted the basic tenets of analytic philosophy and he saw metaphor as external to ordinary everyday language and meaning, which was the heart of what I was interested in. Mark Johnson had studied with Paul Ricoeur. So he knew the Ricoeur tradition and the continental tradition and had come to the conclusion, through working with Ricoeur, that metaphor was central to thought.¹ But I wasn't at all influenced by that tradition. What influenced me was the discovery that ordinary everyday thought and language, and especially ordinary everyday thought, is structured metaphorically. It followed that the correspondence theory of truth and analytic philosophy in general was fundamentally mistaken. That was the major discovery. Max Black, as an analytic philosopher, hated that. He wrote a review of our book and he thought it was an awful book. If he was to maintain his fundamental philosophical assumptions, he *had* to believe that (Lakoff 1998: 88–89).

R: The 1998 interview started with the historic roots of cognitive linguistics (hereafter CL). Let us now turn to the contemporary state of the art in the cognitive paradigm. How do you see your contribution to it? Is your own theoretical “evolution” representative of the cognitive paradigm? To what extent does your approach orient CL?

1. Paul Ricoeur has written a great deal on metaphor. He does account for Black's influence in his work, see Ricoeur (1981).

L: One of the wonderful things about CL is that it is not dominated by any one figure. I consider myself to be extremely fortunate to have had great colleagues and students, people who have had their own interests and their own ideas. That is what a lively discipline is like.

My own theoretical evolution started with generative linguistics and generative semantics, then moved to CL, and now has evolved to the neural theory of language, which I see as part of CL. Langacker and Fauconnier also started with important careers in the generative tradition. Most other cognitive linguists did not, so far as I can tell.

I am always trying to integrate everything within CL. Most of the others of my generation are busy enough doing the important work they do, without concentrating on such integration. But that does not necessarily mean that what I do orients the field.

R: You have claimed that your research is connected to that of Fillmore's, Fauconnier's, Langacker's. Could you be more specific about the contribution of each one of these authors? Let's start with Langacker. How does what Langacker (1990, 1991, 1999) is doing relate to what you are doing? Has each one of you followed a different path (after finding some obstacle)?

L: Langacker is interested in a broad set of issues: imagery in semantics, dynamic processes in semantics and in discourse, a wide range of semantic structures, polysemy, the way meaning is expressed in the languages of the world, and so on. He has worked more on these than I have, though I share his interests and respect his insights. Langacker is not interested in doing the kinds of thing that I am most interested in: precise formulations of metaphors and radial categories, the formulation of a theory of constructions, links to other branches of cognitive science, the neural theory of language, and applications to literature, politics, philosophy and mathematics. In some cases, we disagree as to particular analyses, but not all that often. We mostly just think about different issues in different ways. And Ron has developed his own vocabulary and notations, which are not always useful for what I am interested in.

R: In what respect is Construction Grammar, as it is developed by Fillmore (1996), Sweetser (1996), Goldberg (1995, 1996a, 1996b), compatible with your approach? Where do you converge, what are the differences?

L: Construction grammar began with a collaboration by me and Fillmore in the late 1970s, growing out of his work on case grammar and frame semantics and my paper on “Linguistic Gestalts” (1977). The first major work on construction grammar was my case study of *There-Constructions*, done in 1983 and published in 1987 in *Women, Fire, and Dangerous Things* (1987) (henceforward: WFDT). The Fillmore-Kay-O’Connor paper came later, in 1988. Goldberg was a student of both mine and Fillmore’s — a brilliant and original student.

Fillmore and I parted company intellectually over the issue of CL, specifically over the need for linguistics to incorporate and contribute to results of cognitive science. Fillmore sees himself as an ordinary working grammarian, not as a contributor to the theory of mind, nor as beholden to broader research on the mind and brain. Because of this difference in perspective, Fillmore has never learned metaphor analysis, nor the theory of radial categories, nor cognitive grammar, and has no interest in the neural theory of language. He sees himself as a generative linguist. Nonetheless, he is one the world’s most insightful linguists, and I and other cognitive linguists have profited enormously from his insights. But as Fillmore and Kay have moved away from cognitive reality and toward an HPSG-like theory, our views have diverged. I am still very much involved in developing construction grammar within the neural theory of language.

R: Is there any incompatibility between your approach and Fauconnier’s (1997)?²

L: None that I know of. Though we do tend to focus on different issues. I accept and use the theory of mental spaces and I think it is deep and important. But, since I tend to be interested in details that he is not interested in, I don’t find his formalism useful in most cases.

R: One could argue that Len Talmy (1996) is one of the founders of the cognitive paradigm. Where does he stand now in comparison with the above strands?

L: Len has been one of the mainstays of the field since the mid-1970s. His interests are largely limited to the semantics of closed class elements and to

2. See Fauconnier and Sweetser (1996), Fauconnier and Turner (1994, 1996).

differences in lexicalisation patterns across languages. He is not interested, say, in studying conceptual metaphor or the theory of constructions or the neural theory of language. Given what he is interested in, he has made enormous contributions.

R: What is it that keeps all these strands in the cognitive paradigm together?

L: A passion for studying all of language from a cognitive perspective, a genuine feeling of mutual respect, a realisation that no one person is going to be able to think about everything or get everything right, and a commitment to building a co-operative and open scientific community.

Ultimately I think the Neural Theory of Grammar will be a unifying force, since it will provide a common vocabulary for all the different strands.³

3. Language, culture and cognition

R: One of the topics of our first interview dealt with the relation between culture and cognition. Your answers support the hypothesis, empirically verified, as you claim, of a universal basis for cognition.

R: Would you say we have universal concepts? Do we have universal feelings? In WFDT, you claim that anger, for instance, is universal and it may be explained by physiological reactions.

L: Yes, there are universal concepts. There are universal metaphors, universal aspects of language, because we all have very similar bodies and our physical experiences in the world are very similar. Those are where universals come from.

R: So, you are on the opposite side of the Whorfian hypothesis (1956) about language?

L: No. The Whorfian hypothesis as it is usually stated is badly described. There is a large chapter on this in WFDT. Whorf is much more interesting than most people give him credit for and he said many, many more interesting

3. The reader may find more about the Neural Theory of Grammar on <http://www.icsi.berkeley.edu/NTL/>.

things than to propose linguistic determinism. Whorf had a theory of universals. Whorf taught Summer School courses in which he went through the kinds of universals of semantics that would show up in every language. So Whorf was not against the existence of universals. People describe him as if he were, but that's not true. He was interested in many, many things. The use of metaphors in language. He thought incorrectly that there were languages that had no metaphors. He was wrong about it. But he was right about a great many things. He was right that there are differences in conceptual systems and that these differences do show up in different parts of language. And he was especially right that the morphological and grammatical parts of language function differently than the non-morphological and non-grammatical parts. They function more automatically, almost like reflexes. And therefore the kinds of concepts coded in those systems are automatic and unreflective. He said that this is important, and he was right. We are not against that. In fact, one of the things we are very much concerned with is developing a neural theory that will characterise the differences between those aspects of language that are subject to reflection and those that are not. We don't have it yet (Lakoff 1998: 98–99).

R: Many researchers both in cognitive anthropology and in language acquisition come up with strong evidence that different cultures use entirely different conceptualisations of space experience and space co-ordinates,⁴ thereby giving new credibility to the Whorfian relativity principle, in its classical interpretation: language, understood as a social phenomenon, guides our thoughts and perceptions. What would you say about this? To what extent is the Whorfian hypothesis relevant and even part of CL?

L: It is not all one way or the other. As I say in the section on Whorf in WFDT and in *Philosophy in the Flesh* (Lakoff & Johnson 1999), there are both universal concepts and language-particular concepts. In some cases, like spatial relation concepts, there are universal primitives that combine in different ways in different languages. The work in cognitive anthropology tends to ignore research on universal primitives.

4. For cognitive anthropology see Levinson (1994) for Tzeltal. For language acquisition see Bowerman (1996a, 1996b).

But there are also concepts that are just different across cultures, and there are even metaphors that differ across cultures, though as Grady (1997) has observed, the primary metaphors tend to be the same (but aren't always).

There is no such thing as "the" Whorfian Relativity Principle. There are about a dozen different dimensions to Whorf's central idea, each with different empirical evidence for and against it. See WFDT, Chapter 18.

R: Wierzbicka (1996) and some other researchers have been pursuing the hypothesis of universal concepts. In what ways is such a project related to your own approach?

L: Not at all. Wierzbicka is a Leibnitzian. She begins with an *a priori* philosophical theory. She does not look empirically at the same range of data that cognitive linguists do. Her analyses sometimes capture some aspects of meaning, but they miss an awful lot. And they do not fit what we know of the mind and brain. I do not consider her a cognitive linguist at all.

R: Most of your own work describes linguistic data from a synchronic viewpoint. Is it the search for universal concepts that justifies such a methodology? Does your methodology account for the historical dimensions of a given language as well as each word/concept's complicated and multifaceted history?

L: I work within a community of linguists who are very much concerned with history and cross-linguistic differences. My students and colleagues at Berkeley are very much concerned with such issues, and I depend on their insights. I just do not happen to do that research myself. The methodology of our community is particularly geared to the study of the history of both words, concepts, and grammatical constructions. The entire field of grammaticisation, a major emphasis in our department and our field as a whole, is about history. I can't imagine how you could think that CL was not concerned with history.

R: As I said, one does not find historical analyses or studies in your books. Let me focus on universal concepts and ideology. Couldn't an appeal to universal concepts be used to justify ideological exclusions?

L: It's not an "appeal". It's an empirical matter. Just because many concepts are universal, it does not follow that all concepts are universal, by a long shot, as I have been saying for decades. Indeed, my writings on

politics stress differences in conceptual systems across cultures and subcultures. My “Metaphor and War” paper (1992) discussed differences between the conceptual systems of American policy makers and Saddam Hussein. My *Moral Politics* (1996) was entirely about differences in conceptual systems of liberals and conservatives in America.

R: OK, but the hypothesis of universal concepts may underestimate the role of language, understood as a social institution, because language differences may turn out to be just “surface” differences, combinations of universal schemas. Liberals and Conservatives have different conceptual systems but they share the family conceptual metaphor: both of them see the power relation as a relation between parents and children.

L: Your question was, “The hypothesis of universal concepts may underestimate the role of language, understood as a social institution, because language differences would turn out to be just “surface” differences, combinations of universal schemas.” This makes a number of false presuppositions. First, the issue of universal concepts is an empirical one, not an initial hypothesis, and it is clear, as I said, that many concepts seem to be universal and many concepts seem not to be. Second, it does not follow from the existence of many universals, that language differences would be “just ‘surface’ differences, combinations of universal schemas”. Differences in concepts across languages could still be major and profound. Moreover, even if they were “different combinations of universal schemas” that too could lead to profound differences, since it could lead to radically different inferences. Again, all this is an empirical issue.

R: I agree. By ‘just surface differences’ I meant the possibility (an empirical one) that one could trace back cultural differences to combinations (perhaps algebraic ones) of primitive universal concepts and metaphors. For instance, the GREAT CHAIN metaphor would be a primitive universal concept. It may, however, combine with different metaphors and generate completely different conceptual systems. Indeed, in *More than Cool Reason* (1989), you and Turner describe the GREAT CHAIN OF BEING metaphor as if it were not a historically mediated metaphor. In other words, as if it were not a cultural choice, whose roots are to be found in the nature of Western culture. The GREAT CHAIN metaphor is claimed to be in nature itself. It has no history.

What guarantees that the cognitive approach is not taking its authors' cultural models as universal ones?

L: The guarantee of empirical constraints. We argued that on the basis of results in developmental psychology showing that children, by the age of three, tend to categorise animals, plants and objects in terms of their similarity to those children themselves. That is an empirical finding. It may be contradicted ultimately when children across many other cultures are studied. However, the prevalence of such a common "animacy hierarchy" in the languages of the world tends to support the developmental findings.

As we point out, the common Great Chain of Being is not the same as the Elizabethan one, which was much more elaborated.

As in all things, the question of whether a metaphor is universal or widespread across unrelated languages or cultures — or whether it is a historical innovation — is strictly an empirical issue. We were going with whatever empirical findings we knew about.

The claim that the GREAT CHAIN is just a matter of Western history, that it is not widespread in unrelated cultures and does not arise spontaneously in very young children, seems just to be an empirically false claim.

R: Perhaps we could deepen the issue concerning the relation between concept, language and social world. Indeed this was one of the topics in our former interview.

R: The relationship between concepts and language is certainly a vexed question in metaphor research. The thrust of your writings seems to rely upon the assumption that language reflects conceptual metaphors, i.e., that language is not independent of the mind, but reflects a perceptual and conceptual understanding of experience. Does the organisation of language, besides reflecting our conceptual systems, help shape them as well?

L: Well, there is a difference between what we believe and what we talk about. And the reason is this: the things that are physically embodied are easier to study than interpersonal interaction. A child at birth interacts with its parents immediately. There's personal interaction, physical interaction, every kind of interaction, right away. It's not that interpersonal interaction is less important. It's simply that we know less about how to describe it. We know less about how it functions in language and in reason at the present time.

R: But it is always possible within the framework of CL to trace moral and social concepts back to primitive bodily interactions. If you have an abstract or a highly cultural-dependent concept, let us say “democracy” or “love”, you can always trace it back to our bodies, isn’t that right?

L: There is a difference, as I said before, between what we believe and what we write about. We write about something we have evidence for and we believe that culture plays a major role in language, although we don’t have a lot of evidence for that. Partly because the evidence has not been gathered together in a way that would be empirically adequate for this field. But we have no doubt that interpersonal relationships play a major role in language. Take, for example, the fact that children, when they are born, are able to imitate their parents, and they are able to get their parents to react positively. This is an interpersonal fact about human beings at birth. In order to imitate they have to be able to project their bodies onto to their parents bodies, and they have some idea how to control their bodies, in the way that the parents are controlling their own bodies. But, that takes a remarkable amount of neural sophistication, which is the ability to project your body out to someone’s else. This is the basis of empathy. So it’s very important in learning motor programs, in learning all sort of things about having a function in the world. It would be silly to say that this capacity plays no role in conceptual systems. Not only it plays a role in conceptual systems, but it also plays a role in language. For example, as Claudia Brugman (1983, 1984) shows in her study of Mixtec, there you have a system of body part terms that express spatial relations. And the way they work is by the people projecting their bodies onto the things in space, and that capacity of projecting your body onto to something else or someone else, is necessary in order to understand those space structures in language. Now, that seems to be the same capacity as the interpersonal capacity, the capacity to imitate, that interpersonal capacity is also physical, it’s not a separation between the physical and the cultural, or the physical and the interpersonal; they are both one and the same. The interpersonal capacity is at the basis of linguistic capacity for conceptualising space (Lakoff 1998: 93–94).

R: In your paper “The metaphor system for morality” (1996b), you claim that morality is bodily based. Its basis is in the promotion of the material well being. Among others, you claim that it is better to be strong than to be weak. Does such a natural morality system transcend history and ideology?

Isn't it based upon our WASP biases (White, male, Anglo-Saxon Protestant)?

L: First, I am NOT an Anglo-Saxon Protestant!!!! Nobody who knows me could mistake me for an Anglo-Saxon Protestant. My culture and values are not those of Anglo-Saxon Protestants (though some of my best friends are Anglo-Saxon Protestants, and I love and respect them).

R: I am really sorry. The question was meant to be a generic one, I said "our WASP biases". Let me re-state it: To what extent is the moral conceptual system based upon the researcher's own biases?

L: I deeply resent the sexism, racism, and cultural bias implicit in the question. The issue is ONLY whether the claims that I and other cognitive linguists have made are empirically well-founded, not whether they meet some *a priori* test of non-WASP-ness that is based on racism, sexism, and cultural bias.

Third, the question makes other incorrect presuppositions. You portrayed the paper as saying that "the basis of morality is in the promotion of material well-being". What I actually said was somewhat different: "Morality around the world has its basis in the promotion of the material well-being of others and the avoidance and prevention of material harm to others". I did not say, "it is better to be strong than to be weak". I said:

Other things being equal, you are better off if you are:
 healthy rather than sick,
 rich rather than poor,
 strong rather than weak,
 safe rather than in danger,
 cared for rather than uncared for,
 cared about rather than ignored,
 happy rather than sad, disgusted or in pain, ... (Lakoff 1998:250)

"Better off" in English does not mean morally "better". It means that it is easier to survive, function effectively in the world, and flourish. In other words, these are material conditions that (other things being equal) increase the probability that one will survive, function effectively, and flourish. When I said that, all things being equal, one is better off if one is rich rather than poor, I was not referring necessarily to monetary wealth, but to whatever forms of wealth are valued in a given culture, whether beads, cows, chickens, children, land, or yams. To say that this IS true, is NOT to say that it

SHOULD BE true. Indeed, I do not believe that it should be true. However it is. In general, the material conditions that enhance survival and flourishing happen (it is an empirical finding) to form the basis for the metaphors for morality in cultures around the world — metaphors like MORALITY IS PURITY, MORAL ACCOUNTING, MORALITY IS EMPATHY, and so on.

Does the fact that such metaphors show up in cultures throughout the world mean that morality is the same in all cultures? Of course not. As I pointed out in *Moral Politics* and in *Philosophy in the Flesh*, these basic metaphors are given different priority in different moral systems and can be organised by family-based metaphors for morality. The same universal metaphorical building blocks can give rise to wildly different moral systems, and moral systems have elements beyond these universal building blocks.

You asked, “Does such a natural morality system transcend history and ideology?” Yes and no. Yes, in the sense that many of the building blocks of moral systems come from natural experiences. No, in the sense that history certainly plays a major role. As for ideology, ideologies tell you what is right and wrong and hence are comprised to a considerable extent by moral conceptual systems. Moral systems do not arise from ideologies; they are part of what constitutes ideologies.

You asked, “Isn’t it based upon our own biases (that of a white, male, Anglo-Saxon Protestant)?” Putting aside the racism and sexism of the question, the answer is no. It is an empirical issue.

R: I am really sorry about our misunderstanding on this point. As a woman in a third-world Catholic chauvinist country I certainly understand your feelings. But my question was a theoretical one: isn’t it the case that the concepts you are identifying as universal, are seen as such because, being bodily based, they are a function of your own language and culture? Consider the universal concept of ‘empathy’: to what extent does the fact that you speak English (and analyse it as well) influence such a conclusion?

L: First of all, morality as empathy occurs in cultures around the world, e.g., all Buddhist cultures from India to China to Japan to Vietnam. It is hardly just an English concept. Second, our best current understanding of the biological locus of empathy is in our mirror neurons in the prefrontal cortex, which fire when you either perform a complex action or perceive someone else performing the same action. This appears to be the basis for imitation in

children, but also for being able to experience internally what you perceive in someone else.

The earliest research on mirror neurons was done with macaque monkeys and has since been extended to human beings. The research was done in Italy, not in an English-speaking country. If the mirror neuron hypothesis is correct, then empathy is fundamentally physical, though it may play a role in culturally specific conceptual systems and play special roles in such systems.

Empathy is a natural capacity that has to be developed like other natural capacities. If you don't hear any music throughout your childhood, you won't become a musician. If you are not treated empathetically and are not brought up in a culture of empathy, you will not develop your empathic capacity.

R: Let us suppose you are right about empathy being not only a universal bodily-based concept, but also a neurological one. How would it relate to moral issues? Would the natural concept of empathy be sufficient to guarantee a society ruling out the extermination of "otherness"?

L: Of course not. Moral systems are very complex. Empathy is just one part. Other metaphorical concepts like MORAL STRENGTH or MORAL AUTHORITY or the MORAL ORDER may play a greater role, one that overrides empathy.

R: This is the explanation for the fact that "natural" morality is often overridden, right?

L: The term "natural morality" is yours, not mine. As I said, and discussed at great length in *Moral Politics*, the capacity for empathy has to be developed through the experience of empathy. Particular moral systems, in households or wider cultures, can lead to the lack of the development of the capacity for empathy.

Here it is important to refer to *Moral Politics*, where I discuss the STRICT FATHER versus NURTURANT PARENT moral systems. The NURTURANT PARENT system promotes empathy and responsibility (toward both others and yourself). The STRICT FATHER system promotes MORAL AUTHORITY, MORAL STRENGTH and the MORAL ORDER. The MORAL ORDER metaphor derives from the experience that you are better off if you have power over others than if others have power over you. In the MORAL ORDER metaphor, the hierarchy of power should reflect the hierarchy of morality. Thus, in the

MORAL ORDER metaphor, your group is more moral than other groups — and hence should exert power over them. In extreme forms, other groups are less than human.

Horrible examples abound in recent history. STRICT FATHER MORALITY can be seen as either defining ends (in conservative political systems) or means (in both conservative and militant leftist systems). The Khmer Rouge saw those who disagreed with their political and economic views as lower in the Moral Order and subject to torture and execution. The Nazis saw Jews as lower on the Moral Order and less than human. The same has occurred, via STRICT FATHER MORALITY, on both the left and the right — in Yugoslavia, Argentina, East Timor, China, and elsewhere.

Empathy suffers under either neglect or under a form of a STRICT FATHER MORALITY.

4. Language and ideology

R: We are now on the theme of “language and ideology”, a vast and turbulent area, where hardly any basic agreement over the definition of each of the concepts the theme mobilises has been reached.

R: Let me focus on the topic of language itself first. In several of your writings, we read that language is a reflection of our cognitive structures, which are bodily based. But isn’t there something — call it “la langue” — which has some kind of autonomy and which precedes us as individuals, a public treasure, so to say?

L: What is language itself? Suppose you’d subtract all of phonetics, everything to do with actual sound systems, the auditory system, the acoustic systems, and you subtract everything that has to do with semantics, that is, argument structure, hierarchical semantic structure, and, you know, suppose you subtract everything that has to do with attention, and so on, you have almost nothing left. That is, what we see is an organisation of cognitive faculties on the phonological side, and on the semantics and pragmatics side, and the attention side. The functional side has to do with attention and memory, and so on. All those things come together to structure what language is. There are only particular ways in which these can be put together to structure what language is. I don’t see anything in the language

that is truly independent of all these things. I don't see any phenomenon at all that is independent of all these things.

R: If I understood you correctly, language is not a social institution. What is language, for you?

L: I don't know what language is, if it's not a relationship between the phonological means of expression — and, in sign language that would include hands as well, — and concepts. The way which you express in phonological form what you conceptualise, and that doesn't exist independently of the kinds of ideas expressed, nor it exists independently of the phonology and the actual phonetics. And phonology doesn't exist independently of phonetics.

Given language as a means of expression, social considerations of course enter in at every level, since expression always occurs in a social and interpersonal context. The reason is that we use our conceptual systems to function socially and to comprehend social life. Since language reflects our conceptual systems, it will reflect the social aspects of our conceptual systems. Thus, seeing language from a cognitive perspective entails seeing language from a social perspective.

In addition, since language is a tool for expression and communication, it can be used for social ends and as a marker of social status. In order to study the use of language for social ends, one must have a conceptual system characterising what "social" means. Here cognition enters the study of social issues once more (Lakoff 1998: 109–110).

R: How do you relate this concept of language, a link between a material means of expression and concepts, and ideology? Is 'ideology' a synonym for 'system of ideas'?

L: That's not quite right. Any ideology is a conceptual system of a particular kind, including a moral system. However, ideologies have both conscious and unconscious aspects. If you ask someone with a political ideology what she believes, she will give a list of beliefs and perhaps some generalisations. A cognitive linguist, looking at what she says, will most likely pick out unconscious frames and metaphors lying behind her conscious beliefs. To me, that is the interesting part of ideologies — the hidden, unconscious part. It is there that cognitive linguists have a contribution to make.

R: Do you believe ideology is bodily-based? If so, in what sense?

L: The conceptual building blocks, including primary metaphorical concepts, are ultimately bodily based, but not in any simple direct way. Suppose concepts A and B each have bodily groundings A' and B'. Now a complex concept C formed from both A and B, will be partially grounded through bodily experiences A' and B', but there will be no single bodily experience grounding the entire concept C, since A' does not ground concept B and B' does not ground concept A.

In short, there is no simple-minded yes or no answer, but only such a complex answer.

5. Ideology and scientific research

R: In many passages of our first interview you claim that from a scientific viewpoint the cognitive approach is the “best” available one at present.

R: CL holds that the basis of meaning is embodiment. I believe this is a very interesting and a powerful hypothesis, but sometimes I have the impression that the body is just an organism.

L: CL is not just a nice idea. There is evidence for it. If you look at the meaning of colour, you have to look at the physiology of colour vision, at the neural physiology of colour vision. It shows you that there is no colour out there in the world. So if you cannot be an objectivist about this, you are no longer an empiricist about colours. But colours do come out of your body so you can not be subjectivist about colour concepts either. There is no way of being either of the traditional things, just taking the small amount of data about the nature of colour. Colour is a very simple example, because it avoids a lot of the complexity, and you can see right there that both rationalists and empiricists are wrong about colour. And that is not simply a matter of having a nice idea that concepts are embodied. Colour is embodied. The same is true with basic-level categorisation and spatial relations and all sorts of other things including metaphor. So, once you see that, it is the evidence that is compelling. It is not just a nice idea.

R: Well, I could always reply that evidence is a function of the theory, data is also a function of the model that you are building in.

L: I refer you to Chapter 6 of *Philosophy in the Flesh*. There we discuss the idea of “convergent evidence” which is required in any scientific theory. Convergent evidence is evidence from multiple methodologies, each with different assumptions. The assumptions of various sources of evidence, being different, cancel each other out. That way the evidence is not a function of any specific model or methodology.

A good example is evolution, where you look at the geological record, carbon dating evidence, morphological evidence from specimens, and DNA evidence. Similarly, in metaphor studies you look at inferential evidence, polysemy evidence, psychological experiments, historical change evidence, gesture evidence, discourse evidence, and so on (Lakoff 1998: 116–117).

R: Someone reading our former interview may get the impression both that CL was discovered (it has no history), and all its achievements are empirical findings. Isn’t such a posture a way of turning a blind eye to the contributions of many philosophers and linguists who have been anticipating central tenets and findings of the cognitive theory of metaphor?

L: After the fact, one can find quotes here and there that we didn’t know about that talked about something like conceptual metaphor, but which are usually so vague you can’t tell. I don’t really see detailed cross-domain mappings that are experientially grounded in any earlier material. I don’t see spatial relations primitives (image schemas and force dynamic schemas) before Talmy, Langacker, etc. I don’t see basic-level concepts before Brown, Berlin, and Rosch. Some things really are discovered.

R: Isn’t that parallel to the claim that there are objective facts out there, and, by consequence, objective criteria for choosing the best theory. Aren’t you claiming that there are non-ideological criteria? To what extent is the choice for the best theory a non-ideological move?

L: I am saying no such thing. Again I refer you to Chapter 6 of *Philosophy in the Flesh*. We are making three assumptions, assumptions that any scientist would have to make: to take evidence seriously, to look for convergent evidence, and to seek generalisations. I am not saying this is objective. It is just what defines reasonable scientific practice. I’m not saying it always leads to the best theory. That depends on all sorts of things, like how smart and imaginative the scientists are in finding convergent evidence and in formulating hypotheses to explain them. It also depends on history — the

history of science. Without knowledge of neuroscience, neural computation, and child development, we would have no theory of metaphor learning and no explanation for primary metaphor. In short, current theories of metaphor were impossible three decades ago, for historical reasons.

R: Let's talk about CL's "discoveries". Why are they "discoveries" rather than "conclusions"? Is it a way of putting CL in the "natural sciences"? Would you say human affairs may be studied with the natural sciences methodology?

L: I do not accept the old-fashioned distinction between the so-called "hard" sciences and the humanities and social sciences. I think scientific findings are possible in humanistic and social subject matter. I do not think that all of the humanities is "reducible" to scientific questions — only some aspects. For example, in *More Than Cool Reason*, Turner and I argue that certain interpretations of poems use the same conceptual metaphors that exist in our everyday conceptual systems. This is a scientific claim and I think it is a reasonable application of cognitive science to the humanities. In my "Metaphor and War" paper, I claimed that American foreign policy is based on certain conceptual metaphors. I think this is a reasonable application of cognitive science to the social sciences. I think there are a lot more.

R: In your book *Moral Politics* you affirm that from a non-ideological viewpoint the nurturance metaphor is better than the authoritative one. Your argumentation implies two strong claims: first, there are better metaphors; second, there is a neutral place — which seems to be science — from where one may point to better metaphors. Isn't it dangerous to believe that scientific knowledge may be used to help decide moral issues?

L: Let's take these one at a time. First, I do not believe in the so-called "scientific method". I think there are necessary ingredients to good science, like the three I mentioned above, e.g., convergent evidence.

Second, suppose that science CAN bear on moral issues. Then it would be dangerous NOT to use it. The question then is whether science can have moral implications.

Third, cognitive science CAN tell us about the precise nature of moral conceptual systems and their implications. It would be immoral NOT to use such knowledge. THIS knowledge does not tell us what to do, but it does clarify the bases on which we act.

Fourth, some metaphors ARE better than others for certain purposes. The reason is that conceptual metaphors preserve inference and they may have entailments that are not metaphorical and that can be checked out empirically. Scientific metaphors are a good example. Einstein's metaphor that the force of gravity isn't a force at all but is the curvature of space-time has had a great deal of success. I think that the common neuroscience metaphor that networks of neurons are electrical circuits is a pretty apt one, which has also had a lot of success. The metaphor that electricity is a fluid has done pretty well — at least in restricted cases.

Fifth, I argue at the end of *Moral Politics* that there are scientific reasons to choose NURTURANT MORALITY over STRICT FATHER MORALITY:

- (1) it's better for raising children (all major child development research paradigms agree),
- (2) it is consistent with the way the mind works, while STRICT FATHER MORALITY isn't, and
- (3) NURTURANT MORALITY is in accord with basic human flourishing and STRICT FATHER MORALITY isn't.

As I said, the danger is in ignoring what cognitive science and other sciences can tell you.

6. Cognitive linguistics and the social dimension

R: Would you say that changing our ordinary metaphors is a way of changing our world view. Like, instead of seeing people as numbers we should try to see people as individual beings ...

L: That's true. I think it's possible that once you understand your own metaphors that there are certain possibilities for changing your world view. I think that's true, but I think that is not new. I think every therapist knows this.

R: Yes, but there is a danger in this position.

L: But there is nothing dangerous in my description of it.

R: The danger is not in the description, but in the prescription.

L: It is not a prescription. I mean the prescription is simply the same one that Socrates had: it is better to know yourself than not to know yourself. That's the only prescription and then you make your choice. I am not suggesting that we should manipulate people to change their metaphors at all. In fact, if you know yourself, then you are less subject to that manipulation. There is no danger at all (Lakoff 1998: 116).

R: So, some metaphors should be overcome. What criteria do you rely upon in order to justify the claim for better metaphors?

L: Just as I said before. Conceptual metaphors preserve inferences and in context the inferences can be about non-metaphorical things. Some scientific metaphors are just scientifically inadequate, like Chomsky's metaphor that a language is a set of strings, of meaningless symbols, and a grammar is a set of autonomous rules for generating them. The metaphor just doesn't fit the facts of language.

Some metaphors are harmful, like the American foreign policy metaphor that THIRD WORLD COUNTRIES ARE CHILDREN and that MATURITY IS INDUSTRIALISATION. It's a disastrous metaphor. Or the metaphor that THE MARKET IS A FORCE OF NATURE. Another moral disaster. The same for NATURE IS A RESOURCE. It's ecologically immoral.

R: You still owe me an explanation about the criteria you are using to justify your claim that the above metaphors are harmful or wrong. But you are certainly right about their being harmful. Thus describing our common metaphors is not only a way of making ourselves aware of ideologies — something you have already stressed — but also a way of combating them, right?

L: I agree entirely.

R: Does the description of our common folk metaphors really uncover our deep metaphysical beliefs? We still talk of the sun rising and setting, as if we didn't know better.

L: Conceptual metaphor is primarily a matter of reason, not just speech. The question is: Do we reason on the basis of conceptual metaphor, do we act on those conclusions, and does it matter? The case of sunrise and sunset is trivial. When we are not thinking about physics, we automatically conceptualise the sun as rising and setting and it doesn't hurt anything.

But when George W. Bush uses the metaphor that EVIL IS A FORCE in

the world to justify opposition to gun control, that matters. When conservatives use the metaphor that SCHOOLS ARE A BUSINESS and TEACHERS ARE LABOUR RESOURCES, that matters. When the head of the American National Security Agency uses the conceptual metaphor that THIRD WORLD COUNTRIES ARE CHILDREN, arguing against trying to prevent the East Timor massacre on the grounds that, like the mess in his daughter's college dorm room, not all messes are worth trying to clean up — that matters.

It is more than a bit dangerous to ignore our metaphor systems.

R: In Brazil, the liberal policy is imposing upon us the metaphor SCHOOLS ARE A BUSINESS. A student of mine, Lunardi (2000), shows that the authority metaphor for language — that is her terminology — is dangerous precisely because second language teachers ignore that their acting is oriented by it. Do you think CL may help research in applied linguistics, especially in the area of second language learning? How? What would you say about an applied CL?

L: I am engaged in starting a political think-tank to apply CL to politics. I think that the metaphors for NURTURANT PARENT MORALITY can help create a better society. I think new foreign policy metaphors need to be found. Yes, I think there can and should be an applied CL.

I also think CL could be of enormous use in second language learning, in mathematics teaching, in therapy, and in the understanding of social and political life.

R: What about a cognitive sociolinguistics?

L: There is a cognitive sociolinguistics in existence, in my *Moral Politics*, in Steven Winter's new book on law and CL, *A Clearing in the Forest*, in the dissertation by Pamela Morgan on political speeches and the conceptual system of business schools, and in the dissertation by Nancy Urban on business metaphors being used to restructure education.

R: What is, in your opinion, the best metaphor to characterise the “social” role of CL? If there is one.

L: It is vital. CL is not merely an academic discipline that studies language from a cognitive perspective. Rather it provides a methodology for understanding the conceptual basis of harmful social and political policies and allows us to articulate better the moral basis of more helpful social and

political policies. It can also help one comprehend one's own life and one's interactions with others. It is a great aid in following the Socratic advice to "Know thyself".

R: Thank you very much, George.

Acknowledgments

We would like to thank the organisers of the first volume of *Fórum Lingüístico* and Prof. George Lakoff for authorising the re-publication of fragments of Lakoff's interview. Although I interviewed Lakoff in 1997, during the 5th International Cognitive Linguistics Conference in Amsterdam, the interview was published in 1998, and may be found in Lakoff (1998).

References

- Berlin, Brent and Kay, Paul. 1969. *Basic Color Terms. Their Universality and Evolution*. Berkeley, Los Angeles: University of California Press.
- Berlin, Brent, Breedlove, Dennis E. and Raven, Peter H. 1974. *Principles of Tzeltal Plant Classification*. New York: Academic Press.
- Black, Max. 1962. *Metaphor. Models and Metaphors*. New York: Ithaca, 25–47.
- . 1993. "More about metaphor". In A. Ortony (ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 19–71.
- Bowerman, Melissa. 1996a. "Learning how to structure space for language: A cross-linguistic perspective". In P. Bloom, M. Peterson, L. Nadel and M. Garrett (eds), *Language and Space*. Cambridge, MA: MIT Press.
- . 1996b. "The origins of children's spatial semantic categories: Cognitive vs. linguistics determinants?" In J.J. Gumperz and S.C. Levinson (eds), *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press.
- Brown, Cecil H. 1990. "A survey of category types in natural language". In: S.L. Tsohatzidis (ed.), *Meanings and Prototypes. Studies in Linguistic Categorization*. London: Routledge, 17–47.
- Brugman, Claudia. 1983. "The use of body-part terms as locatives in Chalcatongo Mixtec". In *Report no. 4 of the Survey of California and Other Indian Languages*. Berkeley: University of California, 235–90.
- . 1984. *Metaphor in the Elaboration of Grammatical Categories in Mixtec*. Linguistics Department. University of California, Berkeley.
- Brugman, Claudia and Lakoff, George. 1988. "Cognitive topology and lexical networks". In S.L. Small, G.W. Cottrell, and M.K. Tanenhaus (eds), *Lexical Ambiguity Resolution: Perspectives from Psycholinguistics, Neuropsychology, and Artificial Intelligence*. San Mateo, CA: Morgan Kaufman, 477–508.

- Fauconnier, Gilles. 1997. *Mappings in Thought and Language*. New York: Cambridge University Press.
- Fauconnier, Gilles and Sweetser, Eve (eds). 1996. *Spaces, Worlds and Grammars*. Chicago: University of Chicago Press.
- Fauconnier, Gilles and Turner, Mark. 1994. Conceptual projection and middle space. Technical Report 9401 Department of Cognitive Science.
- . 1996. "Blending as a central process of grammar". In A. E. Goldberg (ed.), *Conceptual Structure, Discourse and Language*. Stanford, CA: CSLI Publications, 113–130.
- Fillmore, Charles J. 1996. "The pragmatics of constructions". In D. I. Slobin, J. Gehard, A. Kyratzis and J. Guo (eds), *Social Interaction, Social Context, and Language: Essays in Honor of Susan Ervin-Tripp*. Mahwah, N. J.: Lawrence Erlbaum Associates, 53–69.
- Fillmore, Charles J., Kay, Paul and O'Connor, Catherine. 1988. "Regularity and idiomaticity in grammatical construction: The case of 'let alone'". *Language* 64: 501–538.
- Goldberg, Adele E. 1995. *Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- . 1996a. "Jackendoff and construction-based grammar". *Cognitive Linguistics* 7: 3–19.
- Goldberg, Adele E. (ed.) 1996b. *Conceptual Structure, Discourse and Language*. Stanford, CA: CSLI Publications.
- Grady, Joseph E. 1997. "Theories are buildings revisited". *Cognitive Linguistics* 8–4: 267–290.
- Johnson, Mark (ed.). 1981. *Philosophical Perspectives on Metaphor*. Minneapolis: University of Minnesota Press.
- Lakoff, George. 1977. "Linguistic gestalts". *CLS* 13: 236–287.
- . 1986. "The meaning of literal". *Metaphor and Symbolic Activity* 1,4: 291–296.
- . 1987. *Women, Fire and Dangerous Things. What categories reveal about the mind*. Chicago: University of Chicago Press.
- . 1990. "The invariance hypothesis: Is abstract reason based on image-schemas?" *Cognitive Linguistics* 1,1: 39–74.
- . 1992a. "Metaphor and semantics". In W. Brigh (ed.), *International Encyclopedia of Linguistics*. Oxford: Oxford University Press, 417–419.
- . 1992b. "Metaphor and war: The metaphor system used to justify war in the Gulf". In M. Pütz (ed.), *Thirty Years of Linguistic Evolution. Studies in honour of René Dirven on the occasion of his sixtieth birthday*. Amsterdam and Philadelphia: John Benjamins, 463–481.
- . 1993. "The contemporary theory of metaphor". In: A. Ortony (ed.), 202–250.
- . 1996a. *Moral Politics: What Conservatives know that Liberals don't*. Chicago: University of Chicago Press.
- . 1996b. "The metaphor system for morality". In A. E. Goldberg (ed.), 249–266.
- . 1998. "Cognitive semantics. In the heart of language". *Fórum Lingüístico*, Volume 1,1: 83–118.

- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago: University of Chicago Press.
- . 1999. *Philosophy in the Flesh: The embodied mind and its challenge to Western thought*. Chicago: University of Chicago Press.
- Lakoff, George and Turner, Mark. 1989. *More than Cool Reason: A field guide to poetic metaphor*. Chicago: University of Chicago Press.
- Langacker, Ronald W. 1990. *Foundations of Cognitive Grammar. Vol.2 Descriptive application*. Stanford, CA: Stanford University Press.
- . 1991. *Concept, Image, and Symbol: The cognitive basis of grammar*. (Cognitive Linguistics Research: 1) Berlin: Mouton de Gruyter.
- . 1999. *Grammar and Conceptualization*. (Cognitive Linguistics Research: 14). Berlin: Mouton de Gruyter.
- Levinson, Stephen C. 1994. "Vision, shape, and linguistic description: Tzeltal body-part terminology and object description". *Linguistics* 32: 791–855.
- Lowe, John, Baker, C.F. and Fillmore, Charles J. 1997. "A frame-semantic approach to semantic annotation". *Proceedings of the SIGLEX Workshop 'Tagging Text with Lexical Semantics: Why, what and how'*. Washington, D.C., April 4–5: available from: (www.icsi.berkeley.edu/~framenet).
- Lunardi, Angelita Mendes. 2000. Professores de língua e a metáfora da língua. M.A. thesis in linguistics. Universidade Federal de Santa Catarina.
- Morgan, Pamela S. 1997. "Self-presentation in a speech of Newt Gingrich". *Pragmatics* 7,3: 275–308.
- . 1998. Beyond the issues: A linguistic and conceptual study of American public discourse. Unpublished Ph.D. dissertation. University of California, Berkeley.
- Ortony, Andrew (ed.) 1993. *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Pires de Oliveira, R. 1997. "'A manhã é uma esponja': um Estudo sobre a Engenhosidade Semântica". *D.E.L.T.A.*, vol. 13, no. 2: 247–274.
- Richards, I. A. 1936. *The Philosophy of Rhetoric*. New York and Oxford: Oxford University Press.
- Ricoeur, Paul. 1981 "The metaphorical process as cognition, imagination and feeling". In M. Johnson (ed.), *Philosophical Perspectives on Metaphor*. Minneapolis: University of Minnesota Press.
- Rosch, Eleanor. 1977. "Human categorization". In N. Warren (ed.), *Studies in Cross-cultural Psychology*, Vol. I. London etc.: Academic Press, 1–49.
- 1978. "Principles of Categorization". In E. Rosch and B.B. Lloyd (eds), *Cognition and Categorization*. Hillsdale, J.J.: Lawrence Erlbaum, 27–48.
- Sweetser, Eve E. 1996. Mental Spaces and the Grammar of Conditional Constructions. In G. Fauconnier and E. Sweetser (eds), 318–333.
- Sweetser, Eve E. and Fauconnier, Gilles. 1996. "Cognitive links and domains: Basic aspects of mental space theory". In G. Fauconnier and E. Sweetser (eds), *Spaces, Worlds and Grammars*. Chicago: Chicago University Press: 1–28.

- Talmy, Leonard. 1996. "Fictive motion in language and 'ception'". In P. Bloom, M. A. Peterson, L. Nadel and M. F. Garrett (eds), *Language and Space*. Cambridge, MA, and London: MIT Press, 211–276.
- Urban, Nancy Y. 1999. The school business: Rethinking educational reform. Unpublished PhD. dissertation. Berkeley: University of California.
- Wierzbicka, Anna. 1994. "Cognitive domains and the structure of the lexicon". In L. Hirschfeld and S. A. Gelman (eds), *Mapping the Mind. Domain Specificity in Cognition and Culture*. Cambridge: Cambridge University Press, 431–452.
- . 1996. *Semantics: Primes and Universals*. New York and Oxford: Oxford University Press.
- Whorf, Benjamin Lee. 1956. *Language, Thought and Reality: Selected writings*. Edited and with introduction by John B. Carroll. Cambridge, Mass.: MIT Press.
- Winter, Steve. 1995. "A clearing in the forest". *Metaphor and Symbolic Activity* 10,3: 223–245.

Pragmatism, Ideology and Embodiment

William James and the Philosophical Foundations of Cognitive Linguistics

Tim Rohrer

University of Aarhus, Denmark

1. Introduction

Much as I dislike beginning a paper with prefatory remarks, it seems equally important to note that we must make a fundamental distinction between work which uses the techniques and methods of cognitive linguistics to analyse ideology, and that which focuses on questioning the philosophical foundations and ideological systems implicit within cognitive linguistics itself. Put in a pithy nutshell, this is the distinction between thinking about the cognitive linguistics of ideology on one hand and the ideology of cognitive linguistics on the other. Yet this distinction is basic to understanding how these two types of projects proceed, and the organisation of these two volumes reflects this distinction. In this article I address some issues within the philosophical foundations of cognitive linguistics, while in an article in the other volume of this collection I use the methods of cognitive linguistics to analyse some ideological systems (Rohrer 2001).

In this article I review several of the different senses of the way the word ‘embodiment’ is currently used in cognitive linguistics, and argue for a broad theoretic framework which ties cognitive linguistics to the larger enterprise of cognitive science. I take research on spatial frames of reference as my primary topic of analysis because it is important to show that the embodied approach to cognitive linguistics is much more than simply a set

of hypotheses within one of its most prominent theories, conceptual metaphor (for previous related work on this topic within cognitive semantics see Rohrer forthcoming a,b). I trace the topic of spatial frames of reference through all the multiple levels of investigation implicit in the conception of cognitive science as a multi-disciplinary enterprise which ranges from anthropology all the way to comparative neuroanatomy. I conclude that both cognitive linguistics and cognitive science can benefit from the principled application of this theoretic framework.

2. Squirrels doing metaphysics

In his second lecture on Pragmatism, the philosopher William James introduces the pragmatic method as settling a metaphysical dispute about the meaning of the English phrase ‘to go round the squirrel’ (James 1907). James’ squirrel example is a brilliantly lucid description of the ambiguity of some of the kinds of spatial frames of reference used by human beings. He writes:

Some years ago, being with a camping party in the mountains, I returned from a solitary ramble to find every one engaged in a ferocious metaphysical dispute. The *corpus* of the dispute was a squirrel — a live squirrel supposed to be clinging to one side of a tree-trunk; while over against the tree’s opposite side a human being was imagined to stand. This human witness tries to get sight of the squirrel by moving rapidly round the tree, but no matter how fast he goes, the squirrel moves as fast in the opposite direction, and always keeps the tree between himself and the man, so that never a glimpse of him is caught. The resultant metaphysical problem now is this: *Does the man go round the squirrel or not?* He goes round the tree, sure enough, and the squirrel is on the tree; but does he go round the squirrel? In the unlimited leisure of the wilderness, discussion had been worn threadbare. Everyone had taken sides, and was obstinate; and the numbers on both sides were even. Each side, when I appeared therefore appealed to me to make it a majority. Mindful of the scholastic adage that whenever you meet a contradiction you must make a distinction, I immediately sought and found one, as follows: “Which party is right”, I said, “depends on what you *practically mean* by ‘going round’ the squirrel. If you mean passing from the north of him to the east, then to the south, then to the west, and then to the north of him again, obviously the man does go round him, for he occupies these successive positions. But if on the contrary you mean being first in front of him, then on the right of him, then behind him, then on his left, and finally in front again, it is quite as obvious

that the man fails to go round him, for by the compensating movements the squirrel makes, he keeps his belly turned towards the man all the time, and his back turned away. Make the distinction, and there is no occasion for any farther dispute. You are both right and both wrong according as you conceive the verb 'to go round' in one practical fashion or the other."

Although one or two of the hotter disputants called my speech a shuffling evasion, saying they wanted no quibbling or scholastic hairsplitting, but meant plain honest English 'round', the majority seemed to think that the distinction had assuaged the dispute.

I tell this trivial anecdote because it is a peculiarly simple example of what I wish now to speak of as the pragmatic method. (James 1907: 17)

What is unmistakable here is not only that James is giving us a sophisticated cognitive semantics analysis of two meanings of the English verb-particle construction 'to go round', but also that James will use this analysis to draw a larger philosophical point about the methods of inquiry. While I will be doing much the same in this paper, let us first diagram the spatial situation to which James' example refers.

James' initial point is that there are two equally rational spatial frames of reference in which the problem may be considered: a *geocentric* frame of reference, in which it is possible to go around the squirrel with reference to the four cardinal directions; and an *object-centred* frame of reference, in which it is possible to go around the squirrel with reference to its front, left side, back and right side. This sort of second spatial reference involves projecting the relations of left/right and front/back from the speaker's body onto the squirrel's body for use as the directional landmark. In both cases, the person is the trajector while the squirrel is an important landmark. However, the frame of reference changes from one case to the other: in one case, the frame of reference is fixed according to external directional landmarks, while in the other it is fixed with relation to the squirrel's body as the landmark. The situation could be schematically drawn as in Figure 1.

As James notes, there was some grumbling at his solution to this frames-of-reference problem. It is important to see that James' solution involves a point of view shift that is relatively unorthodox for many English speakers, though intelligible and expressible. English speakers typically use a third frame of reference that is *viewer-centred* — that is, relative to the speaker's point of view. By contrast, the geocentric frame of reference often makes use of an overhead or bird's-eye or god's-eye point of view. Seen in



Figure 1. James' squirrel being chased around a tree by a man

these terms, the object-centred frame of reference takes up a point of view situated at the object — in this case, it takes up the squirrel's point of view. Notice that changing who the speaker is makes the viewer-centred frame of reference ambiguous: in one condition the conclusions line up with the object-centred frame of reference, in the other with an absolute frame of reference. If, on one hand, the speaker is the man trying to go around the squirrel, he fails in that from his vantage point he never can view the squirrel's backside. If, on the other hand, the speaker is some other person who is viewing the situation from a standpoint external to the immediate scene of action, the man succeeds in that his path has circumnavigated the squirrel. Shifting the point of view from which the frame of reference is anchored provides an easy entry into understanding how such confusions arise.

I mention the matter of point of view with respect to James' example because of a recent controversy in cognitive linguistics. Claudia Brugman (1985) and George Lakoff (1987; see also related work in MacLaury 1989) have claimed that in Mixtec, a Mayan language which exclusively uses body-part morphemes to indicate the spatial relations performed by English prepositions, the resulting frames of reference system is not only an object-centred one, but one which on the face of it appears to be metaphoric. The claim is that speakers of Mixtec systematically understand spatial relations by metaphorically projecting body-part orientations onto other entities in the world. An example, quoted from Lakoff's (1987: 313) summary of Brugman's research, would be that *The stone is under the table* requires saying the stone

is proximal to the table's belly (*yuu wa hiyaa cii-mesa / stone the be-located table-belly*). While English does not normally systematically construct spatial relations in this way, many such metaphoric expressions are lexicalised: mountains may have a foot, faces, and shoulders, while rivers have mouths, arms, beds.

Such evidence fits with a key component of Lakoff and Johnson's embodiment hypothesis; namely, the view that abstract concepts are given meaning through a mapping process from more embodied domains. At first blush, a metaphoric mapping from body parts to spatial relations appeared to be similar to the directionality of projection noted in the vast majority of other conceptual metaphors. When taken together with the basic fact that in the neuroanatomy of the visual system all the information received by the visual system is first centred about the viewpoint of the person viewing the situation in the retinotopic maps, such evidence bolstered their claim that the evidence from body-part languages showed that a prior viewer-centred frame of reference must be projected in order to form the object-centred frame of reference. This evidence gave a certain initial plausibility to the Lakoff-Brugman hypothesis that frames of reference may be projected. Near the close of this article I will return to the question of how the current evidence in neuroscience bears on the plausibility of their proposal.

But the philosophical question I wish to raise first is even more fundamental: Why should names for body parts constitute a more basic source domain than the body interacting with space? Though originally taken as a metaphoric projection, much related investigation has fundamentally called into question whether this kind of spatial reference in Mayan languages is the result of a metaphoric projection. In the next section of this paper, I discuss two prongs of research which each argue that it is not a case of metaphoric extension. I then use this controversy to instigate a deeper philosophical discussion about the core hypotheses of cognitive linguistics; namely, that its embodiment hypothesis is a much broader philosophical position than simply the one claim that much of language and cognition is structured by conceptual metaphors. Frames of reference are an excellent example of embodied cognition that can be metaphoric, but that are not necessarily so; and so I use this example to develop a broader theory of what the term 'embodiment' means within cognitive linguistics.

3. Metaphysics, geometry, and developmental cognition

Claims concerning spatial frames of reference have long fascinated linguists, some of whom have been searching for metaphysically ‘primitive’ or ‘universal’ frames of reference to which the diversity of the actual occurring systems of reference-framing within the world’s languages might be typologically reduced. However, only recently have attempts been made to address these issues within the broader framework of cognitive science. One of the most important of these is represented by a group of scholars centred around the Max Planck Institute for Psycholinguistics. While much of this work is not explicitly within the rubric known as cognitive linguistics (see particularly Levinson’s (1994) trenchant criticisms of the cognitive linguistics account of body-part locative terms as metaphoric), it has grown up alongside and crucially interacting with that tradition. By contrast, the second set of studies is centred about a developmental account of spatial cognition. These studies were conceived within the scope of cognitive linguistics and were in part intended to inquire philosophically into the scope of its embodiment hypothesis.

In a review of their survey of the cross-cultural variation in languages, Pedersen, Danziger, Wilkins, Levinson, Kita and Senft (1998) observe that language communities vary as to whether and how frequently James’ geocentric and object-centred frames of reference are used in describing spatial situations. From a series of cross-cultural interviews in which language informants were asked to describe the relationship between a man and a tree, the researchers developed a typology of languages according to the frames of reference that were present in the language and, in languages where both the absolute and relative frames of reference were present, according to which frames of reference were predominantly used within communities of language informants. (Their terminology of *absolute*, *intrinsic* and *relative* frames of reference roughly parallels the typology of geocentric, object-centred and viewer-centred I have given above.)¹

1. Though I regret to add more terminology to an already overly jargonesque subject matter, my philosophical differences with their position will, eventually require I refrain from adopting their precise terminology. I will, however, point out that Levinson (1996) provides a useful survey of the variety of terms employed by neuroscientists, cognitive psychologists, linguists, philosophers and others working on frames of reference.

For example, Dutch and Japanese speakers regularly provided information drawn from the relative (or viewer-centred) frame of reference, in which the speaker's left/right are regularly used in describing the objects in the photograph. By contrast, informants from languages such as Tzeltal and Longgu provided information which relied on either the geographic information in the photo or on fixed bearings such as cardinal directions, and therefore from an absolute (or geocentric) frame of reference.

What is particularly admirable about their research program, however, is that it does not stop with a cross-linguistic typology. Instead, their work exemplifies the contemporary cognitive science paradigm of attempting to synthesise typological results in cross-cultural linguistics with the experimental tradition in cognitive psychology, and even eventually with evidence concerning the frames of reference in neuroscience. One sample task described in Pedersen, Danzinger, Wilkins, Levinson, Kita and Senft (1998) is the animals-in-a-row task, in which the subjects were asked to remember an array of three toy animals on a table that were arranged on a rectangular table in a line facing either to the subject's left or right. Subjects were then asked to turn 180 degrees around and reconstruct the scene exactly as they had seen it. Speakers of the languages which primarily use the relative frame of reference regularly reconstructed the scene so that the animal that had been on their left was still on their left, and so on — maintaining the order of the animals relative to their own bodies. By contrast, speakers of the languages which primarily use the absolute frame of reference regularly reconstructed the scene so that the animal which was to the south end of the table was to the south, and so on — maintaining the order of the animals with respect to the orientation of the table or to the geocardinal directions. From this and related experiments, Pedersen et al. argue that the linguistic variation as to which frame of reference is preferred strongly influences which spatial frame of reference is used in solving conceptual problems.

I mention these studies from psycholinguistics for two reasons. The first is to show why Levinson believes that the typology argues against the notion that the relative system is basic to all languages and is metaphorically projected, while the second is to illustrate that the problem of differing levels of investigation within the many disciplines of cognitive science is non-trivial. With respect to the first point, Levinson and Brown (1994) have given a historical survey which traces the argument that the relative frame of reference is universal to human cognition back to Immanuel Kant (1768).

The typological data gathered by the Max Planck group, however, finds that there are Mayan and Austronesian languages which use intrinsic (or object-centred) frames of reference alone (summarised in Table 5 of Pedersen et al. 1998: 572). If the relative system does not occur in all languages, then this appears to be *prima facie* evidence that the relative system is not universal to human linguistic cognition.

However, when this finding is considered alongside the previously mentioned fact that since all vision starts off as viewer-centred, it poses a cognitive puzzle about why an object-centred (or intrinsic) system occurs by itself in some languages. Levinson (1994: 840–845) considers this puzzle briefly and initially proposes it could be the natural outcome of a modular visual system in which the object-centred neural maps that perform object recognition in the visual system operate as an intermediary level of representation that can interact with language processing, while lower-level visual processing containing the viewer-centred maps does not. Importantly however, Levinson continues by pointing out a flaw in his first solution, namely that Tzeltal body-part terms are sensitive to various spatial primitives in the intrinsic geometry of objects. These spatial primitives consist of items such as the relative internal axes and specific shape contours used by such viewer-centred maps. Levinson (1994: 843) stops short, however, of rejecting modularity outright, even while admitting that his evidence would have to be stretched to support it. Ultimately, however, it is this allegiance to the Marrian theory of vision with its strict emphasis on the modular and bottom-up algorithmic neural computation of visual properties that leads his criticisms of metaphor theory astray.

Levinson's biases lead him to reject, on erroneous grounds, the Lakoff-Brugman proposal that the intrinsic (or object-centred) system of spatial reference is constituted by a metaphoric projection of a supposedly more basic relative (or viewer-centred) frame of reference system. The reasoning here is faulty because Levinson's rejection of the metaphoric character of this projection falls into a levels-of-investigation trap. Metaphor, in the Lakoff and Johnson sense, is not "some loose analogy" (Levinson 1994: 812) which takes place solely on the level of language as it would in traditional theories of metaphor viewing metaphor as deviant figurative language, but instead a phenomenon which takes place on multiple levels of investigation. Based on his mistaken impression that conceptual metaphor is a high-level and top-down hypothesis, Levinson (1994: 807–812; 833–836) argues that

explanations given on metaphoric grounds are too unconstrained and hence overly generative of possible mappings which do not occur as regular morphemic markings in Tzeltal (and when such mappings do occur they are clearly deviant and figurative). But in fact Levinson's analysis of the geometric constraints on Tzeltal is quite a bit closer to the kind done by conceptual metaphor theorists. What Levinson omits is a careful discussion of how Johnson's image schemata (1987:29) constrain the mappings of conceptual metaphors. Image schemata, proposed on philosophical, neural, cognitive and developmental psychological grounds (see Rohrer 1998: Chapter 5), posit many of the same sort of geometric structures that Levinson's analysis emphasises as spatial primitives of the visual system. Though these proposals do differ as to the specific structures proposed, the particular content of Levinson's proposals about what these spatial primitives might be are highly image-schematic in nature. Taking conceptual metaphor theory apart from its sister theory of neurally instantiated image schemata ensnares Levinson in the levels-of-investigation trap, and thus illustrates why this problem is a non-trivial one for those of us working in the cross-disciplinary paradigm of cognitive science. I will offer a theoretic framework meant to address this problem in a subsequent section.

However it is also important to acknowledge that, even despite the similarities that Levinson's argument overlooks, the two underlying proposals are not entirely equivalent. Deep philosophical differences remain concerning the modular and algorithmic rigidity that informs Levinson's theoretical outlook on neural processing. For example, because Johnson's image schemata are explicitly conceived as crossmodal patterns, they might not be modular enough to suit Levinson's philosophical predisposition toward modularity. The furious philosophical debates over the purported modularity of language (or, alternatively, the contributions of perceptual processing to linguistic processing) remain an open controversial question in neuroscience, though they are gradually yielding to experimental definition. In sum, it is probably fair to say that while it appears that there may be much more contribution from perceptual processing to linguistics than traditional theories of language supposed, much remains to be learned about the extent to which and precisely how such contributions occur.

The developmental evidence from language acquisition studies provides a more subtle critique of the Lakoff-Brugman proposal concerning whether body-part languages rely on a metaphoric projection from a viewer-centred

frame of reference onto a target object. Kristine Jensen de Lopez and Chris Sinha (1998) and (Sinha 1999a) have researched whether children learning to speak yet another related Mayan language, Zapotec, acquire body-part morphemes first as body-part terms and then only later metaphorically project them as spatial relations terms. The preliminary analysis of the fieldwork suggests Zapotec speakers in fact acquire them in the reverse order, while Danish and English children acquire them in the order that the Lakoff-Brugman argument suggests. If body-part terms are acquired first as spatial terms by Zapotec children, it contravenes the notion of a metaphoric projection of terms from the body onto objects. Of course, it may still be likely that there is a metaphoric projection of body part terms in languages such as Danish or English that do not normally use the object-centred frame of reference.

In fact, what their study really does is challenge the core conception of embodiment within cognitive linguistics in two key respects. First, the reversed acquisition order suggests that interacting with the spatial world might be just as basic as naming the parts of the body. This is an important insight, if only because from outside cognitive linguistics the embodiment hypothesis is sometimes seen merely as the idea that the body serves as a source of metaphors used for understanding some more abstract target domain. For example, Lakoff and Johnson (1980, 1999) have argued for something we might call the *strong directionality constraint* over what kinds of sources project to the target. In their view, there is normally a unidirectionality of metaphoric projection from more basic bodily source domains to more abstract target domains. Thus, a naive view of the acquisition order evidence might suggest that in this case it looks like a reversal of the strong directionality constraint, i.e. Zapotec speakers use projections from something more abstract — space — to structure something more basic, the body. However, this is both a false conclusion and an overly narrow formulation of the embodiment hypothesis. Though the directionality constraint is in fact one important component of the embodiment hypothesis, Lakoff and Johnson have repeatedly emphasised the interactional and pragmatic character of embodiment. The body does not exist by itself, in isolation from the world, but instead develops in contact and through experimentation with it. Seen in the richer light of a broader conception of embodiment that includes the body interacting in space, the debate over the original Lakoff-Brugman claim seems to be somewhat misguided.

Second, and in addition to challenging the overly narrow interpretation of the embodiment hypothesis as simply taking the body in isolation from the environment as the source domain for understanding anything, Jensen de Lopez and Sinha (1998) also push the boundaries of embodiment in another key respect: the contribution of cultural practices. With respect to the cross-cultural differences in acquisition order, Jensen de Lopez currently hypothesises that the difference may derive from differing cultural practices. She notes that Zapotec infants spend most of their first two years in a sling on the mother's back, sharing her spatial perspective, while Danish and English children are placed in cribs and carriages and encouraged more to move about on their own. Consequently, joint attentional episodes during which the child's body parts are named may be less frequent in Zapotec child-rearing practices than in Danish or English cultural practices. In short, she suggests that what might have looked like a projection of self or viewer-centred body-part terms in order to form an object-centred frame of reference is instead simply the raw acquisition of an object-centred frame of reference through joint attentional episodes focused on the spatial characteristics of such objects. While this particular suggestion is still speculative, there is no doubt that language — like a significant portion of human cognition — is learned during joint attentional episodes between infant and caregiver (Sinha 1999a, 1999b). Establishing shared reference is something that takes place in a cultural context; the developing body exists no more in isolation from people and culture than it exists in isolation from interacting with space.² In this sense, the embodiment hypothesis is broadened 'upward', away from the small scale of neurons and neural circuitry and into the larger scale cultural phenomena of people interacting with one another.

One might question, of course, whether a broadening of the notion of embodiment is useful. Typically, when one broadens a scientific claim one risks making it less predictive and hence less falsifiable. Yet I have discussed briefly how evidence from several different levels of analysis — among them the linguistic, conceptual, cultural, neural — as if they all could equally and unproblematically contribute to our understanding the frames of

2. Lakoff and Johnson (1980: 117–119) are quite straightforward on this point, arguing that there are three natural kinds of experience, including not only experience of the body but interactions with the physical environment and culture. See Chapter 5 of Rohrer 1998 for a review.

reference puzzle engendered by James' squirrel. My thoughts to this point have thus mirrored James' initial insight as he first answers the question: The problem posed by the squirrel is not so much a metaphysical dispute about the universally true meaning of 'to go round', but a practical problem of how human beings habitually and successfully construct meaningful worlds of shared reference and joint attention.

But just as for James, upon reflection we see that the real problem is how we 'scientist-squirrels' — that is, we 'cognitive linguists' — are to go about doing the metaphysics of our enterprise. By the phrase 'doing metaphysics', I mean only that the squirrel problem brings up deep philosophical issues about the nature of inquiry in cognitive linguistics such as whether and how we can systematically go about tying all these levels of investigation together, or as to what level of investigation is the one at which such frames of reference can be said to exist, or as to what extent different-at-different-levels-yet-still-eerily-similar frames of reference can be reconciled with each other, and so on. So here at last is a difference between James' project and mine: In James' case he uses the squirrel problem to launch a discussion of the conflict between religious belief and scientific inquiry, while in this case I am concerned with what is 'cognitive' about cognitive linguistics. Over the next section of this article I explicitly develop a broad-based framework for research in cognitive linguistics, and subsequently I use this framework to discuss related evidence from fields as diverse as navigation systems and neurology, arguing that there are many good reasons to suppose that all these spatial frames of reference exist as differently embodied systems.

4. The senses of embodiment and the levels of investigation theoretic framework

It is usually wise to begin descriptively before proceeding prescriptively; the following section proceeds accordingly. One relatively uncontroversial fact is that the meaning of one of the most central terms in cognitive linguistics, 'embodiment', is also one of its most hotly contested ones. By my current count, the term 'embodiment' can be used in at least ten different important senses with respect to our cognition. Because theorists often (and sometimes appropriately) conflate these senses, it is important to get a clear picture of

as many as we can of the different dimensions of variability indicated by the term. I would not claim that this list is entirely exhaustive of the term's current usage, nor that these dimensions I identify here are necessarily entirely independent of one another or entirely distinct from one another. Thus it is also important to note that this initial survey is not intended to be a prescriptive definition of the term, but instead is intended to catalogue the usage of the term in a way that reveals a number of the most relevant dimensions to which one must be responsive in order to develop a general theoretic framework for the embodiment hypothesis of cognitive linguistics.

1. 'Embodiment' has a *phenomenological* meaning in that it can refer to the things we notice consciously about the role of our bodies in shaping our self-identities and our culture through acts of conscious and deliberate reflection on the lived structures of our experience (See Geeraerts 1985 for example).

2. 'Embodiment' can refer to the *cultural* contributions and context in which the body, cognition and language emerge and are perpetually situated; similarly, it can refer to the *cultural artifacts* that aid and manifest cognition.

3. 'Embodiment' is also used as shorthand for a counter-Cartesian *philosophical* account of mind and language. Descartes took problems within geometric and mathematical reasoning (such as the meaning of the term 'triangle') as model problems for the study of mind and language, and concludes that knowledge is disembodied — that is, fundamentally independent of any particular bodily sensation, experience, or perspective. From this perspective, the philosophy of language typically consists in (i) mapping the reference relations between idealised mental objects of knowledge and the objects or 'states of affairs' in the real world (as in 'truth-conditional semantics'), and (ii) in discussing the logical internal structure of the relations which hold between these mental objects ('syntax'). Of course, Descartes is by no means unique nor alone within Western philosophy in claiming this position (held in varying forms by Pascal, Russell, young Wittgenstein, Quine, Chomsky and many, many others), but his extraordinary clarity has garnered him the laurel of becoming metonymic for that package of assumptions.

4. 'Embodiment' can also mean what Lakoff and Johnson (1999) have recently called the *cognitive unconscious*. Here 'embodiment' refers to the ways in which our conceptual thought is shaped by many processes below

the threshold of our active consciousness, usually as revealed through experimental psychology. For example, psychologists have investigated what frames of references English speakers are more likely to use when reading the spatial term 'above' (Carlson-Radvansky and Irwin 1993).

5. In a *neurophysiological* sense, the term 'embodiment' can refer to the particular neural structures and regions which accomplish feats like metaphoric projection, the integration of image schemata, object-centred versus viewer-centred frames of reference in the visual system, and so on.

6. 'Embodiment' can also be taken to refer to *neurocomputational* models of language, particularly with respect to conceptual metaphor. Such neural networks may be said to be embodied in two ways. First, they may more or less closely model the neurobiology of the neural circuitry they seek to emulate. Second, they may use as their input structures the output from maps of better understood embodied neural structures, typically from within the perceptual modalities. Zlatev (1997) has studied how neural nets can acquire spatial relations terms and frames of reference. Other examples of the neurocomputational sense of embodiment include Howard (this volume) on the biasing inherent to prototype representations as well as efforts by the Neural Theory of Language group at Berkeley (see summary in Lakoff and Johnson 1999; Regier 1995; Narayanan 1997; Bailey 1997).

7. The next two senses both highlight variability along the often neglected temporal dimension as well as along the dimension of physical size. Thus in yet another important sense 'embodiment' can refer to the *developmental* changes that the organism goes through as it transforms from zygote to fetus, or from child to adult. Research on the acquisition course of spatial relation terms (Lopez de Jensen and Sinha 1998) would be an example of the developmental dimension).

8. Another important sense of the term 'embodiment' refers to the *evolutionary* course of development the species of organism has undergone throughout the course of its genetic history. For example, an account of the gradual differentiation of information into separate multiple maps each representing a different frame of reference in the visual system of mammalian evolution would be an evolutionary explanation of multiple frames for spatial reference. Or on an even grander scale: human beings have presumably not always had a language capability, and so evidence from studies on the evolutionary dimension of embodiment may often prove crucial to

understanding why, for example, language processing in the brain does not appear to be exclusively concentrated as an autonomous module but instead draws on numerous subsystems from the perceptual modalities (see Deacon 1997; Edelman 1992; Donald 1991 for treatments).

9. A particularly influential sense of 'embodiment' stems from Lakoff and Johnson's (1980: 112) early formulation of the embodiment hypothesis as being a constraint on the *directionality of metaphor mappings*. In this strong directionality constraint they claim that we normally project image-schematic patterns of knowledge unidirectionally from a more embodied source domain to understand a less well understood target domain.

10. However, I think there are actually two senses of embodiment worth distinguishing in the previous point. In its original formulation the embodiment hypothesis was first stated as a generalisation about the *kinds* of basic conceptual domains which were generally serving as source domains, rather than as explicitly referring to the directionality of *projection* for each and every element mapped within a particular metaphor. We might call this sense of embodiment *the directionality of explanation* to distinguish it from the previous sense. This sense is also similar to that stated in Lakoff and Turner's grounding hypothesis, in which they argued that meaning is grounded in terms of choosing from a finite number of semantically autonomous source domains (Lakoff and Turner 1989: 113–120).

I should mention again in closing that this list is not meant to be entirely exhaustive of the usage of the term 'embodiment', but rather to illustrate that the scope of the embodiment hypothesis requires thinking through evidence drawn from a multiplicity of perspectives on embodiment, and from multiple methodologies. Of course almost no researcher or research project can attend to all these different senses of the term and produce sound scientific findings; but, at minimum, a review of the literature on any given topic in cognitive linguistics needs to take account of all these dimensions. Of particular interest of course, are research projects that build bridges or perform parallel experiments across these differing dimensions.

It is my contention that much of the confusion stemming from this situation of multiple overlapping dimensions of the term 'embodiment' might be alleviated if research in cognitive linguistics were conceived in a broad-based theoretic framework. In developing a broader theoretic framework for use in cognitive linguistics, I have made use of Posner and Raichle's (1994)

schematisation of the levels of investigation in cognitive science as a broad theoretic framework for cognitive linguistics (Figure 2). The most basic organising criterion of my theoretic framework is the scale of the relative physical sizes of the phenomena which produce the different kinds of cognitive or neural events to be studied. Size is mapped on the y-axis, providing a relative distribution of the 'higher to lower' levels of cognitive processes. To provide clarification, in the next column I provide examples of what the relevant physiological structures are at a given physical scale. I describe the 'Level of Investigation' in accordance with the kinds of cognitive processes studied at that order of magnitude. A general name of each level is indicated by boldface type.

Because I want to preserve Posner and Raichle's deep insight that it is profitable to consider how the experimental tasks change at various levels of investigation, the 'Tasks' column of this theoretic framework specifies for conceptual metaphor theory in particular some typical relevant experimental tasks. Where the notion of an experimental task does not apply, I provide some other relevant foci of analysis. In the next column I describe some of the relevant theoretic constructs operative at the level of investigation, while in the final column I identify some of the various methods used to study phenomena at that level of investigation.

In addition to spatial frames of reference, this framework can be used to structure studies of other topics of interest to cognitive linguists, such as metaphor, mental imagery, categorisation, and so on. This type of theoretic framework is now fairly common within much of cognitive science, but cognitive linguistics has been slow to give explicit attention to the problem of how we are to theoretically situate and reconcile these different levels of investigation.

I should also note that I have explicitly included a level of cultural and communicative analysis. By choosing to include a level situated at 1 m and up relative size scale, I mean to indicate not just the size of physiological structure of the central nervous system of language-producing human beings, but also the standard scale of their interactional distance in speaking with one another. Language is not learned in isolation nor are words uttered in a vacuum, and investigations in cognitive linguistics should include this level of investigation. Finally, while this chart of the framework gives a good overview of the relationship between body, brain and culture, it is not as illustrative for issues pertaining to evolutionary and developmental time

Size	Physiological Structures	Level of Investigation	Typical Frames of Reference Theory Tasks	Sample Operative Theoretic Constructs	Sample Methods of Study
1 m and up	Multiple Central Nervous Systems	Communicative and cultural systems in anthropology, language, science and philosophy	Navigational problem-solving, speakers communicating about the spatial locations of men and trees	Geocentric, viewer-centred and other frames of reference in mapmaking; and in language	Linguistic analysis, cross-linguistic typology, textual analysis, discourse analysis, cognitive anthropology
5 m to 2 m	Central Nervous Systems	Performance domain; Cognitive, conceptual, gestural and linguistic systems as performed by individual subjects	Reproducing spatial relations as in the Animals-in-a-row and related task; gestural tasks such as the Sylvester and Tweety Bird task	Geocentric, viewer-centred and other frames of reference in language and cognition	Verbal report, observational neurology and psychiatry, discourse analysis, cognitive and developmental studies examining reaction time (RT)
10^{-1} m to 10^{-2} m	Gross to medium size neural regions (anterior cingulate, parietal lobe, etc.)	Neural systems	Activation course in somatosensory, auditory, and visual processing areas when processing spatial relations tasks	Neglect; parietal lobe	Lesion analysis, neurological dissociations, neuroimaging with fMRI and PET, ERP methods, neurocomputational simulations
10^{-2} m to 10^{-4} m	Neural networks, maps and pathways	Neuroanatomy; Neural circuitry in maps, pathways, sheets	Neuroanatomical connections from visual, auditory, somatosensory regions to language areas	Spatial location and object recognition maps	Electrocellular recording, anatomical dyes, neurocomputational simulations
10^{-3} m to 10^{-6} m	Neurons, Cortical columns	Neurocellular systems; Cellular and very small intercellular structures	Fine neuroanatomical organisation of particular structures recruited in the processing	Orientation-tuning cells; ocular dominance columns	Electrocellular recording, anatomical dyes, neurocomputational simulations
Less than 10^{-6} m	Neuro-transmitters, ion channels, synapses	Subcellular systems; subcellular, molecular and electrophysical	None — beyond theoretical scope	Neurotransmitter, synapse, ion channels	Neuro-pharmacology, neurochemistry, neurophysics

Figure 2. Theoretic framework for the embodiment hypothesis in cognitive science as applied to spatial frames of reference

scales, which may be considered at any of these levels. However, this is more a limitation of the imagery of the chart than the theoretic framework itself. If we were to add an axis for time perpendicular to the surface plane of the chart, we could then imagine this framework as a rectangular solid. I have omitted representing this dimension because such an illustration would make it difficult to label the levels, but I mention it because the time courses of these phenomena is a central dimension to understanding them.

5. Spatial frames of reference and cultural artifacts

To illustrate how this kind of theoretic framework might be applied within cognitive linguistics, I want to first focus on what we might think of pushing the study of spatial frames of reference upward and outward. Thus far, I have reviewed a number of central studies concerning frames of reference and body-part languages at the linguistic and cognitive level, but I have not sufficiently demonstrated how the study of spatial frames of reference can benefit from analyses at the cultural and performative levels of investigation that are not narrowly focused on language per se. To this end, I am going to discuss one of the areas in which frames of reference have tremendous practical import: navigation and direction-finding.

We have probably all had the experience of being given ambiguous directions in an unfamiliar locale. For example, in navigating a foreign city we might resolve the ambiguous phrase “the theatre is just to the right of the cathedral” in several different ways depending on the frame of reference chosen. Suppose we had just received this response when we asked a native for directions, and then while looking at our map (a geocentric frame) realised that we could arrive at the cathedral by walking due south. Now, because the canonical orientation of a map is to have north at the top, we decided that by ‘to the right’ the speaker meant that the theatre as being to the east of the cathedral. But suppose we didn’t find it there, and after some initial confusion, we concluded that perhaps the speaker had given us path-dependent directions, where ‘to the right of the cathedral’ should have been resolved relative to our perspective on the situation as we approached the cathedral (a viewer-centred frame). Using this frame of reference, we realised that the theatre might have been to the right of the cathedral as we approached it by walking south, and hence on its west side. Further suppose,

however, that this interpretation also fails, for on the west side the cathedral faces a wide-open plaza. Nearing complete confusion, we finally ask another native for directions to the theatre. Her response is to laugh, and to point a building due north of the theatre — a building that we had already walked by twice. In a flash of insight, we finally come to realise that what the first speaker actually meant was that the theatre is to the right of the cathedral according to an object-centred frame of reference. Because this cathedral has a canonical orientation where its front is where the doors open westward onto the plaza, ‘to the right of the cathedral’ can also mean just to the north of it.

I have constructed the phenomenology of this imagined situation carefully in order to generate a situation in which none of the frames of reference co-align. Interestingly, Sotaro Kita (submitted) has studied how the gestures given in such situations reveal a pre-linguistic process of co-aligning the frames correctly so that accurate directions can be given. His analysis of videotaped gestural data shows that, when facing in a different direction from the path to the destination for the directions they give, people will frequently shift their gaze or even awkward, torso-twisting or across-body physical gestures in order to imagine better the situation by aligning their viewer-centred frame of reference with the absolute frame of reference.³ He argues that the gestural evidence reveals that speakers are aligning the frames in order to facilitate the correct linguistic utterance. In other words, people subconsciously prefer to establish co-alignment between the geocentric and the viewer-centred reference frames before giving directions — as supported by the phenomenological experiences of anyone who has ever turned around with a map until both they and the map faced north, or who as a direction-giver has subconsciously repositioned themselves so that their orientation matches how they would geographically travel to their destination.

Within cognitive anthropology, Edwin Hutchins (1995) has shown how such spatial frames of reference become embedded in cultural artifacts of knowledge, such as in the geocentric physical charts and maps used by Western navigators or in the viewer-centred conceptual models used by

3. It is import to note that Kita (submitted) found that speakers make these gestures only in certain restricted situations in which they do not make use of a local landmark. An example of direction-giving which uses a local landmark would be the instruction “turn to the left, in the direction the theater will be”.

Micronesian navigators. Hutchins (1995: 136) describes how such navigational artifacts can lead to problems in the co-alignment of reference frames:

While the Palau was steaming eastward, southwest of San Diego Harbor, a quartermaster attempted to identify the Coronado islands, which lay about 7 miles south of the ship. The three islands were clearly visible out the window of the pilothouse just above the chart table. Of the three islands on the chart, the leftmost island was labeled 'North Coronado' and the rightmost one was labeled 'South Coronado.' Because the quartermaster was looking to the south however, North Coronado was on the left in the world (the reverse of their positions on the chart relative to him). By mapping the spatial structure of the chart directly onto the visible world, the quartermaster managed to mistake North and South Coronado for each other.

The navigational chart embeds the geocentric frame of reference into its structure, but because it can be used in a variety of spatial orientations, it is a tool that can also create potentially dangerous mismatches.

The geocentric frame of reference is so central to our Western practices of navigation that most of us could not imagine finding small islands amidst vast oceans without plotting a course to our destination on a chart and checking it repeatedly. Yet the system of navigation developed by the Micronesian peoples for sailing their outrigger canoes among the tiny coral atolls of the southwestern Pacific Ocean utilises a viewer-centred frame of reference coupled with an oral tradition which encodes the relative bearings between islands and the rising and setting points of prominent stars on the horizon (Hutchins 1995: 65–91). This system begins by conceptualising the canoe as moving away from the island, but once the canoe is out of sight from land the canoe no longer moves. Instead, the world moves about the canoe. Hutchins notes that this is true even when the canoe comes in sight of neighbouring islands off to the left and right of the course to the destination — informants report that the islands are moving, not the canoe. In fact, it is the moving islands that are the key to knowing when the canoe has reached the vicinity of the destination, whereupon other navigational systems and frames of reference once again come into play. How is it possible that Micronesian navigators can travel for days at a time on the open ocean and yet repeatedly and easily pass the stern test of landfall?

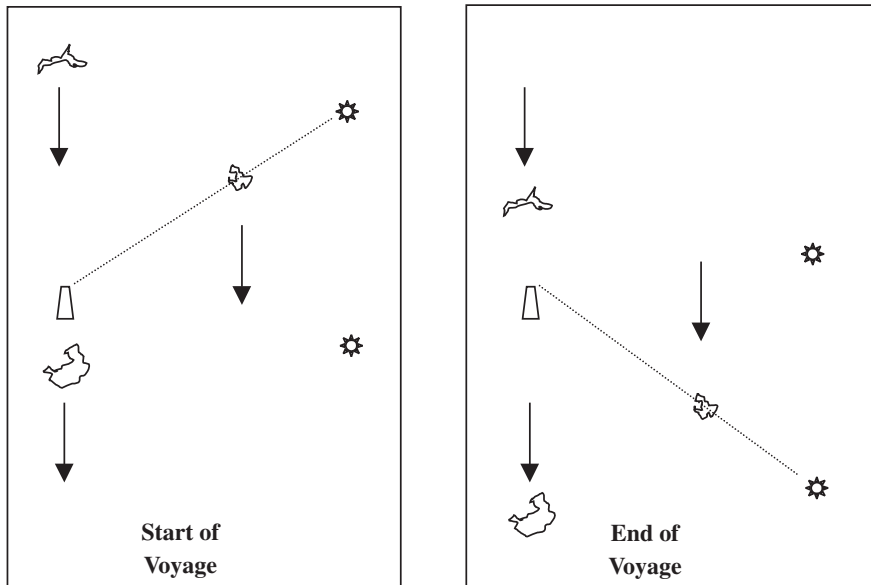


Figure 3. Navigation using a viewer-centred spatial frame of reference. The islands and stars move past the boat. The result of the world moving past the boat for the distance symbolised by the vector is shown in the second frame. Note that the bearing on the island has reached the rising point of the second star; this is how the navigator knows that the voyage is nearing its end. This voyage is highly simplified for schematic purposes; a longer voyage will have multiple segments, navigational islands and bearings. This illustration is an adaptation of those found in Hutchins (1995: 83–91).

Consider the canoe as the stationary standpoint of a viewer-centred frame of reference (see Figure 3). From it, the islands appear to move about the canoe, much as a person sitting in a car might imagine a water tower off some distance to one side moving by the car. (I have chosen this analogy because I find the feeling of being a passenger on a long car journey is akin to the feeling of effortlessly sailing on the regular swells of the open ocean.) The position of these islands is then tracked in comparison with a yet more distant object, which, in the case of the Micronesian system, is the rising or setting point of certain stars on the horizon; or in our hypothetical analogy to the car passenger, say it is two widely separated peaks of a mountain range paralleling the road. Now, just as over the course of an hour the water tower ‘moves past the car’ from under the first mountain peak to under the

second, at the beginning of the voyage the island is under a particular star's rising point while at the end of it the island is under another star's rising point. From the viewer-centred frame of reference of the navigator, the island has moved relative to fixed points on the horizon, and this is what tells the navigator that the journey is at an end.

One of the interesting side effects of the Micronesian system is that it eliminates the problem of co-aligning the geocentric frame of reference embedded in a map with the perspective given by a viewer-centred frame of reference. The roughly comparable Micronesian artifact is a chant that encodes a series of viewer-centred bearings between islands and the points on the horizon, but because all the information is framed viewer-centrally, there is no possibility of the kind of co-alignment error experienced by the quartermaster. Of course, this is not to say that the Micronesian system of navigation is intrinsically superior to the charts of Western navigators, but it is an illustration of how the design of a cognitive system can serve to eliminate one source of error. Hutchins analyses these systems in considerable detail, arguing that they are examples of *distributed cognition*. In distributed cognition, tasks are both off-loaded onto material and cultural artifacts and are socially distributed across an ensemble of practitioners.

This conception of distributed cognition is a fruitful hypothesis at several levels of investigation, and it is also worthwhile to trace it 'downward' (in terms of physical scale) into levels of investigation focused on the brain. For example, we could conceptualise the relationship between the gestural system and the linguistic system as one which distributes cognition across multiple neural systems which are then co-activated with the appropriate linguistic response. Assuming that the gestural evidence reveals that a person is engaging in a mental imagery task while preparing the linguistic response for giving the relevant directions, this imagery probably utilises regions of the brain already implicated in integrating sensorimotoric information with visual information. The topology of the perceptual imagery involved in co-aligning the reference frames then contributes to choosing the appropriate linguistic response (that is, turn *right* or *left*). Such a hypothesis raises questions about just what we know from neuroscience about how the perceptual systems represent spatial frames of reference — a problem to which I now turn.

6. Spatial frames of reference in neuroscience

Among the most significant theoretic discoveries in neuroscience has been the realisation that the brain manipulates perceptual information in image-like wholes. One of the basic principles of neural organisation is *the topological representation of neural maps* — visual, somatosensory, auditory and other perceptual information is represented spatially in neural fields that map perceptual features such as location, motion, the hand, pitch, and so on. The organisational structure of these maps necessarily imply a frame of reference, and the brain expends much effort to update these maps constant given changes in eye movement, head movement, or bodily orientation. As information is passed forward and re-represented in later maps, the information retains much of its original contour patterns; these are the neural bases for Johnson's (1987) image-schematic patterns. For example, visual information is initially represented in a frame of reference centred retinotopically, but then must be adjusted for the direction and size of the next saccadic eye movement (Lee, Rohrer and Sparks 1988), while some later neuronal maps in the ventral intraparietal region utilise a head-centred frame of reference, tracking an object's location by preserving the shape contours of the object and simultaneously integrating information from the somatosensory system that encodes the position and movement of the head (Colby and Duhamel 1993). While the problem of how such schemata are continually, represented, transformed and re-represented in multiple frames of reference is the topic of much research in cognitive neuroscience, few attempts have yet been made to bring the work on neuroscience together with research on frames of reference in language.⁴ However, a recent survey of some of the relevant literature suggests that the linguistic frames of reference observed at higher

4. Of course some important exceptions to this rule exist, including research done by Jordan Zlatev (1997) in theoretical cognitive linguistics in conjunction with developmentally-based neural network models. See particularly his account of how spatial relation terms and frames of reference could be acquired by a simple neural network model trained on a dataset of actual child language utterances. See also the more historical survey on language and neuroscience given by Petersen, Nadel, Bloom and Garrett (1996) as a chapter in their edited volume *Language and Space*. Other articles in that collection, including Levinson (1996) are useful as well, while Levinson (1994) brought work in the neurocomputational modeling of vision together with language. However, none of these efforts explicitly bring to the table the principled approach to synthesising the research from multiple levels of investigation offered here.

levels of cognition may well be embodied with fairly direct neural analogues in spatial cognition (Petersen, Nadel, Bloom and Garrett 1996).

One important source of evidence at what I have called the neural systems level of investigation results from asking questions of neurologically impaired patient populations. Such patients typically have brain lesions resulting either from a stroke or some intrusive traumatic head injury. The loss of brain region typically translates into a loss of function, but it can be very difficult to pin down exactly what task is performed by a particular brain region, and not all tasks are necessarily localisable to brain regions. However, patients with lesions in the parietal cortex typically exhibit symptoms of a syndrome called hemineglect. Hemineglect is characterised by reduced attention to the half of space contralateral to the lesion. For example, when asked to copy a clock face and label the hours, a right parietal patient would typically crowd the numbers into the right side of the object while omitting some numbers normally found on the left side. Such deficits are naturally amenable to research as to which spatial frames of reference are used to organise this region of parietal cortex.

Marlene Behrman and collaborators have designed a series of experiments which differentiate between the viewer-centred and object-centred frames of reference for visual stimuli (Behrman and Tipper 1999; Tipper and Behrman 1996; Behrman and Tipper 1994; Behrman and Moscovitch 1994). For example, one such experiment consisted of asking a patient to track the right side of a barbell figure (two circles joined by a horizontal line) as the barbell was incrementally rotated until the right side of the barbell was in the left visual field. Patients were then evaluated to how well they responded to a target presented in either the left or right visual field. This finding shows that “the neglect that was associated with the left side of the object accompanied the object to its new location” (Behrman and Tipper 1999: 84). Target detection was impaired on the left side of the barbell, which was now in the right side of visual space — thus supporting the hypothesis that neglect can take place within an object-centred frame of reference. Together with related experiments, this finding constitutes important evidence that the absolute and relative spatial frames of reference are embodied within the perceptual system. More importantly, it suggests an avenue for further research within the cognitive linguistics paradigm exploring whether damage to this region of the right parietal cortex inhibits language comprehension or production of sentences that use one or the other of these spatial frames of reference. Such

research would bear strongly on the question of whether or not language was an autonomous module which did not access the spatial primitives of the perceptual system.

However, it is not yet clear from analysis at the neural system level that these spatial frames of reference are necessarily encoded as separate and distinct maps within the cortex. Behrman and Tipper (1999: 84) caution that if the horizontal line of the barbell is removed from their experiments, the evidence no longer supports object-centred neglect but reverts to viewer-centred neglect. Previous studies on the static pictorial presentation of rotated objects (Coslett 1989; Behrman and Moscovitch 1994) have shown that objects which have a canonical object-centred frame of reference intrinsic to them, such as asymmetric letters or drawings of a left or a right hand, are more prone to exhibiting object-centred neglect than objects which do not have such canonical orientations (such as symmetric letters or the profile of a cow). In neurocomputational simulations that model the kind of maps found at the neuroanatomical level of investigation, Pouget and Sejnowski (1997) have pointed out that it is not necessarily the case that every possible change in spatial frame of reference must be represented in an intermediary map. They present a model of parietal neuron responses as approximated by the product of a Gaussian function of retinal location and a sigmoid function of eye position, arguing that if neuronal maps were organised to take advantage of this mathematics they could represent the position of an object in multiple frames of reference simultaneously. Their simulation demonstrates that it is at least possible that neglect of both kinds might result from a unitary parietal representation that encodes spatial information relevant to both frames of reference.

Once again, however, complications are induced by further evidence at the neuroanatomical and neurocellular levels of investigation. Single-cell recordings from two macaque monkeys, who have a visual cortex closely resembling that of humans, show that there are two adjacent fields of posterior parietal neurons which modulate selectively to body-referenced (viewer-centred) stimuli and world-referenced (geocentric) stimuli (Snyder, Grieve, Brotchie and Andersen 1998). Responses to visual targets were compared from data recorded while the body and head of the monkey had been rotated together to several positions to data recorded with the monkey head position held constant while the body position was counter-rotated; a third condition explored the monkey's own active head rotation to identical targets.

The neuronal field of the LIP cortical region responded to the body-referenced information in the body rotation without head rotation condition, while the neuronal field of cortical area 7a responded to the world-referenced information in the body and head rotation condition. This evidence suggests that there are separate representations of visual space which represent object location in different spatial frames of reference; hence animal studies have made the problem more complicated, suggesting separate pathways and representations for the other two spatial frames. Further work might also show the same result for comparison between object-centred and world-centred frames, but as the evidence on the three frames currently stands it tends to support the Lakoff-Brugman view that the object-centred and viewer-centred frames are more tightly coupled than the viewer-centred and the geocentric frame.

Throughout these last two sections I have not only been illustrating the effect of a principled cross-disciplinary analysis of the different levels of investigation, but have also been making proposals as to how cognitive linguistics could test its hypotheses and benefit from interaction with its sister disciplines in cognitive science. For example, if cognitive linguistics could come up with appropriate stimuli which could test for these frames of reference in humans by means of linguistic data, and if Lakoff and Johnson's embodiment hypothesis were correct in supposing that language co-activates the relevant areas of parietal cortex that perform imagery tasks, then it might be possible that linguistic research might contribute to answering this kind of question, even though it is supposedly about a purely perceptual phenomenon. Such experiments would have the advantage of being carried out using the less invasive techniques of functional magnetic resonance imaging and event-related potentials, and might reveal spatially discriminable fields for such frames of reference in humans without requiring further invasive experiments on monkeys. This kind of cross-disciplinary work represents a model project very much in the original spirit of what cognitive linguistics was to be (Lakoff 1987). It is important, however, that cognitive linguistics does not just import evidence from psychology and neuroscience as serious influences which constrain linguistics hypotheses, but actively interacts with those disciplines in order to shape hypotheses within them as well. Only then will cognitive linguistics be not just a listening but a speaking member of the cognitive science family.

7. Conclusion: Toward a PCP-based cognitive linguistics

Though I have argued for importing into cognitive linguistics the broad theoretical framework that resulted primarily from the cognitive neuroscience revolution within cognitive science, I want to make it clear that we should not be blind to some of the poor assumptions in early cognitive science. Much ink has been spilled both within and without cognitive linguistics on the differences between generations of cognitive scientists. Like most caricatures, these differences are usually overdrawn but exist nonetheless. Hutchins argues that theorists “in the classical camp of cognitive science have taken what is called ‘a physical symbol system’ as the primary architecture of human cognition” (1995: 358). Newell and Simon’s conception of the brain as a physical symbol system (PSS) was supposed to be an instance of a Turing-like universal machine that could manipulate symbols without any knowledge as to their semantic content, because their semantic content was assumed to be a matter of what 20th-century analytic philosophy had said it was — a simple matter of reference to states of affairs holding in the world and independent of the vagaries physiological apparatus which garnered it. The fact that the view of the brain as essentially a symbol processor exists and still holds much sway should not be doubted (see Newell and Simon 1990; for a historical overview see Gardner 1985).

What I am saying about the old guard in cognitive science might seem obvious, but it isn’t entirely so. The classical view of cognition states that the mind is fundamentally composed of representations which link symbols to the world, and it is called the classical view for a reason. It is called ‘classical’ because this conception is an old notion in the philosophy of language that can be traced back to Platonic and Aristotelian philosophies of language and science (Rohrer 1998: Chapter 1). The idealised language would ‘cleave nature at its joints’, and refer purely and clearly to the categories as they are in nature, apart from our experience of them. The metaphor, and the accompanying philosophical project, has its roots in Plato. In the *Statesman*, Plato has the Eleatic stranger instruct a young Socrates in the art of definition:

We must beware lest we break off one small fragment and then contrast it with all the important sections that have been left behind. We must only divide where there is a real cleavage ... it is splendid if one really can divide off the class sought for immediately from all the rest — that is, if the structure of reality authorizes such divisions. (Plato: 262b)

Plato's myth of the Eleatic stranger is at the source of one tradition within cognitive science; that given by William James, John Dewey and other American pragmatists is at another. There lies the source of the richly philosophical sense of embodiment, and it is what underlies the theoretic framework I have proposed.

In order to oppose this overly referential view of language and this symbol-minded view of cognition as a PSS, I would propose instead a pragmatic-centred philosophy (PCP) for cognitive linguistics. Just as discoveries in evolution, psychology, and pedagogy drove the philosophical revolution that became American pragmatism, the recent developments in cognitive science and cognitive neuroscience can drive a PCP-based cognitive linguistics. If, as good pragmatists, we see language not as some magical special ability of a rationality which sets *homo sapiens* apart from the animals but instead as a well-developed and highly-evolved refinement continuous with the bodily and animal cognition of our past, we might begin to see language as another highly effective cognitive tool developed in the course of our adaptation to a complex yet highly patterned world. It is my view that we should base our explanations of language first and foremost in what gives a shared and mediated world; namely the shared facets of our bodies, brains, development and cultures. Neither the arcane depths of neuroscience nor the heights of cultural analysis are any more real or any less necessary to explaining language. The neurosciences, with all their various apparatuses, are ultimately focused on patients. Not all deficits are as dramatic as visual neglect, but at the centre of such work lies the suffering patient to whom science is ultimately addressed. Similarly, we can take what we have learned about language — about, for example, the ambiguity of direction finding and apply it to solving simple problems like direction finding. For example, cognitively-inclined computer scientists in Sweden have explored which frames of reference are most suitable for an information kiosk geared toward guiding tourists around an unfamiliar town. Such work can drive a PCP-based cognitive linguistics that is very similar in spirit to Lakoff and Johnson's embodiment hypothesis, and is at the core of the philosophical sense of the term.

Of course, I am not saying that anyone should give up linguistics to become doctors or computer scientists. But as cognitive linguists we can and should interact with them more, and bring them our hypotheses to put to the test. Nor am I saying that we should leave old projects entirely behind, but

simply that we should clean off the lenses through which we look at them. The referential capacity of language is important and should be given its due; Sinha (1999b) has recently argued for a theory of the emergence of referential meaning as embedded in the joint attentional episodes taking place between infant and caregiver. But just as important is understanding figuration; how can the object of reference stand out against the backdrop of experience? In my view, research on spatial frames of reference tackles both the problems of reference and figuration, both in the tracking of an object in the visual or somatosensory modalities within cognitive neuroscience and in analysing how language calls our attention to different features of our world within linguistic analyses. It has already taken some steps toward becoming this kind of multi-disciplinary study, even though some of that interdisciplinary work has been done by a severe critic of a central approach within cognitive linguistics. As such, this topic is a natural avenue for renewed attention in cognitive linguistics, using the sort of principled theoretic framework I have outlined in this article.

I began this article by quoting a passage about squirrels and frames of reference from the American philosopher William James. It is perhaps fitting that I conclude by continuing that same quote, for like James, I have told

... this trivial anecdote because it is a peculiarly simple example of what I wish now to speak of as the pragmatic method. The pragmatic method is primarily a method of settling metaphysical disputes that otherwise might be interminable. Is the world one or many? — fated or free? — material or spiritual? (James 1907: 18)

(To James' list of important questions, I think we might well add: "Is space relative or absolute?" But he continues:)

— here are notions either of which may or may not hold good of the world; and disputes over such notions are unending. The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences. What difference would it practically make to any one if this notion rather than that notion were true? If no practical difference whatever can be traced, then the alternatives mean practically the same thing, and all dispute is idle. Whenever a dispute is serious, we ought to be able to show some practical difference that must follow from one side or the other's being right. (James 1907: 18)

In the end, my view is that cognitive linguistics could do no better than adopt James' definition of the pragmatic method as its ideological motto.

What difference does it make that one can marvel that it is possible to form semantic nonsense sentences such as ‘colourless green ideas’? Not a whit. But it can and does make a difference if we can trace semantics and syntax back to our embodied experience of space, or if we could show how perceptual cognition about spatial frames of reference is critically involved in linguistic expression of the same sentences. It makes a practical difference to the person asking directions, to the design of information kiosks which can guide you to museums in foreign cities, to the patient with neglect whose suffering might be eased if we knew more about the ways in which the disorders of spatial frames of reference work.

In short, what really matter are the practical problems of living, and just as such problems drive cognition they should drive explanation. This was the central insight of the pragmatists and it is the one we should adopt. A PCP-based cognitive linguistics thus not only has a pragmatically-centred philosophy, but a patient-centred and problem-centred one as well. Cognitive linguistics can and should be vitally engaged with pragmatic problems.

Acknowledgments

I would like to acknowledge the Danish-American Fulbright Commission and the stimulating intellectual environment of the Centre for Semiotic Research in Aarhus, Denmark for their generous financial support for much of the research written up in this article. When this research was only in a formative stage, Jordan Zlatev and Peter Gaardenfors kindly invited me to present them as a colloquium given to Lund University’s Cognitive Science Centre. I am indebted to the comments and suggestions that I received there as well those offered when I presented a revised version of this work at the Language and Ideology theme session of the International Cognitive Linguistics Association Conference in Stockholm. I have also benefited from numerous conversations with Jordan Zlatev, Chris Sinha, Sotaro Kita, Mark Johnson and George Lakoff on these issues. Finally, the final version of this article was written while I was supported by NIMH-supported postdoctoral fellowship to the Institute for Neural Computation at the University of California in San Diego.

References

- Bailey, David. 1997. When push comes to shove: A computational model of the role of motor control in the acquisition of action verbs. Ph.D. Dissertation, Computer Science Division, University of California Berkeley.

- Behrman, Marlene and Moscovitch, Morris. 1994. "Object-centered neglect in patients with unilateral neglect: Effects of left-right coordinates of objects." *Journal of Cognitive Neuroscience* 6: 151–155.
- Behrman, Marlene and Tipper, Steven P. 1999. "Attention accesses multiple reference frames: Evidence from visual neglect." *Journal of Experimental Psychology* 25: 83–101.
- . 1994. "Object-based attentional mechanisms: Evidence from visual neglect." In C. Umiltà and M. Moscovitch (eds), *Attention and performance XV: Conscious and Nonconscious Information Processing*. Cambridge, Mass.: MIT Press, 351–375.
- Brugman, Claudia. 1985. "The use of body-part terms as locatives in Chalcatongo Mixtec." In *Report No. 4 of the Survey of Californian and Other Indian Languages*, 235–290. Berkeley: University of California.
- Carlson-Radvansky, Laura A. and Irwin, David E. 1993. "Frames of reference in vision and language: Where is above?" *Cognition* 46: 223–244.
- Colby, C. and Duhamel, J. 1993. "Ventral intraparietal area of the Macaque: Anatomic location and visual response properties". *Journal of Neurophysiology* 69: 902–914.
- Coslett, H.B. 1989. "The role of body image in neglect". *Journal of Clinical and Experimental Neuropsychology* 11: 79.
- Deacon, Terrence. 1997. *The Symbolic Species: The co-evolution of language and the brain*. New York: W.W. Norton.
- Donald, Merlin. 1991. *Origin of the Modern Mind: Three Stages in the Evolution of Culture and Cognition*. Harvard: Harvard University Press.
- Edelman, Gerald. 1992. *Bright Air, Brilliant Fire: On the matter of mind*. New York: Basic Books.
- Gardner, Howard. 1985. *The Mind's New Science: A history of the cognitive revolution*. New York: Basic Books.
- Geeraerts, D. 1985. *Paradigm and Paradox: Exploration into a paradigmatic theory of meaning and its expistemological background*. Leuven: Leuven University Press.
- Howard, Harry. This volume. "Age/gender morphemes inherit the biases of their underlying dimensions".
- Hutchins, Edwin. 1995. *Cognition in the Wild*. Cambridge: MIT Press.
- James, William. 1995 [1907]. *Pragmatism*. New York: Dover Publications.
- Jensen de Lopez, Kristine and Sinha, Chris. 1998. Corn stomach basket. Spatial language and cognitive development in Danish- and Zapotec-acquiring children. Paper presented at the Child Language Seminar, Sheffield University England, September 1998.
- Johnson, Mark. 1987. *The Body in the Mind: The bodily basis of meaning, imagination and reason*. Chicago: University of Chicago Press.
- Kant, Immanuel. 1991 [1768]. "On the first ground of the distinction of regions in space." [Von dem ersten Grunde des Unterschiedes der Gegenden im Raume.] In J. van Cleve and R.E. Frederick (eds), *The Philosophy of Right and Left*. Dordrecht: Kluwer, 27–33.

- Kita, Sotaro. Submitted. "Interplay of gaze, hand, torso orientation and language in pointing". In S. Kita (ed.), *Pointing: Where language, cognition, and culture meet*. Cambridge: Cambridge University Press.
- Lakoff, George. 1987. *Women, Fire and Dangerous Things*. Chicago: University of Chicago Press.
- . 1993. "The contemporary theory of metaphor." In A. Ortony (ed.), *Metaphor and Thought*, 2nd. ed. Cambridge: Cambridge University Press.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago: University of Chicago Press.
- . 1999. *Philosophy in the Flesh*. New York: Basic Books.
- Lakoff, George and Turner, Mark. 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Langacker, Ronald. 1987/1991. *Foundations of Cognitive Grammar*, Vol I, II. Stanford: Stanford University Press.
- Lee, Choongkil, Rohrer, William H., and Sparks, David L. 1988. "Population coding of saccadic eye movements by neurons in the superior colliculus." *Nature* 332: 357–360.
- Levinson, Stephen. 1994. "Vision, shape and linguistic description: Tzeltal body-part terminology and object description." *Linguistics* 32: 791–855.
- . 1996. "Frames of reference and Molyneux's question: Crosslinguistic evidence." In P. Bloom, M. A. Peterson, L. Nadel and M. F. Garrett (eds), *Language and Space*. Cambridge, Mass.: MIT Press.
- Levinson, Stephen and Brown, Penelope. 1994. "Immanuel Kant among the Tenejapans: Anthropology as empirical philosophy." *Ethos* 22: 3–41.
- MacLaury, Robert. 1989. "Zapotec body-part locatives: Prototypes and metaphoric extensions." *International Journal of American Linguistics* 55: 119–154.
- Narayanan, Srina. 1997. KARMA: Knowledge-based Active Representations For Metaphor and Aspect. M. S. Thesis, Computer Science Division, University of California, Berkeley.
- Newell, Alan. and Simon, Herbert A. 1990. "Computer science as empirical inquiry: Symbols and search". In J. L. Garfield (ed.), *Foundations of Cognitive Science: The essential readings*. New York: Paragon House.
- Pederson, Eric, Danzinger, Eve, Wilkins, David, Levinson, Stephen, Kita, Sotaro and Senft, Gunter. 1998. "Semantic typology and spatial conceptualization". *Language* 74: 557–589.
- Peterson, Mary A., Nadel, Lynn, Bloom, Paul and Garrett, Merrill F. 1996. "Space and language". In P. Bloom, M. A. Peterson, L. Nadel and M. F. Garrett (eds), *Language and Space*. Cambridge, Mass.: MIT Press.
- Plato. no date. *Statesman*. Translated by J. B. Skemp.
- Posner, Michael and Raichle, Marcus. 1994. *Images of Mind*. New York: Scientific American.
- Pouget, Alexandre and Sejnowski, Terence J. 1997. "Spatial transformations in the parietal cortex using basis functions". *Journal of Cognitive Neuroscience* 9: 222–237.
- Regier, Terry. 1995. *The Human Semantic Potential*. Chicago: University of Chicago Press.

- Rohrer, Tim. 1998. When metaphors bewitch, analogies illustrate and logic fails: Controversies over the use of metaphoric reasoning in philosophy and science. Ph.D. Dissertation, Department of Philosophy, University of Oregon.
- . 2001. "Even the interface is for sale: Metaphors, visual blends and the hidden ideology of the internet". In R. Dirven, R. Frank and C. Ilie (eds), *Language and Ideology. Vol. 2: Descriptive Cognitive Approaches*. Amsterdam and Philadelphia: John Benjamins.
- . Forthcoming a. "The cognitive science of metaphor from philosophy to neuroscience". *Theoria et Historia Scientiarum*.
- . Forthcoming b. "The embodiment of blending: Cognitive semantics and contemporary cognitive science". *Cognitive Linguistics*, forthcoming special issue on conceptual integration networks.
- Sinha, Chris. 1999a. Language, culture and the embodiment of spatial cognition. Paper presented at the 7th International Cognitive Linguistics Conference in Stockholm, Sweden, July 1999.
- . 1999b. "Grounding, mapping and acts of meaning". In T. Janssen and G. Redeker (eds), *Cognitive Linguistics: Foundations, scope and methodology*. Berlin: Mouton de Gruyter, 223–255.
- Snyder, Lawrence A., Grieve, Kenneth L., Brotchie, Peter and Andersen, Richard A. 1998. "Separate body- and world-referenced representations of visual space in parietal cortex". *Nature* 394: 887–891.
- Tipper, Steven P. and Behrman, Marlene. 1996. "Object-centered not scene-based visual neglect". *Journal of Experimental Psychology* 22: 1261–1278.
- Zlatev, Jordan. 1997. *Situated Embodiment: Studies in the Emergence of Spatial Meaning*. Stockholm: Gotab Press.

Does Cognitive Linguistics Live up to its Name?

Bert Peeters

University of Tasmania, Australia

There can be no doubt that *structural* linguistics, which flourished half a century ago on both sides of the Atlantic Ocean, lived up to its name: it was structural because it considered languages to be self-contained entities that had either to be shaped into a rigorous structure, or actually possessed a structure which was real and merely waiting to be discovered. There can be no doubt either that *transformational* grammar, which in its heydays pushed structuralism into quasi-total oblivion, lived up to its name: it was transformational because it posited several successive strata or structures in sentence generation which were linked by means of transformations of all sorts. On the contemporary scene, there can be no doubt that *functional* linguistics lives up to its name: it attaches a great deal of importance to the way in which languages function and to the functions of language. The question that will be raised in the next few pages is the following: does Cognitive Linguistics, as we know it today, live up to its name?¹

Before I answer the main question, let me ask, and answer, another one. I mentioned structural linguistics, transformational grammar, and functional linguistics, and spelled all of them with lower case initials.* Why did I use

1. Minimalism (Chomsky 1995), the successor of Government and Binding, itself an outgrowth of classical transformational grammar, does not. Although a lot of excess apparatus has been disposed of, the remnants of previous approaches are too numerous for the framework to be really “minimalist”.

*. *Editors' note:* There is significant, relevant tension between the author and the editors on this particular naming practice. The editors insist on a more conventionalized naming choice

upper case initials when referring to Cognitive Linguistics (and why am I doing it again)? It is certainly not common practice. Langacker (1998: 1), for instance, points out that the “movement called *cognitive linguistics* [lower case, B.P.] belongs to the functionalist tradition”. He then goes on to add, quite crucially, that “although its concern with cognition hardly makes it unique, the label *cognitive* is not entirely arbitrary” (1998: 1). The subordinate clause indicates why, in my view, the use of upper case initials is warranted. There is a lot of cognitive linguistics going on *outside* the movement described by Langacker. Generativists in particular have more than once expressed their annoyance regarding what they see as the “misappropriation” of the term by Cognitive Linguists. Their research interests, and that of many others, carry an equal entitlement to identification by means of the label *cognitive linguistics*. It is an entitlement which, in the current climate, they will find increasingly difficult to claim.²

Instead of pondering the possible implications of the terminological skirmishes that are taking place, let us return to our main question. Does Cognitive Linguistics (with upper case initials) live up to its name? At one stage (Peeters 1998), the answer (or rather, my answer) came much closer to a two-letter word than it does today. I now suspect that after all there is some room around the cognitive science table for Cognitive Linguistics. However, Cognitive Linguists must do their homework first.³ An increased commitment to certain aspects of reality (to be defined below) is likely to result in much-needed closer ties with, and increased visibility in, the

(i.e., “cognitive linguists”) while the author has, on a principled but not conventionalised basis, a personal preference for “Cognitive Linguists.” We accept and present this difference of approach to the naming problem in the spirit of the respectful engagement of tension which pervades the entire volume.

2. Schwarz (1992) did use the label *cognitive linguistics* to refer to the *wider* field of “approaches to natural language as a mental phenomenon” (Geeraerts 1995: 112). This includes not only Cognitive Linguistics, but also approaches such as those taken by Noam Chomsky and by Manfred Bierwisch. Schwarz’s example has been followed by, e.g., Taylor (1995) and Newmeyer (1999). Geeraerts (1995) provides a brilliant summary of how Cognitive Linguistics and generative grammar differ in their commitment to cognition.

3. Rohrer (This volume) argues for a broad-based theoretical framework which would tie Cognitive Linguistics in with cognitive science. The latter is redefined as a patient-, problem- and pragmatically-centred multi-disciplinary enterprise that binds together levels of investigation ranging from the cognitive neurosciences through the computer sciences and psychology to anthropology.

cognitive science community at large (in which, it would seem, they have not as yet acquired their rightful place, in spite of the fascinating facts of language which they have been able to unearth). Only when such closer ties obtain will it be possible to change the answer to the question from ‘not yet’ to ‘yes’.

I do realise that even a more considered answer such as this one (more considered at least than the one I formulated in Peeters [1998]) is likely to raise many eyebrows. Those who are twitching should recall that the Cognitive Linguistics movement as we know it today was born out of polemical opposition to Chomskyan linguistics. Cognitive Linguists, therefore, ought to be able to handle a bit of polemical opposition directed at themselves. Although possibly corrosive, my remarks intend to be constructive. I see my role as that of a gadfly, and hope that those people who are being bitten won’t ache too much.

1. Reflexions on psychological and biological reality

1.1 *God’s truth from structural linguistics to the present day*

I started off by saying that structural linguistics was structural because it considered languages to be self-contained entities that had either to be shaped into a rigorous (phonological, morphological, possibly lexical) structure, or actually possessed a (phonological, morphological, possibly lexical) structure which was *real* and merely waiting to be discovered. In his celebrated review of Zellig Harris’ *Methods in Structural Linguistics* (Harris 1951), Householder (1952: 260) referred to those two ideological positions by means of the labels *God’s truth* and *hocus-pocus*.⁴ The details are as follows:

On the metaphysics of linguistics there are two extreme positions, which may be termed (and have been) the ‘God’s truth’ position and the ‘hocus-pocus’ position. The theory of the ‘God’s truth’ linguists [...] is that a language *has* a structure, and the job of the linguist is (a) to find out what that structure is, and (b) to describe it as clearly, economically, and elegantly as he can, without at any point obscuring the God’s truth structure of the language. The *hocus-pocus* linguist believes (or professes to believe — words and behavior are not

4. In fact, as the following quote indicates, he claimed that the terms had been used before. To my knowledge, no earlier source has ever been identified.

always in harmony) that a language [...] is a mass of incoherent, formless data, and the job of the linguist is somehow to arrange and organize this mass, imposing on it some sort of structure (which must not, of course, be in any striking or obvious conflict with anything in the data).⁵

The hocus-pocus position was fairly widespread. Householder himself did not object to what he called “a *certain amount* of hocus-pocus” (Householder 1952: 261; emphasis added); in fact, he went on to say that in his view “all linguists indulge in it frequently, for fun; and it is the greatest fun of linguistics” (ibid.).

Just under half a century later, a bewildering variety of descriptive frameworks are doing the rounds. Even if the terms are no longer on everyone’s lips, the distinction, widely accepted by the American structuralists of the classical era (as pointed out on 23 March 1999 by Esa Itkonen on Funknet), remains valid.⁶ At the same time, most (if not all) contemporary linguists firmly believe in the *reality* or *objective existence* of the (sub)structures they describe. Unfortunately, this appears to be another instance where “words and behaviour are not always in harmony” (Householder). The structures that are put forward in the present day and age by an ever increasing number of often incompatible accounts are so hugely different that they cannot all exist as such in the material that is being described. They are at best “interpretations” of an internal organisation which remains more or less elusive. The map, as is often said, is not the territory. In some forms of linguistics, it may be more *complex* (contra Hutton, This volume).

One important difference between the fifties and the present needs to be highlighted. For many linguists, psychological and biological reality (or at least likelihood) is more important than ever before. Behaviourism, in the crude form in which it had been imported into linguistics by Bloomfield, had

5. Note that Householder, in true structuralist fashion, talks about *languages* and not about *language*. God’s truth is *not* that “language has a structure”, a view that most linguists nowadays, unless they believe in universal grammar, would reject out of hand. Cognitive linguists, for instance, rightly start from conceptual structures, which can be reflected in thousands of different ways in the languages of the world, where they are shaped in part by the building blocks of those languages.

6. In the printed literature, the terms resurface (quite exceptionally for the nineties) in Houben (1993). In the early seventies, they made a fleeting appearance in proverb studies (Krikmann 1971; Kuusi 1972, cf. Grzybek 1995). In the sixties, anthropologists became familiar with them thanks to Burling (1964).

little or no such reality value. With that in mind, the terms *God's truth* and *hocus-pocus* may be redefined (and have been).⁷ In his Funknet posting, Itkonen presented a set of updated definitions:

The 'hocus-pocus' view (without any negative connotations) has been and is (and will be) represented by those who just want to present the facts of a given language [...] in a maximally simple (*sic*) and general way. Most of the time, this way has or is meant to have NO psychological or biological reality. [...] The 'God's truth' position (without any either positive or negative connotations) is represented by those who do not merely wish to capture the psychological and/or biological reality, but who actually succeed in doing so, at least to some extent.⁸

Cognitive Linguistics has come a long and arduous way, but it has an even longer and more arduous way to go: to increase its chances of real integration in and recognition by the cognitive science community at large, it must engage with this new form of God's truth, i.e. with psychological *and* with biological reality — the mind *as well as* the brain — in a way it has not done hitherto.⁹

1.2 *Psychological vs. biological reality*

Nobody would want to deny that Cognitive Linguists have made inroads into the area of the *mind*. They have done so by asking questions relating to psychological reality at large, and in particular to the nature of categorisation, to the issue of storage versus computation, etc. Hence, I am not saying that there

7. I am almost quoting Householder now, not because I want to be facetious, but because this time there really is an earlier source.

8. Itkonen's quote shows the effects that political correctness is now having on everyday discourse. Why else was it necessary to qualify those very labels that Householder used with no precautions other than the usual inverted commas?

9. Pursuing God's truth, as defined here, is different from "taking up God's perspective, which is impossible" (Mark Johnson apud Hutton, This volume). God's truth does not necessarily correspond to a *God's eye view* of truth, to the truth as it exists prior to any description, to the objective truth about the workings of a language. If it did, it would be unattainable, at least according to the cognitive linguistics canon set out in Lakoff (1987). For reasons known to everyone, cognitive linguists will be among the first to recognise that Householder's terminology is metaphorical. "Because of the pervasiveness of metaphor in thought, we cannot always stick to discussions of reality in purely literal terms" (Lakoff apud Hutton, This volume). This is true as well when we go one step further and actually *set out* to study the brain (cf. the quote from Lakoff in Section 1.2).

is *nothing* cognitive about Cognitive Linguistics. However, for most Cognitive Linguists, *cognitive* seems to be synonymous with *psychological*. This is not the way the term is used, for instance, among cognitive psychologists, whose subject area is of course not “psychological psychology”. For them, *cognitive* means ‘pertaining or related to knowledge’. Just as it is wrong to reduce cognition to neurocognition (as I did more or less in Peeters 1998), it is wrong to reduce cognition to psychology. Unfortunately, the Cognitive Linguistics movement as a whole stands out for doing just that: when it comes to matters of the *brain* (i.e. biological reality), there is not as yet a lot of interest among its members. There are certainly multiple references in the literature to the “mind/brain”, but that is often as close as one gets to the brain. In fact, mind and brain are vastly different entities: the former is psychological, the latter biological. As I have pointed out elsewhere (Peeters 1996): “The mind is what the brain does for a living”.¹⁰

I would be remiss not to mention at this point the work of scholars such as George Lakoff, Paul Deane and Terry Regier. Deane is the author of a very impressive volume called *Grammar in Mind and Brain* (Deane 1992), and of a paper (Deane 1996) which examines the effects of agrammatic aphasia on neurological support for Cognitive Linguistics. Regier (1996) has shown that spatial relations as expressed in language have no objective existence in the world, but depend directly upon the structure of the human brain. Together with cognitive scientists Jerry Feldman, Lokendra Shastri, David Bailey, Srini Narayanan and others, all based at the International Computer Science Institute at Berkeley, California, Lakoff has spent much of the last ten years or so working on a “neural theory of language”. It has been said that the latter may one day become a “unifying force” in Cognitive Linguistics, “since it will provide a common vocabulary for all the different strands” (Lakoff interviewed by Pires de Oliveira, This volume: 27). The published text of another interview, conducted by John Brockman after the release of Lakoff and Johnson (1998), is equally relevant. It contains the following clarification:¹¹

10. Until the present day, it has been impossible to track down the exact source of this amazing aphorism. I would love to be in a position to claim authorship for it. As it happens, I encountered it somewhere or other, but I failed to write down who had said or written it first.

11. Note the use of the “common neuroscience *metaphor* that networks of neurons are electrical circuits” (Lakoff interviewed by Pires de Oliveira, This volume: 41; emphasis added).

A human brain consists of a very large number of neurons connected up in specific ways with certain computational properties. How is it possible to get the details of human concepts, the forms of human reason, and the range of human languages out of a lot of neurons connected up as they are in our brains? How do you get thought and language out of neurons? That is the question we are trying to answer in our lab through the computational neural modelling of thought and language.¹²

An ambitious undertaking indeed. The fact remains, though, that at this stage Lakoff is more readily recognised for his equally important work in metaphor and prototype theory (Lakoff and Johnson 1980; Lakoff 1987; Lakoff and Turner 1989, etc.).¹³ If, at this very moment, there is one Cognitive Linguist who is widely known for having succeeded in capturing the biological reality not just to some extent, but (in my view) to a very considerable extent, and to present that reality, in its full complexity, to his fellow linguists in a relatively easy-to-follow way, it must be Sydney Lamb. According to him (Funknet, 26 March 1999), interest in “God’s truth” can be reformulated for modern times as an interest in what is in the mind *and/or* the brain. In his newly published *Pathways of the Brain* (Lamb 1999), which appears set to become a highly controversial work, he provides a fascinating *neurocognitive* account of the workings of language (and other cognitive abilities). Instead of isolating linguistics from other scientific endeavours, as ignorance of those other scientific endeavours often compels individual scholars to do, he builds bridges to other disciplines. Whether they will stand the test of time, only time can tell.

12. The entire Brockman interview is a worthwhile read for those who are interested in the *philosophical* revolution that Lakoff and Johnson have been involved in. It can be found on the world-wide-web (<http://www.edge.org/documents/archive/edge51.html>), in the 51st issue of the electronic magazine *Edge*.

13. What matters here is not what (and how much) Lakoff has produced, but what (and how much) he has produced that is actually being read and/or taken further by a majority of cognitive linguists.

2. Cognitive Linguistics versus cognitive linguistics

2.1 *From Cognitive Linguistics to cognitive linguistics*

Just over two decades ago, it was Lakoff, not Lamb, who was taken to task by Chomsky (1979:150) for “working on ‘cognitive grammar’, which integrates language with nonlinguistic systems”. Chomsky (1979) is the English version of a text originally published in French in 1977, two years after the term *cognitive grammar* had first surfaced in Lakoff’s writings (cf. Lakoff and Thompson 1975). Chomsky, for one, did not “see any theory in prospect there”. This flippant remark raises the interesting question of the (hidden) impact which the man from MIT may have had on the Lakoff-Langacker agreement to use a common label for their work (in replacement for Langacker’s term *space grammar*, which was still in use in the early eighties). In other words, did Chomsky’s criticism backfire? Did Lakoff read Chomsky (1979), and did he think that *cognitive grammar* was too beautiful a term not to be made use of by Langacker and himself (against Chomsky)?

Whatever the case may be, it is quite ironical that Lamb (1999) felt unable to freely use the term he too had proposed (cf. Lamb 1971), earlier than Lakoff (or Chomsky), earlier even than Lewis Sego, who in late February 1999 reported on Cogling that — I quote — “almost twenty-seven years ago (precisely 13 April 1972), when I synthesised two separate doctoral programs I had nearly completed and therefrom coined the term *cognitive linguistics*, I considered the underlying concept a possible source of philosophical and scientific peacemaking”.¹⁴ Lamb decided instead to resort to the more explicit term *neurocognitive linguistics*, for fear of being mistaken for one of the many linguists who, by the end of the eighties, had started to use terms such as *cognitive linguistics* and *cognitive grammar* in a rather different and much broader way.

Let us recall some of the evidence. Although a preprint had been in circulation since 1984, the year 1987 saw the (official) publication of the first volume of Langacker’s *Foundations of Cognitive Grammar* (Langacker 1987–1991). Lakoff (1987) was published almost at the same time, and is of

14. Sego is now the editor of the electronically published *Pedagogical Quarterly of Cognitive Linguistics* (<http://pqcl.indstate.edu/>). See also Lewis (2001).

course another milestone, even though its title does not refer explicitly to either cognitive grammar or Cognitive Linguistics.¹⁵ This was followed in 1988 by a hefty volume on *Topics in Cognitive Linguistics* (Rudzka-Ostyn 1988), and in 1989 by a gathering in Duisburg (Germany), which was proclaimed to be the first International Cognitive Linguistics Conference. A selection of the papers read during that meeting was published four years later, in a volume (Geiger and Rudzka-Ostyn 1993), which became the pretext for my much-maligned (but also, in other quarters, much-applauded) review article called “Cognitive Musings” (Peeters 1998).¹⁶ In other words, what had been, until the end of the eighties, a collocation like any other one, gained the status of a proper name, an ideological label rather than a purely descriptive one, chosen in order to gain legitimacy, and to outdo other cognitivists. The term *Cognitive Linguistics* had been around for almost twenty years, but its consistent use as a name to refer to what is today a broadly defined paradigm with a very respectable following was new. It became the name adopted by *one* particular group of people, led by Lakoff and Langacker, to refer to the sort of work *they* were undertaking. It also became — quite naturally — the name used by *others* to identify that particular group of people.

In his interview with John Brockman (cf. Section 1.2), Lakoff summarises his contribution to contemporary linguistics as follows:

I set about, along with Len Talmy, Ron Langacker, and Gilles Fauconnier, to form a new linguistics — one compatible with research in cognitive science and neuroscience. It is called Cognitive Linguistics, and it’s a thriving scientific enterprise.¹⁷

15. Lakoff preferred a more “commercial” title, one that would sell — and sell it did (100,000 copies, according to René Dirven, *p.c.*).

16. Geiger and Rudzka-Ostyn (1993) is the third volume (after Langacker 1990 and Deane 1992) in the now well-established CLR (*Cognitive Linguistics Research*) series published, together with the journal *Cognitive Linguistics*, by Mouton de Gruyter. Among the later volumes, Casad (1996) and Achard (1998) deserve special mention.

17. The upper case initials are in the original text. Work published by the three authors referred to by Lakoff includes Talmy (2000) (a revision and digest of earlier work), Langacker (1987/1991, 1990), Fauconnier (1995, 1997). Talmy introduced the principles of Gestalt psychology into linguistic analysis. Langacker, among other things, developed Talmy’s insights into a coherent overall framework. Fauconnier brought the philosophical questions of reference and mental representation to bear on Cognitive Linguistics. As Lakoff points out at the beginning of the interview conducted by Pires de Oliveira (This volume: 25): “One of the

The question arises whether compatibility with research in cognitive science and neuroscience is enough. I am inclined to think that it is *necessary*, but *not sufficient*. The trouble for those who think that the work they are undertaking fits Lakoff's description is that compatibility implies (at least some) awareness. Unfortunately, large numbers of Cognitive Linguists remain *unaware* of what is happening in cognitive science and especially neuroscience (as shown by the references in their published work). They practice what Sydney Lamb, in the Funknet posting referred to above (and also in Lamb 1999), calls *analytical linguistics*. The latter, he says, is the familiar kind. "In this mode one is mainly concerned with accurately describing linguistic productions (without concern for the process of production or that of comprehension or the system that makes those processes possible)". Neurocognitive linguistics, on the other hand, aims at "understand[ing] that system and those processes".¹⁸

Geeraerts (1995: 111–112) provides the following useful summary of the sort of work in which most Cognitive Linguists today are engaged:

Because cognitive linguistics [what I call Cognitive Linguistics; B.P.] sees language as embedded in the overall cognitive capacities of man, topics of special interest for cognitive linguistics include: the structural characteristics of natural language categorization (such as prototypicality, systematic polysemy, cognitive models, mental imagery and metaphor); the functional principles of linguistic organization (such as iconicity and naturalness); the conceptual interface between syntax and semantics (as explored by cognitive grammar and construction grammar); the experiential and pragmatic background of language-in-use; and the relationship between language and thought, including questions about relativism and conceptual universals.

wonderful things about CL is that it is not dominated by any one figure". Instead, there are several important figures who approach each other's work with "a genuine feeling of mutual respect, a realisation that no one person is going to be able to think about everything or get everything right, and a commitment to building a co-operative and open scientific community"p. 26.

18. Perhaps *neurocognitive linguistics* is the answer of one Cognitive Linguist (Lamb) to Givón's (1998: 64) call for a "combined metadiscipline that is yet to be born — cognitive neuro-linguistics". This is not quite the same as what is commonly referred to as *neuro-linguistics* (tout court). The latter predominantly looks at language disorders (agrammatism, selective language impairments and other aphasias). For a recent "tutorial overview", see Levy and Kavé (1999).

A broader use of the label *cognitive linguistics* than was originally the case (in Lamb's earlier work) is entirely legitimate, because there is indeed more to cognition than neurocognition. The crucial thing, however, is that in the broader meaning of the label there should be a clearly visible spot for the original use. Unfortunately, for those who were expecting to find them included, neurocognitive issues are conspicuously absent from Geeraerts' list. They are not among the "topics of special interest" to Cognitive Linguists. And yet, it cannot be denied that the study of neurocognition and of its implications for language is a legitimate part of the study of language and cognition, not something that can be left to a few individuals in the Cognitive Linguistics community (who, by the way, also involve themselves with non-neurocognitive issues).

2.2 *The need for more "neurocognitive depth"*

More Cognitive Linguistics research is needed in the neurocognitive arena; we must stop thinking that others will do it for us and will by themselves ensure visibility for Cognitive Linguistics outside the narrow bounds of linguistics as a scientific endeavour. *Neurocognitive linguistics*, the "non-analytical" counterpart to the various "analytical" issues listed by Geeraerts, is an important branch of the overall cognitive enterprise. Sadly, it is hardly even described or referred to in the increasing number of introductions to Cognitive Linguistics that are currently being released. And here, of course, we end up in a vicious circle. As long as only a handful of Cognitive Linguists are doing neurocognitive work, those with enough knowledge of the field to write introductory texts will not find it worthwhile to report on the work of that minority. The introductory texts are being read by newcomers to the field who then, typically, start doing the sort of work that *is* reported on, without reaching out further.

It is my personal conviction, which I know many others do not share, that the lack of "neurocognitive depth" in Cognitive Linguistics is one reason why cognitive scientists in general do not take more notice of Cognitive Linguistics than they currently do. This is easily verifiable when one inspects the contents of the most commonly used introductions to and readers in cognitive science: whereas some go as far as to ignore linguistics altogether, in any of its forms, others often limit themselves to work which Cognitive Linguists readily dismiss as ill-conceived (e.g. generative grammar, truth-

conditional semantics).¹⁹ Similarly, there is a lot of linguistics, but little to no Cognitive Linguistics, in the major cognitive science serials. The tables of contents of *Cognitive Science*, *Cognition*, *Trends in Cognitive Sciences*, *Behavioural and Brain Sciences*, the Proceedings of the Annual Meeting of the Cognitive Science Society — not to mention those serials that more or less explicitly deal with language (e.g. *Brain and Language*, *Journal of Memory and Language*, *Language and Cognitive Processes*, *Mind and Language*) — provide direct evidence for the low profile of Cognitive Linguistics in cognitive science.

Admittedly, it could be argued that the poor visibility of Cognitive Linguistics in cognitive science texts has an altogether different reason. In his comments on the abstract which lies at the origins of this paper, Langacker referred to “the utter dominance of generative grammar for several decades and the length of time it realistically takes for a different set of ideas to become known outside (even inside) the field, especially when they depart from the ‘mainstream consensus’ that outsiders initially look to”. It is quite clear, though, that outside the USA generative grammar is no longer as dominant as it once was. In fact, Cognitive Linguistics itself, and many similarly oriented functional schools, have seriously undermined what used to be an almost unassailable position. There is no such thing as a “mainstream consensus” anymore, and there has not been one for a long time. Finally, whether length of time is an issue can also be questioned: it did not take Chomsky a long time to get noticed by psychologists, and his “set of ideas” was certainly very different from anything that had been heard before. As is well known, he gained early prominence with a lengthy review (Chomsky 1959) in which Skinner’s *Verbal Behavior* (Skinner 1957) was shred to pieces.²⁰ Skinner, of course, was just about the most respected psychologist of the day. I am reasonably confident that if anyone within the Cognitive Linguistics community were to similarly attack one of today’s

19. In saying this, I rely on my experience with the cognitive science texts that I have seen over the last few years. I could have produced a list, and in fact tried to as I was writing this paper. But that list soon became unwieldy, even though I had set 1995 as a *terminus post quem* for my planned survey (which would have required a full-fledged bibliographical report of its own).

20. Chomsky’s review, published about two decades before Dennett (1978), could no doubt be dubbed the “Skinner Skinned” of linguistics.

outstanding cognitive scientists, the cognitive science community at large would not fail to take notice. And it would not take very long either. But it is not necessarily the best way forward. Chomsky gained prominence among psychologists, less on the merits of his own work (which many found problematical) than on the ferocity with which he destroyed one of theirs, and not just anyone. I do not think that Cognitive Linguists would want to engage in that sort of activity.

3. Whereto from here?

3.1 *Innateness and modularity*

In March 1999, on Cogling, a step was made in the right direction. A few weeks before, Dick Hudson had asked for suggestions for introductory readings on Cognitive Linguistics for undergraduates. On 10 March, he produced an annotated bibliography which covered not only Cognitive Linguistics, but also innateness and modularity. These were actually the three sections which, in his own words, he had distinguished “rather arbitrarily”. That judgement was wrong insofar as it is in fact common practice for introductory textbooks in Cognitive Linguistics to refer to innateness and modularity *without* exploring either at great length (in contrast, there are entire chapters about prototypes, metaphor, frames, or about the traditional disciplines of linguistics such as lexicology, morphology, syntax, phonetics etc.). Hudson’s judgement was however right insofar as both innateness and modularity are important themes in cognitive linguistics, and should figure much more prominently in Cognitive Linguistics as well. Questions to be asked include the sort of *evidence*, if any, that can be found in favour or against innateness, in favour or against modularity. Those who provide that sort of evidence (or theoretical justification) are not normally associated with the Cognitive Linguistics movement.²¹ It is to be hoped that Hudson’s bibliography will actually be put to good use, so that students who learn

21. The Cognitive Linguistics heading in Hudson’s bibliography contains items by Cognitive Linguists such as René Dirven, Dirk Geeraerts, Ron Langacker, Günter Radden, John Taylor and Marjolijn Verspoor. The innateness and modularity headings have entries by authors who are at best interested onlookers.

about Cognitive Linguistics also learn, and read, about innateness and modularity in more detail than appears to be currently the case.

For the sake of completeness, I shall add a few comments on both. According to widespread opinion, innateness is a theoretical claim, a matter of belief rather than of research. But this, of course, depends on how much you want to assume is innate, the two extremes being the physiology to acquire a language, given appropriate circumstances, vs. an entire universal grammar. The former position is easier to research than the latter, which has indeed defied scientific scrutiny. Even so, evidence is scant and debatable, and the ethical implications of this sort of research loom large. For a recent appraisal, cf. Elman et al. (1996).

Modularity, on the other hand, is a slippery concept as well (Hilferty 2000). In discussions among linguists, the term *module* is used, not only with reference to language as a whole (as opposed to other presumed modules such as vision), but also — often at the same time — with reference to semantics and syntax, etc., even with reference to components within the latter, all of which according to some can be shown to be separate modules (submodules, sub-submodules). Uriagereka (1999: 268) reminds us that Fodor (1983), who is often identified as the most important catalyst for the recent modularity debate in linguistics, never intended the concept of “module” to be used in that way; he intended it as a ... *theoretical* construct at the higher level (e.g. language, vision), where modularity, like innateness, therefore does appear to remain very much a matter of belief. At lower levels, though, some sort of (limited) modularity does seem to occur, although finding proof of more promises to be a very difficult enterprise.

3.2 *Matters of the brain*

I shall give another example of what, I believe, also ought to belong in Cognitive Linguistics. I remember watching a television documentary a few years ago, which had been produced in 1994 for the BBC. Its title was *The Man who Made up his Mind*,²² and it focused on work by Gerald Edelman. Edelman is not a linguist, let alone a Cognitive Linguist; he is a neurobiologist. But his work on so-called neural Darwinism (Edelman 1987) has

22. Produced for the BBC Horizon series by P. Millson and directed by D. Singleton.

implications for language, which I believe the documentary briefly referred to. In Peeters (1998), I report what happened after that. I asked the readership of *Cogling* for more information on Edelman, thinking Cognitive Linguists would know everything about him that there is to know. The results were contrary to expectation. Two or three replies came in, one of which stated in unambiguous terms that I was asking the wrong people ... This left me puzzled. There is hardly anything more cognitive than the question of how language is processed in the brain. For that reason, exploration of brain processes, with special reference to language, *ought* to be part of the overall brief of Cognitive Linguists.²³

In his comments on the abstract of this paper (cf. Section 2.2), Langacker wrote as follows:

Maybe we should all study and cite Edelman, but does that tell us how to characterize the meaning of dative case in Polish or describe an antipassive construction? Should we all go work in wetlabs, or can mental spaces and blending be studied without that experience? [...] There has to be a large quantity of work that is specifically linguistic in nature, work that is specifically psychological or neurological, and work that tries to bring these together in one way or another. All are legitimate and important, requiring their own expertise, and they should all be welcomed for their contribution to what is an immense overall investigatory enterprise.

I could not agree more. In fact, we should *not* “all study and cite Edelman”. But a few more than are currently taking any notice should read him more attentively, in an attempt to gauge the implications of his research for our understanding of how language is processed in the brain, and they should tell the rest of us what they have discovered. However, what is really needed is a *book* of the kind that is now invading computer stores all over the world, a book titled, for instance, *Edelman for Dummies*. Those who have tried to read Edelman will have noticed that he is not an easy author to follow, not

23. Does our training as linguists preclude us from understanding what is going on in the brain? Most of us have had no training whatsoever in the workings of the brain. Those who have developed an interest have typically done so independently of their study of linguistics. They have read up on the literature, in a slow but certain process of familiarisation with a hugely complex area which has traditionally been the hunting ground of neurologists, anatomists, brain surgeons and the like.

even in his so-called popularising account *Bright Air, Brilliant Fire* (Edelman 1992), in which he approvingly quotes Lakoff, and criticises Chomsky.²⁴

But what if Edelman has got it wrong? Or what if he is not entirely right? The latter stand is taken by Sydney Lamb, who was singled out earlier for his contribution to neuroCognitive Linguistics. Lamb arrived *independently* at the basic idea of what Edelman so appropriately calls “neural Darwinism”. In a private e-mail message dated 25 May 1999, he reports that, as he became aware of Edelman’s work, he started to read selectively (as one is often obliged to do these days) and found himself in sufficient agreement to include a few, overall favourable, references in *Pathways* (Lamb 1999). Later, more exhaustive, readings produced disappointment: having struggled through Edelman (1987), which was a challenging read even to him, Lamb found that Edelman “comes close”, but does not quite understand after all how the brain actually stores information. One is tempted to conclude that Lamb’s exposition of the theory of neural Darwinism may be more accurate than Edelman’s...²⁵

Skeptics who have some idea of what is happening in the brain but do not really want to know more might at this point say the sort of thing that Aya Katz quite aptly expressed on Funknet, on 29 March 1999:

Brain configurations vary. Persons with severe brain damage in early childhood are often capable of normal language processing and production, even though the connections in their brains are very different from the norm.

What if we found that even in normal, undamaged brains, there is an immense variety of ways in which the same item can be stored and processed by native speakers of the same language? If we concentrated on the biological entity that produces it, we’d lose the generalization involved in the communicative function of language.

Speakers don’t know how their interlocutors’ brains are configured. Communication is based on the abstract system of contrasts set up in the language. We react to electronically programmed simulations of human speech

24. For an early introduction to Edelman, cf. Rosenfield (1988).

25. The assumption, here, is of course that Lamb did not misunderstand Edelman, and that his own hypothesis is correct. A reader of this paper suggested I attempt at least to summarise the basic idea. Suffice it to refer, once more, to the phrase *neural Darwinism*. Principles applied by Darwin to explain evolution at large apply within the brain as well: strengthening (of the more active neuronal groups), weakening/withering/disappearance (of the less active or inactive ones), in brief “survival of the fittest”.

just as we would to those produced by actual people, if it's close enough. We read manuscripts written thousands of years ago, and the information is communicated, even though the brain that produced it has long ago been consumed by worms.

That's the magic of language. The concretes don't matter.

There was an immediate reaction from Tony Wright, who later apologised for having somewhat condescendingly referred to "those [linguists] who want to be neurologists" and for having expressed his disbelief that some people would actually "want to give up linguistics for bean counting (neuron-counting)". Wright knew of course that neurologists do a lot more than just count neurons (otherwise he would not have apologised). He also knew that "the concretes do matter", even though at the same time he was fascinated by the way Katz had summarised the position of a majority of linguists (including Wright himself) who feel that the brain, for them, is *terra incognita*.

Why do the concretes matter? First of all, because by looking at language processing in the brain we can subject to detailed scrutiny the very theses that we constantly pay lip-service to, but do not pursue any further. We can begin to notice that the oft-repeated statements that we cherish are as extreme as the equally oft-repeated contrary statements heard in other circles. For instance, Cognitive Linguists like to say that there is no separate language module, that language is but one way humans use among several others to interact with the world, using general cognitive mechanisms. Langacker (1998: 1) puts it this way:

[Cognitive Linguistics] contrasts with formalist approaches by viewing language as an integral facet of cognition (not as a separate "module" or "mental faculty"). Insofar as possible, linguistic structure is analyzed in terms of more basic systems and abilities (e.g., perception, attention, categorization) from which it cannot be dissociated.

Generativists, on the other hand, are generally ready to swear the exact opposite. A closer look at the brain, and at how things really work, is increasingly likely to show that neither position can be maintained in its extreme form. The truth is no doubt somewhere in the middle (Newmeyer 1999: 5ff.). There is a certain degree of modularity, in that language — and in fact every other cognitive mechanism — involves brain activity that is unique to it. But clearly, there is a lot of interaction as well.

The concretes also matter for another reason. There are things that they could teach us, say, about polysemy, which, according to most Cognitive Linguists, is an essential property of a majority of lexical material (see now Cuyckens and Zawada 1999). Polysemy is the norm, rather than monosemy. While I have on various occasions argued against this view, I am now ready to admit that I was looking at things from a purely systematic point of view, without any reference to real language processing. In the meantime, my awareness of storage and computation of language material in the brain has increased — or so I hope —, and I am ready to answer the question: “Is X — where X is a word of whichever language I am studying — polysemous or monosemous?” by saying: “Yes, of course”, i.e. it is both.²⁶ It depends on the speaker. But in order to be totally sure, we might want to check whether study of brain mechanisms is able to enlighten us further. If, for instance, a word which is potentially polysemous were inserted in different disambiguating contexts, and these contexts were read out to subjects whose brain activity is being measured, could we not tell, from the chemical processes and the neuron firings observed, whether that word is more likely to be monosemous (similar firings independent of context) or polysemous (rather dissimilar firings in each context of use)? I am not aware of any work that is being done in this area right now. If there is, we ought to know about it. The aim is to reach an understanding of polysemy which is, in Lamb’s (1999) terminology, not only operationally and developmentally plausible, but also neurologically.²⁷ The “immense variety of ways in which the same item can be sorted and processed by native speakers of the same language” (Aya Katz) is exactly one of the things we must try to understand: viz. why it is possible to have that variety of ways, without significant risk to normal communication being impeded.

26. I am grateful to David Tuggy for suggesting, at the 5th International Cognitive Linguistics Conference (Amsterdam, 1997), that for once the appropriate answer to a question which asks for information is affirmative.

27. A theory of language is *operationally plausible* if it provides a plausible basis for understanding the processes of speaking and comprehension. It is *developmentally plausible* if there is a plausible means whereby the proposed model or system could be acquired by children. It is *neurologically plausible* if it can offer a plausible account of how the system might be represented in neural structures. Theories which meet all three criteria qualify as forms of *neurocognitive linguistics* (in Lamb’s meaning of the term).

Let us take another example. Many Cognitive Linguists undertake research on Idealised Cognitive Models (i.e. cognitive simulations of reality, also known as ICMs). It would be interesting to explore whether, for instance, selling and buying should be associated with one such model (as appears to be current practice) or with two. The shift in simulation perspective may be too significant to stick with just one ICM. It appears to be more significant than the shift observed when an event is being verbalised by means of a passive rather than an active construction, or when a stealing event is looked at from the point of view of the person victimised (*X was robbed of Y*) rather than from that of the object taken (*Y was stolen from X*). Coming back to buying and selling, one could think of an experiment where subjects are asked to conceptualise either event, while having their brain activity subjected to detailed observation. I do not know the outcome, but would suggest that, perhaps, there are two models involved rather than a single complex one (or two frames, in Fillmore's sense; cf. Fillmore 1982, 1985; and also Peeters 2000a).²⁸ Someone who is in the process of buying always deals with a vendor or a salesperson, but someone who is in the process of selling does not necessarily sell anything to anyone. He or she may just be trying to sell, be an unsuccessful tradesperson. ??*I am buying a house, but there is nobody selling theirs* sounds weird in a way that *I am selling my house, but I haven't found a buyer yet* does not.

And yes, there are multiple areas of research where so-called "neuron counting" is not going to be of any help. Clearly, the dative case in Polish and antipassive constructions in Australian aboriginal languages and zillions of other phenomena are unlikely to be better understood if we observe what is happening in the brain when they are being uttered or perceived. I must stress once again that not every single Cognitive Linguist is supposed to "study and cite Edelman" (or Lamb for that matter). Similarly, not every single cognitive scientist is supposed to engage in neuroscience. There is a lot of other work to be done, and lots of people are needed to do it. Still, more linguists — and especially more Cognitive Linguists — should start looking at the neurocognitive side of things. More linguists — and especially

28. I shall leave in the middle the question of whether Fillmore is or is not a Cognitive Linguist. Lakoff (interviewed by Pires de Oliveira, This volume: 26) has his doubts. Undeniably, though, Fillmore was one of the first to analyse the commercial transaction scene at great length.

more Cognitive Linguists — should set out to explore what remains a largely unknown part of God’s truth, instead of exclusively devoting themselves to the mapping of psychological reality. And, crucially, God’s truth linguists and hocus-pocus linguists at large should keep talking to one another, in an effort to inform each other’s ventures into uncharted territory.

4. Conclusion

The relative lack of “neurocognitive depth” in Cognitive Linguistics, on the one hand, and the scarcity of coverage of Cognitive Linguistics in cognitive science serials and in broadly based introductions to cognitive science, on the other hand, provide powerful arguments for a soul-searching exercise. The time has come to take stock, not only of the achievements, but also of the possible vulnerability of Cognitive Linguistics. I consider the scarcity of neurocognitive research within Cognitive Linguistics to be its Achilles’ heel (in the sense that Cognitive Linguistics has not yet engaged in it with sufficient visibility). It is reassuring to see that some Cognitive Linguists, and several onlookers, have been increasingly vocal in this respect and fully endorse the need for an open discussion.

I, for one, have argued that Cognitive Linguistics (as it currently stands) has to broaden its scope even further than it has done hitherto. For now, it is essentially just another competing linguistic model — an attractive one, for sure, but for linguistic-theoretical reasons, *not* because of an all-encompassing cognitive outlook (one which *visibly* includes neurocognitive issues). Biological reality *is* to be taken more seriously. I have pointed out that more Cognitive Linguists (but by no means all of them) will need to follow the lead taken by colleagues such as Lakoff, Deane and Lamb. More of us need to be doing — and to be seen to be doing — the same sort of work.

But perhaps I am missing something. To quote Langacker again:

Are we really doing so badly? I notice that the pages of *Cognitive Linguistics* are starting to fill up with the results of experimental investigations, and that is symptomatic of what is happening in the field in general.

If that is the case, let us make sure that this new exciting research is given increased visibility. Cognitive Linguists must combat the widespread feeling out there that all they are good at is prototype theory, conceptual metaphor,

blending and other such phenomena (i.e. psychological reality). The best way to combat that feeling is by shifting attention to other (neurocognitive) issues, but without neglecting the (analytical) work that has rightly turned Cognitive Linguistics into a force to be reckoned with.²⁹

If, on the other hand, my impression is correct and Langacker's is premature, then those of us who feel that the connection between Cognitive Linguistics and cognitive science remains weak have a right to speak out. If my impression is correct, the worst that unconvinced Cognitive Linguists can do is put their heads in the sand and hope for the clamours and murmurs to go away. They will not. There has to be a clear recognition that neuro-Cognitive Linguistics and analytical cognitive linguistics are both valid forms of Cognitive Linguistics, but that, in the interest of outside recognition, increased visibility, and greater integration with the other cognitive sciences, and to improve the standing of Cognitive Linguistics both among linguists and in the cognitive science community as a whole, more research activity than is currently being undertaken by Cognitive Linguists is needed in the neurocognitive arena. Only then will we be able to truthfully state that Cognitive Linguistics does indeed live up to its name.

Acknowledgments

The "cognitive musings" in *this* paper are a rethink of those that were published under the author's name in the August 1998 issue of the journal *Word*. They owe their existence, and much of their formulation, to René Dirven, who kindly requested that I take part in the "Language and Ideology" theme session at the 6th International Cognitive Linguistics Conference held in Stockholm in July 1999. I hope he does not now regret his insistence, because what I have said here is certain to ruffle many feathers. I am grateful to René Dirven, Dirk Geeraerts, Joe Hilferty, Ron Langacker, Sydney Lamb, Francis Steen, John Taylor and an anonymous referee for having provided me with ideas for which, of course, they do not bear any responsibility. I have also profited from discussions on Funknet, the electronic discussion forum dealing with issues in (American style) functional linguistics based at Rice University (funknet@list-serv.rice.edu), and on Cogling, Cognitive Linguistics' own electronic discussion forum based at the University of California San Diego (cogling@ucsd.edu).

29. For an interesting attempt to link prototype semantics and neurocognitive linguistics, see Howard, This volume. Also Rohrer, This volume, has strong links with neuroscience.

References

- Achard, Michel. 1998. *Representation of Cognitive Structures: Syntax and semantics of French sentential complements*. Berlin: Mouton de Gruyter.
- Burling, Robbins. 1964. "Cognition and componential analysis: God's truth or hocus-pocus?". *American Anthropologist* 66: 20–28. Reprinted in R. A. Manners and D. Kaplan (eds) (1968), *Theory in Anthropology. A Source-Book*. Chicago: Aldine, 514–523.
- Casad, Eugene H. (ed.). 1996. *Cognitive Linguistics in the Redwoods: The expansion of a new paradigm in linguistics*. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 1959. "Review of Skinner (1957)". *Language* 35: 26–58.
- . 1979. *Language and Responsibility*. Sussex: Harvester Press.
- . 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Cuyckens, Hubert and Zawada, Britta (eds). 1999. *Polysemy in Cognitive Linguistics*. Amsterdam and Philadelphia: John Benjamins.
- Deane, Paul D. 1992. *Grammar in Mind and Brain: Explorations in Cognitive Syntax*. Berlin: Mouton de Gruyter.
- . 1996. "Neurological evidence for a cognitive theory of syntax. Agrammatic aphasia and the spatialization of form hypothesis". In E. H. Casad (ed.), 55–11.
- Dennett, Daniel C. 1978. "Skinner skinned". In D. C. Dennett, *Brainstorms. Philosophical Essays on Mind and Psychology*. Montgomery: Bradford, 53–70.
- Edelman, Gerald M. 1987. *Neural Darwinism: The theory of neuronal group selection*. New York: Basic Books.
- . 1992. *Bright Air, Brilliant Fire: On the matter of the mind*. New York: Basic Books.
- Elman, Jeffrey L., Bates, Elizabeth A., Johnson, Mark H., Karmiloff-Smith, Annette, Parisi, Domenico and Plunkett, Kim. 1996. *Rethinking Innateness: A connectionist perspective on development*. Cambridge, Mass.: MIT Press.
- Fauconnier, Gilles. 1995. *Mental Spaces: Aspects of meaning construction in Natural Language*. Cambridge: Cambridge University Press.
- . 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Fillmore, Charles J. 1977. "Topics in lexical semantics". In R. W. Cole (ed.), *Current Issues in Linguistic Theory*. Bloomington: Indiana University Press, 76–138.
- . 1982. "Frame semantics". In Linguistic Society of Korea (ed.), *Linguistics in the Morning Calm*. Seoul: Hanshin, 111–137.
- . 1985. "Frames and the semantics of understanding". *Quaderni di semantica* 6: 222–254.
- Fodor, Jerry. 1983. *The Modularity of Mind: An essay on faculty psychology*. Cambridge, Mass.: MIT Press.
- Geeraerts, Dirk. 1995. "Cognitive linguistics". In J. Verschueren, J.-O. Östman and J. Blommaert (eds), *Handbook of Pragmatics*. Amsterdam and Philadelphia: John Benjamins, 111–116.

- Geiger, Richard A. and Rudzka-Ostyn, Brygida (ed.). 1993. *Conceptualizations and Mental Processing in Language*. Berlin: Mouton de Gruyter.
- Givón, Talmy. 1998. "The functional approach to grammar". In M. Tomasello (1998: 41–66).
- Grzybek, Peter. 1995. "Foundations of semiotic proverb study". *De Proverbio 1* (<http://www.deproverbio.com/DPjournal/DP,1,1,95/GRZYBEK.html>). Also, with minor stylistic differences, in *Proverbium 4*: 39–85 (1987).
- Harris, Zellig S. 1951. *Methods in Structural Linguistics*. Chicago: University of Chicago Press.
- Hilferty, Joseph. 2000. "Grammar, the lexicon, and encyclopedic knowledge. Is there such a thing as informational encapsulation?" In B. Peeters (2000b: 377–392).
- Houben, J. E. M. 1993. "Barthari en de structuur van het Sanskrit: 'God's truth' of 'hocus-pocus'?" In J. Goedegebuure (ed.), *Nieuwe Wegen in Taal- en Literatuurwetenschap. Handelingen van het Eenenvestigste Filologencongres*. Tilburg: Tilburg University Press, 143–158.
- Householder, Fred W. Jr. 1952. "Review of Harris (1951)". *International Journal of American Linguistics* 18: 260–268.
- Howard, Harry. This volume. "Age/gender morphemes inherit the biases of their underlying dimensions".
- Hutton, Christopher. This volume. "Cultural and conceptual relativism, universalism and the politics of linguistics: Dilemmas of a would-be progressive linguistics".
- Krikmann, Arvo A. 1971. "Zur Problematik der Metasprache als Ausdruck der Bedeutungstreuung der Sprichwörter". *Proverbium 17*: 624–626.
- Kuusi, Matti. 1972. "Towards an international type-system of proverbs". *Proverbium 19*: 699–736.
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What categories reveal about the mind*. Chicago: University of Chicago Press.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago: University of Chicago Press.
- . 1998. *Philosophy in the Flesh: The embodied mind and its challenge to Western thought*. New York: Basic Books.
- Lakoff, George and Thompson, Henry. 1975. "Dative questions in cognitive grammar". In R. E. Grossman, L. J. San and T. J. Vance (eds), *Papers from the Parasession on Functionalism*. Chicago: Chicago Linguistic Society, 337–350.
- Lakoff, George and Turner, Mark. 1989. *More than Cool Reason: A field guide to poetic Metaphor*. Chicago: University of Chicago Press.
- Lamb, Sydney M. 1971. "The crooked path of progress in cognitive linguistics". *Georgetown University Monograph Series on Languages and Linguistics* 24: 99–123. Reprinted (1973) in A. Makkai and D. G. Lockwood (eds), *Readings in Stratificational Linguistics*. Alabama: University of Alabama Press, 12–33.
- . 1999. *Pathways of the Brain: The neurocognitive basis of language*. Amsterdam and Philadelphia: John Benjamins.

- Langacker, Ronald W. 1987–1991. *Foundations of Cognitive Grammar* (2 vol.). Stanford: Stanford University Press.
- . 1990. *Concept, Image, and Symbol: The cognitive basis of grammar*. Berlin: Mouton de Gruyter.
- . 1998. “Conceptualization, symbolization, and grammar”. In M. Tomasello (1998: 1–39).
- Levy, Yonata and Kavé, Gitit. 1999. “Language breakdown and linguistic theory”. *Lingua* 107: 95–143.
- Newmeyer, Frederick. 1999. “Bridges between generative and cognitive linguistics”. In L. de Stadler and C. Eyrich (eds), *Issues in Cognitive Linguistics*. Berlin: Mouton de Gruyter, 3–19.
- Peeters, Bert. 1996. “Language and the mind. On concepts and values”. *Pragmatics and Cognition* 4: 139–152.
- . 1998. “Cognitive musings”. *Word* 49: 225–237.
- . 2000a. “Setting the scene. Recent milestones in the lexicon-encyclopedia debate”. In B. Peeters (2000b: 1–52).
- Peeters, Bert (ed.). 2000b. *The Lexicon-Encyclopedia Interface*. Oxford: Elsevier Science.
- Regier, Terry. 1996. *The Human Semantic Potential: Spatial language and constrained connectionism*. Cambridge, Mass.: MIT Press.
- Rohrer, Tim. This volume. “Pragmatism, ideology and embodiment: William James and the philosophical foundations of cognitive linguistics”.
- Rosenfield, Israel. 1988. *The Invention of Memory: A new view of the brain*. New York: Basic Books.
- Rudzka-Ostyn, Brygida (ed.). 1988. *Topics in Cognitive Linguistics*. Amsterdam and Philadelphia: John Benjamins.
- Schwarz, Monika. 1992. *Einführung in die kognitive Linguistik*. Tübingen: Francke.
- Sego, Lewis. 2001. “Philistine, barbarians, aliens, *et alii*: Cognitive semantics in political ‘otherness.’ In R. Dirven, R. Frank and C. Ilie (eds); *Language and Ideology. Volume II: Descriptive cognitive approaches*. Amsterdam/Philadelphia: John Benjamins.
- Skinner, B. F. 1957. *Verbal Behavior*. New York: Appleton-Century-Crofts.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics* (2 vol.). Cambridge, Mass.: MIT Press.
- Taylor, John R. 1995. “Approaches to word meaning. The network model (Langacker) and the two-level model (Bierwisch) in comparison”. In R. Dirven and J. Vanparys (eds), *Current Approaches to the Lexicon*. Frankfurt: Lang, 3–26. Reprinted, with a new afterword, in B. Peeters (2000b: 115–141).
- Tomasello, Michael (ed.). 1998. *The New Psychology of Language: Cognitive and functional approaches to language structure*. Mahwah: Lawrence Erlbaum.
- Uriagereka, Juan. 1999. “Review of Chomsky (1995)”. *Lingua* 107: 267–273.

Ideological Ground and Relevant Interpretation in a Cognitive Semantics

Peter Grundy
University of Durham

Yan Jiang
*The Hong Kong Polytechnic
University*

The perceptual mechanisms — and perceptual salience itself — are relevance oriented.
(Sperber and Wilson 1986/1995: 152)

1. Introduction

In this paper, we show how the figure/ground *gestalt* enables discourse to be interpreted in relation to the background ideological context in which it occurs. We argue that the relation of linguistic figure to contextual ground is indicated by discourse markers which function as viewpoint shifters and space builders enabling contextual ground to be represented in the mental space model of cognitive semantics proposed by Fauconnier. Although it is nowhere explicitly stated in Fauconnier's work, we suggest that his proposals also reflect the figure/ground *gestalt* in the characterisation of the different cognitive functions associated with Focus — the mental space where meaning is being constructed and 'upon which attention is currently being focused', and Viewpoint — the space that provides a perspective from which others are set up (Fauconnier 1997: 49).

The data on which we draw are taken from President Clinton's national television address of 18 August 1998 following his testimony to the grand jury

in the Monica Lewinsky affair. (See appendix for the full text.) Our analysis provides cognitive plausibility for the well motivated distinction made in relevance theory between conceptual and procedural meaning (Blakemore 1987),¹ and at the same time shows how both linguistic expressions and non-linguistic pragmatic conditions are represented in a single semantics.

Broadly, the intuition is that there is little (if anything) procedural about the utterance

- (1) Presidents have private lives.

But when Clinton says

- (1') Even presidents have private lives

the procedural use of *even* constrains the interpretation of *Presidents have private lives* by restricting the set of contexts which are called up. It is in relation to these contexts that *Presidents have private lives* is both one amongst a set of possible variables (i.e. many other things might have been said) and a salient figure. In this way, procedural meaning relates a new notion, a variable figure, to an established context, the invariant ground (Talmy 1978). This ground may well be, and perhaps usually is, in part ideological. Given the obvious ideological context in which Clinton's conduct appears unacceptable, it is hardly surprising that his national television address exhibits a very wide range of metalinguistic and meta-pragmatic procedural encodings.

The principal focus of this paper is the implication for the nature of a cognitive semantics posed by attempting to model data containing a wide range of procedural forms with space shifting and space building properties. Thus, a complete semantics for the statement/utterance

- (2) Indeed, I did have a relationship with Ms Lewinsky that was not appropriate. In fact, it was wrong.

would need to model at least how the contexts are constructed which are oriented to by the maxim hedges *indeed* and *in fact*, by emphatic *did*, by the higher level metalinguistic predicates *not appropriate* and *wrong*, and by an

1. Conceptual meaning is the term used to describe propositional representations; procedural meaning is the term used to describe the instruction(s) an utterance may contain for its own interpretation in the context in which it occurs.

utterance that glosses the preceding utterance. In this paper, we attempt to model the way in which such metapragmatic phenomena relate conceptual meaning to background ideological context. Readers expecting an ideological critique of a moment in US political history will, therefore, be disappointed.

From a model theoretic point of view, this paper addresses the issue of how non-linguistic elements are represented in cognitive semantics. The work of Fauconnier and others is largely, although not exclusively, concerned with showing how linguistic expressions build mental spaces (representations of the unfolding discourse) and how meanings are constructed in them. In this paper, we will attempt to characterise the way in which mental spaces may, and indeed must, include non-linguistic objects which provide a ground in relation to the linguistic figures in focus. It is the fact that the prevailing background ideology is relevant in interpreting Clinton's statement rather than explicitly encoded in it that make the data discussed here especially pertinent.

In the remainder of this paper, we will first delimit the semantic/pragmatic area under consideration and review the ways in which the figure/ground *gestalt* has informed linguistic analysis. We then will argue that this *gestalt* can also be productively linked to the relevance theoretic notions of procedural and conceptual encoding and that it is implicit in proposed mental space representation types. After considering the status of meaning constructions in the light of the arguments presented in the earlier sections, we will show how cognitive semantics allows for the construction of the ideological contexts without which the interpretation of the linguistic figure is at best problematic, and sometimes even impossible.

2. Semantics, pragmatics and cognitive linguistics

The essential facts that a semantics of language production and comprehension has to account for are that a speaker conveys Meaning X in Context Y by means of Form Z and that (all being well) their addressee/s process Form Z, supply Context Y and infer Meaning X.² Because the roles of speakers

2. We are grateful to an anonymous reviewer for pointing out that this 'simple' account of production and comprehension might be mistaken for a conduit-type representation of linguistic

and their addressees are different in that speakers start with a meaning to convey and addressees end by recovering that meaning, pragmatic accounts have typically focused either on production, as in Speech Act theory, or on understanding, as in Grice's theory of conversational implicature and Sperber and Wilson's work on relevance. In the cognitive literature, Langacker at one point suggests that conceptualising is identified primarily with speakers and secondarily with addressees (1991: 318). As we shall see, there is a considerable advantage in a proposal which recognises the conceptualising role of both speakers and hearers.

Cognitive linguists typically reject the semantics/pragmatics distinction on the grounds that logical semantics presupposes a relation of language to an objective world which takes no account of the language user's conceptualisation. However, the propositional form of an utterance (Form Z) and the propositional form of the inferred meaning (Meaning X) are often, perhaps typically, unrelated. Thus a speaker may use the form "I'm tired" to convey *I want to go to bed, I want you to come to bed, I don't want to get out of bed, I want you to get out of bed and make me a drink, etc.*

Whilst cognitive semantics models pragmatic phenomena such as presupposition and deixis and some cases of implicature, we suggest that the new propositional forms associated with (most) implicatures are not so easily captured in this kind of meaning construction. In any case, it isn't appropriate to do this. If the relevance theoretic notion that implicatures are deductive inferences is right, it seems reasonable to restrict the role of mental space constructions to providing all the information necessary for drawing the deductive inference. This is consistent with the notion that mental space configurations are mental models of discourse (Fauconnier 1994: xxxix) and not that they represent the overall process of discourse understanding. The absence of any mention of pragmatics in the 'Final remarks' of *Concept, Image, and Symbol* and the conclusion that "The only elements ascribable to a linguistic system are semantic, phonological, and symbolic structures that occur overtly as (parts) of linguistic expressions, schematisations of such structures, and categorising relationships" (Langacker 1991: 343) also

communication. It is precisely the requirement that the addressee should recover a context and then infer a meaning which distinguishes this communication model from a conduit-type representation — as pointed out in Chapter 1 of Sperber and Wilson (1986/1995).

supports the suggestion that a cognitive semantics is limited to specifying a meaning construction which includes both linguistic forms and pragmatically conditioned contexts, but stops short of modelling the implicature whose propositional form is entirely new.

In this paper, we argue that Form Z is a figure and that context Y is a ground and that both exist as meaning constructions, but that Meaning X exists, not as a conceptualisation, but in rather the way that we would draw a conclusion about what to do from looking through the window in the morning and seeing the sun shine or the clouds gathering, as shown in Table 1.

Table 1. Meaning construction

Cognitive construction		Pragmatic inference
What is said	+ Context of utterance	What is meant by what is said
Weather observed	+ Knowledge of weather types	What to wear, etc.

Thus the purpose of cognitive construction is to resolve indeterminacy and to provide a unique characterisation of utterances and their contexts: "Linguistic forms are (partial and underdetermined) instructions for constructing *inter-connected domains* with internal structure." (Fauconnier 1997: 35)

The distinction between Meaning X on the one hand and a meaning construction including Form Z (= Figure) and Context Y (= Ground) on the other is reflected in current accounts of cognitive semantics. In his summary of operating principles for natural language semantics, Fauconnier (1997: 111) lists many relevant pragmatic conditions (background knowledge, knowledge of activity types, beliefs, cultural constructions, focusing devices, etc.), and in *Mental Spaces* (1994 [1985]) he discusses presupposition and scalar implicatures, but, significantly, none of these pragmatic processes result in the construction of new propositional forms of the kind associated with Gricean particularised conversational implicatures and with relevance oriented implicatures in the sense defined in Sperber and Wilson. In fact, meaning constructions are not either an underlying form or a linguistic representation; nor are they a representation of real or possible worlds, but rather a conceptualiser's (i.e. non-truth conditional) way of relating language and the world in which it occurs, and thus resolving the indeterminacy associated with Form Z (Fauconnier 1997: 36).

Resolving linguistic indeterminacy involves inference. For example, Fauconnier (1985/1994: 39ff) discusses the sentence *The President changes every seven years*, and points out that the expression *The President* will have different values in different places or organisations at different times. Moreover, *The President* could equally be a referential description referring metonymically to the President's mood, for example, or an attributive description (i.e. *whoever is President*). Each different determination of the expression *The President* is also likely to be linked to a different determination of the expression *changes*.

In order to illustrate the argument that pragmatic phenomena which preserve propositional form are part of mental space meaning constructions and that relevance oriented implicatures are not, we might consider the case of

(1') Even presidents have private lives.

In the Gricean account, *even* would be treated as a conventional implicature whose literal meaning can be distinguished from its pragmatic function — which is to suggest a scale of individuals who have private lives and advise the hearer that presidents are at one end of this scale. In mental space terms, the scale is part of a larger meaning construction which also represents the ideological context and the different attitudes people are assumed to hold to those at different points on the scale. However, the further inference drawn from what is said and the background knowledge invoked or, strictly, constrained by *even* will be an implicature with a new propositional form, maybe something along the lines of *What I do in my own time is my business not yours, and certainly doesn't interfere with my ability to do a good job as President*. Sperber and Wilson see this implicature as a deductive inference which follows from the premises represented in the meaning construction.³

Although we agree that the distinction between semantics and pragmatics as traditionally drawn is not motivated, we argue that cognitive semantics represents everything that is necessary to deduce Meaning X from Form Z, but not Meaning X itself.

3. Strictly, the process of language understanding is deductive as we draw explicatures and implicatures as logical consequences from premises. However, as the premises are not given but accommodated, the inferential process is more of an abductive kind in which Meaning X is a best explanation of the available evidence.

3. The figure/ground *gestalt* in linguistic analysis

In this section, we review the way in which the figure/ground *gestalt* has been applied in linguistic analysis. The review will show how pervasive the figure/ground relation is in linguistic representation. We will argue additionally that linguistic structure and relevant non-linguistic context are equally accounted for in this way.

Essentially, figures are associated with discreteness, shape and singularity, whereas diffuseness is the principal characteristic associated with ground. This insight is owed the pioneering experimental work of Rubin (1915/1958) in the field of visual perception. What we 'see' is the figure. We assume that the contour marking the boundary of figure and ground belongs to the figure and not to the ground against which the figure is, consequently, profiled. Figures give an impression of solidity, closeness and density of colour relative to ground. The ground appears to continue uninterruptedly behind the figure. It is the figure and not the ground which is remembered. However, without ground there can be no figure.

In relation to the 'actual' world, these perceptions are, strictly speaking, illusions. They are, therefore, direct reflections of cognitive processes which impose, even on a flat surface such as the page you are now reading, the impression that some parts of what you see, i.e. the graphemic symbols, are closer to you than the background (we cannot avoid the metaphor) on which they are printed. The salient shapes to which your attention is drawn are those of the symbols and not of the background page. Moreover, you can easily reproduce the symbols, but would have immense difficulty reproducing the shape which shares a common contour with them.

The figure/ground *gestalt* has been appealed to at a number of linguistic levels. One of the earliest is the Prague School's structuralist characterisation of poetic language, and especially the work of Mukarovsky.⁴ For Mukarovsky, poetic language consists of the "foregrounding" of phonological, syntactic or even semantic features, whose resulting prominence tends to push meaning into the background (Freeman 1970:43ff). Thus the formal means of expression rather than what is expressed is the salient figure: what

4. Mukarovsky does not refer to Rubin or specifically to the figure/ground *gestalt*. Nevertheless, his work clearly presupposes such a notion.

is drawn to our attention in the case of poetic writing is not what is conveyed, but how it is conveyed. Mukarovsky's insight therefore lays the foundations for Jakobson's functionalist definition of poetic language as "projecting the principle of equivalence from the axis of selection into the axis of combination" (1960: 358).

Many of the later, more overt appeals to the figure/ground *gestalt* focus on the intra-sentential structural properties of language. In Talmy's account of complex sentences (1978: 628ff), figure is seen as a variable in relation to a ground provided in the subordinate clause. Thus clauses introduced by *after* and *before*, for example, and phrases introduced by *during* provide the ground, or presupposition, in relation to which the rest of the sentence is seen as a figure. This assertion-as-figure/presupposition-as-ground hypothesis is also taken up by Levinson (1983: 180). For Langacker, figure designates the foregrounded entity in the trajector/landmark profile of a grammatical relation, such as that of subject and predicate (1991: 301). As the term *trajector* suggests, the figure is dynamic rather than static. Another, less remarked on, figure/ground relation is the profile/base distinction proposed by Langacker to account for the particular conceptualisation of a base domain in a specific instance of use. Thus a variety of different expressions (*island*, *shoreline*, etc.) profile different features of the base domain *land surrounded by water*, base predicates have aspectual profiles, base nouns may have number profiles, etc.

At the level of the word or phrase, Hanks (1992) argues that deictics uniquely capture the relation of referential figure to indexical ground in a single linguistic expression. Thus what a demonstrative points to as a figure in an expression like *you* or *this year* is related to the indexical ground or deictic anchoring point of the speaker (and sometimes of the hearer) at the time when and in the place where the utterance occurs.

Each of these accounts extends a perceptual theory to the understanding of language and shows how salience, a relation of figure to ground, is basic to language. The positions adopted by Talmy and, especially, Hanks strongly suggest that the structures of language must reflect the cognitive structure of the mind in this respect.

Wallace (1982) attempts to draw together and expand on the considerable body of existing work on grammatical categories, which, he argues, demonstrate figure/ground polarity. Thus languages have a range of grammatical forms (perfective/imperfective, eventive/non-eventive, etc.) which are predominantly

oriented to expressing figure/ground relations. Wallace therefore invokes the figure/ground *gestalt* to explain discoursal phenomena: a speaker has the means at each point in a discourse to foreground some element of propositional meaning as figure in relation to some other element as ground.

These and other like accounts may be seen as demonstrations of the linguistic reflexes of a fundamental processing strategy in which salience is perceived as a relation of figure to ground. In these accounts, ground is typically represented as a co-textual phenomenon (Langacker, Talmy) or as the linguistic form which is not made salient (Mukarovsky) or selected (Wallace). By contrast, Hanks treats context as the ground which enables the identification of the *demonstratum* by virtue of their relatedness. Langacker also acknowledges this type of contextual ground, stating that it includes the “speech event, its participants, and its immediate circumstances (such as the time and place of speaking)” (1991: 318). Table 2 summarises these accounts of how figure/ground relations have been invoked in linguistic analysis.

Table 2. Figure/ground *gestalt* in linguistic theorising

Level	Author	Figure which is remembered	Ground against which the Figure stands out
Word/phrase	Hanks	Deictic reference	Deictic <i>origo</i>
Word/phrase	Langacker	<i>Profile</i>	<i>Base</i>
Sentence	Langacker	<i>Trajector</i>	<i>Landmark</i>
Sentence	Talmy	Content of asserted sentence	Content of presupposed sentence
Discourse	Mukarovsky	Form of poetic text	Meaning of poetic text
Discourse	Wallace	(E.g.) a perfective in an imperfective discourse	(E.g.) the imperfective discourse surrounding a perfective item
Discourse	Langacker	Speech act ⁵	The speech event, its participants and its immediate circumstances

⁵ The term ‘speech act’ is ours rather than Langacker’s and is used non-technically.

In this paper we extend the application of the figure/ground *gestalt* to show how the broader contextual, and particularly the ideological, ground is relevant in processing foregrounded linguistic phenomena.

4. Procedural and conceptual encoding and the figure/ground *gestalt*

So far as we know, encodings of propositional attitude have not previously been discussed in relation to the figure/ground *gestalt*, despite their roles in limiting the ground in relation to which the figure appears salient.

Expressions of propositional attitude are a long recognised category and include, for example, hedges and intensifiers on Gricean maxims. Thus, expressions such as *I'm told*, *all I know is that*, *by the way* and *I mean* advise the hearer of the extent to which the speaker is committed to the well-foundedness, informativeness, relevance and perspicuity, respectively, of the propositions to which they are attached. They show speaker viewpoint and advise the hearer how to take what is in focus. In Fauconnier's model of cognitive semantics, as discourse unfolds, mental spaces are constructed, each of which relates to one or more items in the propositional content of utterances. Whilst new spaces are introduced to reflect changes of propositional notions such as time and location, propositional attitude is indicated by the space taken as viewpoint.

Meta-talk is by no means limited to hedges and intensifiers on Gricean maxims. Schiffrin (1987) draws attention to a range of phenomena, including higher level predicates such as *right*, *wrong*, *for example* and *like*, which modify propositions in the text and thus show the speaker's evaluation of the stated proposition. And in his more general work on reflexivity, Lucy (1993) brings together deictics, reported speech, gloss, mention and a range of other phenomena where it is possible to distinguish propositional description from talk about talk. All these expressions of propositional attitude invoke ground in relation to which the propositions to which they are attached or on which they comment may be seen as figures.

As well as these meta-talk phenomena, there is another important category, usually known as discourse particles, whose function has been especially productively studied within the relevance theoretic framework, and particularly in the ground-breaking work of Blakemore (1987). This has led to a recognition of the distinction between conceptual and procedural meaning. Utterances typically contain both conceptual and procedural encodings, or, as Wilson and Sperber put it, "information about the representations to be manipulated, and information about how to manipulate them" (1993: 2). This second, computational, type of encoding (i.e. information about how to manipulate representations) is held to constrain the interpretation

of conceptual meaning by limiting the available ground in relation to which it is to be interpreted. Whereas to say

- (1) Presidents have private lives

is to encode a conceptual meaning, to say

- (1') Even Presidents have private lives

is to encode not only a conceptual meaning but also to constrain the background context in relation to which the conceptual meaning is to be interpreted by implying that the explicated proposition that *Presidents of the United States such as the speaker are entitled to privacy in their personal relationships* (inferred from "Presidents have private lives") would be low on a scale of expectability given the prevailing ideology which constitutes the contextual ground. It is in relation to this prevailing ideology that *Presidents have private lives* is both one amongst a set of possible variables and a salient figure. In this way, procedural meaning relates a new notion, a variable figure, to an established context, the invariant ground. This ground may well be, and perhaps usually is, in part ideological, as stated earlier. In Sperber and Wilson (1986/1995), the relevance of the utterance (the variable figure) is guaranteed, but is only proved by the recovery of the appropriate context (ground), which in this case is made possible by *even*.

Put simply, it is much more difficult to know in what way the would-be figure *Presidents have private lives* could be relevant (i.e. what might be meant by uttering it) when recovery of the relevant ground is not triggered by the procedural *even*. Thus procedural encodings provide the hearer with an indication of how to limit the potentially infinite set of contexts in relation to which Meaning X is to be inferred. They therefore enable a hearer to recover the ground in relation to which an utterance can be a figure in a more economical way.

For these reasons, we suggest that Blakemore's relevance theoretic distinction between conceptual and procedural meaning should also be considered in relation to the figure/ground *gestalt*. And given the distinctly ideological context in which Clinton's conduct appears unacceptable, it is hardly surprising that his national television address exhibits a very wide range of metalinguistic and metapragmatic procedural phenomena which act as space shifters and space builders for pragmatically conditioned material,

thus establishing viewpoints not set up in the meaning construction built from previous discourse.

Finally, it turns out that the figure/ground representational phenomena described in this section parallel Hanks's three-part *Denotatum type – Relational type – Indexical type* categorisation of the figure/ground properties of deictics discussed in the previous section. Table 3 includes three representative examples from Hanks's original table showing the relational structures of deictic reference with respect to figure (Denotatum type) and ground (Indexical type) (1992: 52).

Table 3. Figure/ground properties of deictics

Form	Denotatum type	Relational type	Indexical type
this =	“the one	Proximal to	me”
here =	“the region	Immediate to	you”*
now =	“the time	Immediate to	this utterance”

Both higher-level predicates such as *not appropriate* and the relational function of *even* establish a relation between figure and ground comparable to that encoded in demonstratives, as shown in Table 4.

Table 4. Figure/ground in conceptual and procedural encoding

Figure (Focus space)	Relation (Connector)	Ground (Viewpoint space)
the one	Proximal to	me (this)
Clinton's conduct	Not appropriate to	the cultural context
P has private life	⟨relator = even⟩	A ¹ , A ² , A ³ , ... have private lives

5. Mental space representations of figure/ground phenomena: the case of deixis

The question then is how a cognitive semantics represents the relative salience which is a fundamental feature of perceptual cognition in general (Rubin 1915/1958), and which, according to Wallace, determines the very linguistic

* *Editors' note:* here too 'me' would be more appropriate than 'you'.

categories available to us. We suggest that Fauconnier's definitions of Focus space as the space "where meaning is currently being constructed" (1997: 72) and Viewpoint as "the space from which others are accessed and structured or set up" (1997: 49) precisely allows for the representation of a figure/ground relation. This is hardly surprising since cognitive linguists seek to show how linguistic expressions evoke conceptual structures as natural reflections of such cognitive abilities as grounding, i.e. relating language (and other) events to the perspective of "the conceptualiser [who] chooses to construe the situation and portray it for expressive purposes." (Langacker 1991: 315)

A detailed proposal for representing ground in meaning constructions is made by Grundy and Jiang (1998) for deictics. They suggest a re-analysis of an example discussed by Rubba⁶ (1996: 234 ff.) in order to account for the anaphoric as well as the deictic reading of *this* in the utterance

- (3) ...or the same with when I go to, like, a Spanish part of town,
you know, see everything in Spanish, and I say, well, you know,
this is not where I belong

They propose that when *this* arises in Focus space, the index associated with the demonstrative must either find an antecedent in the same Focus space as itself, or, where this default mechanism fails, float up to Viewpoint space (by analogy with presupposition float) where it acts as a space builder for pragmatically conditioned material. How then might we get either a deictic or an anaphoric reading of *this* in this example?

In Rubba's account there are four spaces:

- a Base space containing the utterance situation, i.e. speaker, hearer, etc.,
- a Time space opened by *WHEN I go*,
- a Location space opened by *TO like a Spanish part of town see everything in Spanish ...*,
- and a Quotation space opened by *SAY for well you know this is not where I belong*.

When the Location space is Viewpoint and the Quotation space is Focus, *this* cannot find an antecedent in Focus and is therefore treated as deictic. When this is the case, according to Grundy and Jiang's (1998) proposal, the deictic

6. Rubba proposes sententially embedded rather than discursively sequential space building. The advantage of Rubba's proposal is that spaces can be enlarged 'upwards' as well as reassigned.

index floats up to Viewpoint. When the index reaches Viewpoint, it builds a new mental space to be filled with pragmatic material which the space-building index causes to be recovered from encyclopaedic knowledge, processing of local context, etc. and which constitutes the interpretation.⁷ This proposal acknowledges that a deictic figure necessarily first occurs in the Focus space, but that its interpretation crucially depends on the indexical ground, which will be in Viewpoint space. Index-instantiation thus becomes a matter of choosing the relevant ground among the available spaces that serve as potential alternate grounds. Thus the indexical element of a demonstrative is space building just in case it cannot co-index with a linguistic item in a Focus space, in which case a deictic interpretation is then assigned. In addition, treating indexes as space builders provides us with a principled way of showing how non-sentential pragmatic material is incorporated in mental spaces.

Although Rubba does not consider the possibility of an anaphoric interpretation, Grundy and Jiang (1998) suggest that the uses of the procedurals “you know” and “well” in Rubba’s example shift the Viewpoint back to the Base. In this case, the index attaches to a co-referential item “the Spanish part of town” in the enlarged Focus which includes Rubba’s time, location and quotation spaces. We believe that this is the preferred reading and that the deictic reading is hard (but not impossible) to recover.

The ease with which these two interpretations are modelled seems to show the advantage of mental space theory, which captures in a maximally economical manner the relatedness of deictic and anaphoric reference by showing how an index is either instantiated into a contextually inferred interpretation (deictic reference) or attached to an antecedent item in the

7. This analysis follows Nunberg’s theory of deferred reference for deictics, in which index (a linguistic entity) and referent or interpretation (a pragmatically inferred entity) are distinguished. Thus an academic at a conference who whispers to a colleague while a paper is being read, “These papers are dull”, points to an instance of paper reading (the figure). However, the reference or interpretation is not accomplished just by mentioning *these papers* (as claimed in Kaplan’s theory of direct reference [1977/1989: 493]); rather, it is only possible to know which papers are included in the reference in relation to a deictic *origo* (the ground). The index, or *demonstratum*, (a single paper being read at the time of utterance), is thus instantiated in an interpretation, or *demonstrandum*, (a set of papers mutually known to speaker and hearer).

linguistic co-text (anaphoric reference), depending on the space taken as ground or Viewpoint.⁸

This is a radical proposal for two reasons: Firstly, the new space created is built by the index, i.e. the deictic element of a *demonstratum*. Secondly, a new space is built from Viewpoint, contrary to the standard position that new spaces can only be built, for apparently obvious reasons, from Base or Focus spaces (Cutrer 1994, in Fauconnier 1997: 83). However, Grundy and Jiang's proposal seems intuitively suited to a mental space theory which allows for the incorporation of not only linguistic but also pragmatically conditioned contextual material. Indeed Grundy and Jiang argue precisely that the default for a demonstrative, such as *this*, is that it should find a linguistic antecedent. But where the default interpretation is impossible, the demonstrative is a space builder for non-linguistic material which is necessarily in the viewpoint of the speaker, a viewpoint which constitutes the deictic *origo* in relation to which the figure is in focus.

The intuitively persuasive notion that linguistically filled spaces are built from Focus and Base spaces and that pragmatically conditioned spaces are built from Viewpoint will turn out to be an important principle in accounting for data contained in Clinton's address.

At the beginning of this section, we cited Fauconnier's definition of Viewpoint as "the space from which others are accessed and structured or set up" (1997: 49). We are now in a position to expand this definition so that the spaces accessed and structured from Viewpoint include a construction of the conceptualiser's understanding of the relevant context and the instantiation of pragmatically conditioned structure. The whole mental space lattice then invites a further conceptualising inference which results in the new propositional form of a relevance oriented implicature.

8. The notion of co-indexing in generative grammar has long been rather nebulous and seems to consist of little more than attaching integers to items intuitively felt to be in an antecedent/anaphoric relation. The elegant way in which mental space theory enables both deictic and anaphoric reference to be modelled collapses the two notions of index (the one identified in accounts of indexical reference and the one supposed in syntactic co-indexing) and neatly explains why first and second person pronouns are typically deictic (i.e. when no co-textual item is identified as the index) and third person pronouns are typically, although not necessarily, anaphoric (i.e. when a co-textual item is identified as the index).

6. Instruction in Fauconnier's cognitive semantics

In his proposals for a cognitive semantics, Fauconnier posits a restricted set of frames or knowledge schemata and space types sufficient to represent all possible meaning potentials: "What human grammar reflects is a small number of general frames and space builders which can apply to organise the very large numbers of situations that we encounter or imagine" (1997: 190). The generative position in which an autonomous syntax is semantically interpreted to give a context-free truth-conditional meaning, which is itself subject to pragmatic processes resulting in a context-bound meaning is rejected (1997: 34, 111). Rather, knowledge of language involves knowing "how to apply partial grammatical instructions in context to provide appropriate cognitive configurations" (1997: 189). As in Relevance Theory, this definition treats grammar as less than fully determining of structure, recognises the computational nature of grammatical instructions, and acknowledges the role of context in determining meaning. However, because our knowledge of the way in which context contributes to the elaboration of constructions is tacit and because, unlike grammatical instructions, context lacks any kind of formal instructions for its recovery or specification beyond the constraining effect of discourse particles, precise proposals for how context is included in a semantics are not easy to decide.

Cognitive semantics, therefore, treats sentences as sets of "(under-specified) instructions for cognitive construction at many different levels" (1997: 40). It seems to us that there will need to be two kinds of instructions: those which enable us to specify the cognitive configurations that relate linguistic material, and those which specify how frames and other kinds of schemata or ICMs necessary for the successful recovery of meaning in context are related to the cognitive configurations containing linguistic material.

Cognitive construction takes place at a level which is neither a representation of language nor a representation of models of the world. According to Fauconnier (1997: 36):

constructions at level C ... are a function of the language expressions that come in, the state of the cognitive construction when the language expression arises, and the context of the discourse; this includes social framing, pragmatic conditions such as relevance, and real-world events perceived by the participants.

Even though space building is driven by linguistic information, the spaces themselves are not linguistically filled, because they are by nature part of a mental representation or “language thought” in the sense of Pinker (1994). Thus the mental space built by the linguistic content of the utterance is only the initial cognitive context, and can be enriched by factors in the non-linguistic context which are cognitively salient. New elements are added to spaces “by linguistic expressions (e.g., indefinites) or by non-linguistic pragmatic conditions (e.g., objects which are salient in the interaction that produces the discourse)” (Fauconnier 1997: 39).

There is always a Base space or starting point for the construction, a Focus space in which meaning is currently being constructed, and a Viewpoint space “from which others are accessed and structured or set up” (Fauconnier 1997: 49). These spaces may be, and typically will be, re-assigned as the discourse unfolds. There are a number of processes which ensure that structuring in one space is accessible in another. The purpose of these representations is to constrain potentially available interpretations to that intended, or assumed to be intended, by the speaker.

Since new spaces may not be built from Viewpoint (except when co-incidentally it is also Base or Focus space), its function may appear somewhat underspecified. However, there is clear intuitive support for the notion of Viewpoint, which is motivated as a construct by the way in which natural language sentences express attitudes to and instructions for manipulating the propositions which they contain. It is for this reason that we propose that spaces built from Viewpoint should be available for non-linguistic pragmatic conditions, often in the form of ICMs, as motivated in our earlier discussion of deictics. Despite stating that space building is “determined by linguistic and non-linguistic features of the ongoing discourse and discourse setting” (1997: 131) and hinting that matching allows for various pragmatic parameters for a single cognitive construction (1997: 143), Fauconnier provides only a limited number of illustrations of the operation of space building in relation to the non-linguistic pragmatic conditions. The remainder of this paper, therefore, focuses on the cognitive semantic treatment of discourse particles, which in Relevance Theory are taken as instructions for accessing a limited (i.e. processable) set of contexts which prove the relevance (i.e. interpretability) of the conceptual content of the utterance.

In *Mappings in Thought and Language*, Fauconnier mentions a number of discourse particles and discusses their function: “words like *even*, *but*,

already ... typically signal implicit scales for reasoning and argumentation” (1997: 40), and “words like *therefore* signal deductive relationships that may not have been explicitly stated” (1997: 70).⁹

Our discussion of the semantic and pragmatic properties of the word *even* draws heavily from the findings of Kay (1990).

Kay described *even* as a scalar operator, which relates two propositions in a scalar model. While formal characterisations can be found in Kay (1990), we explain the ideas in non-technical terms here. A scalar model (henceforth SM) is made up of a set of interconnected propositions functioning as background assumptions of the speaker and hearer at the time of utterance. The propositions in an SM are constructed as some dimensions of entities arranged according to some pragmatic ordering. A proposition can thus be implicationally related to another in the sense that the assertion of one will entail the other. As an example, consider an imagined situation in which individuals in the USA are expected to have varying degrees of private lives reversely compatible to their levels of responsibility in the society, ‘private lives’ here being a euphemism for non-legitimate personal relationships. Assuming also that the President is among the individuals expected to have no private life of this kind, we can depict the related system of entailment relations in a scalar model as Figure 1 below.¹⁰

In the diagram, for each entry on the horizontal axis, there is a column of possible entries on the vertical axis that can be matched against the horizontal entry. Likewise, for each entry on the vertical axis, there is a row of possible entries to match it. Therefore, in the space between the two axes, each cell is a meeting point for a possible pairing of the entries related to the two axes. We can describe a meeting point as an ordered pair $\langle x, y \rangle$, where x stands for the entry on the horizontal axis and y for the entry on the vertical one. Each meeting point is in fact a proposition, in the form of *Individual x has private life y*. That is why such a model is made up of propositions.

9. In the construction of one mental space diagram, Fauconnier proceeds by “Leaving aside the pragmatic scale constructed by *even*” (1997: 55). In another case, *otherwise* is shown to set up a counterfactual space.

10. Although the example diagram is newly constructed, the basic spirit is in accordance with Kay (1990).



If the pairing truly reflects the actual state of affairs, the meeting point, or rather the proposition, gets a value of TRUTH, represented as 1. If not, it gets a value of FALSITY, represented as 0. Then we can have $\langle x, y \rangle^s = \{0, 1\}$, meaning that the semantic value of the ordered pair $\langle x, y \rangle$ relative to a state of affairs s is either true or false exclusively.

Figure 1 can be used to represent an SM according to which the more responsibility an individual assumes, the less private life he is supposed to have, so much so that a President is among the people expected to have no private life. It is obviously impossible to fit each and every individual into this pair of scales, and it is not necessary either. The SM stands all the same without exhausting the members in the domain, so long as the following entailment relationship is obtained: if it is true that a person X numbered, for example, 35, is involved in an amount of private life 55, then it should also be true by entailment that anyone with less responsibility than X will be involved in at least the same amount of private life, if not more. On the other hand, if it is false that a person Y numbered, say 36, is involved in the amount of private life 56, then it should also entail that nobody with more

responsibility than Y can have that amount of private life, if not less.¹¹

It is also possible to view the horizontal axis as not inhabited by particular individuals, but as types of individuals. Thus the individuals can refer to generics, that is, types of individuals. This modification will render better service to our analysis of Clinton's address.

According to Kay (1990), a sentence containing *even* expresses a text proposition (henceforth tp) which is more informative (in the Gricean sense) than a context proposition (cp) taken for granted in the context. Both the tp and the cp are in the same SM related by the scalar operator *even*. tp entails cp but not *vice versa*. Thus in relation to the tp expressed by (1'), that Presidents, *contra* the general belief, also have private lives, the cp can be that it was believed that some other types of individuals with less responsibility can have varying amounts of private life. The tp introduces a new value of truth to the one introduced by the cp, as shown in Figure 2, in which Presidents inhabit an imagined position 36 in the horizontal scale. And some other type of individual with less responsibility sits at an imagined position 20. The exact value of cp on both axes is not the concern, so long as its horizontal value is less than the number assigned to the position of Presidents and its vertical value is at least as much as the amount assigned to that of Presidents. Without *even*, the SM would not be evoked, and no cp would be assumed. Compared to the tp expressed by the sentence, cp has been

11. Since $\|\langle 35, 55 \rangle\|^S = 1$, that $\|\langle 35, 1 \rangle\|^S \wedge \dots \wedge \|\langle 35, n \rangle\|_{(n=55)}^S = 1$ is also entailed. That is, for entry 35 on the horizontal axis, if it is true that it matches 55 on the vertical axis, then it should also entail that the horizontal 35 matches 1–55 on the vertical axis. Likewise, given $\|\langle 35, 55 \rangle\|^S = 1$, that $\|\langle 35, 55 \rangle\|^S = 1$, that $\|\langle 0, 55 \rangle\|^S \wedge \dots \wedge \|\langle n, 55 \rangle\|_{(n=35)}^S = 1$ is also entailed. It is in this sense that Kay (1990) remarked that “in every state of affairs all the ‘1’ (TRUE) entries form an unbroken cluster around the origin of the space” [represented in our diagram as O]. In Figure 1, the arrows near the value 1 in the space mark the unbroken cluster related to that value, likewise for the value 0. One more observation needs to be made before we see the complete picture. By the nature of entailment relations, although the truth of $\|\langle 35, 55 \rangle\|^S$ entails the truth of $\|\langle 35, 1 \rangle\|^S \wedge \dots \wedge \|\langle 35, n \rangle\|_{(n=55)}^S$, the truth of the former does not entail the truth of $\|\langle 35, 0 \rangle\|^S$. For $\|\langle 35, 0 \rangle\|^S$ means X does not have any private life. That would negate the truth of the previously established values, leading to a contradiction. On the other hand, the truth of $\|\langle 35, 55 \rangle\|^S$ does entail the truth of $\|\langle 0, 55 \rangle\|^S$. That is, if it is true that an individual with an amount of responsibility 35 has an amount of private life 55, by entailment it is also true that an individual with an amount of responsibility 0 has an amount of private life 55, if not more. The reason that $\|\langle 35, 55 \rangle\|^S$ entails $\|\langle 0, 55 \rangle\|^S$ is that according to the way the SM is constructed, the latter is always true if the former is true. But if the former is false, the latter may be true, or it may be false (hence it is not a presupposition).

hitherto taken as the norm. It is in this sense that tp is more informative. It brings about a belief revision in the shared background assumptions.¹²

(1') Even presidents have private lives.

more	P	.			
	R	.			
	I	.			
	V	56			
	A	55			
	T	.			
	E	.			
	L	4			
	I	3			
	I	2		1 ← (cp)	1 ← (tp)
	F	1			
less	E	0			
			1 2..	20..	36 37..
			less	Individuals responsibility	more

Figure 2. Scalar model of *even* sentences

Given that the tp in (1') is that *Presidents also have private lives* and that the cp is that *Some (other) people (with less responsibility) were believed to have private lives*, how can we derive another propositional meaning that should also be in the context triggered by *even*, which is that *Presidents are believed to have no private lives*? To say that this proposition is entailed by the tp is to commit a logical fallacy (see footnote 11). In fact, such a proposition can be derived as a generalised conversational implicature [henceforth GCI] from the cp. That is, to say that *some people are believed to have private lives* is to implicate that *not everyone is believed to have a private life*, which is logically equivalent to *some people are believed not to have private lives* or *some people are believed to have no private lives*. From that, it is just one step to infer the particularised conversational implicature [henceforth PCI] that *Presidents are believed to have no private lives*, taking into consideration the SM concerned as well as the tp conveyed by (1'). Thus we take the tp

12. See Kay (1990) for detailed discussions and more complex cases.

conveyed by (1') to not only convey a new proposition but also to be a confirmation of the related cp and a rejection of the PCI derived from the GCI triggered by the cp. In summary, the interconnected propositions are presented in full in the following list, though not necessarily derived in that order in real-time processing:

- a. the Sentence: "Even Presidents have private lives"
- b. tp: *Presidents also have private lives [contra the common assumption]*
- c. cp: *Some (other) people (with less responsibility) are believed to have private lives*

[tp and cp triggered by the scalar operator *even* and the content of the rest of the sentence]

- d. CGI: *Not everyone is believed to have a private life*

[GCI derived from cp]

- e. equivalence: *Some people are believed to have no private lives*

[logically equivalent to (d)]

- f. PCI: *Presidents are believed to have no private lives*

[PCI inferred on the basis of (e) and other contextual information]

It is also important to note the superiority of this SM-based account over the earlier, end-of-the-scale account (e.g., Fauconnier 1975). In the latter, Presidents would be taken to occupy the end of a conceived pragmatic scale based on the degrees of unlikelihood of the types of the individuals having private lives. As Kay (1990) indicates, *even* does not need to require that the concerned entity be at the end of a scale. There might be some other entities that take positions at some more extreme points. The utterer of (1') may think it even more unlikely that Bishops and Popes have 'private lives'. But that belief does not debar him from making assertions about Presidents in (1'). This scenario can be accommodated by a scalar model account but not by an end-of-the-scale one, even though that the two may coincide in many other cases when the individual concerned happens to be at the end of a scale.

Now the crucial issue is how the kind of shared background assumptions containing both the scalar model and the cp elicited by *even* are obtained. Kay (1990) mentions factors such as lexical items and non-lexically specified

grammatical constructions. He also studies some fairly complex processes of pragmatic accommodation that can come into play in the construction of the scalar model. But he only briefly mentions the need to study the concrete psycho-social status of the shared assumptions. It is in this connection that we venture into the issue of ideological ground.

The cognitive construction must therefore include ICMs which provide background knowledge about the set of paradigmatic cases of which *even*^P (= even+ following proposition) is a near end-of-scale member. This is the Viewpoint in relation to which the proposition in Focus is understood. Taken together, proposition and context constitute the premises which yield Meaning X as a deductive inference. In the case of

- (1) Presidents have private lives

no constraint on relevance-making contexts is available and the hearer will have a hard time drawing the appropriate inference as to what was meant by what was said, unless the discourse context provides very considerable help. This is because the hearer lacks a sufficiently rich perspective or viewpoint. However, in the case of Clinton's utterance

- (1') Even Presidents have private lives

the existence of a pragmatic scale is suggested to the hearer containing sets of representative individual referents who "have private lives". It is this ground which enables the hearer to infer what Clinton meant by what he said. The question then is how to represent this scale with its particularly interesting ideological content in the cognitive construction.

This leads naturally to the related question of how frames or schemata are represented in meaning constructions. Fauconnier discusses the sentence

- (4) In France, Watergate wouldn't have done Nixon any harm

at some length. Much of his work on this example addresses issues of counterfactual representation, which are not directly relevant to the issue under consideration here. However, in his discussion, Fauconnier states that the background knowledge required to make sense of the sentence "is not in any way conveyed by it" and suggests that when the sentence is processed, "the space builder *in France* ... is going to bring in two new spaces. First it brings in a space G (as in Gallic) corresponding to relevant partial background information about the *French political system*" (1997: 107).

It seems to us that such data are not a special case at all. The relevance theoretic construct of explicature enables us to enrich “In France” to a full propositional form something like *In French political culture* and “Watergate” to a full propositional form something like *The Watergate break-in in which Republican Party officials were instructed to burgle the office of their Democrat opponents and steal information from them*. Metonymies such as these occur in most utterances. Because the metonymic items are conceptual encodings and do not invoke pragmatic contexts beyond those required to elaborate them, they do not require the same kind of meaning construction as those triggered by procedural encodings (such as *even*) that invoke, or, more accurately, constrain, contexts. In fact, metonymies are more comparable to deictics — at Viewpoint the metonymic ‘index’ is instantiated in an interpretation of the kind suggested above for “In France” and “Watergate”.

How would this work, then? Imagine an ‘index’ associated with expressions as a space builder for ICMs which the speaker as conceptualiser supposes that the hearer as conceptualiser can recover.¹³ Thus explicatures of linguistic representations are constructed at Viewpoint where encyclopaedic knowledge is recovered in the form of ICMs to resolve the indeterminacy of the meanings being structured in Focus space.

A plausible model might see a mental space configuration for *Even Presidents have private lives* along these lines:

Base space (also, co-incidentally, the Viewpoint space):

- the discourse context (following Rubba), including Clinton and his television audience

Focus space = Figure:

- *Presidents have private lives* (conceptual content)
- *Even* (procedural content); an instruction to build new structure from Viewpoint which elaborates the scale associated with *even*

Viewpoint space = Ground (also, co-incidentally, the Base space):

- through access to relevant ICMs, the conceptual content in Focus is explicated or enriched to give the full propositional form *Presidents of the USA such as the speaker are entitled to privacy in their relationships*

13. This presupposes the extension of indexicality to all referential descriptions and predicates. This is not a new suggestion, and merely takes account of the fact that all linguistic expressions are indeterminate and require explication.

- the existence of a paradigmatic scale *even^a*, *even^b*, *even^c* ...*evenⁿ*
- ICMs which provide background knowledge about the set of paradigmatic cases
- a consequential inference as to what it means to be at or near the end of scale of expectability (perhaps in the form of an ICM).

This mental model then provides the premises for a deductive inference which is guaranteed to produce the most relevant way of understanding what is meant by saying *Even Presidents have private lives*. There is nothing especially remarkable about linguistic ostension in this respect. Deciding on meaning, like deciding to overtake when driving a car, is a decision taken in relation to a mental model constructed as a representation of all the relevant data.

7. Cognitive pragmatics and President Clinton's television address

President Clinton's address of 18 August 1998 was printed in *The Times* of 19 August under the headline "Reading between the lines of TV address". The address itself was prefaced by the sub-heading "What Clinton said". To the right of the address, the sub-heading which prefaced the interpretation offered by *The Times* was "What Clinton meant". Although *The Times'* interpretation was concerned only with such matters of conceptual content as, for example, the significance of the distinction between "legally accurate" answers on the one hand and not having "volunteer[ed] information" on the other, it is our opinion that another important aspect of "What Clinton meant" can only be captured by understanding his awareness of the significance of the ideological ground constructed by his use of procedural space builders and meta-talk in general. It is this awareness which we now explore.

Most attempts to model the meaning construction of utterances work with examples like

- (4) In France, Watergate wouldn't have done Nixon any harm

which are straightforward encodings of conceptual meaning requiring only the kind of explication suggested earlier. This contrasts with Clinton's utterance,

- (2) Indeed, I did have a relationship with Ms Lewinsky that was not appropriate. In fact, it was wrong

which contains several overt comments on the proposition that he had a relationship with Ms Lewinsky: *indeed* and *in fact* and the emphatic auxiliary *did* advise us of the extent to which the propositional information is to be regarded as reliable; the higher level predicates *not appropriate* and *wrong* are speaker comments on the proposition; in addition, the repair “In fact, it was wrong” is evidence of the speaker’s belief that he could not get away with styling the relationship “not appropriate”.

The question then is how mental space construction is determined by meta-talk and how it represents the pragmatic background evoked by the speaker’s realisation that the predicate “not appropriate” is inadequate to the ideological context in which it occurs.

Let’s begin with considering how an utterance like

(5) I had a relationship with Ms Lewinsky that was not appropriate

might be represented as a mental space configuration. Following Rubba, we begin with a Base space representing the discourse context, including President Clinton and his audience. A new space, which we will call R, is then opened and contains *I had a relationship with Ms Lewinsky*. A further comment space, which we will call C, is then opened. C inherits the material in R by optimisation, or downward spreading, and adds the higher-level predicate *that was not appropriate*.¹⁴

The issue now is how this construction differs from the construction for

(5′) Indeed, I did have a relationship with Ms Lewinsky that was not appropriate

Earlier we suggested that discourse particles such as *you know* and *well* shift the Viewpoint back to the Base. As the Viewpoint is already the Base space in the example under consideration, this doesn’t enable us to distinguish *Indeed*-R from R. Moreover, there is a distinction between the discourse context as represented in the Base and Clinton’s perception of the discourse context. We therefore suggest a modification to allow such particles to open up a new Viewpoint space which inherits the conceptualiser’s view of the initial discourse context based on ICMs from Base and represents the

14. Schiffrin (1987) uses the term ‘higher-level’ of predicates which have a metalingual or commenting function.

conceptualiser's view of the discourse context at the moment of conceptualisation. Thus we can distinguish the R version of this utterance in which Base is also Viewpoint from the *Indeed-R* version in which Base and Viewpoint are distinct spaces. But how can we justify such structure building, apart from by appeal to its intuitive rightness?

Grundy and Jiang (1998, 2001) discuss the representation of anomalous sentences which are typically found as public address messages in Hong Kong, such as

(6) Last bus had departed

and

(7) This passage was closed

They argue that what makes them anomalous in the contexts in which they are encountered is that it is impossible to recover a reference time in relation to which the events are located. They then try to show how mental space configurations are able to represent this anomaly. Their suggestion is that the index associated with the deictic tense form acts as a space builder. In non-anomalous utterances such as

(6') When we arrived, the last bus had (already) departed

this space contains linguistic material, i.e. *when we arrived*, and is the Viewpoint or ground in relation to which the figure, *the last bus had departed*, is in Focus. The space builder is therefore an index, the deictic element of the tense, which in non-anomalous utterances will be instantiated in a linguistic form such as *when we arrived* to provide a ground or reference time in relation to which (6') is interpretable. Their characterisation of an anomalous utterance such as (6) is, therefore, that there is a Viewpoint space opened by a pragmatic index which remains empty of linguistic material.

We now wish to appeal to this kind of cognitive construction as a way of accounting for the difference between R and *Indeed-R* type utterances, and at the same time to refine Grundy and Jiang's (1998) characterisation of pragmatic anomaly: an anomaly occurs when a Viewpoint space is built and remains empty of either linguistic or pragmatically conditioned material. This is illustrated in the case of (6), which is anomalous when displayed as a public address message at a bus station (as observed originally), but which poses no such problems as the opening sentence of a novel, precisely

because the reader is able to supply sufficient pragmatically conditioned material to provide a reference time. Similarly, the standard English sentence

(6'') The last bus had already departed

isn't anomalous, again because *already* acts as a space builder for the Viewpoint space which the hearer or reader is able to fill with pragmatically conditioned material (such as *when we arrived*).

Since a Viewpoint space distinct from the Base space is independently motivated to account for the space-building properties of the deictic index in examples like (6) and (7), we therefore suggest that expressions like *indeed* in (5') are also space builders for a Viewpoint space which contains the speaker's apparent representation of the discourse context inherited from the Base space at the moment of conceptualisation. This space enables the hearer to reconstruct the speaker's viewpoint of, or perspective on, the space R currently being constructed — in this case that the speaker wants to assure the hearer that what is asserted in R is reliable information. Emphatic *did* works in the same kind of way and opens a further Viewpoint space, again filled with pragmatically recovered material. Although it is sometimes possible for conflicting viewpoints to be constructed, in this case the Viewpoint spaces opened by *indeed* and *did* offer consistent perspectives on the proposition in the space being constructed.

The material in the new Viewpoint space I (for *indeed*) will constrain the interpretation of the linguistic material in R and as a result enable the hearer to draw a conclusion as to what the speaker means by uttering R. We assume that *indeed* is therefore also a space builder for an ideological context recovered as an ICM in relation to which the speaker utters R. The distinction between the B context and the I context is that the I context contains the knowledge the speaker has of Base, which is essentially ideological. Thus it is more difficult to interpret *I had a relationship with Ms Lewinsky* than it is to interpret *I did have a relationship with Ms Lewinsky*, and more difficult to interpret *I did have a relationship with Ms Lewinsky* than it is to interpret *Indeed, I did have a relationship with Ms Lewinsky*. This is because each procedural encoding assists the conceptualiser to identify a context which makes what Clinton means by uttering *I did have a relationship with Ms Lewinsky* more relevant.

Knowing that he cannot get away with describing this relationship as “not appropriate”, Clinton then constructs a further Viewpoint space opened

by “In fact” and a further Comment space to include “was wrong”, as well as a Focus that inherits the antecedent structure in respect of which “It” is an anaphor. The space opened by “In fact” is filled with a slightly different speaker conceptualisation of the ideological ground from that already opened by “Indeed”, and it is with respect to his perception of this new ground that the speaker assures his audience of the status of his representation, “it was wrong”, as a well-founded comment.

The same kinds of analysis are appropriate to the other examples of meta-talk in Clinton’s address. Consider the case of

(8) Still, I must take full responsibility for all my actions...

Fauconnier (1985/1994: 114ff) suggests that the function of the arguably more propositional use of *still* in the apodosis of (counterfactual) conditionals is to cancel an implicature that would otherwise have arisen on the basis of expectability. Thus

If A, B (e.g., If you wear a suit, you’ll get the job)

gives rise to the expectation that *If ~A* were to occur, then so would *~B*. Thus the unexpected case

If ~A, B

is often metalinguistically marked, to give

If ~A, still B (e.g., If you don’t wear a suit, you’ll still get the job).

(8) follows the self-congratulatory statement, “I answered their questions truthfully, including questions about my private life, questions no American citizen would ever want to answer.” The expectation of further statements in this vein, presumably constructed from Viewpoint as a kind of template for the new meaning to be constructed in Focus space, presupposes the same Base and Viewpoint. We, therefore, suggest that the procedural encoding, *still*, cancels this template and reassigns the separate Base, Viewpoint and Focus spaces of the preceding construction so that they are now understood as Base (and, consequently, Viewpoint) in relation to which a contrasting new meaning will be structured in Focus space.

As you know in

(9) As you know, in a deposition in January, I was asked questions...

returns the Viewpoint to Base and the ideological context in which the speaker is the President of the United States and not the person who in the previous Focus space has just stated “I did not volunteer information.”

Although *but* has the same truth function as *and*, it implies a contrast between the conjoined stretches of discourse. Fauconnier treats *but* as an explicit warning against a likely implicature (1985/94: 110, 113), and in some cases against the expectation of optimisation. Thus in

(10) But I told the grand jury today and I say to you now that...

the previous Focus space has become a Viewpoint space for the materials being constructed in (10). The expectation derived from Clinton’s admission in the previous sentence that what he had done “constituted a critical lapse in judgement and a personal failure on my part for which I am solely and completely responsible” sets up a template for a further admission. This template is cancelled by *but*, and the previously constructed spaces reasigned as a new Base, and therefore Viewpoint. The expectation templates cancelled by *still* and *but* are constructions based on ideological perspectives which Clinton wishes to challenge.

The factive *know* in

(11) I know that my public comments...

opens a space for a presupposition which reflects the ideological perspective (the President holds) of the President’s audience.

In

(12) I misled people, including even my wife

even is a space builder for a scale constructed from Viewpoint where such an act of betrayal is extremely unexpected and of which Clinton will say, “I deeply regret that.” This creates an expectation template which awaits an explanation. The explanation is provided by

(13) I can only tell you I was motivated by many factors

Only constructs a scale from Viewpoint. Given such a scale, *only*^p (=only+ following proposition) is not an especially convincing explanation — but then given the prevailing ideology and associated expectations of presidential behaviour in relation to which Clinton’s account of his conduct is to be interpreted, there cannot be much of a justifying explanation.

The penultimate sentence of the address begins with (14):

- (14) And so tonight, I ask you to turn away from the spectacle of the past seven months.

In the Conversation Analytic literature (Heritage 1985: 100), *so* is a conventional way of signalling an upcoming formulation. Typically, formulations follow accounts and attempt to summarise the relevance or procedural consequentiality of these accounts. Thus *so* reassigns all the spaces containing the preceding account to a new Base (and consequently Viewpoint) in relation to which a formulation is offered. Moreover, the close connection between the account-bearing meaning construction and the new Focus space is indicated by *and*.¹⁵

As we see, these examples contain space builders and space shifters which do not contribute to the conceptual or propositional content of Clinton's address, but instead provide instructions for the cognitive construction of ideological ground.

8. Conclusion

Most existing accounts of how the figure/ground *gestalt* is linguistically realised have focused on conceptual meaning. To be satisfied with this is tantamount to treating communicating meaning as a simple matter of encoding and decoding linguistic form rather than causing an addressee to draw inferences from explicated linguistic and inferred non-linguistic premises. We have been able to show that mental space constructions neatly allow for the construction of linguistic figure in Focus space and contextual ground in Viewpoint space. In doing this, we demonstrate how mental space representations are uniquely able to represent in a single account phenomena treated counter-intuitively (and certainly non-cognitively) as either semantic or pragmatic in other theories.

15. The various phonetic realisations of *so* and *and so* suggest that spaces need to be built to show the extent of the relatedness of Viewpoint to Focus, i.e. the relevance of a formulation to an account, as conceptualised by the speaker.

Acknowledgments

We warmly acknowledge the extremely helpful comments made on earlier drafts of this paper by René Dirven and an anonymous reviewer. We are also indebted to Esra Sandikcioglu and Birgit Smieja for all their help in preparation of the manuscript.

Appendix

Clinton's national television address of 18 August 1998:

Good evening. This afternoon in this room, from this chair, I testified before the Office of Independent Council and the grand jury.

I answered their questions truthfully, including questions about my private life, questions no American citizen would ever want to answer.

Still, I must take complete responsibility for all my actions, both public and private. And that is why I am speaking to you tonight.

As you know, in a deposition in January, I was asked questions about my relationship with Monica Lewinsky. While my answers were legally accurate, I did not volunteer information.

Indeed, I did have a relationship with Ms Lewinsky that was not appropriate. In fact, it was wrong. It constituted a critical lapse in judgement and a personal failure on my part for which I am solely and completely responsible.

But I told the grand jury today and I say to you now that at no time did I ask anyone to lie, to hide or destroy evidence or to take any other unlawful action. I know that my public comments and my silence about this matter gave a false impression. I misled people, including even my wife. I deeply regret that.

I can only tell you I was motivated by many factors. First, by a desire to protect myself from the embarrassment of my own conduct.

I was also very concerned about protecting my family. The fact that these questions were being asked in a politically inspired lawsuit, which has since been dismissed, was a consideration, too.

In addition, I had real and serious concerns about an independent counsel investigation that began with private business dealings 20 years ago. Dealings, I might add, about which an independent federal agency found no evidence of any wrongdoing by me or my wife over two years ago.

The independent counsel investigation moved on to my staff and friends, then into my private life. And now the investigation itself is under investigation.

This has gone on too long, cost too much and hurt too many innocent people.

Now, this matter is between me, the two people I love most — my wife and our daughter — and our God. I must put it right, and I am prepared to do whatever it takes to do so.

Nothing is more important to me personally. But it is private, and I intend to reclaim my family life for my family.

It's nobody's business but ours. Even Presidents have private lives. It is time to stop the pursuit of personal destruction and the prying into private lives and get on with our national life.

Our country has been distracted by this matter for too long, and I take my responsibility for my part in all of this. That is all I can do.

Now it is time — in fact, it is past time — to move on. We have important work to do: real opportunities to seize; real problems to solve; real security matters to face.

And so tonight, I ask you to turn away from the spectacle of the past seven months, to repair the fabric of our national discourse, and to return our attention to all the challenges and all the promise of the next American century.

Thank you for watching and good night.

References

- Blakemore, Diane. 1987. *Semantic Constraints on Relevance*. Oxford: Blackwell.
- Cutrer M. 1994. Time and tense in narratives and everyday language. PhD dissertation. San Diego: University of California.
- Fauconnier, Gilles. 1975. "Pragmatic scales and logical structure". *Linguistic Inquiry* 6: 353–75.
- . 1985. *Mental Spaces*. Cambridge, Mass.: MIT Press. (Revised edition Cambridge: Cambridge University Press, 1994).
- . 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Grundy, Peter and Jiang, Yan. 1998. "Cognitive semantics and deictic reference". *Working Paper*. <http://www.polyu.edu.hk/~cbs/jy/output.htm>
- . 2001. "The bare past as an ideological construction in Hong Kong discourse." In R. Dirven, R. Frank and C. Ilie (eds), *Language and Ideology. Vol. 2: Descriptive cognitive approaches*. Amsterdam and Philadelphia: John Benjamins.
- Hanks, William H. 1992. "The indexical ground of deictic reference". In A. Duranti and C. Goodwin (eds), *Rethinking Context*. Cambridge: Cambridge University Press, 43–76.
- Heritage, John. 1985. "Analysing news interviews: Aspects of the production of talk for an overhearing audience". In T. van Dijk (ed.), *Handbook of Discourse Analysis, Volume 3*. London: Academic Press, 95–119.
- Jakobson, Roman. 1960. "Closing statement: Linguistics and poetics". In T. A. Sebeok (ed.), *Style in Language*. Cambridge, Mass.: MIT Press, 350–77.
- Kaplan, David. 1977. "Demonstratives". In J. Almog, J. Perry and H. Wettstein (eds), *Themes from Kaplan*. New York and Oxford: Oxford University Press, 1989.
- . 1989. "Afterthoughts". In J. Almog, J. Perry and H. Wettstein (eds), *Themes from Kaplan*. New York and Oxford: Oxford University Press, 1989.
- Kay, Paul. 1990. "Even". *Linguistics and Philosophy* 13: 59–111.
- Langacker, Ronald W. 1991. *Concept, Image, and Symbol: The cognitive basis of grammar*. Berlin: Mouton de Gruyter.

- Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- Lucy, John A. (ed.). 1993. *Reflexive Language: Reported speech and metapragmatics*. Cambridge: Cambridge University Press.
- Mukarovskiy, Jan. 1964. (English version) "Standard language and poetic language". In D.C. Freeman (ed.), *Linguistics and Literary Style*. New York: Holt, Rinehart and Winston, Nunberg, 40–56.
- Nunberg, Geoffrey. 1993. "Indexicality and deixis". *Linguistics and Philosophy* 68: 1–43.
- Pinker, Steven. 1994. *The Language Instinct*. New York: W. Morrow and Co.
- Rubba, Jo. 1996. "Alternate grounds in the interpretation of deictic expressions". In G. Fauconnier and E. Sweetser (eds), *Spaces, Worlds and Grammar*. Chicago: University of Chicago Press, 227–261.
- Rubin, Edgar. 1915. "Figure and ground". In D.C. Beardslee and M. Wertheimer (eds), *Readings in Perception*. New York: Van Nostrand 1958, 194–203.
- Schiffrin, Deborah. 1987. "Meta-talk: Organization and evaluative brackets in discourse". *Sociological Inquiry* 20: 199–236.
- Sperber, Dan and Wilson, Deirdre. 1986/1995. *Relevance: Communication and cognition*. Oxford: Blackwell.
- Talmy, Leonard. 1978. "Figure and ground in complex sentences". In J.H. Greenberg (ed.), *Universals of Human Language*. Stanford: University of California Press, 625–49.
- The Times*. 19 August 1998. London: Times Newspapers Ltd.
- Wallace, Stephen. 1982. "Figure and ground". In P.J. Hopper (ed.), *Tense-Aspect: Between semantics and pragmatics*. Amsterdam and Philadelphia: John Benjamins, 201–223.
- Wilson, Deirdre and Sperber, Dan. 1993. "Linguistic form and relevance". *Lingua* 90: 1–15.

Linguistic Dilemmas of Afrocentricity

The Diaspora Experience

Ali A. Mazrui

*State University of New York,
Binghamton, New York*

Alamin M. Mazrui

*The Ohio State University,
Columbus, Ohio*

1. Introduction

In his study of the social dimension of cognitive grammar, Bruce Hawkins looks at how linguistic cognition can be influenced by the sociopolitical context of language use. He examines, in particular, a sub-set of textual reference which he describes as iconographic. Hawkins defines an iconographic reference as “one that constructs an image of the referent which is intended to evoke a strong emotional response to that referent” (Hawkins 1997: 22). A textual reference, in addition, can range from a simple nominal to an extended text.

Hawkins then relates iconographic reference to the Althusserian notion of “interpellation”: This, in our case, is the linguistically-mediated process through which, ultimately, individuals become subjects to the ideology of the ruling power/class. We acquire “the categorisation and modes of expression of our native language. We learn to conceptualise time, space, and other experiential domains in the way that has become conventional within that community in which we are acquiring the language” (Hawkins 1997: 25). In the process we submit to these “modes of conceptualising” our experience without, necessarily, becoming permanent prisoners to them. And it is this dynamic relationship between language and ideology, partly established

through a system of iconographic and other references drawn from a culturally-based corpus of images, that this chapter seeks to examine in the specific context of Afrocentricity.

Throughout much of the “Anglophone”¹ Black world, the English language has sometimes been regarded as a carrier of a Eurocentric world-view built on a racist premise of Black inferiority. Inscribed in the repertoires of Black folk as a language of white enslavement and colonisation, it has accumulated a heritage of metaphors and imagery, of an iconographic system, that has invested Black identity with negative meanings and under-valued their place in world history. In naming “reality”, in a way that has fostered Black marginality the Euro-world has gained control over it partly because it is through its languages that reality becomes known to us.

It is partly against this linguistic legacy of Eurocentrism that Afrocentrists have sought to rebel. Regarding language as “essentially a means of controlling thought”, with the potential of “boxing” the victims into the concepts of the victimiser, “liberation from the captivity of racist language” and ultimate control of one’s “own language” is thus seen as a first order of Afrocentric intellectuals in the quest to self-direct the future of the global Black community (Asante 1989: 31).

But what is Afrocentricity² and how does it relate to Pan-Africanism? What has been the role of the English language in both these ideologies of race consciousness and how have they responded to their linguistic circumstances? What have been some of the means of lingo-conceptual liberation espoused by Afrocentrists and what have been some of their implications? It is to a consideration of these questions that we must now turn.

1. The term is employed here not to describe the proportion of people who speak the English language in the countries concerned, but the degree and perhaps the nature of lingo-cultural dependence on it.

2. We use the term “Afrocentricity” to designate the movement of ideas of ontological rootedness in an African world, and reserve “Afrocentrism” for the conscious ideology arising from those ideas and its manifestations in verbal and non-verbal behaviour. We define the “African Diaspora” as the dispersal of people of African descent worldwide, but especially in the Americas.

2. Between Afrocentricity and Pan-Africanism

Afrocentricity is a view of the world which puts Africa at the centre of global concerns and idealises its role in human affairs. It puts great emphasis on the agency of Black people in shaping not only their own history, but the history of the world at large, ascribing to people of African descent a greater role in the construction of human civilisation than has been recognised. In the final analysis, Afrocentricity seeks to restore the pride and confidence of Black people in their own African heritage.

Pan-Africanism, on the other hand, is a doctrine or movement which believes in the common destiny of African peoples and seeks to unite them politically, economically and culturally. Whereas Afrocentricity regards Africa as a cultural complex in the widest sense of the word and is inspired by the idiom of Black dignity, Pan-Africanism sees the continent primarily as a political entity and its idiom draws heavily on the spirit of solidarity.

Of course, neither of these ideologies is monolithic and undifferentiated across cultures, time and space. There are certainly different schools and trajectories within Afrocentricity, ranging from those that celebrate Africa's glorious material achievements to those most comfortable with the continent's humanism. And Pan-Africanism can be global (the unity of all Black people worldwide), west hemispheric (the unity of people of African descent in the western hemisphere), trans-Atlantic (the unity of Africa and its own Diaspora across the Atlantic), trans-Saharan (the unity of the African continent as a whole, both north and south of the Sahara) and sub-Saharan (the unity of Black people south of the Sahara). Whatever their internal variations, however, Afrocentricity is united by an interpretation of the global significance of Africa, while Pan-Africanism essentially coheres around a policy of the unity of Black people at some demographic plane or other.

While almost all Afrocentrists are Pan-Africanists, only some Pan-Africanists can be described as Afrocentrists. Only some Pan-Africanists believe that Africa is at the heart of the human condition or the center of global concerns. On the contrary, a good proportion of Pan-Africanists is inspired by a perceived marginality of Africa and by the need, therefore, to unite its people and galvanise their energies towards achieving for it a greater centrality in world affairs.

In the second half of the twentieth century Pan-Africanists (though a minority) are to be found in virtually every country in Africa and the Black

world. They may be politicians or students, artists, writers or workers. Afrocentrists, on the other hand, are primarily a phenomenon of the African Diaspora, especially the Diaspora of the Americas and Western Europe. Because Black people in North America and Western Europe feel the centrality of the West in global affairs the most directly, they have felt the need most keenly to substitute Afrocentricity for Eurocentrism. And it is partly this reactiveness to Eurocentrism that explains some of the linguistic responses of Afrocentricity.

3. Between relativism and functionalism

The United States is arguably the cradle and the most important constituency of Afrocentricity and, to a much lesser extent, of trans-continental Pan-Africanism. In both these movements, the English language came to play a critical role.

English has been the language of Pan-African conferences and festivals, going back to the Pan-African Congresses organised by W.E.B. DuBois. Because of the peculiar racial politics of their historical place and time, African Americans came to assume a central place in the leadership of Pan-Africanism in its early stages of evolution. And because African Americans were English-speaking, they were able to establish links more readily with the Anglophone region of Africa than with its Francophone counterpart — not overlooking the fact, of course, that in the post-colonial period, some radical Francophone African countries served as safe havens for African American activists. And until today, English is the primary instrumental bridge between the Diaspora and continental Africans schooled in European languages.

With regard to Afrocentricity within the United States, on the other hand, the ideology seems caught between the instrumental value of English and the symbolic value of indigenous African languages. The instrumental value can include both a collective scale (of fostering community bonds, for example) and individual scale (of serving the communicational needs of individual users). The symbolic value, on the hand, relates more to concerns of collective identity, consciousness and heritage.

In more theoretical terms, the symbolic resort to African languages within Afrocentricity coincides with a quasi-Whorfian position. Cognitive linguistics has, of course, been quite influential in rehabilitating Benjamin

Lee Whorf and his (and Edward Sapir's) relativist hypothesis. Not only is Whorf no longer understood to have been an absolutist in his linguistic relativism, there is now a considerable body of literature that is believed to support his argument, for example, that linguistic patterns do influence our patterns of attention and categorisation in a culturally specific manner.

At the lexical level of Whorfian linguistics, a distinction has sometimes been made between two categories of words: (a) Culture-specific words; these constitute the "vast majority of words in any language [which] have complex and rather language-specific meanings" and which "can often be seen as reflecting and embodying the distinctive historical and cultural experiences of the speech community", and (b) Cultural key words, "the highly salient and deeply culture-laden words in a language" which often stand "at the centre of a large cluster of fixed phrases, and appear frequently in proverbs, sayings, popular songs, book titles, and so on" (Dirven and Verspoor 1998: 145).

It is from these culture-specific and cultural key words in Africa's linguistic heritage that Afrocentrists have often drawn in their efforts to centre Africa as the modal point of their ideology. But precisely because African Americans are not themselves direct products of the respective African lingo-cultural experiences, the terms drawn from African languages are, in reality, devoid of cognitive effect on African Americans. To that extent, the role of these linguistic Africanisms in Afrocentric discourse becomes primarily symbolic.

The instrumental side of Afrocentricity that is pegged to the English language, on the other hand, is predicated on a "functionalist" view of language that is somewhat akin to the phenomenon described by Hawkins (1997). The concern here is not with how language influences cognition, but with how language itself is (re)structured in terms of the functions to which it is put. Racial assumptions and biases and exclusionary ideologies are not inherent in language, but are reflected, perpetuated and naturalised in the way language is used. In essence, then, concepts in language can potentially have a multiplicity of competing meanings, each being determined by the social location of the user. To some extent, this sense of location can be loosely equated with *grounding* in cognitive linguistics in which a discourse text is seen to be relative to "the speaker's experience of the world" (Dirven and Verspoor 1998: 95). Within this framework, then, Afrocentrists see the English language as an instrument by which to inscribe the Black experience

within which African Americans are grounded in a racially divided society entrapped in a hegemonic ideology that is decidedly Eurocentric.

Afrocentrists do not seek, explicitly, to resolve the seeming contradiction between their Whorfian and functionalist positions. But, in general, they seem to accept the uniqueness of language as shaped by its cultural-experiential environment without denying the universality of language as a human experience. They see language as operating in two domains: One that is particularistic, reflecting a heritage of Black people in Africa and its Diaspora, shaped by their historical experience over the centuries; the other, more plural (universal?) — malleable and potentially amenable to a multiplicity of accommodations (though often through a process of struggle and contestation).

4. Between English and Kiswahili

Many nationalists within the continent of Africa tend to advocate for the replacement of European languages inherited from the colonial tradition by African ones. In the forefront of this campaign has been the Kenyan writer, Ngugi wa Thiong'o, who has repeatedly argued that "the domination of a people's language by languages of the colonising nations was crucial to the domination of the mental universe of the colonised" (1986: 16).³ The process of radical decolonisation proposed by Ngugi, therefore, involves a rejection of English, the subsequent refusal to submit to the worldview supposedly embedded within it, and the recentering of African languages in the intellectual life of African peoples.

For Afrocentrists in the West, however, the range of linguistic alternatives to Eurocentrism is much more circumscribed. With English as their first and often the only language, African Americans cannot easily exercise the kind of total linguistic shift advocated by African nationalists. The linguistic challenge and dilemma confronting the Afrocentrist, then, has been how to articulate a counter-hegemonic and anti-Eurocentric discourse in a language of "internal" imperialism.

3. In his latest book, *Penpoints, Gunpoints and Dreams* (1998) Ngugi wa Thiong'o seems to assume less of a Whorfian and more of an instrumentalist view of language in human communication.

One path that has been pursued by Afrocentrists has been the deracialisation of English. This process has sometimes involved attempts to inscribe new meanings or to create new concepts in the language so as to make it more compatible with the dignity and experiences of Black people. The development from a “Black is Beautiful” position to the rejection of “blackness” as an identitarian category in African America is all part of this momentum of linguistic revolution. So is the reformulation of terms like “slaves” and “slavery” to “the enslaved” and “enslavement”, to emphasise both agency, force and resistance. Asante provides a list of examples of English words today which, in his opinion, “must either be redefined or eliminated” altogether because they belong to the kind of language that “can disrupt the thought of good solid brothers and sisters” (1989: 46–47).

Asante is quite cognisant of the fact, however, that Eurocentrism in language transcends lexical semantics or meanings inscribed in individual words and phrases. It exists, rather, in the entirety of its symbolic constitution. Beyond the level of specific words, writes Asante, “that are monoethnic there are substantive influences upon language (a sort of Whorfian twist) that make our communicative habits sterile. The writers who have argued that English is our enemy have argued convincingly on the basis of ‘*blackball*’, ‘*blackmail*’, ‘*black Friday*’, etc.; but they have not argued thoroughly in terms of the total architecton of society” (1987: 55). The Afrocentric challenge, then, is seen as one of subverting the entire symbolic generation of “monoethnic” (i.e. Eurocentric) meanings in an otherwise plural world.

The deracialisation of English among Afrocentrists has also taken the form of particularising what had hitherto been portrayed as universal. This is particularly true when existing iconographic or other textual references create images of the experiences of the “other” by their exclusion from the scope of the referent. When we make inference to “classical music” — a phrase invariably taken to refer to the compositions of people like Beethoven, Bach and Mozart — Afrocentrists insist on knowing whose classical music we are talking about. Terms like “discovery”, “modern languages”, and many others are similarly subjected to this relativist reinterpretation which allocates meanings to their specific cultural-experiential contexts. As Tejumola Olaniyan aptly put it:

Instead of one world, one norm, and many deviants, Afrocentric cultural nationalism authorizes several worlds with several norms. The universalist claim of Europe is shown to be a repression of Otherness in the name of the Same.

“Culture”, as the West erects it, is hence subverted to “culture”, “Truth” to “truth”, “Reason” to “reason”, “Drama” to “drama”. This is the fundamental ethicopolitical point of departure of the Afrocentric cultural nationalist discourse, an empowerment of a grossly tendentiously misrepresented group to speak for and represent itself... (1995: 35)

What is involved, ultimately, in this attempted recodification in the terrain of language and discourse is a challenge on who has the moral right to define.

Some Afrocentrists also believe that there is a certain Eurocentric structuring of thought in the construction of knowledge that is promoted partly through the English language. They associate with English certain conceptual tendencies including, for example, dichotomisation (e.g. reason versus emotion or mind versus body), objectification and abstractification (where a concept is isolated from its context, its place and time, and rendered linguistically as an abstract). These features, it is argued, are in contradiction to the human essence and reality and their end result is the fortification of a Eurocentric ideology with all its conceptual trappings (Ani 1994: 104–108).

All in all, then, in embracing English as their own, Afrocentric thinkers have refused to accept its idiom, especially its iconographic system, passively and uncritically. And, sometimes, they have risen to the challenge of constructing new and imaginative metaphors and meanings. They have aimed to follow in the tradition of Nat Turner and Henry Highland Garnet, two important figures in African American protest history, who are said to have stood “against the tide of Europeanisation in their discourse even though the representational language was American English”, the language of their oppressors (Asante 1987: 126).

Even as they seek to transform it, however, English has continued to serve as the main medium of an Afrocentric counter-discourse. Much of the theorising about Afrocentricity and the formulation of models based on it has been done in English. And it is with the facilitating role of the English language that Afrocentricity gets communicated to Black people both within the USA and beyond. It is in this sense of articulation and communication of ideas that we have ventured to suggest that Afrocentricity is dependent on the instrumental value of the English language.

But in the attempt to affirm an African identity, to devise maxims based on that identity, and to construct a symbolic bridge between the African Diaspora and African cultures, Afrocentrists have often had to turn to

African languages. Yoruba, for example, has come to feature quite prominently in libation rituals in many an Afrocentric gathering. Kariamu Welsh-Asante (1993) partly draws from the Shona language of Zimbabwe to define the conceptual parameters of an African aesthetics. And in spite of the fact that Alexis Kagame's work (1956) has been discredited by some African philosophers (e.g. Masolo 1994: 84–102), his propositions of an "African worldview" based on the categories of his native language, Kinyarwanda, have continued to exercise a strong influence on Afrocentric thinkers in the USA. In the words of Dona Richards, Kagame has made it possible for Afrocentric intellectuals "to express African conceptions in African terms" (1990: 223).

From the entire corpus of African languages, however, it is Kiswahili that has been Afrocentricity's most productive source of symbolic enrichment. Indeed, according to Karenga, African Americans have the same kind of claim to Kiswahili as Jews, for example, have to Hebrew. "Swahili is no more frivolous or irrelevant to Black people than Hebrew or Armenian is to Jews and Armenians who were not born in Israel or Armenia and will never go there" (Karenga 1993: 15). Kiswahili is the language of the most serious challenge to Christmas to have emerged in the African Diaspora. Inspired by African harvest ceremonies as markers of temporal cycles, an entire idiom drawn mainly from Kiswahili has come into existence to designate *Kwanzaa*, the African American end of the year festival, and its *Nguzo Saba* or seven pillars of wisdom.

5. The language of festivals

Let us look more closely at the wider cultural meaning of festivals like *Kwanzaa*. One of the major gaps in the African experience within the ancestral continent is the absence of supra-ethnic indigenous festivals. On one side there are ethnic festivals specific to the Yoruba or the Baganda which are indigenous. On the other hand, there are national and supra-national festivals which are imported from Islamic, Christian or Western origins. What the African continent itself does not have are national or supranational festivals which are culturally indigenous.

Thus while all African countries treat Christmas as a national holiday, and while most African states recognise at least one Muslim festival as a national holiday, there is no national holiday in Africa which celebrates either indigenous cultures or indigenous religions. Independence Day cannot

be described as culturally indigenous in that sense. The date of Independence Day was, in most cases, partly chosen by the departing imperial power.

When we turn to the African Diaspora, on the other hand, the picture is different. The African peoples in the Diaspora have indeed evolved national or even supranational festivals which are distinctive to their new habitat; especially in the Americas, such festivals have often been modes of reaffirmation and means of communication.

Elsewhere in the world festivals have often pushed the frontiers of language and song. In Christian history Christmas has been especially seminal — from Handel's *Messiah* (Oratorio, 1741) to Bing Crosby's *Dreaming of a White Christmas* (1944) — and all the hymns in-between! Plays, films, operas, ballets, and musical compositions have all felt the stimulation of Christmas and the story of the Nativity.

The most spectacular festivals of the Black Diaspora of Latin America and the Caribbean have been the Carnivals in their different flamboyant forms. From Brazil to Cuba, from Trinidad to New Orleans, the spirit of the Carnival captures the people by storm for a few days every year. Songs, poems, calypsos, dances and sheer spectacle explode in colourful abundance. Every year some sixty million people are involved in carnivals in Brazil, Spanish America and the Caribbean.

African Americans tend to be under-counted in the U.S. census for a variety of sociological reasons. Most estimates would put the African American population as over thirty million but below forty million.

Outside Louisiana Blacks in the United States had no nation-wide festival until relatively recently. Now there are every year two major occasions for Black reaffirmation — one a month long and the other a week long. The month-long period of Black reaffirmation is the Black History Month — mainly observed in educational and cultural institutions in the United States every February. But we now also have *Kwanzaa*, available to be observed by every family. *Kwanzaa* is Black America's quiet response to the Festival of Carnival further south.

But *Kwanzaa* itself is not a Festival of Exhilaration like the Carnival. *Kwanzaa* is a Festival of Re-Affirmation. It also includes within it a quest for *Roots*.

Whenever African Americans pursue religious re-Africanisation, they often tend to turn to West Africa — studies of Ogun and other deities of the Yoruba and rituals of libation are undertaken.

Whenever African Americans pursue linguistic re-Africanisation, they tend to turn to East Africa — with a special focus on the Swahili language. The idiom of *Kwanzaa* is fundamentally Swahili — with all the basic words drawn from that East African language. Kiswahili also happens to be the most widespread indigenous language in Africa. Maulana Karenga's fascination with the Swahili language is a compelling example.

When African Americans pursue re-Africanisation in dress, they again tend to return to West Africa — ranging from the *kente* cloth of Ghana to the rich dress cultures of Nigeria and Senegal and beyond. Molefi Kete Asante has even been elected an Asante Chief and, on ceremonial occasions, Molefi Asante goes almost fully Ghanaian.

Whenever African Americans pursue racial re-Africanisation, they particularly tend to identify with South Africa with its painful experience of prolonged segregation of the races under apartheid, echoing many of the historic racial pains of the Black experience in America. Randall Robinson and his organisation TransAfrica began their pro-Africa lobby by focussing on the struggle against apartheid South Africa.

Whenever African Americans pursue civilisational re-Africanisation, they particularly tend to identify with North Africa — with special reference to the glories of ancient Egypt under pharoanic kingdoms. Thinkers like John Henrik Clarke, Ivan van Sertima and Molefi Asante have all been mesmerised by ancient Egypt.

West Africa for religion and dress, East Africa for language, Southern Africa for race, North Africa for grand civilisation. And yet all this happened without the intervention of a grand architect. It is a happy coincidence that African American approaches to Pan-Africanism have been inspired by East, West, North and South of the ancestral continent.

Although the idiom of *Kwanzaa* is primarily Swahili, the spirit of *Kwanzaa* also covers race, religion, civilisation and human solidarity.

Kwaanza is a new star in the galaxy of festivals. It is celebrated in the last week of December, day by day. The *Kwanzaa* principle of *Umoja* does mean “unity” — but it also means “oneness”. In other cultures, Muslims have a whole science of what is called *tawheed* (“oneness”) — but in the case of Islam the *tawheed* is derived from the oneness of God, a very strict monotheism in Islam.

But in the case of *Kwanzaa* the *Umoja* or oneness refers to the oneness of a people — the African people — inspite of the fact that history has spread

them out so widely that the sun never sets on the descendants of Africa.

The second pillar of *Kwanzaa* is *Kujichagulia* — ‘self-determination’. It is derived from the Bantu word *chagua*, (meaning ‘choose’). The principle of choice is at the centre of the pillar of *kujichagulia*. Our people were once subjected to the ultimate denial of choice — enslavement. Those who were left behind in Africa were later subjected to the second worst denial of choice — colonialism. Rites of passage for the young are being devised partly on the basis of *nguzo saba* ‘seven principles’. These are also affirmations of self-determination. *Ujima* refers to collective work and responsibility. It is probably only accidental that this African word sounds like the Arabic word *ijma* ‘consensus’. In Islam, *ijma* is a collective concept — but it refers mainly to spiritual consensus among believers.

Kwanzaa uses a Bantu word which sounds similar but is not derived from Arabic, as far as we have been able to ascertain. The *Kwanzaa ujima* focuses on a shared work ethic and a spirit of collective responsibility. The *Kwanzaa* principle seeks to repair any damage to the Black work ethic which slavery, colonialism and centuries of racism might have inflicted. Collective responsibility is also therapeutic for any forms of dependency generated by subjugation.

The *Kwanzaa* principle of *Ujamaa* refers to economic solidarity and cooperation. Originally the word *ujamaa* in Swahili simply meant “familyhood”. It was Julius K. Nyerere, the founder president of Tanzania (1961–1985, years in power), who gave the concept the sense of economic familyhood at the national level in Tanzania — a kind of African version of socialism. What *Kwanzaa* has done is to make Nyerere’s concept of *ujamaa* remain economic but not necessarily socialist. *Ujamaa* can be solidarity in free enterprise.

The *Kwanzaa* principle of *Nia* means not only “purpose” but also “will” or “intent”. What is at stake is the determination to make sure that Black people are recognised as a people with a will of their own — that they count as actors in history and not merely as objects (or pawns) of history.

The *Kwanzaa* principle of *Kuumba* is derived from a Bantu concept which is a little stronger than the English word “creativity”. *Kuumba* is perhaps the most deeply African of all the seven principles of *Kwanzaa*. The word *kuumba* is used at almost the level of creation as, for example, when we say God created heaven and earth in six days. *Kuumba* operates almost at the level of divine creativity, creating something out of nothing. This is an exceptionally high level of creativity and innovation.

The African people need to recapture that scale of creativity which once gave birth to that early grand civilisation — ancient Egypt — erected the towering pillars of Aksum, constructed the brooding majesty of Great Zimbabwe, and made Africa a major contributor to universal civilisation.

There is finally the *Kwanzaa* principle of *Imani*, which means both “faith” and “compassion”. Worldwide the African people are a religious people. They have faith in God. And yet they do not always have faith in themselves. Self-confidence is of the utmost importance for the redemption of the African people. They need to believe in themselves.

But the Swahili word *imani* also means “compassion”. So the African people need not merely have faith in themselves but also compassion towards others. Internal confidence and external compassion — self-recognition and respect for others.

The fundamentals of *Kwanzaa* are solid and worthy of annual re-affirmation. Lawrence of Arabia’s *Seven Pillars of Wisdom* have been matched by Maulana Karenga’s *Seven Principles of Kwanzaa*.

But while the principles of *Kwanzaa* are not in doubt, the details of how they are to be celebrated are still evolving. Some obvious comparative questions include the following question: Should *Kwanzaa* follow the precedent of Christmas and popularise the idea of a *Kwanzaa* greeting card? True, in the history of Christmas, Christmas cards are a rather recent addition. The first Christmas card as we know it was designed in England in 1843. It portrayed a family party under which were the following words:

A Merry Christmas and
A Happy New Year to you

It was designed by a J. C. Horsley apparently for his friend Sir Henry Cole. The Christmas card is a method of communication. The African people are adopting the *Kwanzaa* card with a clean conscience — just as they have adopted other foreign-invented means of communication like telephones, faxes, e-mail and satellite communication.

The African cultural practices and experiences that are “appropriated” by Afrocentrists are, in fact, seldom regarded as specific to particular group(s) at a specific point in place and time. Rather, they are presumed to have a continental and enduring validity, with an origin that is virtually innate to Africa. African cultures thus become distilled, generalised, homogenised and ossified, in the process masking the fact of the social (and sometimes

colonial) construction, their diversity along parameters of ethnicity, class and gender, sometimes in conflictual competition, and their dynamism across space and time in a manner that is constantly (re)shaping identities. But for the immediate symbolic needs of Afrocentrists, capturing such complexity is both unnecessary and dysfunctional.

6. Kiswahili as the soul

The *Kwanzaa* festival is itself rooted, of course, in a wider ideology of Afrocentric nationhood propounded by Maulana Karenga (1978). This ideology, *Kawaida*, with its various concepts and axioms, is again built on an idiom that is entirely Swahili and seeks to unfold a creative motif for African American identity. Kiswahili continues to sensitise symbolically people of African ancestry in the Diaspora to the African cultures of the continent.

An even more controversial use of Kiswahili is made by Marimba Ani. Not only does Ani utilise Kiswahili words in wide currency in East Africa, like *asili* (origin, source, essence) and extends its meaning to include the “underlying explanatory essence of culture”, she engages in Kiswahili linguistic engineering to arrive at totally new coinages in the language. These include *utamawazo* (the cultural structuring of thought) and *utamaroho* (spirit life of a culture) (Ani 1994: xxv). For Ani, it is as if English is wanting as a critical medium against Eurocentric thought and she was seeking to complement its “weaknesses” by a creative adoption of Kiswahili.

In spite of the revolutionary potential within English, therefore, Afrocentrists believe that there are areas of meaning and conceptualisation which the language is simply not designed to handle with any degree of adequacy given the cultural context within which it developed. “An Afrocentric perspective demands examination of the artifacts of African culture from the vantage point of the traditions of Africa. Therefore, it is unproductive to try to explain the concept *okyeame* from a Eurocentric perspective, particularly when that concept is not present in European culture” (Asante 1987: 61–62). Too exclusive a reliance on the resources of the English language, it is feared, will ultimately constrain the very Africanity of Afrocentricity.

There are good reasons, of course, as to why Kiswahili has come to assume such an important place in the Afrocentric imagination. The language is second only to Arabic as the most international African language on the

continent, employed by people across several national boundaries. In Kenya, Uganda and Tanzania it has acquired a national and official status. It has served as a medium of communication among people of diverse ethnic backgrounds in their struggles against European colonial rule. It is heard regularly on radio broadcasts throughout the world and is offered as a subject in universities in Africa, Asia, Europe and the Americas. In Tanzania, Kiswahili also acquired a reputation as a counter-idiom to capitalist exploitation and as a tool of mobilisation towards greater national self-reliance. It was also in the heartland of Swahili political culture that trans-continental Pan-Africanism found its “resurgence” with the convening, in Tanzania, of the Sixth Pan-African Congress. And distinguished personalities, from both eastern and western Africa, like Ngugi wa Thiong’o and Wole Soyinka, have at different times advocated for its establishment as the language of continental Pan-Africanism. A combination of these and other factors, in other words, was bound to make Kiswahili particularly attractive to those in the Diaspora seeking a symbolic linguistic connection with the land of their ancestors.

In spite of its credential as the most triumphant African language, Kiswahili is also decidedly Afro-Islamic. Its parenting civilisations have included both Africa and Islam: It is at once part of the heritage of Africa and part of the universal legacy of Islam. The Islamicity of Kiswahili lies partly in its readiness to borrow concepts, words and idioms from Arabic as the language of the Qur’an and of Islamic ritual, and from the Islamic civilisation at large. Although its structure is completely Bantu and not remotely Semitic, Kiswahili has probably borrowed a higher proportion of its vocabulary from Arabic than English has from Latin. Basic sociological words not only for religion (*dini*) but also for language (*lugha*), trade (*biashara*) and kinship (*ujamaa*) are Arabic-derived. Moral and ethical vocabulary in Kiswahili is saturated with such Arabic loan words as *udhalimu* (injustice), *murua* (moral behaviour), *dhambi* (sin), *haramu* (taboo) and *halali* (ritually permissible). The roots of all three of Marimba Ani’s Afrocentric concepts central to her critique of Eurocentrism — namely, *asili* (essence), *-fahamu* (consciousness) and *-roho* (spirit) — are also of Arabo-Islamic derivation.

The Islamicity of Kiswahili had once split the ranks of Eurocentrists of the Christian missionary type in East Africa. On the one hand, there were the likes of Bishop A. Mackay who believed that since both Islam and Christianity were monotheistic religions drawn from the same Middle Eastern ancestry and shared a considerable number of spiritual concepts and values, Kiswahili

could serve well for the conversion of indigenous Africans to Christianity — precisely because Kiswahili could already cope with the conceptual universe of Islam (Mackay 1898: 103).

On the other hand, the language met some stiff resistance from missionary Swahiliphobes who regarded the association of Kiswahili with Islam as *ipso facto* dysfunctional to Christianity. Bishop Tucker, for example, was reported to have said that Mackay:

... was very desirous of hastening the time when one language should dominate Central Africa, and that language he hoped and believed would be Swahili ... That there should be one language for Central Africa is a consummation devoutly to be wished, but God forbid that it should be Swahili ... English? Yes! But Swahili never. The one means the Bible and Protestant Christianity — the other Mohammedanism ... sensuality, moral and physical degradation and ruin. (Mackay 1908: 215)

As far as this school of missionaries was concerned, therefore, Kiswahili was too closely related to Islam to be welcome in Christian missionary work.

And so the question arises as to whether the Islamic factor in Kiswahili would also pose a dilemma for Afrocentrists as it once did for Eurocentrists. Does Kiswahili's part-Islamic parentage dilute its Africanity? Is Afrocentricity compatible with Islam on the linguistic plane? Or, like the missionaries of the colonial period in East Africa, are Afrocentrists also divided about Kiswahili's Islamicity?

7. Between Islamophobia and Swahiliphilia

It is worthwhile highlighting that Afrocentricity can be either Islamophilic or Islamophobic. Islamophile Afrocentricity in the African Diaspora has included people of African descent who have converted to Islam partly for reasons of racial dignity and Black nationalism. In the United States such people this century have included major political leaders like Malcolm X (al-Hajj Malik al-Shabbaz) and Louis Farakkhan, and outstanding sporting figures like Muhammad Ali (formerly Cassius Clay). And indeed many African American Muslims have actually equated Islamisation with Africanisation.

A nineteenth century Black pioneer in Islamophile Afrocentricity was indeed Edward Wilmot Blyden, the Diaspora African who returned home to Africa and became a precursor of such doctrines as Negritude, Pan-Africanism

and Afrocentricity. Though himself a Presbyterian minister, Edward Blyden came close to saying that Islam was the right religion for Africa. As Director of Muslim Education in Sierra Leone in 1902, Blyden was seeking to persuade the new British colonial regimes in West Africa that Islam was “the most effective educational force in Negro-land”, and, although there is no record that he himself ever became a Muslim, “Blyden so closely identified with them [Muslims] that his name is still well known and highly regarded among West African Muslims” (Lynch 1971: 272).

On the African continent, Islamophile Afrocentricity is perhaps best represented by the Pan-Africanist and first president of Ghana, Kwame Nkrumah. In his book, *Consciencism*, Nkrumah explicitly projects Islam not as a threat to the African heritage but as a potential ally. “With true independence”, argued Nkrumah, “... a new harmony needs to be forged, a harmony that will allow the combined presence of traditional Africa, Islamic Africa and Euro-Christian Africa, so that this presence is in tune with the original humanist principles underlying African society. Our society is not the old society, but a new society enlarged by Islamic and Euro-Christian influences” (1964: 22). And, in spite of his efforts to think of Africa in non-purist cultural terms, Nkrumah has remained one of the celebrated figures among some Afrocentrists.

In general, Islamophile Afrocentrists have regarded Arab Africans as fellow Africans, and accepted Islam as part and parcel of the African heritage. This affected their attitude towards the Arabic language, and to other African languages influenced by Arabic, like Kiswahili and Hausa. Blyden’s interest in Islam was aroused partly because he was concerned about religion and partly because Blyden was a philologist who became curious about the Arabic language. He spent three months in Egypt, Lebanon and Syria in 1866 partly in order to improve his command of Arabic. At that time Blyden was already a Professor of Classics at Liberia College and wanted to introduce the language in his department there. Overall, Blyden celebrated Arabic as an enriching experience to the African condition. In his words: “Already some of the vernaculars have been enriched by expressions from Arabic... They have received terms regarding the religion of one God, and respecting a certain state of civilisation ...” (Lynch 1971: 279)

Nkrumah, on the other hand, married a native speaker of the Arabic language, and the mother-tongue of Nkrumah’s children today is indeed Arabic. And Arabic continues to be studied by many African American

Muslims today not only to gain greater access to the world of Islam, but also as an additional symbol of Africanity. As a result, Islamophile Afrocentrists have generally felt comfortable with the Arabo-Islamic impact on Kiswahili.

The Afrocentric current that is hostile to the Islamic presence in African cultures is Islamophobe Afrocentricity which, by extension, also tends to be Arabophobic. This orientation is most noticeable on the issue of Egypt. Much of Afrocentric literature at large reveres ancient Egypt not only as the genesis of grand civilisations but also as the ultimate triumph of Black creativity. Most Afrocentrists regard ancient Egypt as having been a Black civilisation. Today's Egypt is Muslim, a product of the Arab conquest of the seventh century. Islamophobe Afrocentrists regard the arrival of Islam as a negation of its Africanity, as the ultimate sabotage of classical African civilisation — although the Arab conquest had in fact been preceded by the Greek, Roman and Byzantine conquest of Egypt. Islamophobe Afrocentrists view Arabised Egypt as a betrayal of the Afrocentric glory of pharaonic Egypt.

Islamophobe Afrocentrists also associate the Arab slave trade in Africa with Islam and regard both as a stigma on languages like Kiswahili. Is Kiswahili a product of the Arab slave trade? Islamophobe Afrocentrists like John Henrik Clarke and Molefi Kete Asante have been profoundly ambivalent about Kiswahili's links with the Arabic language and with the legacy of Islam.

Much more paradoxical are the Arabophobe Swahiliphiles. These are usually people who love the Swahili language and its heritage, but wish to distance it from the Arab influence. Within Africa Arabophobe Swahiliphiles are usually reacting to a pejorative definition of Kiswahili as a hybrid child of a union between the languages of Africans and Arabs — in the words of Captain Stigand (1912: 130) of the “highest of animals” i.e. Africans and the “lowest of human beings” i.e. Arabs. Half-baked ethnographic ideas from Europe thus went on to create the impression that the achievements of Kiswahili would not have been possible without its presumed “more human” parentage. It is in reaction to this colonial conception that African nationalists were led to reject not only the suggestion that Africans were less than human, but also the thesis that Kiswahili was less than wholly African. Kiswahili and its achievements now came to be regarded in quasi-purist terms as the product of the collective genius of the African people themselves with very little Arab participation in its formation. What is involved in this enterprise is the dis-Arabisation and reindigenisation of the origins of Kiswahili.

The people concerned may be pro-Swahili but anti-Arab. The two positions are systematically related.

There is yet another kind of Arabophobe Swahiliphiles. This type includes people like the Nobel Laureate, Wole Soyinka, the Nigerian writer and critic, Chinweizu, and the Ghanaian novelist, Ayi Kwei Armah. There is strong, if guarded, evidence of Arabophobia, for example, in Soyinka's "African World and the Ethnocultural Debate" (1990), in Chinweizu's *Decolonizing the African Mind* (1989) and in Armah's historical novel, *Two Thousand Seasons* (1973), among their other writings. But there is even greater evidence of Swahiliphilia, especially in Soyinka. Quoting the pro-Swahili resolutions of the Second Congress of Negro Writers and Artists that took place in Rome in 1959 and of the 1986 Accra meeting of the Union of Writers, Soyinka too came out in support of Kiswahili as the language of continental Pan-Africanism. And drawing on the authority of Cheik Anta Diop, Soyinka asserted that "when it came to his [Diop's] choice of language for continental adoption, he unreservedly chose Swahili" (1988: 92-93).

Arabophobe Swahiliphilia is expressed even more passionately by Kwesi Otabil. Castigating Africans for being all too hypocritical to acknowledge Arab oppression of Africans, he continues to condemn "the even more damning scandal" in the Organisation of African Unity where "Arabic enjoys the privilege of a summit language, along with the Euro-colonial languages, while Swahili — a potential African lingua franca — has never seriously been considered for a similar role" (1994: 81). Elsewhere he takes to task the Secretary-General of the Organisation of African Unity, Salim Ahmed Salim, for proposing that Arabic (or Kiswahili or Hausa) be considered as a possible candidate for an Africa-wide lingua franca. Otabil considers Salim's recommendation as treasonous which he can only attribute to "the sway of the Afro-Arab unity lobby as well as Salim's own Muslim, hence arabised, background" (1994: 128). Clearly, Otabil is one of those Afrocentric thinkers who makes little distinction between Islam and Arabism. To him one naturally leads to another: His own Arabophobia is intricately connected with Islamophobia.

On the whole, however, Arabophobe Swahiliphilia is still very much a product of continental Africa. But there is evidence that it has some modest manifestations in the Diaspora.

8. Conclusion: Towards the democratisation of Afrocentricity

We began this essay by showing, following Hawkins (1997), how the relationship between language and ideology can be cognitively stabilised through an internalised system of iconographic and other textual referencing. Hegemonic as such a system may be, however, it can also be linguistically subverted depending on the ideological location of different groups of users, through (re)referencing or creation of new references altogether. Where the new references are from the native language, their effect could indeed be cognitive; when they are from a “foreign” language, however, they may simply be intended for symbolic effect.

Within the context of the USA, where the ideology has had its greatest success, Afrocentricity has relied on the instrumentality of English and the symbolism of Kiswahili and, to a much lesser extent, other African languages — with a seeming tension between linguistic functionalism and linguistic relativism. Each of these languages has posed its own challenges for Afrocentricity. As a language of their enslavers and internal colonisers, English is seen to have been tainted with racist images and metaphors degrading to the Black “race”. To this linguistic condition, Afrocentrists responded by attempting to deracialise the language as they continue to put it into maximum effect for the benefit of Afrocentricity.

Kiswahili, on the other hand, because it developed within an Islamic culture and borrowed many Arabic words, has carried considerable Islamic associations. This religious attribute of the language has endeared it to Islamophile Afrocentrists but rendered it suspect in the eyes of Islamophobe Afrocentrists. Will the latter, one day, seek to dis-Islamise Kiswahili as a way of reauthenticating its Africanity? Or will Kiswahili’s Islamicity eventually be overshadowed by its increasing ecumenicalisation and secularisation?

As we indicated earlier, Kiswahili began as a fusion of two civilisations — indigenous Bantu and Islamic. The arrival of Christian missionaries helped to initiate a new phase in the history of Kiswahili — the use of the language for religions other than Islam. The language had now entered the ecumenical stage of its evolution. But its ecumenicalisation was also the beginning of its secularisation. As the language became the medium of worship in diverse religions, it became a medium of communication across religions. It gathered its own momentum, fostering trade in the Eastern African region as a whole, facilitating labour migration within and across

national boundaries, in time developing into a major cross-ethnic lingua franca. In the process, Kiswahili increasingly took a universal dimension, becoming a language of science and technology. But has Kiswahili's transformation from a relatively provincial Afro-Islamic tongue into widening circles of overlapping constituencies sufficiently de-Islamised it to the comfort of Islamophobe Afrocentrists?

The uneasy balance between English and Kiswahili poses yet another problem for Afrocentrists. Afrocentrists are in search of a language of counter-idiom and counter-discourse to the language of Eurocentrism. But precisely because Kiswahili is foreign in the American soil it cannot provide more than a symbolic relief to the Afrocentric cause. English, on the other hand, is indeed being transmuted into a potent tool of Afrocentric combat. It has the additional value of linking Afrocentrists in the Diaspora with continental Afrocentrists and Afrocentric sympathisers and supporters in Africa. But both in the USA among African Americans and even more so in Africa, English is at best a language of the elite. It promotes "elite closure", serves as a barrier to keep ordinary people out, and is a serious obstacle to the democratisation of Afrocentric knowledge and thought. And unless this epistemological democratisation is allowed to take place, Afrocentricity is creating linguistic conditions for its own demise. What, then, is the solution?

A possible linguistic alternative for Afrocentricity in the USA is, of course, Ebonics (also known as Black English and by a host of other names). There is, of course, continuing debate in the USA about whether Ebonics is merely a dialectal variety of American English, a creole born in the womb of African enslavement, or a distinct language classifiable as African in structure. What is not at issue among the different schools of Ebonicists, however, is that the medium bears a significant proportion of Africanisms that are integral to it. In Ebonics, therefore, Afrocentrists may discover a natural synthesis between the instrumentality of English and the symbolism of Kiswahili. Ebonics, furthermore, may help break down the walls of linguistic elitism and democratise the Afrocentric struggle by allowing the common folk to participate in inscribing meaning in its language. By turning to Ebonics, in other words, Afrocentricity in the USA may create a more organic linguistic environment for its own growth and development.

Afrocentrists are keenly aware, of course, that Ebonics has long suffered distorted and adverse portrayals not only by people from other cultures, but even by some African Americans themselves. This negative image was quite

evident in the controversy that was generated in December 1996, when the Oakland Unified District Board of Education in California passed a resolution recognising Ebonics as the language many African American students brought to the classroom and calling for adequate instructional strategies that take this fact into consideration. The media quickly became inundated with iconographic references of the caricature type — images to be reviled (Hawkins 1997: 21). Like the colonialist perceptions of African languages, Ebonics too has been regarded as intrinsically deficient and incapable of articulating philosophical and scientific positions. The adoption of Ebonics, therefore, may not only convince its detractors of the fallacy of their own position and rehabilitate it in the eyes of many, but will also enrich and sharpen it for continued Afrocentric struggles. Afrocentric thinkers will thus have started doing for Ebonics what African writers like Ngugi wa Thiong'o and Mazisi Kunene have been attempting to do for African languages on the continent for the last couple of decades.

It cannot be assumed, however, that the mere adoption of a different linguistic form like Ebonics will automatically lead to an alternative (i.e. Afrocentric) expression. As much as Ebonics is more reflective of the cultural history of African Americans, it may not be any less of a linguistic site of struggle over the inscription of new meanings than is Standard American English. In other words, if Ebonics is not challenged and put to subversive uses in the production of meanings it will end up reproducing the discourse of Eurocentrism — only now in an African American linguistic image.

In addition, understandable as it is in terms of historical context and evolution, Afrocentricity is essentially a reactive ideology. It is a particular kind of Black response to the prevailing hegemony of Eurocentrism. But its reactiveness makes it particularly vulnerable to entrapment in Eurocentric terms of reference. We have had occasion to refer to Marimba Ani's (1994) indictment of the dichotomising tendency of English, valuing more highly one set in the dichotomies (associated with people of European descent) over the other (identified with the "Other"). In looking for new ways to redefine "reality" however, Afrocentricity stands a real danger of merely reversing the order of value of the sets in the dichotomies: This kind of semantic revaluation does little more than lend legitimacy to Eurocentric categories of definition. The real challenge to Afrocentricity, then, lies not in creating a counter-discourse to Eurocentrism (even though this may not be avoidable at times), but in constructing an independent discourse, one that will have liberated

itself altogether from the lingo-conceptual prison-house of Eurocentrism.

Finally, and as Hawkins (1997) has argued, iconographic and other references that may go into constructing an ideology may be a single lexical item or entire volumes of text. Within Afrocentricity, however, the conscious attempt has been primarily restricted to the lexico-semantic domain. There is an almost underlying assumption that ideological language is limited, in a simplified way, to words, their meanings, and their uses. To finally arrive at an independent discourse, however, Afrocentrists will have to confront the challenge posed by Molefi Asante (quoted earlier in this chapter) of grappling, not only with the lexicon, but also with clause level grammar and with discourse linguistics at large.

References

- Ani, Marimba. 1994. *Yurugu: An Africa-Centered Critique of European Cultural Thought and Behavior*. Trenton: Africa World Press
- Asante, Molefi Kete. 1987. *The Afrocentric Idea*. Philadelphia: Temple University Press.
- . 1989. *Afrocentricity*. Trenton: Africa World Press.
- Armah, Ayi Kwei. 1973. *Two Thousand Seasons*. London: Heinemann.
- Chinweizu. 1989. *Decolonizing the African Mind*. London: Sundoor.
- Dirven, René and Verspoor, Marjolijn. 1998. *Cognitive Explorations of Language and Linguistics*. Amsterdam and Philadelphia: John Benjamins.
- Hawkins, Bruce. W. 1997. "The social dimension of a cognitive grammar". In W.-A. Liebert, G. Redeker and L. Waugh (eds), *Discourse and Perspective in Cognitive Linguistics*. Amsterdam and Philadelphia: John Benjamins, 21–36.
- Kagame, Alexis. 1956. *La Philosophie Bantu-Rwandaise de L'être*. Bruxelles: Académie Royale des Sciences Coloniales.
- Karenga, Maulana. 1978. *Essays in Struggle*. San Diego: Kawaida Publications.
- . 1993. *Introduction to Black Studies*. Los Angeles: University of Sankore Press.
- Lynch, Hollis R. (ed.). 1971. *Black Spokesman: Selected published writings of Edward Wilmot Blyden*. London: Frank Cass and Co. Ltd.
- Masolo, D. A. 1994. *African Philosophy in Search of Identity*. Bloomington and Indianapolis: Indiana University Press.
- Mackay, Bishop A. 1908. *Fifteen Years in Uganda and East Africa*.
- . 1989. *Mackay of Uganda* (8th Edition).
- Ngugi wa Thiong'o. 1986. *Decolonizing the Mind: The politics of language in African literature*. London: Heinemann.
- . 1998. *Penpoints, Gunpoints and Dreams: Towards a critical theory of the arts and the state in Africa*. Oxford: Clarendon Press.

- Nkrumah, Kwame. 1964. *Consciencism: Philosophy and ideology for decolonization*. London: Heinemann.
- Olaniyan, Tejumola. 1995. *Scars of Conquest/Masks of Resistance: The invention of cultural identities in African, African-American and Caribbean drama*. New York and Oxford: Oxford University Press.
- Otabil, Kwesi. 1994. *The Agonistic Imperative: The rational burden of Africa-centeredness*. Bristol (IN): Wyndham Hall Press.
- Richards, Dona. 1990. "The implications of African-American spirituality". In M. K. Asante and K. Welsh-Asante (eds), *African Culture: The rhythms of unity*. Trenton: African World Press, 207–231.
- Soyinka. Wole. 1988. *Art, Dialogue and Outrage*. New York: Pantheon Books.
- . 1990. "The African world and the ethnocultural debate". In M. K. Asante and K. Welsh-Asante (eds), *African Culture: The rhythms of unity*. Trenton: Africa World Press, 13–38.
- Stigand, Captain C. H. 1913. *The Land of Zinj*. London: Frank Cars and Co. Ltd.
- Welsh-Asante, Kariamu. 1993. "Introduction". In K. Welsh-Asante (ed.), *The African Aesthetic: Keeper of the tradition*. Westport: Greenwood Press, 1–5.

Age/Gender Morphemes Inherit the Biases of their Underlying Dimensions

Harry Howard

Tulane University, New Orleans

1. Introduction

Natural language is rife with asymmetries that belie a biased or ideological world view. This paper examines the classification of humans in terms of age and gender in certain morphological constructions in English and Spanish, for instance, the generic usage of *man* for all humans in *Man is the measure of all things*, and argues that this usage is conditioned by the fact that *man* occupies the higher magnitude on the underlying dimensions of AGE and GENDER and so should be considered unmarked. In this way, the unmarked nature of ADULT and MASCULINE in general can be assimilated to the well-known fact that higher-magnitude dimensional adjectives are unmarked with respect to their polar opposites. For instance, *big* is unmarked with respect to *small*, as can be seen by the unremarkable status of a question out of context like *how big is a flea?* with respect to the oddity of *how small is a flea?*, which is only felicitous in a context in which the small size of fleas has already been established.

In terms of language acquisition, the claim is that the unmarked nature of ADULT and MASCULINE on the corresponding dimensions of AGE and GENDER facilitates the acquisition of the morphemes that show age/gender bias in this direction. This claim has far-reaching implications; in particular, it leads one to ask whether the unmarked nature of ADULT and MASCULINE would enhance the learning of ageist and sexist world views. Or in more

inflammatory words, are children cognitively biased to expect ageist and patriarchal societies? Would that be their first guess at the structure of the communities that they are born into? If it were true, it would help to explain the persuasiveness of patriarchy in contemporary societies: it is easier for children to learn.

I actually do not know of any independent evidence for or against this broader contention and so will concentrate on supporting the linguistic analysis, and in any event, there is reason to think that the processes to be described below are just the initial stage of age/gender cognition, but such broader issues of the interpenetration of language and society are what makes the topic so interesting in the first place — and what motivates the inclusion of this paper in a volume on language and ideology — and should never stray too far from our thoughts.

2. Introduction to linguistic age/gender biases

2.1 *Man/other asymmetries*

Perhaps the clearest case is the usage of the word *man* to refer to the whole human species. One can distinguish four varieties: (a) generic contexts, (b) certain collective, distributive, and possessive phrases, (c) through compounding with other parts of speech, and (d) as a denominal verb. These are exemplified in (1):

- (1) a. Man is the measure of all things.
Man hopes for peace, but he prepares for war.
- b. When the audience smelled smoke, it was every man for himself.
They arose as one man to protest the verdict.
After a refreshing sleep, he was again his own man.
- c. man-eater “an eater of humans”
manhandle “to move by human strength, without mechanical force”
manhole “a hole through which humans enter a sewer, drain, etc.”
mankind “humanity”

man-made “made by humans”
 man-hour “the work done by a human in an hour”
 manhunt “an intensive search for a human that has run afoul
 of the law”
 manpower “work performed by a number of humans”
 manslayer “a killer of humans”
 manward “towards humanity, as opposed to towards God or
 heaven”

- d. to man “to furnish with human workers”

There are several other instances of (1c) found in specialised nautical, industrial, or military terminology. Let us refer to this usage as inclusive *man*, or MAN⁺.

2.2 Masculine/feminine asymmetries

One of the best-known examples is that grammatical devices associated with male gender have broader reference than those associated with female gender in many western European languages.

In English, the principal manifestation of this asymmetry is the usage of the pronoun *he* for referents of mixed or unknown gender. There are two cases: (a) the bound-pronoun reading, in which the pronoun is in the scope of a quantified noun phrase, and (b) headless relative clauses:

- (2) a. Everyone_i said that he_i had a good time.
 b. He who hesitates is lost.

Both usages of *he* include reference to girls and women. Conversely, replacement of *he* with *she* does not rule in reference to boys or men.

Spanish has a highly productive system of masculine-feminine contrasts in grammatical gender for humans and other animals, as exemplified in Table 1 below.

Tío and *gato* are masculine, as signalled by the word-final ‘o’, while *tía* and *gata* are feminine, as signalled by the word-final ‘a’. In most usages, the morphological gender of animals corresponds to their natural gender. However, the masculine gender can be used to refer to the female sex in certain special contexts. The three most common are (i) situations in which the sex of the animal is unknown, (ii) generic reference, and (iii) in the

Table 1. NUMBER and GENDER markings in Spanish

	Masculine	Feminine
Singular	<i>tío</i> 'uncle, parents' sibling' <i>gato</i> 'tomcat, generic cat'	<i>tía</i> 'aunt' <i>gata</i> 'female cat'
Plural	<i>tíos</i> 'uncles; aunts and uncles' <i>gatos</i> 'tomcats, tom- and female cats'	<i>tías</i> 'aunts' <i>gatas</i> 'female cats'

plural for groups of mixed sex.

As an example of the first, consider a situation in which a cat is recognised from a distance by its silhouette, but it is too far away to ascertain its sex. Any discussion about it must perforce be conducted using the masculine gender:

- (3) *¿Qué es aquello? — Es un gato.*
 what is that? — [it] is a cat-MASC

Generic reference is reference to the general notion of the animal:

- (4) *El gato es cazador nato de ratas.*
 the cat-MASC is hunter born of rats
 'The cat is a born rat-hunter.'

The masculine plural form can refer back to mixed sexes. Imagine (5a) as a statement and (5b) as a question about the cats introduced in (5a):

- (5) a. *Tengo una tortuga, un perro, un gato y una gata.*
 I-have a turtle, a dog, a cat-MASC and a cat-FEM
 b. *¿Dónde están los gatos?*
 where are the cats-MASC

In all three cases, substitution of the feminine gender for the masculine changes the reference to exclusively female cats. Let us refer to these usages as inclusive *masculine*, or MASCULINE⁺.

A third instance of morphology with a specific gender reference is constituted by those morphemes that turn a stem denoting humans or other animals into the corresponding female. English has at least two such morphemes, the suffixes *-ess* and *-ine*, exemplified in Table 2 below.

As far as I have been able to tell, there is no affix in English that

Table 2. English feminine suffixes

Stem	Derived female
baron	baroness
count	countess
host	hostess
lion	lioness
tiger	tigress
master	mistress
postmaster	postmistress
master of ceremonies	mistress of ceremonies
Negro	Negress
hero	heroine

reverses this direction, which is to say that there is no affix that is added to a nominal stem denoting a female to convert it to male. Let us refer to this usage as exclusive *feminine*, or FEMININE⁻.

2.3 *Adult/child asymmetries*

English and Spanish also betray certain asymmetries between reference to adults and reference to children, giving preference to the former. Two morphological phenomena are reviewed below, English age/gender suffixes, which turn out to be inconclusive, and diminutives in English and Spanish.

2.3.1 *English age/gender suffixes*

English has a fairly productive system of suffixation in which the four age/gender terms — plus two others — become destressed suffixes to a noun stem. I say that it is fairly productive, but a glance at Table 3 shows it to be productive mainly for adult terms.

What is striking is the near complementary distribution: compounds that work for adults fail for children, and vice versa. Of course, this may be due to the pragmatic fact that most of these compounds refer to professions or roles in organisations that children are too inexperienced to hold — or that adults have progressed beyond. So it is unclear whether these data reflect a property of English or of English-speaking societies.

However, there is one point that may indeed reflect a property of

Table 3. English age/gender suffixes

-man	-woman/-wife	-boy	-girl/-maid
kinsman	kinswoman	*kinsboy	*kinsgirl
Englishman	Englishwoman	*Englishboy	*Englishgirl
layman	laywoman		
chairman	chairwoman		
councilman	councilwoman		
foreman	forewoman		
spokesman	spokeswoman		
Congressman	Congresswoman		
fisherman	fisherwoman		
washerman	washerwoman		
mailman	?mailwoman		
herd(s)man	?herd(s)woman		
fireman	??firewoman		
milkman	??milkwoman		milkmaid barmaid nursemaid
marksman			
swordsman			
statesman	stateswoman		
horseman	??horsewoman		
		schoolboy	schoolgirl
		choirboy	choirgirl
		shopboy	shopgirl
		paperboy	?papergirl
houseman	housewife	houseboy	

English — the first two lines consisting of *kins-* and *English-*. The child-based compounds are ill-formed and are included in the adults. For instance, in the children's story "Jack and the Beanstalk", the giant is famous for yelling "Fee, fie, fo, fum, I smell the blood of an Englishman!" when he is in fact smelling the blood of a English *boy*, Jack. Since there appears to be no pragmatic reason why my five-year-old niece is not my *kinsgirl* or why the young son of my Welsh friends is not a *Welshboy*, I conclude that the adult forms include the child forms in these two cases. Let us refer to this usage as inclusive *adult*, or ADULT⁺.

2.3.2 *Diminutives*

More straightforward is the data from diminutive formation. There is a suffix /i/ in English that when added to a proper name of the proper phonological form converts it into a name suitable for a child, as shown in Table 4.

Table 4. English diminutives for children

Proper name for adult or child	Diminutive only for child
John	Johnny
Pat	Patty
Bill	Billy
Sue	Suzy
Jim	Jimmy
etc.	etc.

The corresponding Spanish diminutive in *-ito* is even more productive: not only can it be suffixed to proper names to form a child's name, it can also be suffixed to animal terms to form the corresponding young animal, as shown in Table 5. The Spanish diminutive has a variety of additional uses, *vid.* Howard (1998) for an overview.

The conclusion is clear: the adult sense is unmarked, while the child sense is marked by the diminutive. It follows that we are once again faced with a case of bias by inclusion, in that the adult form includes covert or implicit reference to the child that is brought out by the diminutive, but the

Table 5. Spanish diminutives for children and immature animals

Noun for adult or child/young	Diminutive only for child/young
Juan	Juanito
María	Marita
Ramón	Ramoncito
Susana	Susanita
Jaime	Jaimito
<i>gato</i> 'cat'	<i>gatito</i> 'kitten'
<i>perro</i> 'dog'	<i>perrito</i> 'puppy'
etc.	etc.

child form does not include any reference to the adult at all. Let us refer to this sense of the diminutive as exclusive *child*, or *CHILD*⁻.

2.4 *Summary: the age/gender hierarchy of generality*

As a first step towards analysing these observations, let us try to gather them together into a single statement. to begin with, the three kinds of constructions examined above can be condensed into the following hierarchies of specificity:

- (6) a. *Non-man* specificity: man < all other terms
- b. *Feminine* specificity: masculine < feminine
- c. *Child* specificity: adult < child

In each case, the “less-than” sign (<) is read as ‘the left-hand expression is less specific than the right-hand expression’. Where two or more labels share the same side of the less-than sign, there is no relation of specificity among them — they have the same ranking.

For the sake of concreteness, each of these categories can be instantiated with one or more of the four English age-gender terms *man*, *boy*, *girl*, and *woman*:

- (7) a. *Non-man* specificity: man < boy, girl, woman
- b. *Feminine* specificity: man, boy < girl, woman
- c. *Child* specificity: man, woman < girl, boy

These three hierarchies can now be folded together into a single one by the simple procedure of assigning a numerical weight to each of the terms, say 1 for the more specific and 0 for the less specific, and then adding up all of the weights for every term. (7) is consequently assigned the weighting of (8):

- (8) a. *Man* generality: man (0) < boy (1), girl (1), woman (1)
- b. *Masculine* generality: man (0), boy (0) < girl (1), woman (1)
- c. *Adult* generality: man (0), woman (0) < girl (1), boy (1)

The results are: *man* (0), *boy* (2), *woman* (2), and *girl* (3). These four values can be ordered as in (9):

- (9) man < boy, woman < girl

(9) can be referred to as the *age/gender hierarchy*. It is the observation that we wish to explain.

3. Categorisation and age/gender morphology

The age/gender morphemes reviewed above can be considered categories into which children learn how to classify humans. It follows that an understanding of these morphemes implies an understanding of how categorisation works. In this section, the three principal models that have been considered in modern research on categorisation are sketched: classical or feature-based models, prototype-based models, and exemplar-based models.

3.1 *Classical and prototype-based categorisation*

The advantages and disadvantages of classical or Aristotelian categorisation are undoubtedly well-known, and need not be repeated here. Suffice it to say that the work of Rosch and colleagues, e.g. Rosch (1973, 1975, 1978) and Mervis and Rosch (1981), precipitated a revaluation of Aristotelian categorisation that came to be articulated by the claim that a category is distributed around its most typical member, called the prototype, *vid.* Posner and Keele (1968, 1970). More precisely, when asked to assign an item to a category, the subject responds with the category possessing the most similar prototype, *vid.* Reed (1972).

Despite its improvement over classical categorisation, experimental psychologists soon noticed that prototype-based categorisation suffered from its own defects, *vid.* Smith and Medin (1981), Medin and Ross (1989), Nosofsky (1992), Ashby (1992: 450–1), Ross and Spalding (1994: 124–5), and Ross and Makin (1999: 211ff). There are three main problems.

Categorisation appears to make use of knowledge that goes beyond the prototype and into the particular instances that were used to learn the prototype. For example, if a stimulus is very similar to an item that was presented during the synthesis of the prototype, this stimulus will be categorised more easily than another stimulus that is just as similar to the prototype, but not similar to any of the instances used to learn the prototype, *vid.* Whittlesea (1987).

Moreover, categorisation appears to make use of knowledge that goes beyond the prototypical values for a feature used in categorisation and into particular values, and even combinations of values, that were used to learn the prototype. On the one hand, subjects know the range of values that a feature might have and can use this knowledge to make categorisation decisions, *vid.*

Walker (1975) and Rips (1989). On the other hand, subjects know that some properties go together — the example that is usually quoted is that small birds often sing, while big birds rarely do — and can use this information to aid in categorisation — a singing bird is probably not a big one, *vid.* Medin, Altom, Edelson and Freko (1982) and Malt and Smith (1984).

Finally, categorisation varies as a function of context, but prototypes do not, *vid.* Roth and Shoben (1983). The oft-quoted example is that a robin is a more typical bird than a turkey, but in the specific context of “The holiday bird looked delicious”, a turkey becomes much more typical than a robin. As currently constituted, prototype models have no means of expressing this variation.

3.2 *Exemplar-based categorisation*

The essential claim of exemplar-based models is that there is no single privileged representative of a category to which a stimulus is compared; instead, a stimulus is compared to every representative that the subject has been exposed to, *vid.* Brooks (1978, 1987), Medin and Schaffer (1978), Estes (1986), Hintzman (1986), Nosofsky (1986), and considerable research since then.

Palmeri (1998: 5) claims several advantages for exemplar models. They are some of the most successful and most rigorously tested theories, *vid.* Estes (1994), Nosofsky (1992a, 1992b). They have the widest applicability in other domains of cognition, *vid.* Goldinger (1998), Smith and Zarate (1992), and Valentine and Endo (1992). They have made the furthest inroads into developing an account of the time course of categorisation, *vid.* Lamberts (1995, 1998), Nosofsky and Palmeri (1997), and Palmeri (1997). Moreover, there may be an adaptive advantage to storing exemplars rather than creating abstractions. The creation of an abstraction requires that the organism be prescient as to what information will be required at a later time for survival. By contrast, the retention of detailed information about particular instances allows the organism to generate flexible abstractions on-line which may have been unanticipated when the category was first acquired.

This is not to suggest that exemplar models do not allow abstraction to occur. They do, but it occurs on-line in the service of some particular task, rather than at the time of storage, *vid.* Barsalou (1990). This is why Palmeri can claim that exemplar models are superior to prototype models: they account for all the data that prototype models do, plus some.

3.2.1 *The dimensional representation of age/gender categories*

Having decided on an approach to categorisation, we can now turn to the specifics of age/gender categories. Our contention is that such categories comprise a representation of two sources, age and gender. The simplest representation of age is as a scale that measures it from zero to some maximum. For the sake of consistency — and more importantly, in order to implement the algorithms of exemplar-based categorisation—we assume that gender is also represented on a similar kind of scale.

In the social research literature, AGE is standardly measured on a ratio scale, which is a scale from zero to some maximal value that supports all of the operations of ordinary arithmetic. For instance, if you are 30 and I am 40, then the two of us together are 70. An illustration of such a scale is given in Figure 1.

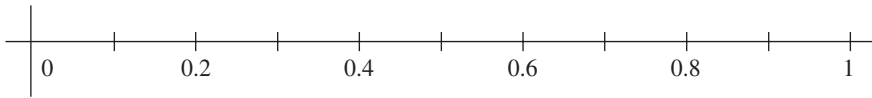


Figure 1. Scale for AGE with maximum at 1 (1 = 100 years old)

For ease of exposition, ‘1’ is chosen here as the maximum value, under the interpretation that it stands for the age of 100.

Of course, a fundamental question about an abstraction like Figure 1 is whether it really captures one’s intuitions about the meaning of the target categories. In particular, it can be objected that the passage from childhood to adulthood is a multidimensional affair, involving among other things, a special ceremony, a change in marriageability and legal status, the ability to hold an occupation and raise a family, etc., and not just the crossing of an arbitrary numerical threshold.

There are several lines of defence that can be pursued. The first and overriding concern is simplicity: it is difficult to reproduce on paper any space that has more than three dimensions, so the age scale in Figure 1 can be most charitably seen as a proxy for the ‘real’ higher-dimensional space of age grading in a given society. In fact, this argument can be strengthened upon consideration of how different the ‘real’ higher-dimensional space could be from the single dimension of age space. My guess is that the ‘real’ space would map homomorphically into the single dimension of Figure 1,

which is to say that relations that exist in the ‘real’ space are conserved in age space.

By the way of illustration, imagine the several changes in status that are ritualised by a special ceremony such as a first communion or *bar mitzvah*. The crucial function of such ceremonies is to mark a threshold: before the ceremony the celebrant has one status; after the ceremony he or she has another. Ratio scales conserve this relation: any particular point on it has a ‘before’ half (all of the points to the left, down to 0) and an ‘after’ half (all of the points to the right, up to 1). It therefore turns out that Figure 1 encodes one of the major relations to be found in social reality rather accurately, though it obviously abstracts away from most of the relevant facts about this relation.¹ Finally, those who consider a homomorphic mapping from social reality to Figure 1 to be an unconscionable abstraction, are invited to view Figure 1 as a mapping from the well-known conceptual metaphor, LIFE IS A JOURNEY, vid. Lakoff and Turner (1989), in which a measure of age stands in for how far one has advanced in one’s life journey — a mapping that can only be accomplished because age, life, and journeys share enough relations to map homomorphically onto one another.²

As for GENDER, it is standardly measured on a nominal scale, vid. among others Healey (1996: 12–3), which means simply that it is category for which one can count individual instances but cannot make any further arithmetic determinations. However, such a scale is too limited for several age/gender phenomena. For instance, there are terms like MACHO and Sissy for which we would like to claim that one is more — or less — masculine than the other. Such considerations imply that GENDER should be described by at least an ordinal scale, which permits relative determinations of “less than” or “greater than”. However, building in the full power of a ratio scale is unwarranted, since I at least find it difficult to imagine a situation in which one would want to claim that „a woman is twice as female as a girl“,

1. Parenthetically, it should be added that many such special ceremonies are tied to specific ages: the *bar mitzvah* of a Jewish boy is at 13, the ‘quinceañera’ of a Latin American girl is at 15, and the debut of a woman from the American South is after her first year of college, usually at 19 or 20.

2. For arguments that one of the major tasks of human cognition is to represent relational similarities among stimuli, see Edelman (1998) and Palmer (1999).

or something to that effect.³ In addition, if I am very male, and you are very female, then both of us together are ... very very gendered? Neuter? The gender scale does not support such ratio-based reasoning.

Thus our decision is to measure GENDER on a scale that supports at least ordinal differentiations. The challenge is to decide how to fix the end-points of such a scale. There are at least three options, (i) female-male as $[0, 1]$, (ii) female-male as $[-1, 1]$, and (iii) female-male-female as $[-1, 1]$, which differs from (ii) in having female at both ends and male in the middle. Considerations of space preclude me from discussing these options, so I have little recourse but to assert that (ii) is the most adequate, with some additional support adduced in the last section. A graph of AGE against this representation of GENDER gives Figure 2.

Under this regimentation, both genders increase monotonically until some maximum is reached, beyond which they are undefined. The neuter middle ground at 0 is where an exemplar has no discernible male or female attributes.

3.2.2 Exemplars of age/gender categories

The space depicted in Figure 2 is the backdrop on which all of the details of the age/gender categories will be arrayed, so it is convenient to have a name for it: age/gender space. As one instance of what it is good for, let us make up ten exemplars that instantiate the four English age/gender terms and list them in Table 6.

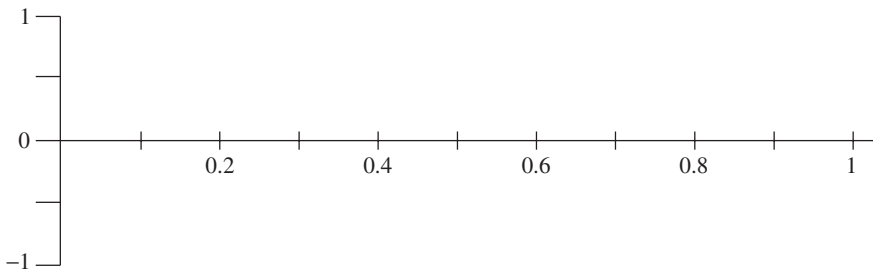


Figure 2. AGE \times GENDER with GENDER in $[-1, 1]$

3. Yet for the adult categories, this may not be so far-fetched. English certainly supports such locutions as “he is twice the man you are”.

Table 6. Sample exemplars of humans in terms of age and gender

Name	AGE	GENDER	Name	AGE	GENDER
John	.5	.9	Ronda	.3	-.55
Mary	.5	-.9	Tom	.8	.45
Billy	.1	.2	Lisa	.9	-.9
Sally	.1	-.4	Nick	.19	.45
Paul	.3	.6	Jane	.19	-.55

These exemplars can be plotted in the space of Figure 2 as in Figure 3:

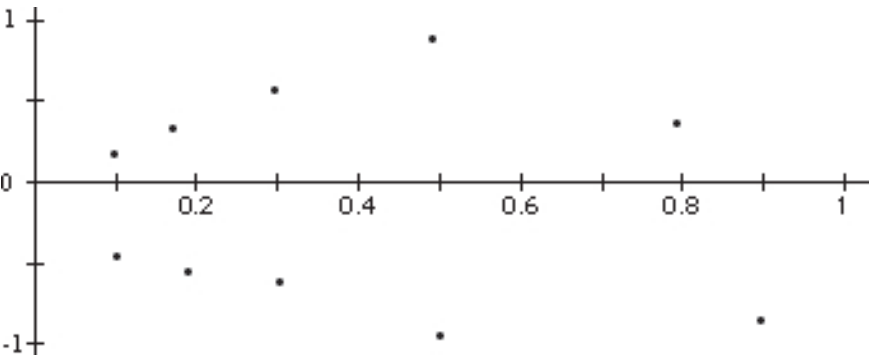


Figure 3. Sample exemplars of English age/gender terms in AGE \times GENDER

This almost supplies enough information to assign each exemplar into an age/gender category. The datum that is missing is to fix the threshold at which children cross over into adulthood. For the sake of illustration, let us arbitrarily choose 0.2 or 20 years old. Other measures could be chosen to encode other perspectives, such as those of the very young (any male over 6 is a man) or the very old (any male under 40 is a boy).

With this assumption in hand, we would now like to find some algorithm that would partition Figure 3 into the appropriate age/gender categories. For instance, the masculine and feminine categories could be separated as in Figure 4.

Note that the number of exemplars in Figure 4 has been increased to 228, in order to provide a more realistic population. In this way, the exemplars

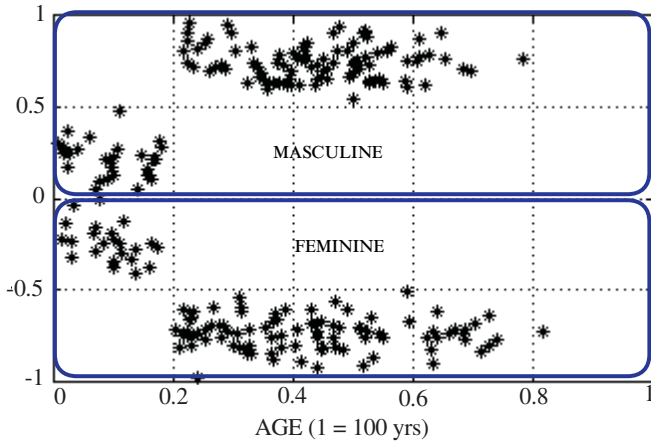


Figure 4. The MASC/FEM categorisation of sample age/gender exemplars

inhabiting age/gender space provide the linguistic component with a backdrop on which to project the patterns of the various age/gender morphemes.

3.2.3 The average distance algorithm

There are many algorithms that could be used to effect the partitioning of Figure 4, but we would like to choose one that is simple and consistent with what is known about categorisation in cognitive and experimental psychology. In line with the current importance of exemplar-based categorisation, I have chosen the average distance algorithm of Reed (1972).

This algorithm consists of two parts. The measurement component calculates the Euclidian distance between a stimulus and every stored exemplar in each category. It then averages across the distances for each category to find the average distance from the stimulus to each category. Then the decision component simply picks the category that has the least average distance from the stimulus as the categorisation of the stimulus. It is customary to say that the various categories are ‘competing’ for the stimulus, with the one at the shortest distance ‘winning’ the competition.

By way of illustration, imagine two clusters of three exemplars, one at $\langle 0.45, -0.5 \rangle$, $\langle 0.5, -0.5 \rangle$, and $\langle 0.55, -0.5 \rangle$, and the other at $\langle 0.45, 0.5 \rangle$, $\langle 0.5, 0.5 \rangle$, and $\langle 0.55, 0.5 \rangle$. For two dimensions, Euclidian distance is calculated by $((x_1 - x_2)^2)^{1/2} + ((y_1 - y_2)^2)^{1/2}$, so from an exemplar at $\langle 0.2, -0.5 \rangle$, the first

cluster has an average distance of 0.3, while the second cluster has an average distance of 1.3. The decision component then chooses the cluster with the lower average distance — the first — as the category of the single exemplar.

To illustrate this process graphically, the age scale is divided into 101 increments, and the gender scale into 21, giving 2121 cells altogether. Then a categorisation of the 228 exemplars in Figure 4 is decided on, such as that of Spanish gender morphology as outlined by the two boxes in Figure 4. Then the average distance from each cell in age/gender space to each category is calculated. Finally, the shortest distance is chosen for each cell as the categorisation of that cell. The results can be visualised by assigning a shade of grey from white — marking the lowest distance — to black marking the highest distance — as plotted in Figure 5:

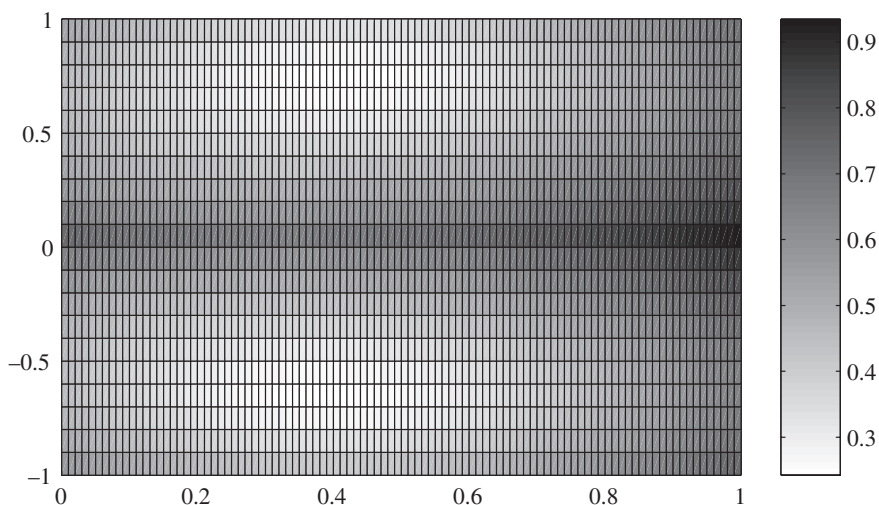


Figure 5. Average distance between gender morphemes in AGE \times GENDER

What we see are two zones of lowest average distance — the whitest spots in the graph, separated by a darker border of highest average distance. The labelling of the two zones corresponds to that of Figure 4, which is not included here for the sake of perspicuity. In words, the lighter the colour of the cell, the higher the probability that an exemplar in it will be categorised by the corresponding label.

3.3 *Masculine/feminine asymmetries*

The graph in Figure 5 constitutes the ‘normal’ case of gender naming against which to evaluate the two masculine/feminine asymmetries discussed above. To refresh the reader’s memory, they are (i) the usage of masculine gender in Spanish to refer to both genders, and (ii) the suffixes that turn a noun stem into one that refers to a female.

3.3.1 *Inclusive masculine gender*

The derivation of the inclusive masculine is rather simple: the competition for age/gender space is always won by the masculine, which produces the plot of Figure 6.

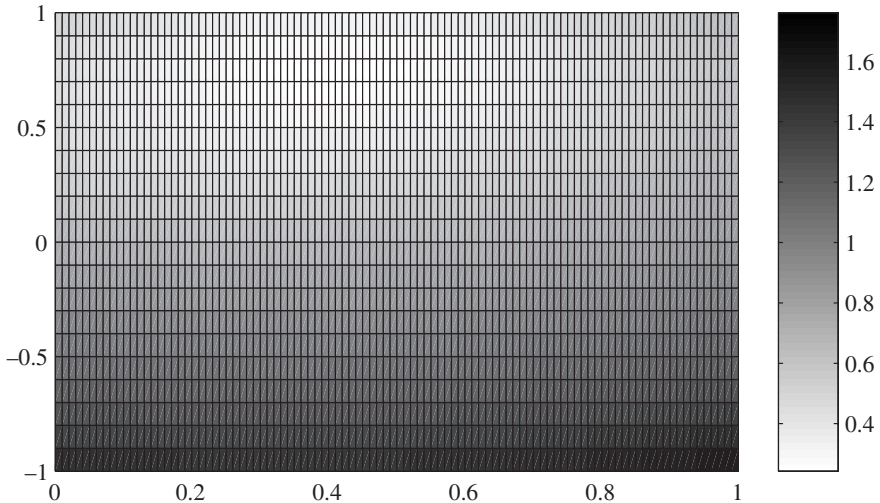


Figure 6. MASCULINE⁺: Average distance from MASCULINE in AGE

An exemplar falling into any cell now only elicits the label ‘masculine’, but the measure of distance shows that this is a stretch for those exemplars that fall outside of the core zone of masculineness.

Thus the plot models quite accurately the prescriptivist and feminist reactions to using masculine gender for reference to females. The prescriptivist claims that the inclusive masculine does not nullify feminine reference,

which the plot shows to be true: the feminine is still there. The feminist claims that it does nullify feminine reference, which the measure of distance again shows to be true, due to the distance of the feminine from the core masculine reference.

A less obvious issue is whether the inclusive masculine depicted in Figure 6 should be considered as a different morpheme from the normal masculine depicted in Figure 5 — different though homophonous. I believe that it should, on structural grounds. The normal masculine gender is partitioned through its direct competition with the feminine; the inclusive masculine does not compete with the feminine, nor with any other morpheme, and thus winds up partitioning age/gender space in quite a different way. This is sufficient to qualify the inclusive as a hyponym of the normal masculine, and it fact provides a mechanism for the development of hyponyms that generalise a specific meaning enough to come to stand for the entire lexical field.

3.3.2 *Feminising morphology*

This proposal does not account for morphology that converts masculine nouns to feminine ones, at least not without further elaboration. If Figure 5 illustrates normal grammatical gender assignment, then some sort of conversion process is required to turn it into its purely feminine counterpart of Figure 7.

I claim that this conversion is accomplished by feminine suffixes in English. It follows that the optimal route to create female nouns is by morphological addition to male noun stems. Note that it will not do to try to derive male nouns by morphological ‘subtraction’ from a more complex female noun, because the FEMININE surface of Figure 7 erases all information about males, so there is no way to know where the male exemplars are in the empty top half.

3.4 *Adult/child asymmetries*

As a brief reminder, the data on adult/child asymmetries is that the English suffixes *-man* and *-woman* can be used for boys and girls, but not vice versa, and that diminutives turn names for adults into names for children in English and Spanish.

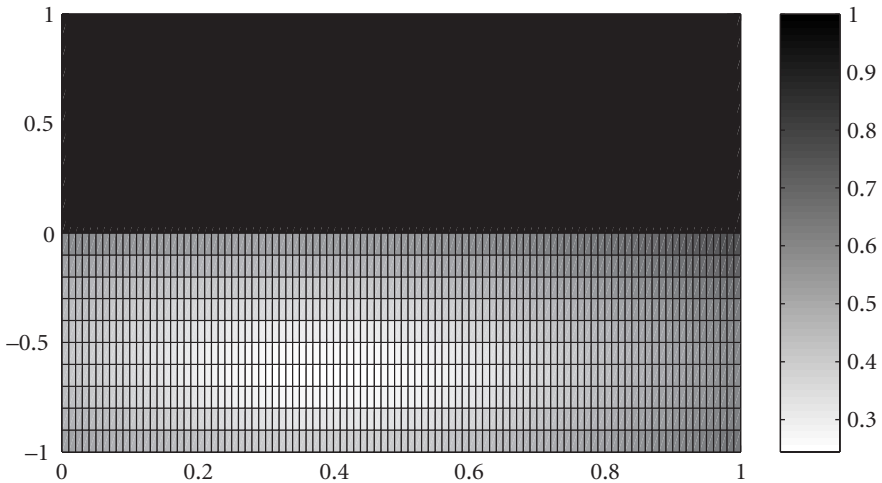


Figure 7. FEMININE⁻: FEMININE half of AGE \times GENDER

3.4.1 Inclusive *-man/-woman*

In order to account for the inclusive usage of *-man* and *-woman*, what we would like to do is find some manipulation of Figure 8 that will expand the two adult categories to include the two child categories.

The account to be proposed should be recognisable as a simple generalisation of the previous accounts to the vertical orientation of the AGE axis.

The mechanism is to reduce the distances to *man* and *woman*, so that they win out over *boy* and *girl*, the results of which are depicted in Figure 9.

Note how the clusters of *man* and *woman* in Figure 8 have expanded to include *boy* and *girl* in Figure 9. The labels for the former thus wind up including the latter, which is just what the morphology in question does.

3.4.2 Diminutives

As for the diminutives, they can be treated just like feminising morphology, except at a different orientation. That is to say, the diminutives increase the distance to the adult exemplars to the maximum, effectively excluding adults from the reference of the morphemes, as seen in Figure 10.

Thus contra-child biases can be assimilated to the system that underlies the other types of bias discussed in this paper.

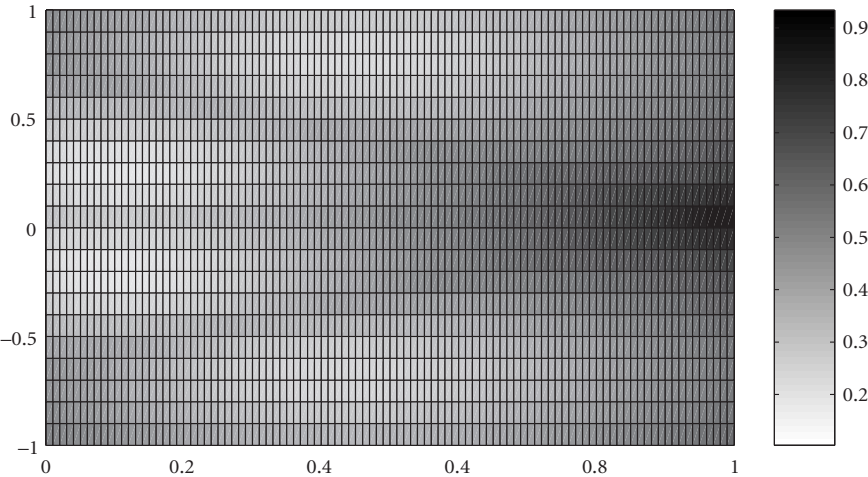


Figure 8. Average distance between age/gender terms in AGE \times GENDER

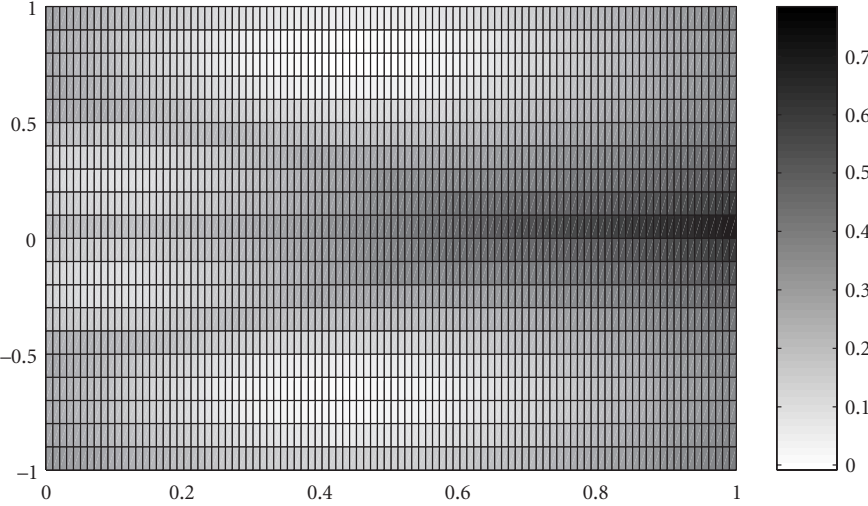


Figure 9. ADULT⁺: Average distance from MAN/WOMAN in AGE \times GENDER

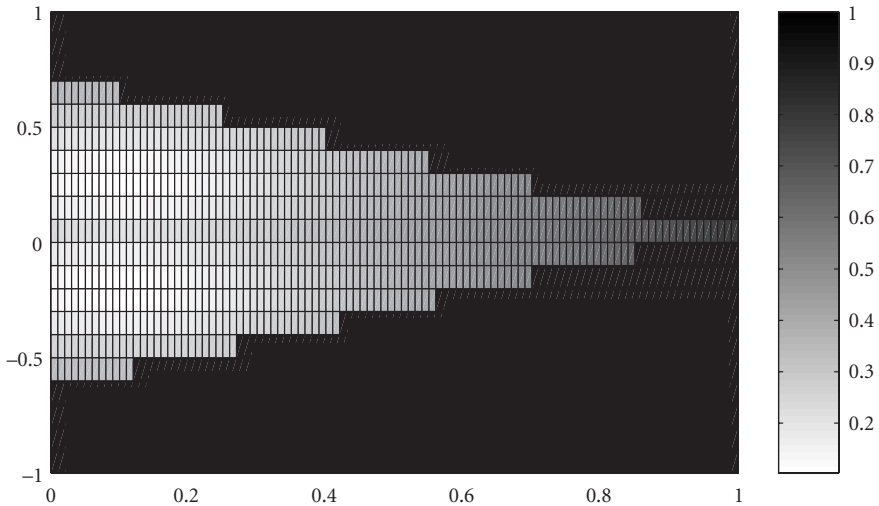


Figure 10. CHILD⁻: CHILD half of AGE × GENDER

3.5 The MAN/other asymmetry

Finally, the usage of *man* to refer to all of humanity can be accounted for by letting the average distance from *man* extend so that it includes the entire lexical field of gender space

This result is practically indistinguishable from that of MASCULINE⁺, and the two have much in common. In particular, MAN⁺ is a different lexical item from MAN, even though they share the same phonological form. Moreover, the conflict between the prescriptive and the feminist intuitions about the biased usage of *man* is resolved just as it for MASCULINE⁺. From the prescriptive perspective, the usage of *man* to refer to all of humanity does not unduly prejudice against any other age/gender category because it includes all of gender space. From the feminist perspective, this usage of *man* does exclude the other three categories, given the distance that they lie from the *man* exemplars.

3.6 The age/gender hierarchy

The final step is to derive the age/gender hierarchy. This can be accomplished by assuming that it results from the activation of all three inclusive

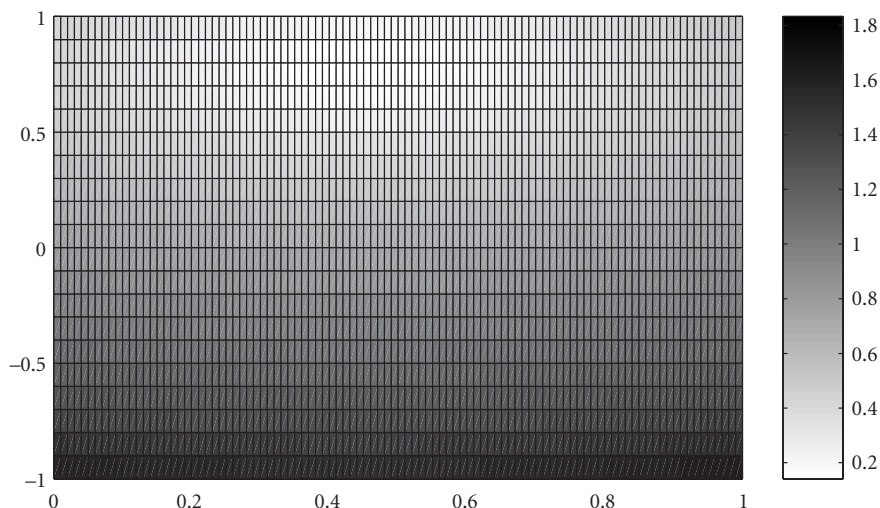


Figure 11. MAN^+ : Average distance from MAN in AGE \times GENDER

categories at the same time. Figure 12 depicts one implementation, which is to add together MAN^+ , $MASCULINE^+$, and $ADULT^+$, and divide by three in order to find the average response across all three categories.

Though it is hard to discern in greyscale, MAN turns out with the least distance, then BOY, then WOMAN, and GIRL has the most. This is nearly the order of the age/gender hierarchy. The difference is that BOY and WOMAN are predicted to be equivalent under the hierarchy. This prediction cannot be realised in age/gender space, given that BOY is closer to MAN.

Thus the two formalisms turn out to be slightly different. Intuitively, one would think that the age/gender space prediction is more accurate. If the system is biased to favour men, then boys should receive slightly more favourable treatment than women, because boys are more similar to men — at the very least, boys turn into men in the natural course of events. However, the linguistic data examined here do not permit us to confirm or disconfirm this extra nuance provided by age/gender space, so it must be left to a larger data set.

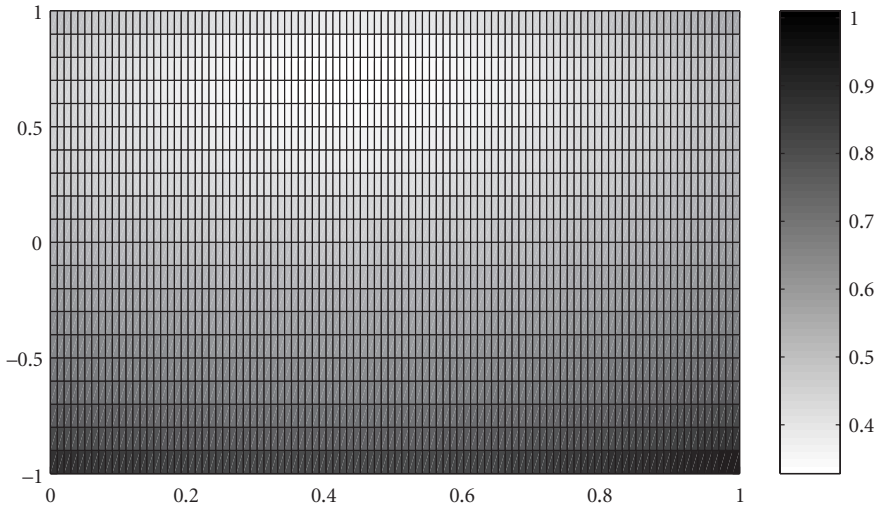


Figure 12. The age/gender hierarchy in AGE \times GENDER

4. Why choose this representation?

Having sketched a theory of categorisation that permits humans to learn and use age/gender morphology, I would now like to go out on a limb and claim that there is something about the child's cognitive system that leads it to expect to find the linguistic system — if not the cultural system — to be biased towards men. In particular, I wish to defend the theorem below:

- (23) *Inclusive category theorem:* An inclusive category is preferentially located at the more salient end of a scale.

Given that a space is evaluated in terms of the average distance from clusters of exemplars, the overall conclusion is that the axes of a space impose subtle biases on the phenomena represented within it.

4.1 *The asymmetry of dimensional adjectives*

The first consideration is that many dimensional adjectives show a bias towards the high end of their scale, as pointed out in Givón (1970), among many others. For instance, the preferred form of a *how* + Adj. question takes

the 'larger' value in a multitude of common cases. (10) is just a small sample:

- (10) a. How {many/#few} cupcakes do you have?
 b. How {much/#little} logic do you know?
 c. How {old/#young} is the baby?

The crosshatched alternatives are only felicitous if their proposition has already been asserted, e.g.:

- (11) a. A: I have very few cupcakes to give away today.
 b. B: So, how few cupcakes do you have?

Given that (10c) demonstrates that age is one of the dimensional scales that show this asymmetry, and that it picks out the end of greater age as the unmarked one, we have a natural bias towards adulthood in the linguistic/cognitive system that accounts for the markedness relations among the age morphology reviewed above.

The challenge is to show that gender is also conditioned in this way. Dimensional adjectives are of no help, because the asymmetry seen above in gender morphology does not carry over to the adjectives *masculine/feminine* themselves. However, developmental psychology does provide a few tantalising clues.

4.2 *Children's dimensional concepts*

Smith (1989: 165ff), in elucidating young children's sensitivity to similarity and magnitude, makes several observations that have a fascinating relevance to the representation of gender undertaken here. They are meant to establish Smith's contention that young children categorise and seriate objects by means of what she calls 'global polarity', but they wind up providing an argument for male being more salient than female, at least for young children.

4.2.1 *Dimensional conflation*

The first is that 3- and 4-year-olds tend to confuse dimensional adjectives that refer to the same end of their scales: *high* with *tall*, *low* with *short*, *big* with *bright*, *small* with *dim*, and *big* with *many*, vid. Ehri (1976), Gitterman and Johnston (1983), and Maratsos (1974). The second is an elaboration of the first, for which I quote Smith (1989: 166):

In one study, Smith (1985), I gave children objects in varying in size and [color] saturation to put into groups. The 3- and 4-year-olds spontaneously formed contrasting groups of large, vividly colored objects versus small, pale objects more than twice as often as they formed contrasting groups of large, pale objects versus small, vivid ones.

Apparently, these children sorted in terms of the global polarity of attributes: objects that were salient in both size and colour were perceived as being alike and being very different from objects that were not salient in both size and colour.

Table 7. Dimensional conflation

Dimension	Small degree	Large degree
Height	low	high
Height	short	tall
Size	small	big
Brightness	dim	bright
Quantity	few	many

Table 8. Dimensional conflation of age and gender

Dimension	Small degree	Large degree
Gender	female	male
Age	child	adult
Height	low	high
Height	short	tall
Size	small	big
Brightness	dim	bright
Quantity	few	many

In order to get an overall visual perspective on this phenomenon, the various scales are lined up together in Table 7. The expectation is that the age/gender terms can be assimilated into this matrix by adding to Table 7 the corresponding dimensions of age and gender, as shown in Table 8.

The prediction then becomes that children of the appropriate age should tend to conflate all of the low-value attributes together against the high-value ones.

4.2.2 *Global seriation*

This prediction is indeed borne out, at least anecdotally. Children from this age group also seriate objects — arrange them into a series — by global directions of difference. Again, I cannot say it any better than Smith (1989: 166) does:

While collecting data in tasks directed to other questions, we have repeatedly observed children trying to seriate objects on two dimensions of magnitude at once. The behavior of one child, a 3.5-year-old, illustrates the phenomenon. The child was given three objects, a 2-inch saturated green circle, a 1.5-inch saturated green circle, and a 1.5-inch desaturated circle as shown in [Figure 13]. As many children seem to do spontaneously, this child labeled the objects [in the order given in the previous sentence] as “Daddy”, “Mommy”, and “Baby”.

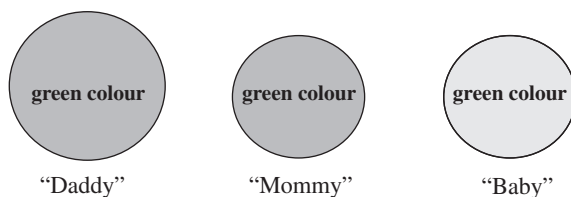


Figure 13. Spontaneous labelling of objects by a 3.5-year-old

This child’s labellings are consistent with the partial ordering of the attributes as in (12a), which can be combined into the global ordering in (12b):

- (12) a. big < small / saturated < unsaturated
- b. big, bright < small, bright < small, dim
- c. adult, male < adult, female < nonadult

The physical global ordering of (12b) maps in a one-to-one fashion onto the linguistic global ordering of (12c) that approximates the age/gender hierarchy.

From these observations it can be concluded that not only do young children conflate dimensions and manipulate objects along such conflated dimensions, but they generalise this behaviour to age/gender terms. They treat adult male as being more salient than adult female, and both in turn are more salient than non-adult. It follows that the dimension of gender should reflect this asymmetry, with male at the higher magnitude.

4.3 *The development of gender labelling*

Of course, the feminist response would be that the bias of 3- and 4-year-olds to treat males as having a higher magnitude than females springs from their early indoctrination into patriarchy. The problem with any such contention is that, at the ages considered here, children have not yet acquired the adult understanding of gender, so it is implausible that they have already acquired the indoctrination into patriarchy that depends so heavily on the adult understanding of gender.

Children's acquisition of gender labels is thought to follow a three-stage process first described by Kohlberg (1966). This process is schematicised in Table 9. At up to about 2 years of age, if children are asked whether they or someone else is male or female, they may answer "female" on one occasion and "male" on the next. However, after the age of 2 or so, they begin to label themselves and others as male or female consistently, except that they base their labels on superficial physical properties. First instance, someone would be labelled 'female' for wearing long hair and a skirt, and 'male' for wearing short hair and a necktie. It is not until the age of 3 to 4 that children begin to understand that a girl will grow up to be a mommy and not a daddy. Nevertheless, they still believe that a boy could change into a girl by engaging in girl-type activities, such as playing with dolls. It is only after 5 years of age that children come to understand that situations cannot change one's gender, which is to say that they conceive of gender as an underlying, unchanging aspect of identity.

Table 9. Stages of acquisition of gender labelling

Stage	Age	Description
0	0–2 yrs	Gender labelling is random
I: gender identity	2–3/4 yrs	Gender labelling is unstable
II: gender stability	3/4–5 yrs	Gender labelling is stable across time
III: gender constancy	5 yrs–	Gender labelling is stable across situations

Subsequent research has confirmed the essentials of Kohlberg's hypothesis, *vid.* Fagot and Leinbach (1993), Golombok and Fivush (1994: 92ff), Whyte (1998: 102–3).

Thus at the age of 3–4 at which children show dimensional conflation, they are at the cusp of passing from stage I to stage II, gender identity to gender stability. Their understanding of gender is entirely superficial and situational, and lacks the key organisational property of patriarchy, gender as a fixed characteristic of identity, though of course the many isolated facts that they know about gender expression are observed from the surrounding patriarchal community. Thus it would seem that the straw-man feminist position set forth at the beginning of this subsection puts the cart before the horse: it is the biased nature of children's perceptual systems that supplies patriarchy with the affordances on which to hang its mantle of 'naturalness', and not that patriarchy imposes itself on a pristine, egalitarian *tabula rasa*.

In fact, one could argue for an even closer tie between children's understanding of dimensions and their understanding of gender labelling by claiming that the challenge that children face when trying to learn the adult system is that they must organise all of their varied and superficially inconsistent facts about gender into the single structure of age/gender space.

5. Conclusions

This paper attempts to reduce the age/gender asymmetries found in English and Spanish and presumably many other languages to a bias that springs from the way dimensions are encoded cognitively, particularly by young children. The specific results are: (i) MAN^+ is inclusive because it has the most salient magnitude on both the AGE and the GENDER dimension; (ii) $MASCULINE^+$ is inclusive because it has the most salient magnitude on the GENDER dimension; and (iii) $ADULT^+$ is inclusive because it has the most salient magnitude on the AGE dimension.

As a final note, the reader may be tempted to come away from this paper with a feeling of pessimism about the possibility of ever achieving a bias-free society, since bias appears to be an inescapable ingredient of human cognition. Nevertheless, what has been overlooked so far in the model is the time course of processing. Age/gender bias has been examined as a perceptual/categorisational phenomenon, and it is well known that such phenomena are processed at an extremely fast rate, on the order of a few hundred milliseconds. It is also well known that there is a posterior stage of 'reflective thought' or something similar, which proceeds at a more leisurely pace

of seconds to minutes. It is at this second stage that an individual's entire store of knowledge can be brought to bear on age/gender issues and so neutralise or reverse the outcome of the automatic initial perceptual/categorisational bias — if the individual is so-inclined.

References

- Ashby, F. Gregory. 1992. "Multidimensional models of categorization". In F.G. Ashby (ed), *Multidimensional Models of Perception and Cognition*. Hillsdale, N.J.: L. Erlbaum, 449–484.
- Barsalou, Lawrence W. 1990. "On the indistinguishability of exemplar memory and abstraction in category representation". In T.K. Srull and R.S. Wyer, Jr. (eds), *Content and Process Specificity in the Effects of Prior Experiences: Advances in social cognition*, Vol. 3. Hillsdale, N.J.: Lawrence Erlbaum Associates, 61–88.
- Brooks, L. 1978. "Nonanalytic concept formation and memory for instances". In E. Rosch and B.B. Lloyd (eds), *Cognition and Categorization*. Hillsdale, N.J.: L. Erlbaum Associates.
- . 1987. "Decentralized control of categorization: the role of prior processing episodes". In U. Neisser (ed), *Concepts and Conceptual Development: Ecological and intellectual factors in categorization*. New York: Cambridge University Press, 141–174.
- Edelman, Shimon. 1998. "Representation is representation of similarities". *Behavioral and Brain Sciences* 21: 449–498.
- Ehri, L. 1976. "Comprehension and production of adjectives and seriation". *Journal of Child Language* 3: 369–384.
- Estes, William K. 1986. "Array models for category learning". *Cognitive Psychology* 18: 500–549.
- . 1994. *Classification and Cognition*. New York: Oxford University Press.
- Fagot, Beverly and Leinbach, Mary. 1993. "Gender-role development in young children: from discrimination to labeling". *Developmental Review* 13: 205–224.
- Gitterman, D. and Johnston, J.R. 1983. "Talking about comparisons: A study of young children's comparative adjective usage". *Journal of Child Language* 10: 605–621.
- Givón, Talmy. 1970. "Notes on the semantic structure of English adjectives". *Language* 46: 816–837.
- Goldinger, S.D. 1998. "Echoes of echoes? An episodic theory of lexical access". *Psychological Review* 105: 251–279.
- Golombok, Susan and Fivush, Robyn. 1994. *Gender Development*. Cambridge and New York: Cambridge University Press.
- Healey, Joseph F. 1996. *Statistics. A tool for social research*. Belmont, Calif.: Wadsworth Publishing.
- Hintzman, D.L. 1986. "'Schema abstraction' in a multiple-trace memory model". *Psychological Review* 93: 411–428.

- Howard, Harry. 1998. Spanish diminutives and neocognitron-type neural processing. First International Conference of the Asociación Española de Lingüística Cognoscitiva, University of Alicante, Alicante, Spain. May 6, 1998 (<http://spgr.sppt.tulane.edu/Spain+Port/HHDocs/Confs/SpDimAELICO/SpDimAELICO.pdf>).
- Kohlberg, L. 1966. "A cognitive-developmental analysis of children's sex-role concepts and attitudes". In E. E. Maccoby (ed.), *The Development of Sex Differences*. Stanford, Calif.: Stanford University Press, 82–173.
- Lakoff, George and Turner, Mark. 1989. *More than Cool Reasons: A field guide to poetic metaphor*. Chicago, Ill.: University of Chicago Press.
- Lamberts, Koen. 1995. "Categorization under time pressure". *Journal of Experimental Psychology: General* 124: 161–180.
- . 1998. "The time course of categorisation". *Journal of Experimental Psychology: Learning, Memory, and Cognition* 24: 695–711.
- Malt, Barbara C. and Smith, E. E. 1984. "Correlated properties in natural categories". *Journal of Verbal Learning and Verbal Behavior* 23: 250–269.
- Maratsos, Michael P. 1974. "When is the high thing the big one?". *Developmental Psychology* 10: 367–375.
- Medin, Douglas L., Altom, M. W., Edelson, S. M. and Freko, D. 1982. "Correlated symptoms and simulated medical classification". *Journal of Experimental Psychology: Human Learning and Memory* 8: 37–50.
- Medin, Douglas L. and Ross, Brian H. 1989. "The specific character of abstract thought: categorization, problem-solving, and induction". In R. J. Sternberg (ed.), *Advances in the Psychology of Human Intelligence*. Hillsdale, N. J.: Erlbaum, 189–223.
- Medin, Douglas L. and Schaffer, M. M. 1978. "Context theory of classification learning". *Psychological Review* 85: 207–238.
- Mervis, C. and Rosch, Eleanor. 1981. "Categorization of natural objects". *Annual Review of Psychology* 32: 89–115.
- Nosofsky, Robert M. and Palmeri, Thomas J. 1997. "An exemplar-based random walk model of speeded classification". *Psychological Review* 104: 266–300.
- Nosofsky, Robert M. 1986. "Attention, similarity, and the identification-categorisation relationship". *Journal of Experimental Psychology: General* 115: 39–57.
- . 1992a. "Exemplar-based approach to relating categorization, identification, and recognition". In F. G. Ashby (ed.), *Multidimensional Models of Perception and Cognition*. Hillsdale, N. J.: L. Erlbaum, 449–483.
- . 1992b. "Similarity scaling and cognitive process models". *Annual Review of Psychology* 43: 25–53.
- Palmer, Stephen E. 1999. "Colour, consciousness, and the isomorphism constraint". *The Behavioral and Brain Sciences* 22: 923–989.
- Palmeri, Thomas. 1997. "Exemplar similarity and the development of automaticity". *Journal of Experimental Psychology: Learning, Memory, and Cognition* 23: 324–354.
- . 1998. "The time course of perceptual categorisation". In M. Ramscar and U. Hahn (eds), *Similarity and Categorisation*. Oxford University Press,

- Posner, Michael I. and Keele, S. W. 1968. "On the genesis of abstract ideas". *Journal of Experimental Psychology* 77: 353–363.
- . 1970. "Retention of abstract ideas". *Journal of Experimental Psychology* 83: 304–308.
- Reed, S. K. 1972. "Pattern recognition and categorisation". *Cognitive Psychology* 3: 382–407.
- Rips, L. J. 1989. "Similarity, typicality, and categorization". In S. Vosniadou and A. Ortony (eds), *Similarity and Analogical Reasoning*. Cambridge [England] and New York: Cambridge University Press, 179–195.
- Rosch, Eleanor. 1973. "On the internal structure of perceptual and semantic categories". In T. Moore (ed), *Cognitive Development and the Acquisition of Language*. New York: Academic Press.
- . 1975. "Cognitive representations of semantic categories". *Journal of Experimental Psychology. General* 104: 192–233.
- . 1978. "Prototype classification and logical classification: the two systems". In E. Scholink (ed.), *New Trends in Cognitive Representation*. Hillsdale, N.J.: Lawrence Erlbaum Associates, 73–86.
- Ross, Brian H. and Spalding, Thomas L. 1994. "Concepts and categories". In R. J. Sternberg (ed.), *Thinking and Problem Solving*. San Diego: Academic Press, 119–148.
- Ross, Brian H. and Makin, Valerie S. 1999. "Prototype versus exemplar models in cognition". In R. J. Sternberg (ed.), *The Nature of Cognition*. Cambridge, Mass. and London: MIT Press, 205–244.
- Roth, E. M. and Shoben, E. J. 1983. "The effect of context on the structure of categories". *Cognitive Psychology* 15: 346–378.
- Smith, Edward and Medin, Douglas. 1981. *Categories and Concepts*. Cambridge, Mass.: Harvard University Press.
- Smith, Eliot R. and Zarate, Michael A. 1992. "Exemplar-based model of social judgment". *Psychological Review* 99: 3–21.
- Smith, Linda B. 1985. "Young children's understanding of attributes and dimensions: A comparison of conceptual and linguistic measures". *Journal of Experimental Child Psychology* 39: 472–491.
- . 1989. "From global similarities to kinds of similarities". In S. Vosniadou and A. Ortony (eds), *Similarity and Analogical Reasoning*. Cambridge, Mass.: Cambridge University Press, 146–178.
- Valentine, T. and Endo, M. 1992. "Towards an exemplar model of face processing: The effects of race and distinctiveness". *Quarterly Journal of Experimental Psychology: Human Experimental Psychology* 44A: 671–703.
- Walker, J. H. 1975. "Real world variability, reasonableness judgments, and memory representations for concepts". *Journal of Verbal Learning and Verbal Behavior* 14: 241–252.
- Whittlesea, B. W. A. 1987. "Preservation of specific experiences in the representation of general knowledge". *Journal of Experimental Psychology: Learning, Memory, and Cognition* 13: 3–17.
- Whyte, Jean. 1998. "Childhood". In K. Trew and J. Kremer (eds), *Gender and Psychology*. London and New York: Arnold, 97–106.

How Pervasive are Sexist Ideologies in Grammar?

Tore Nessel

University of Tromsø, Norway

1. Introduction

In this paper I argue that sexist ideologies may be so deeply embedded in the grammars of particular languages as to pervade inflectional classes. According to the traditional view (which is still held in recent work, cf. e.g. Aronoff 1994), inflectional classes are purely grammatical entities devoid of semantic structure, and I am not aware of any studies of inflectional classes from a feminist perspective. However, my analysis suggests that sexism may be more pervasive in grammar than previous research has been able to demonstrate.

The object of the present study is personal nouns in what I call the Russian *a*-declension. I propose that the nouns of this class may be fruitfully analysed as a radial category with the myths of “women as the second sex”, “woman as Madonna and whore” and “woman’s place is in the home” as pivotal structuring principles. The *a*-declension therefore clearly displays a sexist bias.

My argument is structured in the following way. After a brief presentation of the object of study where the data are divided into three subcategories (Section 2), I explore the predominantly non-feminine subcategories in Sections 3–5. Then, I relate nouns denoting female persons to the category in terms of the three sexist myths mentioned above (Sections 6–8). A summary of the analysis is offered in Section 9.

Here is a table of contents:

1. Introduction
2. The object of study
3. The [FAMILIARITY] schema
4. The [MARGINALITY] schema
- 4.1. Evaluation: Deverbal and deadjectival derivatives
- 4.2. Size and evaluation: Denominative derivatives
- 4.3. Other nouns
5. The [NON-PROTOTYPICALITY] schema
6. Sexism: Woman as the second sex
7. Sexism: Woman as Madonna and whore
8. Sexism: Woman's place in man's world is at home
9. Summary: The contribution of this study

2. The object of study

Russian has four declensional classes for nouns as illustrated in Table 1.¹ In this paper I shall explore personal nouns in class II, which is shaded in Table 1. However, since the class is given different numbers in different traditions, I shall refer to it as the “*a*-declension” rather than e.g. the “second declension”. This label is appropriate insofar as all members take the (phonemic) ending *-a* in the Nominative Singular.

At this point two questions arise. Why nouns denoting persons? And why the *a*-declension? From the point of view of gender studies, these questions have a simple answer. If you are looking for sexist ideologies in language, you would clearly be most interested in personal nouns. You would also take the category where nouns denoting women tend to belong as

1. Many researchers conflate two or more classes, and thus arrive at a smaller number of declensional classes (cf. Corbett 1982; Corbett and Fraser 1993 for discussion). The actual number does not matter here, because under any analysis the nouns I treat as the “*a*-declension” constitute a well-defined object of study that involves all and only the Russian nouns which take a finite set of case/number endings (*-a* in the nominative singular, *-u* in the accusative singular etc.). The examples in Table 1 and elsewhere in this paper are given in transliterated orthography. Throughout the paper English glosses are based on *The Oxford Russian Dictionary*, Oxford University Press, Oxford and New York, 1993.

Table 1. The Russian declensional classes

		Class I (masc. Ø-decl.)	Class II (<i>a</i> -declension)	Class III (fem. Ø-decl.)	Class IV (<i>o</i> -declension)
Sg:	Nom	<i>mál'čik</i> 'boy'	<i>dévuška</i> 'girl'	<i>kost'</i> 'bone'	<i>vinó</i> 'wine'
	Acc	<i>mál'čika</i>	<i>dévušku</i>	<i>kost'</i>	<i>vinó</i>
	Gen	<i>mál'čika</i>	<i>dévuški</i>	<i>kósti</i>	<i>viná</i>
	Dat	<i>mál'čiku</i>	<i>dévuške</i>	<i>kósti</i>	<i>vinú</i>
	Instr	<i>mál'čikom</i>	<i>dévuškoj</i>	<i>kóst'ju</i>	<i>vinóm</i>
	Loc	<i>mál'čike</i>	<i>dévuške</i>	<i>kósti</i>	<i>viné</i>
Pl:	Nom	<i>mál'čiki</i>	<i>dévuški</i>	<i>kósti</i>	<i>vína</i>
	Acc	<i>mál'čikov</i>	<i>dévušek</i>	<i>kósti</i>	<i>vína</i>
	Gen	<i>mál'čikov</i>	<i>dévušek</i>	<i>kostěj</i>	<i>vin</i>
	Dat	<i>mál'čikam</i>	<i>dévuškam</i>	<i>kostjám</i>	<i>vinam</i>
	Instr	<i>mál'čikami</i>	<i>dévuškami</i>	<i>kostjámi</i>	<i>vinami</i>
	Loc	<i>mál'čikax</i>	<i>dévuškax</i>	<i>kostjájx</i>	<i>vinax</i>

your point of departure. In Russian this is the *a*-declension. However, among the personal nouns in the *a*-declension there are also non-feminine nouns. What I shall do in this paper is to investigate the relations between nouns denoting female persons and nouns denoting persons that are either not female or of unspecified gender in order to unpack the sexist structures in the category.

I have divided the personal nouns in the *a*-declension into three subcategories given in Table 2. In view of the programme outlined in the previous paragraph, it was natural first to extract all nouns denoting females into a separate subcategory (subcategory (a) in Table 2). Among the remaining nouns in the *a*-declension, short forms of given names like *Vanja* (<*Ivan*) and *Dima* (<*Dimitrij*) stand out as a well-defined subcategory with regard to their form and function, as we shall see in Section 3 below. These nouns constitute the core of subcategory (b) in Table 2. Two small groups of nouns, viz. family relation terms like *djadja* 'uncle' and *papa* 'daddy', and a limited number of what I shall refer to as "address nouns" (e.g. *dušen'ka* 'darling'), evince properties very similar to those of short forms of names. Accordingly they are placed in subcategory (b) along with proper names like *Vanja* and *Dima*.

Short forms of women's names like *Tanja* (<*Tat'jana*) and *Sveta* (<*Svetlana*) may seem problematic for this classification. Since they denote female persons, but are short forms of names with the same form and

function as the corresponding male names, they could with equal right be assigned to subcategories (a.i) and (b.i). In the following I shall treat them as simultaneous members of both subcategories. By the same token, terms for female relatives like *mama* ‘mummy’ and *tětja* ‘aunt’ are considered double members of subcategories (a.ii) and (b.ii). Notice, however, that these practical decisions have no impact on any issue to be raised in this paper, because subcategories (a) and (b) are well-defined and interrelated in the same way, regardless of how short forms of women’s names and female kinship terms are classified.

The remaining nouns are assigned to subcategory (c). I use the label “non-feminine common nouns” for this subcategory in order to highlight the fact that it contains not only masculine viriles (masculine nouns denoting male persons), but also nouns of so-called common gender which allow both feminine and masculine agreement targets depending on the sex of the referent.²

Table 2 provides only a handful examples of each type, but further examples are discussed in Sections 3 and 4. For even more examples the interested reader is referred to Nessel (forthcoming), which contains a full list of all common nouns in subcategories (b) and (c) included in Zaliznjak (1977).

3. The [FAMILIARITY] schema

After this brief presentation of the object of study, we turn to a more detailed discussion of the three subcategories and the relations between them. I start from subcategory (b), “short forms of given names and related words”, which is of least complexity. We shall see that the nouns in the three groups listed as (b.i)–(b.iii) in Table 2 all denote persons engaged in an intimate relationship to the speaker. Therefore, I shall advance a general schema for all the relevant nouns, for which I shall propose the label [FAMILIARITY].

Short forms of first names are created by truncation of the stem (cf. Stankiewicz 1968:143ff for detailed discussion). Wierzbicka (1992:242) distinguishes between three types on formal grounds: forms with a palatalised

2. The agreement patterns of “common gender” nouns are somewhat more complicated, but since the subtleties have no bearing on any conclusion to be drawn in this paper, I shall not go into detail. For discussion, see Kopeliovich (1977, 1986), Iomdin (1980), Doleschal (1993:113ff) and references therein.

Table 2. Classification of personal nouns in the *a*-declension

(a)	Nouns denoting female persons
(i)	Proper names:
(ii)	<i>Tat'jana</i> (full form of first name), <i>Tanja</i> (short form of first name), <i>Jur'jevena</i> (patronymic), <i>Kudrjavceva</i> (surname)
	Common nouns:
	<i>dama</i> 'lady', <i>deva</i> 'maiden', <i>ženščina</i> 'woman', <i>vdova</i> 'widow'
(b)	Short forms of given names and related words:
(i)	Short forms of names:
(ii)	<i>Vanja</i> (< <i>Ivan</i>), <i>Dima</i> (< <i>Dimitrij</i>), <i>Tanja</i> (< <i>Tat'jana</i>), <i>Lida</i> (< <i>Lidija</i>)
(iii)	Family relation terms:
	<i>papa</i> 'daddy', <i>djadja</i> 'uncle', <i>mama</i> 'mummy', <i>tëtja</i> 'aunt'
	„Address nouns“:
	<i>dušen'ka</i> 'darling', <i>lapočka</i> '(my) pet, darling, sweetheart', <i>miločka</i> 'dear, darling'
(c)	Non-feminine common nouns:
(i)	Common gender:
(ii)	<i>brjuzga</i> 'grumbler', <i>p'janica</i> 'drunkard', <i>plaksa</i> 'crybaby', <i>sirota</i> 'orphan', <i>skrjaga</i> 'miser', <i>ubijca</i> 'murderer'
	Masculine gender (masculine viriles):
	<i>povesa</i> 'rake, scapegrace', <i>volokita</i> 'skirtchaser', <i>vorotila</i> 'bigwig, big noise'

(“soft”) consonant in stem final position, forms with a non-palatal(ised) (“hard”) consonant, and forms where the truncated stem is augmented by the suffix -š. Examples are given in (1). Notice that both male and female names are attested in all three types.

- (1) a. Soft stems: *Vanja* (< *Ivan*), *Tanja* (< *Tatjana*)
 b. Hard stems: *Dima* (< *Dimitrij*), *Lida* (< *Lidija*)
 c. Stems in -š: *Griša* (< *Grigorij*), *Maša* (< *Marija*)

The full forms (given in parentheses in (1)) belong to the first declension (male names) or the *a*-declension (female names), but a short form is always in the *a*-declension regardless of the declensional class of the corresponding full form. Thus short forms are connected to the *a*-declension in a way full forms are not, which makes the short forms particularly relevant for the present study. The short forms may be augmented by various diminutive and affectionate suffixes. We shall return to these suffixes in Section 4.2. below, since they are not restricted to proper names.

Functionally, the short forms of Russian names evince some similarities to English nicknames like *Tom* (<*Thomas*) and *Pam* (<*Pamela*), although the analogy should not be taken too far. The Russian short forms of names are sometimes referred to as “hypocoristic”, and this label gives a rough indication of their function. The most comprehensive analysis I am aware of is that by Wierzbicka (1992: 245), who explicates the meaning of the three types in (2) in terms of the following formulae:

- (2) a. Soft stems (*Vanja, Tanja*):
“I want to speak to you the way people speak to people whom they know well and toward whom they feel something good, and to children.”
- b. Hard stems (*Dima, Lida*):
“I want to speak to you the way people speak to people whom they know well. I don’t want to speak to you the way people speak to children.”
- c. Stems in -š (*Griša, Maša*):
“I want to speak to you the way people speak to people whom they know well and to children.”

Is there a schematic meaning which covers all three types? On the basis of Wierzbicka’s analysis the question can clearly be answered in the affirmative, since all formulae in (2) contain the component “I want to talk to you the way people talk to people whom they know well”. I take this to indicate that short forms of given names imply a close relationship to the speaker; short forms are appropriate for persons who have a special status by virtue of their close relationship to the speaker. In order to capture this, I suggest the general schema “persons who stand out from the multitude by virtue of their intimate relationship to the speaker”. The first part which refers to the “multitude” may seem cumbersome at this point. It is included in order to highlight that we are dealing with persons who enjoy a special status. As we shall see in Sections 5 and 6 below, this is important for the discussion of sexism in the *a*-declension, which is the focus of the present paper. For ease of reference I shall use the mnemonic label [FAMILIARITY] for the schema.

In the previous section I suggested that a number of family relation terms belong to the same subcategory as short forms of names. The most central terms are *mama* ‘mummy’, *papa* ‘daddy’, *tětja* ‘aunt’, *djadja* ‘uncle’, *babuška* ‘grandma’ and *deduška* ‘grandpa’. The notion “family relation terms”

should not be taken to indicate a biological relationship, insofar as the subcategory also includes *njanja* ‘nannie’. On the other hand, not all terms for relatives are in the subcategory. Outside the *a*-declension, for instance, is *brat* ‘brother’. It differs from the terms above functionally in that it tends not to be used as an address form, as siblings usually call each other by name.

There is ample evidence in Russian for the grouping together of family relation terms and short forms of names. The first argument has already been hinted at. The family relation terms in question are used instead of proper names in addressing close relatives. In other words, family relation terms and short forms of names have the same function, which suggests that they belong to the same category.

In addition to this, however, there are also phonological and morphological properties that relate family relation terms to short forms of names. Both types have monosyllabic stems, in most cases without consonant clusters (Stankiewicz 1968: 146).³ Family relation terms display the same contrast between soft and hard stems as short forms of names, and according to Wierzbicka (1992: 242) the contrast has the same semantic effect for both groups. Furthermore, family relation terms and short forms of names combine with the same diminutive and expressive suffixes, which, again, have the same semantic effect (Wierzbicka 1992: 248f and 266). A further similarity, which has not been mentioned in the literature, is that both family relation terms and short forms of names have vocative forms with a long stem vowel and zero ending ([ta:n¹] of *Tanja* and [ma:m] of *mama*). Vocative forms are not created from other nouns, so this is quite a strong indication of the affinity of family relation terms to short forms of names.

Above I invoked the [FAMILIARITY] schema in order to account for short forms of proper names. Given the many similarities between family relation terms and short forms of names, one must ask whether the schema is compatible with family relation terms as well. Clearly, the answer to this question is ‘yes’, because close relatives are indeed persons with whom one is engaged in particularly intimate relationships.

3. Admittedly this generalisation does not hold for *babuška* and *deduška*, but these nouns are affectionate derivatives of *baba* and *ded*. *Baba* is not used for ‘grandmother’ in modern Russian, but rather for ‘married peasant woman’ or as a colloquial or dialect word for ‘wife, (old) woman’. *Ded* and *deduška* may both be used in the meaning ‘grandfather’, but the former lacks the affectionate connotations of the latter.

A third subcategory that instantiates the [FAMILIARITY] schema is what one may refer to as “address nouns”, i.e. nouns like *dušen’ka* ‘darling’, *lapočka* ‘(my) pet, darling, sweetheart’ and *miločka* ‘dear, darling’. According to Doleschal (1993: 117) these are words for “zärtliche Anrede (meist zu Kindern)” ‘endearing address mostly to children’. Vasčenko (1984: 63) describes them as “words with the meaning of affectionate or familiar address” (my translation. TN). I take this to indicate that they are pragmatic markers signalling an intimate relationship between speaker and addressee. Hence, they are compatible with the [FAMILIARITY] schema.

4. The [MARGINALITY] schema

The nouns we have considered in the previous section denote persons who stand out from the multitude with regard to their intimate relationship to the speaker. We now turn to the remaining non-feminine personal nouns in the *a*-declension (subcategory (c) in Table 2, which includes examples like *ubijca* ‘murderer’ and *p’janica* ‘drunkard’). It will be shown that these nouns too denote persons who stand out from the multitude. The persons in subcategory (c), however, enjoy a special status by being placed at the endpoint of some scale. Accordingly, I shall advance a general schema for the subcategory, for which I shall propose [MARGINALITY] as a mnemonic label. I shall explore the scale of *evaluation* with respect to deverbal and deadjectival nouns in 4.1., then turn to denominative derivatives which evince marginality in terms of *evaluation* and *size* in 4.2. Some more marginal types are considered in 4.3.

4.1 *Evaluation: Deverbal and deadjectival derivatives*

Among the personal nouns in the *a*-declension, deverbal or deadjectival derivatives are very common. Examples of some widespread derivational patterns are given in (3), where the corresponding verb or adjective is cited in parentheses. For extensive discussions of the derivational patterns and the productivity of various suffixes, see Švedova (1980) and Vinogradov (1947).

- (3) a. nouns in *-aka/-uka*: *pisaka* ‘scribbler’ (*pisat’* ‘write’), *podljuka* ‘mean person’ (*podlyj* ‘mean’)

- b. nouns in *-aga/-uga*: *brodjaga* ‘tramp, down-and-out’ (*brodit* ‘wander’), *bednjaga* ‘poor fellow’ (*bednyj* ‘poor’)
- c. nouns in *-ala/-ila*: *podpevala* ‘yes-man’ (*podpevat* ‘join (in singing)’), *zubrila* ‘crammer’ (*zubrit* ‘cram’)
- d. nouns in *-jca/-ica*: *ubijca* ‘murderer’ (*ubit* ‘kill’), *umnica* ‘clever person’ (*umnyj* ‘clever’)
- e. Ø-derivations: *zadira* ‘bully, trouble-maker’ (*zadirat* ‘tear to pieces’), *nadoeda* ‘pain in the neck’ (*nadoedat* ‘to get on the nerves’)

Deverbal and deadjectival nouns have the same semantic properties. As pointed out by Doleschal (1993: 117), their meaning has two aspects. First, the relevant nouns characterise a person with regard to a property or an activity, and secondly, they involve an evaluation of this person. The noun *pisaka* ‘scribbler’ in (3a) illustrates this. Like the class I noun (cf. Table 1 in Section 2) *pisatel* ‘writer’, it denotes a person who writes, but insofar as it denotes a *bad* writer, *pisaka* also involves an evaluation, a nuance which is absent in *pisatel*.

The example suggests that evaluation may be characteristic of the *a*-declension (class II in Table 1) as opposed to the masculine Ø-declension (class I), so it may be worthwhile to elaborate on this concept, which, to the best of my knowledge, has not been made explicit in the literature on the nouns in question. We can think of evaluation as involving the mapping of certain properties or activities onto a scale which ranges from negative to positive values. Evaluation is culture-specific, since a given activity or property may be evaluated differently in different cultures. For instance, consumption of alcohol is banned among Muslims, whereas in other cultures it is thought of in neutral or positive terms. Cognitive linguistics enables us to make explicit the relationship between culture and evaluation. As an example, consider again *pisaka*. This noun is relevant for an experiential domain which we may label “knowledge and ability”. We can assume an Idealised Cognitive Model (ICM, Lakoff 1987) for this domain, which we may explicate as the imperative “Be knowledgeable and able!”. This ICM maps *pisaka* onto the negative pole of the evaluation scale, since *pisaka* denotes a person who performs the profession of writing badly and thus conflicts with the requirement of the ICM. In order to account for a broad range of deverbal and deadjectival nouns, one would need several ICMs. For

instance, nouns like *podljuka* 'mean person' and *zadira* 'bully, trouble-maker' may be evaluated against, say, "Act morally!", and *ubijca* 'murderer' actualises a closely related ICM, which we may formulate as "Obey the law!". The more fine-grained the set of ICMs, the more adequate the analysis. However, further ICMs will not be discussed here, since what has already been said suffices to establish the relevance of evaluation for the nouns under scrutiny.

According to Vasčenko (1984: 63) negative evaluation is more widespread in the *a*-declension than positive evaluation. There are, however, examples of positive evaluation as well. A case in point is *umnica* 'clever person' in (3d), which receives positive evaluation in regard to the ICM "Be knowledgeable and able!".

At this point we may ask whether it is possible to formulate a general schema which subsumes nouns of both positive and negative evaluation. Both types involve extreme or polar qualities, i.e. qualities close to either endpoint on the evaluation scale. In other words we are dealing with persons who deviate from the norm of "ordinary" people in terms of their situation on the scale of evaluation. Against this background I would like to propose as a general schema "person standing out from the multitude by being placed at either endpoint of a scale". I have not mentioned the scale of evaluation in the schema even though this scale has been invoked in all examples discussed so far. However, as we shall see in 4.2. and 4.3., other scales are relevant, and I therefore prefer to let the schema be non-specific in regard to particular scales. As a convenient label for the schema I shall use [MARGINALITY].

This schema is so inclusive that it is compatible with many nouns outside the *a*-declension. For example, class I nouns like *lgun* 'liar' and *vrun* 'liar' are clearly negative. Hence, it might be argued, reference to evaluation is not sufficient to distinguish between deadjectival and deverbal derivatives in the two declensional classes. However, there is an important difference. Although it is not too difficult to find nouns in class I that involve evaluation, nouns of this type do not constitute the majority. Therefore, there is no sense in which evaluation can be considered *characteristic* of the first declension. On the other hand, almost all deverbal or deadjectival nouns in the *a*-declension involve evaluation. If one knows that a certain noun is related to an adjective or verb and belongs to the *a*-declension, one may infer with a high degree of probability that it involves evaluation. Evaluation may not be sufficient to *predict* membership in the *a*-declension. Nevertheless,

we may at least (in the terminology of Lakoff 1987:146f) say that it provides *motivation* for the *a*-declension. No such claim can reasonably be made for class I nouns despite the existence of scattered examples like *lgun* and *vrun*. Therefore it seems safe to conclude that [MARGINALITY] is a salient schema in the *a*-declension, but not in class I.

4.2 *Size and evaluation: Denominative derivatives*

We now turn from deadjectival and deverbal to denominative derivatives. It will be proposed that they instantiate the [MARGINALITY] schema in that they denote persons that stand out from the multitude by virtue of their size or — in the same way as the deadjectival and deverbal nouns — in terms of evaluation. I shall argue that size and evaluation are related in terms of metaphorical extensions.

Personal nouns in the *a*-declension include numerous denominative derivatives in *-in-*, *-k-* or complex suffixes containing *-k-*, e.g. *-očk-* and *-išk-*.⁴ A handful of examples are given in (4).⁵ The nouns in question may be derived from deverbal or deadjectival nouns of the type we explored in 4.1 (e.g. *bednjažka* < *bednjaga* < *bednyj* ‘poor’ (adj.)), but they may also correspond to other nouns in the *a*-declension (e.g. *sirotka* < *sirota* ‘orphan’) or to class I nouns. The corresponding class I noun may be underived (*idiot* ‘idiot’) or derived (*lgun* < *lgat* ‘lie’ (verb)).

The suffix *-in-* is traditionally labelled “augmentative”. This suggests that it refers to the parameter of size, i.e. that the nouns in question denote persons of big size. This is, to a certain extent, correct. For instance, nouns like *detina* ‘big fellow’ are clearly used in order to indicate big size. Nouns of this type resemble the deadjectival and deverbal derivatives discussed in 4.1. insofar as they invoke a scale. All types can be said to denote “persons standing out from the multitude by being placed at the endpoint of a scale”. Therefore, the [MARGINALITY] schema seems compatible with denominative derivations as well. However, the relevant scale for examples like *detina* is seemingly not evaluation, but rather physical size.

4. Some other, less widespread, suffixes are also attested, but will not be discussed here.

5. Notice that the glosses in (4) are not intended to capture the subtle semantics of the suffixes, but rather to give readers without prior knowledge of Russian an idea of the meaning of the nouns in question.

- (4) a. *-in-*: *detina* ‘big fellow’, *idiotina* ‘big idiot’, *molodčina* ‘fine fellow’, *kupčina* ‘big, bad merchant’
 b. *-k-*: *kroška* ‘little one (affectionate of a child)’, *sirotka* ‘orphan’, *bednjaka* ‘poor fellow’
 c. *-očk-*: *krošečka* ‘little one (affectionate of a child)’, *sirotočka* ‘orphan’, *bednjažečka* ‘poor fellow’
 d. *-išk-*: *lguniška* ‘paltry liar’, *aktëriška* ‘lousy actor’, *trusiška* ‘coward’

Notice, however, that the scales of evaluation and size are closely connected. Consider *idiotina* and *molodčina*, which are augmentative derivatives from *idiot* ‘idiot’ and *molodec* ‘fine fellow’. In the same way as in English expressions like ‘big idiot’ or ‘big dummy’, the relevant parameter here is not physical size, but rather evaluation, since what is augmented is the negative or positive property of the persons in question. Examples involving evaluation are more common than examples of physical size in the corpus on which the present study is based, so Stankiewicz (1968:128) is probably right in claiming that augmentatives of personal nouns in *-in-* are primarily expressive. Even when attached to evaluatively neutral nouns, derivatives in *-in-* tend to achieve an evaluative nuance. A case in point is *kupčina*. This word, which is derived from the neutral *kupec* ‘merchant’, denotes a big merchant with an additional pejorative nuance of e.g. voracity.

An even clearer illustration of the intimate relationship between size and evaluation is offered by the suffixes *-k-* and *očk-*. Traditionally nouns with these suffixes are labelled “diminutives”, and reference to small size is indeed relevant for their meaning. For instance, the diminutive *knižka* of *kniga* ‘book’ designates a small book. However, among personal nouns it is more difficult to find examples where the parameter of size is foregrounded. In cases like *kroška*, *krošečka*, *sirotka* and *sirotočka* we are indeed dealing with persons of small size (and with the closely related property young age). However, the base nouns indicate small size themselves, and the main contribution of the suffix does not seem to be to emphasise smallness or young age. Rather, the suffixes give the nouns in question a nuance of endearment or pity. This is particularly clear for examples like *bednjažka* and *bednjažečka*, which do not necessarily refer to small persons. Wierzbicka makes these nuances explicit in terms of formulae of the type we have

discussed in Section 3.⁶ The meanings of *-k-* are extremely versatile and elusive, and Wierzbicka assumes slightly different formulae for different stem types. However, the components quoted in (5) are present in all formulae. In (6) the complete formula for *-očk-* is cited.

- (5) Formulae for nouns in *-k-* (excerpts, Wierzbicka 1992: 268f.):
 - a. “I don’t want to show that I feel something toward you of the kind that people feel toward children.”
 - b. “I don’t want to show that I feel something good toward you [...].”
 - c. “I want to speak to you the way people speak to people whom they know well.”
- (6) Formula for nouns in *-očk-* (Wierzbicka 1992: 260):
 “I feel something good toward you of the kind that people feel speaking to small children.”

Smallness is referred to in (5a) and (6) via the image of a child although the formula in (5a) is subtle in this respect. However, the fact that the speaker does not want to *show* the relevant feeling, in fact indicates that such a feeling cannot be denied. The formulae also relate the nouns in *-k-* and *-očk-* to the parameter of evaluation insofar as the reference to “good feelings” in (5b) and (6) implies an evaluation. The formula in (5c) is included in order to show that nouns in *-k-* and *-očk-* are also related to the subcategory of short forms of names like *Tanja*, *Dima* and *Maša* discussed in Section 3 above. Recall that I advanced as a general schema for this subcategory “persons who stand out from the multitude by virtue of their intimate relationship to the speaker”. As shown by (5c) distance to the speaker is also relevant for nouns in *-k-*.

The fourth suffix listed in (4), *-išk-*, is closely parallel to the other suffixes. Consider as an example *lguniška*, which Ušakov’s dictionary (1935) defines as a *ničtožnyj, melkij vral*’ (literally: ‘paltry, small liar’). This definition includes reference to smallness, but Stankiewicz (1968: 132ff) classifies *-išk-* as a pejorative suffix, and Bratus (1969: 33) claims that nouns in *-išk-* “convey disparagement or a condescending irony”. Thus the scale of

6. Wierzbicka refers to the suffixes when attached to short forms of personal nouns, but there is no reason to believe that her analysis does not carry over to other personal nouns as well.

evaluation is foregrounded rather than that of size. It is worth pointing out that a negative nuance arises not only when the suffix is attached to an already negatively loaded word like *lgun* 'liar'. The pejorative *aktëriška* from the neutral *aktër* 'actor' illustrates this.

That diminutive and augmentative derivatives often take on evaluative or expressive nuances is a very common observation (cf. e.g. Stump 1993: 1). In a cognitive approach, the relationship between size and evaluation can be represented in terms of conceptual metaphors (Lakoff and Johnson 1980; Lakoff 1993). I would like to propose the metaphor SMALL IS BAD in order to capture the relationship between smallness and negative evaluation in nouns in *-išk-*. The relationship between positive evaluation and smallness in nouns in *-k-* and *-očk-* can be accounted for in terms of the metaphor SMALL IS GOOD. We have also seen that augmentatives in *-in-* are related to the scale of evaluation. This relationship can be accounted for in terms of the metaphors BIG IS BAD and BIG IS GOOD. Notice that an analysis along these lines is consistent, although SMALL and BIG are both related to BAD and GOOD, because SMALL and BIG are both BAD and GOOD in different ways. SMALL IS BAD tends to involve something sneaky, prickly, underdeveloped, whereas SMALL IS GOOD implies that something is neat, simple, elegant or cute. Likewise, whereas BIG IS BAD often has to do with danger/aggressiveness or stupidity/clumsiness, BIG IS GOOD is relevant in contexts where more is better, more powerful or stronger.

At this point I would like to summarise the analysis in terms of Langeracker's (1987:369ff) type of categorisation network in Figure 1. Not only denominative, but also deverbal and deadjectival nouns instantiate the schema "person standing out from the multitude by being placed at an endpoint of a scale" ([MARGINALITY] for short). Two scales have proved to be relevant, viz. evaluation and size, as indicated by the two lower level schemas in the Figure. They are connected by a dashed arrow symbolising the metaphorical extensions from size to evaluation.

Before leaving the denominative nouns in *-in-*, *-k-*, *-očk-* and *-išk-*, we must ask to what extent the [MARGINALITY] schema is salient for denominative nouns in the *a*-declension. Readers with no prior knowledge of Russian should not get the impression that diminutives or augmentatives (with or without evaluative nuances) are not attested outside the *a*-declension, although the *a*-declension seems to have the richest system, especially as far as diminutive derivations are concerned. Therefore the meanings described

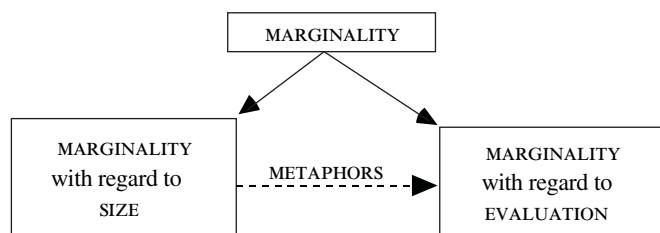


Figure 1. Marginality with regard to size and evaluation

above are not sufficient to predict that a noun would belong to the *a*-declension. Nevertheless the attested meanings provide motivation in Lakoff's (1987: 146f) terms, and are as such relevant for the linguistic analysis of the declension. In two cases, however, predictions do in fact hold. Augmentatives in *-in-* and pejoratives in *-išk-* are always in the *a*-declension, even if the base nouns belong to other declensional classes (cf. *idiotina* and *lguniška* in (4a and d) above from the class I nouns *idiot* and *lgun*). In sum it seems safe to conclude that the schema [MARGINALITY] is characteristic of non-feminine denominative derivatives in the *a*-declension through reference to size and the related parameter of evaluation.

4.3 Other nouns

The analysis summarised in Figure 1 accounts for the majority of non-feminine personal common nouns in the *a*-declension. Nevertheless, it is not too difficult to find examples for which the scales of evaluation and size seem not directly relevant. In what follows I shall explore a number of apparent counterexamples of this type. We shall see that they are in fact compatible with the [MARGINALITY] schema and therefore lend additional support to the proposed analysis.

Consider first the nouns listed under (7). Although the meanings display some variation, all these nouns can be said to denote persons who, in various ways, occupy privileged positions in society, or, as in the case of *sluga* 'servant', underprivileged positions. At first glance these nouns may seem problematic for the analysis advanced in 4.1. and 4.2., since neither evaluation nor size appears directly relevant for their meaning. Notice, however, that the notion of "privilege" has something positive to it, and that persons

in privileged positions may be described metaphorically as “big” (“big boss” etc.). Likewise, persons in underprivileged positions may be associated with negative values and described as “small”. This suggests that the nouns in (7) are not totally unrelated to the nouns explored in 4.1. and 4.2. If one assumes a scale of positions in society ranging from prestigious to non-prestigious, the nouns in (7) designate persons who stand out from the multitude by being placed at the endpoint of this scale. In other words, what at first glance seem to be counterexamples to the proposed analysis, are in fact instantiations of the [MARGINALITY] schema.⁷

(7)	<i>voevoda</i>	‘commander of army in medieval Russia’
	<i>starosta</i>	‘elected head, senior man’
	<i>glava</i>	‘head, chief’
	<i>zapravila</i>	‘boss’
	<i>vel’moža</i>	‘grandee’
	<i>vladyka</i>	‘master, sovereign; member of higher orders of clergy’
	<i>sluga</i>	‘servant’

Among the non-feminine common nouns in the *a*-declension there are some borrowings. A handful of examples, mainly titles of oriental origin, are cited in (8). These nouns are closely related to the nouns in (7) above since they denote persons who occupy privileged or underprivileged positions in a hierarchy. Although clearly peripheral in the Russian language, these nouns are of some interest since they show that the subcategory has been able to attract borrowings.

(8)	<i>magaradža</i>	‘Maharajah’
	<i>lama</i>	‘lama’
	<i>dalaj-lama</i>	‘Dalai Lama’
	<i>mulla</i>	‘mullah’
	<i>papa</i>	‘pope’
	<i>parija</i>	‘pariah, outcast’

7. Also relevant are Lakoff and Johnson’s (1980: 17) HIGH STATUS IS UP and LOW STATUS IS DOWN. “Orientational metaphors” of this kind are closely related to the metaphors proposed in 4.2. The BIG–SMALL schema may be considered the three-dimensional variant of Lakoff and Johnson’s (1980: 14ff) vertical UP–DOWN schema.

Finally, we shall consider the nouns in (9), which do not form a coherent set. The notion of “scale” appears irrelevant for their semantics, so on the face of it they do not seem to fit into the subcategory. However, in a wider sense the nouns in question denote persons for whom the label “marginal” is appropriate. In the traditional folk view, people normally write with their right hand, and in this sense *levša* ‘left-hander’ denotes marginal persons. In the same way, nouns like *tězka* ‘namesake’, *dvo(jn)jaška* ‘twin’ and *tro(jn)jaška* ‘triplet’ can be considered marginal since people normally have different names and are not twins or triplets. Although nouns like these do not foreground the notion of scale, they are still partly compatible with the [MARGINALITY] schema as defined in 4.1. Therefore they are well motivated in the *a*-declension under the analysis advocated in the present study.

- (9) *levša* ‘left-hander’
 tězka ‘namesake’
 dvo(jn)jaška ‘twin’
 tro(jn)jaška ‘triplet’

This concludes the discussion of non-feminine common nouns in the *a*-declension. We have seen that upon closer inspection many apparently problematic nouns turn out to be fully or partly compatible with the [MARGINALITY] schema. Further nouns could have been considered. However, this would have been of limited interest since the discussion in 4.1. through 4.3. is sufficient to establish the salience of [MARGINALITY] for personal nouns in the *a*-declension. As we shall see in the following, this schema will play a central role in the analysis of sexist ideologies in the *a*-declension, which is the central concern of the present paper.

5. The [NON-PROTOTYPICALITY] schema

We have now studied the subcategories of proper names and non-feminine common nouns in some detail. At this point one may ask whether and how these subcategories are related. In what follows I shall show that they are related in that both subcategories instantiate the [NON-PROTOTYPICALITY] schema.

At first glance one might think that proper names like *Vanja* and common nouns like *pisaka* ‘scribbler’ have nothing in common, except that both belong to the *a*-declension. However in the preceding sections I have

argued that the two subcategories instantiate the [FAMILIARITY] and [MARGINALITY] schemas, respectively, and the definitions repeated in (10) below reveal that they share the semantic component “persons who stand out from the multitude”. This component constitutes a general schema which I label [NON-PROTOTYPICALITY]. In other words, the [FAMILIARITY] and [MARGINALITY] schemas are related through the [NON-PROTOTYPICALITY] schema, which they both instantiate.

- (10) a. [FAMILIARITY]:
Persons who stand out from the multitude by virtue of their intimate relationship to the speaker.
- b. [MARGINALITY]:
Persons who stand out from the multitude by being placed at an endpoint of a scale.

Figure 2 gives a pictorial representation of the relationship between the three schemas in terms of a Langackerian categorisation network (cf. Langacker 1987: 369ff). All three schemas include three triangles which represent “the multitude” as well as one or two squares symbolising the person “who stands out from the multitude”. I interpret “stand out from the multitude” in terms of a categorisation relationship in which a target (the person) is compared to a standard (the multitude, crowd) and found to deviate from it. In the Figure, I represent standard and target as circles linked to the multitude and the deviating person, respectively. The circle representing the target is boldfaced in order to convey the fact that the schemas have a nominal profile, i.e. do not designate a relationship, and in order to show that the denotatum is the person that stands out from the multitude. In all three schemas the circles are connected by an arrow which stands for the categorisation relationship. The arrow is dashed in order to indicate that the target is not fully compatible with the standard, i.e. that we are dealing with an extension relation rather than an instantiation in Langacker’s (1987: 369ff) terminology.

This is common to all three schemas. In addition to this, the lower level schema to the left, which represents [MARGINALITY], includes a scale on which the deviating persons (represented as squares) are placed at the endpoints. In this way the Figure conveys the fact that the subcategory involves persons who stand out from the multitude by being placed at the endpoint of some scale. The representation of [FAMILIARITY] includes an extra circle with a capital S representing the speaker. The deviating person

(the square) is closer to the speaker than the multitude is. Thus, proximity on paper symbolises degree of familiarity with respect to the speaker.

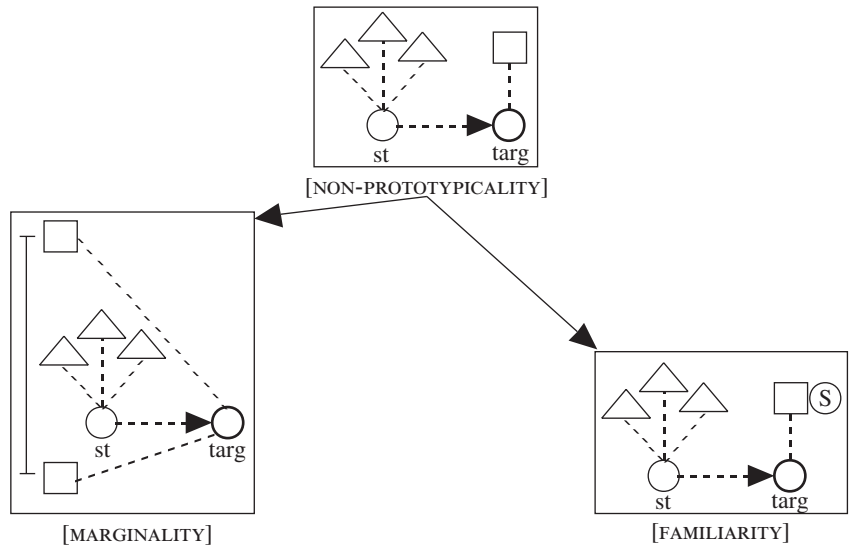


Figure 2. Relating non-feminine common nouns and short forms of names

6. Sexism: Woman as the second sex

The question now arises as to whether the third subcategory, that of women, is related to the remaining subcategories in a similar way. In this section, I shall argue that it is indeed the case that the three subcategories are related, but that a relationship can be established only if woman is construed as the second sex. This claim is interesting from the perspective of gender studies. Since the only way to establish a relationship is through the sexist myth of woman as the second sex, I shall conclude that the *a*-declension reflects sexist ideology.

Three construals of the concept “woman” (and “man”) are readily conceivable:⁸

- W: “Woman” and “man” are defined independently of each other (e.g. in terms of sexual characteristics). (equipollent opposition)
- W1: “Woman” is defined independently (e.g. in terms of sexual characteristics), “man” as “the second sex”. (privative opposition, woman unmarked)
- W2: “Man” is defined independently (e.g. in terms of sexual characteristics), “woman” as “the second sex”. (privative opposition, woman marked)

In Figure 3 I have tried to capture the differences between these construals in terms of pictorial representations of the same type as in Figures 1 and 2 above. All schemas contain three squares marked with “W” which are linked to a heavy-line circle. This conveys that the schemas designate women. The schema [w] includes no further information since this construal does not refer to men. In the case of [w1] and [w2], on the other hand, the schemas involve another circle linked to three triangles, which represent the class of men. The two circles are connected by a dashed arrow representing an extension relation holding between the categories of men and women. The directionality of the relation captures the primary-secondary dichotomy. In [w1] woman is construed as primary because she is the standard to which man is compared, while in [w2] woman is the target of comparison, and hence construed as secondary compared to man.

The construal that will concern us most is [w2], and it is intimately connected to the philosophy of Simone de Beauvoir. In her classic text *The Second Sex* she analyses the relationship between the sexes in terms of a dichotomy between transcendence and immanence.⁹ Traditionally man has been the active, transcendent subject who has created the norms and defined the role of woman. Woman, on the other hand, has been a passive, immanent object; she has been made “the other”. In this way, woman is understood

8. For a neurolinguistic perspective on (biased) construals of this type, see Howard (This volume).

9. *The Second Sex* was originally published in 1949, but the discussion in the present paper is based on the English edition from 1993.

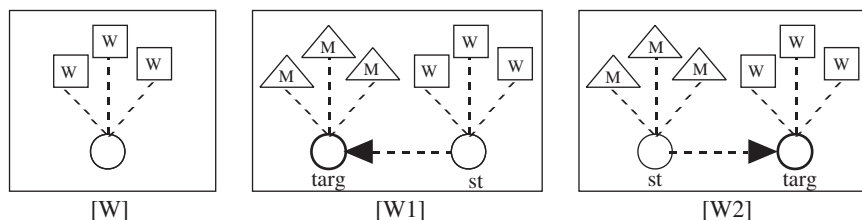


Figure 3. Three construals of “woman”

exclusively through her relationship to man. This is exactly what the representation of [w2] in Figure 3 captures: Woman is defined through a comparison with man in which she is found to be different. A cognitive linguistic account in terms of categorisation therefore seems appropriate.

Simone de Beauvoir’s aim was to unravel the sexist ideologies hidden in the myth of woman as the second sex. By stigmatising woman as “immanent”, the myth deprives her of the freedom to define her own role and to decide upon her own life. Furthermore, the myth can be exploited by men in order to justify suppression of women’s rights. As de Beauvoir herself puts it, “few myths have been more advantageous to the ruling caste than the myth of woman: it justifies all privileges and even authorises their abuse” (de Beauvoir 1993:270). Clearly, therefore, the myth of woman as the second sex is sexist.

When woman is construed as the second sex, she is seen as different compared to men. In this way, men represent a “multitude”, and women stand out from them as different.¹⁰ Now, if woman as the second sex can be described as a person who stands out from the multitude by being the “other” sex, this construal of woman is compatible with the general [NON-PROTOTYPICALITY] schema proposed in the preceding section. [w2] is an instantiation of [NON-PROTOTYPICALITY], in that both schemas pertain to

10. The use of the word *multitude* should not, of course, be taken to indicate preponderance in numerical terms, but rather be considered a representation of what is regarded as “normal” or “unmarked” in a society. This usage is in accordance with the use of the term *minority group* in sociology. It is not considered a statistical concept, but rather designates a group of people who are singled out for their physical or cultural characteristics. In this sense it is meaningful to regard women as a minority group, as was pointed out by Helen Mayer Hacker in her essay “Women as a Minority Group” (Hacker 1969).

persons standing out from the multitude, while [w2] involves additional specifications about the sex of the relevant persons. The consequence of this argument is important. What at first glance may appear to be an arbitrary lumping together of three unrelated subcategories turns out to be a well-defined category containing three subcategories that all instantiate a general schema. The *a*-declension is a category of persons who stand out from the multitude in terms of proximity to the speaker (short forms of proper names), extreme qualities (non-feminine common nouns) or sex (feminine nouns).

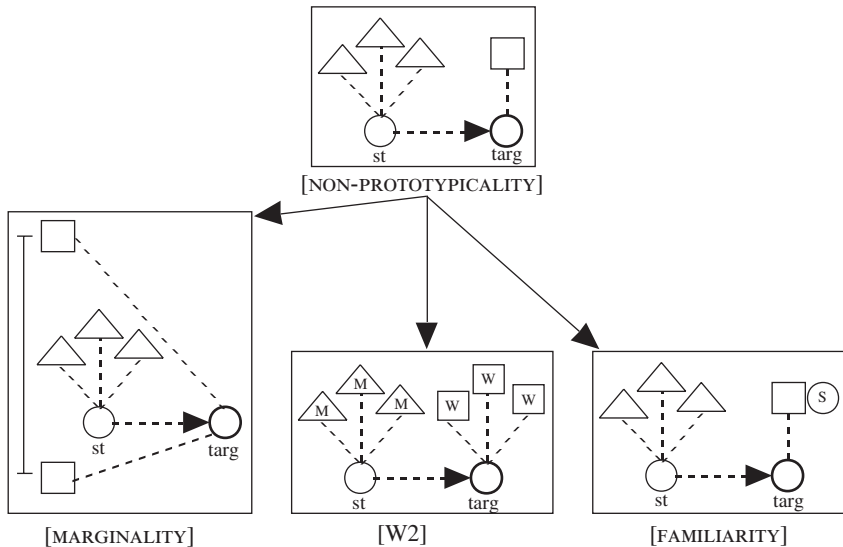


Figure 4. "Woman as the second sex" in the *a*-declension

Figure 4 gives a pictorial representation of the category. I have extended Figure 2 by including the representation of woman as the second sex proposed above. It is important to notice that the two alternative construals of woman are incompatible with the [NON-PROTOTYPICALITY] schema. The construal of woman as the first sex is incompatible because it profiles the standard, not the target in the categorisation relationship, and the construal of woman independently of man is incompatible because it does not involve a categorisation relationship at all. The upshot of this is that the analysis of

the personal nouns in the *a*-declension as constituting a well-defined category can only be maintained as long as woman is construed as the second sex. In this way this construal is reflected by the category. Now, given that [w2] is sexist and is reflected in the category, we are in a position to conclude that the *a*-declension reflects sexist attitudes towards women, because they are seen as belonging to a class of non-prototypical and marginal entities.

7. Sexism: Woman as Madonna and whore

The discussion of the myth of woman as the second sex has suggested that the *a*-declension is not an arbitrary juxtaposition of three unrelated categories, because all three instantiate the general [NON-PROTOTYPICALITY] schema. In the following I shall suggest an even closer connection between the subcategories of non-feminine common nouns and women. I shall try to show that they are related in terms of a set of metaphorical extensions which together reflect a stereotype closely related to the second sex myth, viz. "woman as Madonna and whore".

At the heart of the second sex myth is the concept of "otherness". Woman is regarded as different, and men tend to project onto women everything which they themselves are not. In this way, the category *woman* is associated with "extreme" qualities. These qualities may be both positive and negative. In de Beauvoir's (1993: 151f) words "woman is at once Eve and Virgin Mary. She is an idol, a servant, the source of life, a power of darkness; she is the elemental silence of truth, she is artifice, gossip and falsehood; she is healing presence and sorceress, she is man's prey, his downfall, she is everything that he is not and that he longs for, his negation as his *raison d'être*. [...] Under whatever aspect we may consider her, it is this ambivalence that strikes us first."

In this way a dualistic understanding of woman is created as a natural extension from the myth of woman as the second sex. As a convenient label for this dualism I shall use "woman as Madonna and whore". Notice, however, that this label should not be interpreted literally as relating women to the properties of Virgin Mary and whores exclusively. Rather it is employed as a cover term for a large set of stereotypes which together constitute the dualistic understanding of women by associating her simultaneously with positive and negative properties.

Understanding the tendency to associate women with extreme qualities allows us to deepen our understanding of the *a*-declension. Recall that nouns like *pisaka* ‘scribbler’ and *umnica* ‘clever person’, which involve evaluation, are characteristic of the subcategory of non-feminine common nouns. Thus, nouns of this type evince exactly the extreme qualities that the myth refers to, as was argued at length in Section 4 above. Therefore, the myth provides a conceptual link between the subcategory of women and the subcategory of non-feminine common nouns. Formally, one can represent the link in terms of the metaphorical extensions in (11). The first mediates the relationship between woman and negative characteristics, the second captures the association with positive characteristics.

- (11) SIN AND VICE IS WOMAN
VIRTUE IS WOMAN.

Although I claim that the conceptual metaphors in (11) connect the subcategories of women and non-feminine common nouns, it does not follow from this that (all) the relevant common nouns involve specifically “female” sins, vices and virtues. Such a position would clearly be incorrect in view of nouns like *ubijca* ‘murderer’ and *p’janica* ‘drunkard’, which are probably not first and foremost associated with women. Even clearer evidence is given by nouns like *volokita* ‘skirt chaser’ given its meaning and masculine syntactic gender (agreement class).

I have suggested that the myth of “woman as Madonna and whore” is an integrated part of the category structure of the *a*-declension in that it relates the subcategories of women and non-feminine common nouns with one another into a common schema. I regard the myth as sexist for the same reasons as “woman as the second sex” was considered a sexist myth in the previous section. Given this, the discussion of the metaphorical connections between the subcategories of women and non-feminine common nouns reinforces the conclusion drawn in the preceding section that the *a*-declension reflects sexist attitudes towards women.

8. Sexism: Woman’s place in man’s world is at home

Given that the subcategory of women is related to the subcategory of non-feminine common nouns in terms of an extension relation, one must ask whether

a similar relationship holds between women and the third subcategory, viz. short forms of proper names. In this section I shall show that a relationship can be established in terms of what Lakoff (1987: 93) refers to as the “domain-of-experience-principle”. Roughly, the two subcategories are related insofar as both pertain to the “private sphere”. It will be suggested that this relationship provides another example of sexist ideologies in the *a*-declension.

As a starting point for the discussion, let us draw a distinction between two experiential domains, which I shall refer to as the “private” and “public” spheres of life. The former is centred around the notion of “home” and includes personal relationships to family and friends. The latter pertains to social macro structures and includes a person’s engagement in work, politics, mass media etc. The distinction is well known from the philosophy of Jürgen Habermas (1962), where it is pivotal. However, its importance goes beyond philosophy as it is reflected in the grammars of many languages, e.g. in systems of 2nd person address forms (Brown and Gilman 1960). In Russian, for instance, the familiar form *ty* ‘you’ is used between relatives and close friends, i.e. within the private sphere, whereas the polite form *vy* ‘you’ is appropriate in the public sphere.

In the previous section it was claimed that associating women with extreme qualities was a natural extension of the second sex myth. Another, and arguably equally natural extension is to relate women to a restricted experiential domain of perceived secondary importance. According to traditional sexist practice, women are associated with the private sphere, whereas men play the primary part in the more prestigious public sphere. Women raise children and keep the house, while men are the main breadwinners. Men hold powerful positions in society and make the important decisions; women’s place in men’s world is at home. Needless to say, this “women’s-place-is-in-the-home” myth is sexist, since it deprives women of influence in society (for discussion see de Beauvoir 1993: 186f).

The association of women and the private sphere allows us to establish a conceptual link between the subcategories of women and proper names in the *a*-declension. As will be recalled from Section 3, the relevant proper names are short forms like *Vanja* (<*Ivan*) and *Tanja* (<*Tat’jana*), used to address people who stand in an intimate relationship to the speaker. This may be close relatives and friends, i.e. persons pertaining to the private sphere. In the public sphere, where relations between people tend to be less close, people are most naturally addressed by means of the full form of first

name and patronymic, e.g. as *Tat'jana Jur'jevna* (literally *Tat'jana*, daughter of *Jurij*), or more formally by means of surname accompanied with title, e.g. *professor Kudrjavceva* 'professor Kudrjavceva'. A detailed discussion of address forms in Russian is beyond the scope of this paper. What is important for present purposes is that there is a connection between short forms of proper names and the private sphere. Since both women and short forms pertain to this experiential domain, we can relate the subcategories of women and short forms. In other words, these two subcategories are not only related through the [NON-PROTOTYPICALITY] schema, but also in terms of the domain of experience both subcategories belong to. However, the relation hinges on the sexist association of women with the private sphere, so once again we see that the *a*-declension displays sexism.

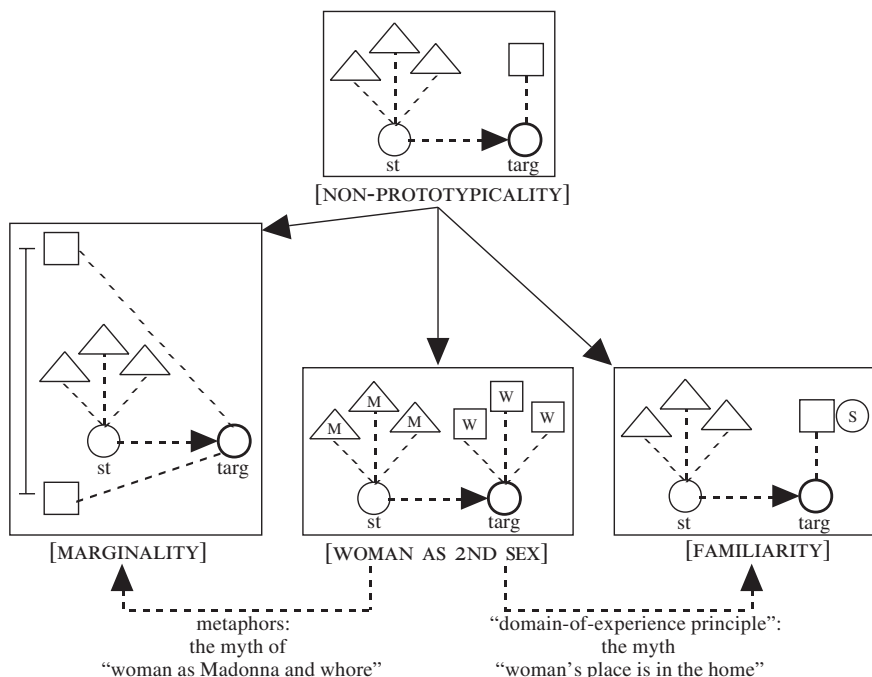


Figure 5. "Woman as the second sex", "woman as Madonna and whore" and "woman's place is in the home" in the *a*-declension

In Figure 5 I have incorporated the relations discussed in this and the preceding sections. Both are considered extension relations (and thus represented by dashed arrows) since they connect schemas that are not fully compatible.¹¹ Notice, however, that the two extension relations are of different kinds. As argued at some length in the previous section, women are related to non-feminine common nouns in terms of metaphors. The relationship between women and short forms of proper names is mediated by what Lakoff (1987: 93) refers to as the “domain-of-experience principle”: “If there is a basic domain of experience associated with A, then it is natural for entities in that domain to be in the same category as A.”

9. Summary: The contribution of this study

This concludes my discussion of sexist ideologies in the *a*-declension. The analysis can be summarised as follows:

- The subcategory of short forms of proper names, represented by the [FAMILIARITY] schema, comprises persons who stand out from the multitude by virtue of their intimate relationship to the speaker (Section 3)
- The subcategory of non-feminine common nouns, represented by the [MARGINALITY] schema, comprises persons who stand out from the multitude by being placed at the endpoint of some scale (Section 4).
- The [FAMILIARITY] and [MARGINALITY] schemas instantiate a general [NON-PROTOTYPICALITY] schema (Section 5).
- The subcategory of women also represents instantiations of [NON-PROTOTYPICALITY], but only insofar as woman is construed as the second sex (Section 6).
- The subcategory of women is related to non-feminine common nouns through metaphorical extensions which reflect the myth of “woman as Madonna and whore” (Section 7).

11. Since the focus of the present paper is on sexism and the subcategory of women, I have represented the extension relations as unidirectional arrows leading from this subcategory to the two remaining subcategories. Notice, however, that the actual directionality of the extension relations is not crucial for the analysis as long as it has been demonstrated that the subcategories are in fact connected in terms of these extension relations.

- The subcategory of women is related to short forms of proper names through Lakoff's "domain-of-experience principle", which invokes the "woman's-place-is-in-the-home myth" (Section 8).
- Because sexist myths are central to the structure of the Russian *a*-declension, I have concluded that this category reflects sexist attitudes towards women (Sections 6 through 8).

To what extent do these findings bear on the question of the pervasiveness of sexism addressed in the title of this paper? Since the Russian *a*-declension is structured in terms of sexist stereotypes about women, we can conclude that sexist ideologies may be so deeply entrenched in the grammar of particular languages as to pervade inflectional classes — an area which is traditionally viewed as devoid of semantic structure. This is an important result. In word formation sexist terms like *chairman* can easily be replaced by neutral terms like *chairperson*. In syntax, rules of anaphoric reference to persons of unspecified sex can superficially, that is in writing, easily be changed from sexist *he* to neutral *s/he*. However, in speaking and hence in spontaneous quick thinking, this is fully ruled out. A fortiori, it is hard to see how the sexism revealed in one of the most unconscious patternings of a language, i.e. its declension system, could be eliminated. This question touches upon the basic claim of linguistic relativity as formulated by Benjamin Lee Whorf half a century ago (Whorf 1956: 213f, original emphasis):

We dissect nature along lines laid down by our native languages. [...] We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way, an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, *but its terms are absolutely obligatory*; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees.

Evidence for linguistic relativity has not been adduced by revealing a sexist declension system, but it is to be tested whether such a biased system also leads to sexist inclinations in a set of classification tests, to be planned and carried through in psycholinguistic research. Only if this is done, will we get evidence for the threat, intrinsic in linguistic categorisation, to women's complete liberation. The feminist movement has tacitly assumed thus far that this threat is omnipresent. To this extent they are also self-declared Whorfians. But as long as no evidence for this highly likely assumption has been

given, the linguistic determinism claimed by the feminist movement still rests on uncertain grounds. What is now needed is research whether the linguistic categorisation revealed in the analysis of the Russian declension system also influences people's thinking and behaviour.

Acknowledgments

I am grateful to K. Bakken, D. Brown, P. Bye, R. Dirven, H.-O. Enger, L. Janda, C. Janss, T. Kudrjavtseva, T. Trosterud and anonymous referees for assistance and valuable comments on earlier versions of this paper. All errors are mine.

References

- Aronoff, Mark. 1994. *Morphology by Itself: Stems and inflectional classes*. Cambridge, Mass. and London, England: MIT Press.
- Beauvoir, Simone de. 1993. *The Second Sex*. London: David Campbell.
- Bratus, B. V. 1969. *The Formation and Expressive Use of Diminutives*. Cambridge: Cambridge University Press.
- Brown, R., and A. Gilman. 1960. "The pronouns of power and solidarity". In T. A. Sebeok (ed.), *Style in Language*. Cambridge, Mass.: MIT Press, 253–276.
- Corbett, Greville G. 1982. "Gender in Russian: an account of gender specification and its relationship to declension". *Russian Linguistics* 6.2: 197–232.
- Corbett, Greville G. and Fraser, Norman M. 1993. "Network morphology: A DATR account of Russian nominal inflection". *Journal of Linguistics* 29: 113–142.
- Doleschal, Ursula. 1993. Genus als grammatische und textlinguistische Kategorie. Eine kognitiv-funktionalistische Untersuchung des Russischen. Doctoral dissertation. University of Vienna.
- Habermas, Jürgen. 1962. *Strukturwandel der Öffentlichkeit*. Darmstadt and Neuwied: Luchterland.
- Hacker, Helen Mayer. 1969. "Women as a minority group". In B. Roszak and T. Roszak (eds.): *Masculine/Feminine. Readings in Sexual Mythology and the Liberation of Women*. New York, Hagerstown, San Francisco and London: Harper Colophon Books, 130–148.
- Howard, Harry. This volume. "Age/gender morphemes inherit the biases of their underlying dimensions".
- Iomdin, L. L. 1980. "O russkich suščestvitel'nyx tak nazyvaemogo obščego roda". *Izvestija Akademii Nauk SSSR. Serija literatury i jazyka* 39.5: 456–461.

- Kopeliovč, A. B. 1977. "K voprosu o kodifikacii imen suščestvitel'nyx obščego roda". In B. A. Cikovič, G. I. Mis'kevič, L. I. Skvorcov (eds), *Grammatika i Norma*. Moscow: Nauka, 178–192.
- . 1986. "Formal'noe, neformal'noe i smyslovoe soglasovanie po kategorii roda v russskom jazyke". In V. F. Kiprijanov, A. B. Pen'kovskij, V. I. Furašov (eds), *Sovremennij Russkij Sintaksis: Slovosočetaenie i Predloženie*. Vladimir: Vladimirsij gosudarstvennij pedagogičeskij institut, 40–48.
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What categories reveal about the mind*. Chicago and London: University of Chicago Press.
- . 1993. "The contemporary theory of metaphor". In A. Ortony (ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 202–251.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago and London: University of Chicago Press.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar. Vol. 1: Theoretical prerequisites*. Stanford: Stanford University Press.
- Nesset, Tore. Forthcoming. "Ideology in inflection — Sexism in a Russian declensional class".
- Stankiewicz, Edward. 1968. *Declension and Gradation of Russian Substantives in Contemporary Standard Russian*. The Hague and Paris: Mouton.
- Stump, Gregory T. 1993. "How peculiar is evaluative morphology?". *Journal of Linguistics* 29: 1–36.
- Švedova, Natalija Jul'evna. (ed.) 1980. *Russkaja Grammatika*. Moscow: Nauka.
- Ušakov, Dmitrij Nikolaevič (ed.). 1935. *Tolkovyj Slovar' russkogo Jazyka*. Moscow: Sovetskaja ěnciklopedija.
- Vasčenko, V. 1984. "Grammatičeskaja kategorija obščego roda v russskom jazyke". *Voprosy Jazykoznanija* 5: 60–68.
- Vinogradov, Viktor Vladimirovič. 1947. *Sovremennij Russkij Jazyk. Grammatičeskoe Učenie o Slove*. Moscow and Leningrad: Gosudarstvennoe učebno-pedagogičeskoe izdatel'stvo narkomprosa.
- Whorf, Benjamin Lee. 1956. *Language, Thought, and Reality*. Edited with a foreword by John B. Carroll. Cambridge, Mass.: The MIT Press.
- Wierzbicka, Anna. 1992. *Semantics, Culture and Cognition*. Oxford and New York: Oxford University Press.
- Zaliznjak, Andrej Anatol'evič. 1977. *Grammatičeskij Slovar' russkogo Jazyka*. Moscow: Russkij jazyk.

Cognitive Linguistics and the Marxist Approach to Ideology

Peter E. Jones

Sheffield Hallam University, Great Britain

1. Preamble: Ideology and social theory

All contributors to this volume would probably accept a view of ideology as having to do with the social function of ideas, with the way in which ideas, expressed in language or some other medium, play a role in justifying, defending, disguising or concealing economic exploitation or political and social inequalities and oppression. It follows that claims about the nature and functioning of ideology always presuppose particular conceptions of the way society as a whole works. In other words, the identification, analysis, and critique of the ideological requires a social theory (explicit or implicit) within which the complex interconnections between ideas (or ‘discourse’ in more fashionable recent parlance) and other aspects of social practice within the social whole can be understood. But where does cognitive linguistics stand on the question of social theory? What is the relationship between the social theory (or theories) espoused by CL and Marxism? And what if CL and Marxist social theory conflict? Does that mean that there is no basis for dialogue between these two theoretical systems? This paper attempts to open a discussion on these issues.

In this author's view, the relevance of Marxist theory¹ to CL discussion of ideology lies in its offering a specific system of concepts and an accompanying methodology for uncovering and studying the interconnections between ideas and social practice with a view to theoretical and practical intervention in struggles against exploitation and oppression, a necessary part of which is the struggle against ideology. Ideology, then, is conceptualised in a very specific way. It is not just any system of ideas or beliefs but ways of thinking in which historically transient exploitative forms of social organisation are represented as eternal, natural, inevitable, or 'rational'. Furthermore, these conceptual structures are not the capricious, subjective fantasies or merely the deliberately confected lies of the direct agents of (for example) capitalist exploitation but, like all ideas, reflect and embody the actual practices and social relations proper to the social formation which they serve. Under capitalist production, the dominant, defining practices and relations are not those of freely associating individuals co-operating to their full potential but the enforced exploitation of the vast majority by the minority. Bourgeois ideology is the representation of this *distorted, alienating* form of social organisation as a rational and 'fair' system based on the mutual exchange of equivalents ("a fair day's pay for a fair day's work"). But because these forms of thinking capture so accurately the actual, historically conditioned and limited state of things, they find themselves increasingly at odds not primarily with other forms of thinking but with the actual historical movement itself. Putting it less abstractly, the mass of workers are forced, through the very circumstances of the exploited life to which capitalist production consigns them, to struggle *practically* (and therefore also *consciously, theoretically*) against those relations which ideology paints as the only fair or workable system. Marxist theory, then, in opposition to ideology, puts itself on the ground of that *practical* revolt of society against its limited and constraining *actual* form and seeks to give it the theoretical weapons to clarify its aims and methods. Consequently, the critique of ideology as a critique of the conceptual distortion and inversion of the real forces of historical development must demonstrate the social roots

1. It should be emphasised that Marxist theory should not be confused with the official 'Marxist-Leninist' dogmas of the (former) USSR and its satellites. These 'communist' dogmas are, in fact, rightly characterised as ideology.

of ideology and at the same time seek out those social forces which must *in practice* attempt to do away with the exploitative form of social organisation of which ideology is the theoretical expression.

How does such a view compare with CL assumptions about the nature and role of ideology? In order to explore this issue, the paper begins with a discussion of how the relations between ideas and reality (social and natural) are in general conceived within Marxist materialism and CL 'experiential realism'. We proceed to a more detailed exposition of the Marxist conception of ideology and its possible relations to the social theory implied by CL analysis of ideology. The paper ends with a discussion of Marxist and CL analyses of ideology in the Gulf War.

2. Marxism and cognitive linguistics

The relationship of CL to the Marxist tradition, though an important issue, has hardly been addressed as yet in the relevant literature (cf. Jones 1999). There are no references to Marxism, as philosophy or social theory, in the main works on the philosophy of CL (e.g. Johnson 1987; Lakoff 1987; Lakoff and Johnson 1999), nor is there any engagement in these works with the long tradition of specifically materialist philosophy and science which was one of the contributory sources of Marxism. It is rather an extraordinary fact that an approach which proclaims itself as "a challenge to Western thought" (Lakoff and Johnson 1999, subtitle) can overlook not only the whole spectrum of Marxist work in philosophy, social theory, history, the natural sciences, economics, and politics but also ignore that immense body of neurolinguistic, psycholinguistic and psychological work from within the Marxist-inspired Vygotskian and Activity Theory traditions.

The situation is all the more ironic in that those issues of central concern to the philosophy of 'embodiment' have been in the forefront of debates within Marxism and between Marxism and other scientific currents for more than 150 years. The claim by Lakoff and Johnson (1980: 181) that their account of truth "can be considered an attempt to extend the realist tradition" by dealing with "social and personal reality as well as physical reality" comes nearly 155 years after the founders of Marxism first expounded their "materialistic conception of history", an attempt to extend their philosophical outlook to the study of human social existence and its laws of development.

Marxist and CL views on such vital issues would hardly be identical, it is true, but a constructive dialogue could be fruitful on a number of grounds. Firstly, Marxist ('dialectical') materialism does not share many of the features of the 'objectivism' or 'external realism' which are offensive to CL theorists. Thus, the "real premises" of historical materialism are "men, not in any fantastic isolation and rigidity, but in their actual, empirically perceptible process of development under definite conditions" (Marx and Engels, "The German Ideology" in *Selected Works*: 25). Secondly, Marxist theory developed through protracted polemical engagement with philosophical trends such as 'empirio-criticism', akin to CL's 'experiential realism', whose proponents claimed, as do those of CL, that their position was a 'third way' between materialism and idealism, escaping the 'defects' of both extreme positions. The Marxists (cf. Lenin 1962) argued that philosophical views which take human 'experience' as their epistemological foundation inevitably lead to idealist or anti-realist positions in the absence of a consistently materialist (or 'objectivist') interpretation of experience. In the course of these arguments, materialist perspectives on such contentious issues as the possibility of objective truth, the relation between relative and absolute truth, and the relationship between sensation and concept, were elaborated which would repay serious study by CL philosophers.²

The central philosophical difference between Marxism and CL, and one crucial to the treatment of ideology, concerns the question of objective truth. In CL terms, Marxism is unacceptably 'objectivist' while, in Marxist terms, CL's 'realism' has a relativist or idealist orientation. From a Marxist perspective, the 'experiential realism' of CL, like other 'experience'-based philosophies, is not a consistent and coherent philosophical system but wavers between materialist and idealist premises, often giving priority to the latter. On the one hand, there is a commitment to "basic realism", i.e., "to the reality of a world existing independent of human beings" (Lakoff 1987: 266), a commitment shared with 'objectivism' (1987 158–159). On the other hand, there is a denial of the possibility of objective truth or objective knowledge when "the mind reproduces the logical relations that exist objectively among the

2. Tim Rohrer (personal communication) suggests that the CL philosophical 'third way' is closely related to the philosophical pragmatism of James, Dewey and others. This insight certainly deserves attention (cf. Rohrer, this volume) but there is no space to consider it here. Lenin's (1962: 342) view of James was characteristically scathing.

entities and categories in the world" (Lakoff 1987: 163), a 'God's eye view' of truth. On the CL view: "Human concepts do not correspond to inherent properties of things but only to interactional properties [i.e. 'experience', PEJ]" (Lakoff and Johnson 1980: 181). Experience, then, though "constrained at every instant by the real world of which we are an inextricable part" (Lakoff 1987: 263) does not provide us with concepts and theories which correspond to the properties and interconnections in the external world. These ideas underlie a CL variant of conceptual relativism (not "a total relativism", 1987: 264) which entertains the "existence of alternative, incompatible conceptual schemes" (ibid.) and in which "reality as we understand it is structured by our conceptual schemes" (1987: 262). On this view truth is not "absolute, objective truth" but truth "relative to understanding" (1987: 294).

However, the conjunction of basic realism with a denial of objective truth (in the above sense) involves a logical contradiction typical of contemporary neo-Kantianism. CL philosophers do not recognise that basic realism in fact already contains the dreaded 'God's eye view', since it asserts that the real world exists independently of human beings and therefore independently of all human experience. Who is there on the CL view — other than God — to speak of the existence (and the properties) of a world beyond all possible and actual human experience? The materialist perspective, on the other hand, proceeds consistently from the premises of basic realism. Human experience proves to us that material reality exists, demonstrating that the 'inherent properties' of material reality, including its existence outside of, prior to and independently of us, are in principle knowable and can be discovered through experience. The concept of 'experience' itself needs critical re-evaluation in this connection. By 'human experience', Marxist materialism means first and foremost *social practice, the practical transformation of the external world by the organised social collective*. Experience is therefore itself an objective, material process subordinate to the laws of material reality existing independently of human experience. Such a view does not necessarily imply that there is "one true or correct description of a system of phenomena" as no attempt is made to prescribe a priori the form that objective knowledge must take. But objective knowledge is possible, since knowledge is the conscious form in which humans, as objective beings amongst others, relate to reality. Human beings, of course, have their own purposes and needs distinct from the natural world but these purposes are

realised in that world through activity. The matter of nature, whose intrinsic properties are independent of and essentially indifferent to our purposes, is the source and material of human life-activity; in bringing this material into the service of our own needs we begin to discover its intrinsic, objective properties, thereby developing images, ideas, and ultimately concepts and systems of theoretical thinking in which the objective phenomena of material reality and their law-governed interconnections are represented. Practice itself is the test of correspondence between idea and reality.

Truth, however, is not a finished once-and-for-all-time state, but a *process*. A particular natural scientific theory, for example the theory of evolution, does not constitute the final and absolute truth of the matter. The correspondence between a scientific theory and the reality it depicts is always conditional, approximate and relative to the system of objective interactions revealed by historical practice. But if the theory is not absolutely true, neither is it absolutely false; if the cupboard is not full, neither is it bare. There is a growing kernel of truth within the theory of evolution to do with the facts, the processes and the mechanisms of development and differentiation of organic life — a kernel which will never be refuted. Truth and falsehood are dialectical ‘opposites’ and must not be counterposed in a formal and mechanical way. A theory may therefore be true only within certain limits, but within those limits absolutely and objectively true.³ From such a standpoint,

3. Cf. Bohm (1957: 31–32):

To pursue our analogy further, we may say that with regard to the totality of natural laws we never have enough views and cross-sections to give us a complete understanding of this totality. But as science progresses, and new theories are developed, we obtain more and more views from different sides, views that are more comprehensive, views that are more detailed, etc. Each particular theory or explanation of a given set of phenomena will then have a limited domain of validity and will be adequate only in a limited context and under limited conditions. This means that any theory extrapolated to an arbitrary context and to arbitrary conditions will (like the partial views of our object) lead to erroneous predictions. *The finding of such errors is one of the most important means of making progress in science.* A new theory, to which the discovery of such errors will eventually give rise, does not, however, invalidate the older theories. Rather, by permitting the treatment of a broader domain of phenomena, it corrects the older theories in the domain in which they are inadequate and, in so doing, it helps define the conditions under which they are valid (e.g. as the theory of relativity corrected Newton’s laws of motion, and thus helped to define the conditions of validity of Newton’s laws as those in which the velocity is small compared with that of light). Thus, we do not expect that any causal

CL arguments from the existence of “alternative conceptualisations” of objects merely provide evidence of the multiplicity and density of interactions and interconnections between all phenomena of nature. They demonstrate, in the terminology of “critical realism” (Bhaskar 1979), “ontological depth”⁴ as well as the relative autonomy, the relatively independent scope for action, of different dimensions and aspects of the material whole.⁵

3. Ideology in Marxist social theory

Marx and Engels referred to their approach to the understanding of society as “the materialistic conception of history”, thereby claiming that there was a way of approaching social structure and social change in a way consistent with materialist assumptions. This approach, hardly in keeping with what Lakoff and Johnson (1999: 74ff) call “a priori philosophizing”, emerged through a critical rethinking of the history of philosophy informed by a close study of the natural sciences combined with an enormous volume of original empirical research in history and economics and, not least, from the experiences — successes and failures — of political struggle, guided by these

relationships will represent *absolute truths*; for to do this, they would have to apply *without approximation and unconditionally*.

4. In fact one finds in science a characteristic pattern of description, explanation and redescription of the phenomena identified at any one level of reality. But only a concept of *ontological depth* (depending upon the concept of real strata apart from our knowledge of strata) enables us to reconcile the twin aspects of scientific development, viz. growth and change... Moreover, only the concept of ontological depth can reveal the actual historical stratification of the sciences as anything other than an accident. For this can now be seen as grounded in the multi-tiered stratification of reality, and the consequent logic — of discovery — *that* stratification imposes on science. (Bhaskar, op. cit.: 16)

5. First of all, our basic starting-point in studying the laws of nature was to consider the processes by which any one thing comes from other things in the past and helps to give rise to still other things in the future. Now this process cannot be studied in its totality which is inexhaustible, both in its quantitative aspects and in the complexity of its details. However, it is a fact, verified by human experience transmitted through our general culture since even before the beginnings of civilisation, as well as by the experience of many generations of scientists, that parts of the processes described above can be studied approximately, under specified conditions, and in limited contexts. This is possible because there is an objective but approximate autonomy in the behaviour of these various parts of the process relative to any particular context. (Bohm, op. cit.: 29)

ideas, on an international scale. Marx himself speaks of “the general *result* [my emphasis] at which I arrived and which, once won, served as a guiding thread for my studies” which he summarises briefly as follows:

In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness. (*Selected Works One*: 503)

As Engels commented,

this apparently simple proposition, that the consciousness of men depends on their being and not *vice versa*, at once, and in its first consequences, runs directly counter to all idealism, even the most concealed. All traditional and customary outlooks on everything historical are negated by it. The whole traditional mode of political reasoning falls to the ground. (op. cit.: 509)

The radical consequences of such a view for thinking in general flow from the fact that “men, who produce their social relations in accordance with their material productivity, also produce *ideas, categories*, that is to say, the abstract, ideal expressions of these same social relations.” (op. cit.: 524) And therefore:

Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. (op. cit.: 25)

For Marx and Engels the principle of the primacy of the economic within the social whole remained a fundamental tenet of their conception, although they ridiculed “the fatuous notion of the ideologists that because we deny an independent development to the various ideological spheres which play a part in history we also deny them any *effect upon history*” (*Selected Works*: 701). Thus:

It is not the case that the economic basis is *cause, is solely active* and everything else is only a passive effect. Rather, there is an interaction which takes place upon the basis of the economic necessity which ultimately asserts itself. (*Letters*: 282)

“Political, legal, philosophical, religious, literary, artistic etc development is based upon economic development”, Engels noted, but nevertheless these “all react upon each other and also upon the economic base” (ibid.).

Essential to the Marxist treatment of ideology is the notion of ‘inversion’ and the associated idea of “false consciousness”. While Marx, in line with his general theory, emphasised that the “abstraction, or idea ... is nothing more than the theoretical expression of those material relations which are their lord and master” (*Grundrisse*: 164), it is not the case that this relation between ideas and material relations is transparent to the social actors whose life process is at issue. Rather, things appear to be quite the reverse: social relations appear to be the consequence of ideas with ideas as the motive force behind social development, e.g.:

the struggle between the classes already existing and fighting with one another is reflected in the struggle between government and opposition, but likewise in inverted form, no longer directly but indirectly, not as a class struggle but as a fight for political principles, and so distorted that it has taken us thousands of years to get behind it. (Engels, *Selected Works*: 696)

In this way, the real movement of the social whole is ‘inverted’ in ideology. Ideology

is a process accomplished by the so-called thinker consciously, it is true, but with a false consciousness. The real motive forces impelling him remain unknown to him; otherwise it simply would not be an ideological process. Hence he imagines false or seeming motive forces. (op. cit.: 700)

Ideology, as a form of social consciousness, is not merely dismissed as deliberately concocted falsehood, although there is also plenty of such in circulation. Instead, the source of ideological notions is viewed as inextricably tied up with the narrow and historically limited scope of social practice itself. An ideological view, such as bourgeois ideology, is a view of society from the standpoint of a particular social class acting in accordance with its own interests. Economic processes, for example, are conceptualised through a system of categories of phenomena consistent with the observations and practice of the agents of capitalist production, such as ‘wages’, ‘profit’, ‘capital’, ‘rent’, etc. These abstractions are not subjective illusions or fantasy; they “are formed not only in the consciousness of an individual of bourgeois society but in the reality itself of the economic social relations which he contemplates” (Ilyenkov 1982: 127). In other words, these phenomena are

real — they are ‘there’ on the surface of the actual social process itself and observable to all: “The things given in contemplation to an individual of bourgeois (“civic”) society are superficially exactly the way they seem to him”.⁶ (ibid.). Ideology specifically is to be found in the account and interpretation of these phenomena and their relationships and, centrally, in their mystification where the “mechanism of mystification consists in the collapsing of social facts into natural ones” (Geras 1990: 216) thereby giving them “an idealistic explanation” (Geras op. cit.: 218). For Marx on the other hand, the categories of bourgeois economics constitute merely the “outward appearance” of the workings of the economic system. They cannot be accepted uncritically as the categories out of which a science of political economy should be built, even though they may offer the starting point for analysis: “That in their appearance things often represent themselves in inverted form is pretty well known in every science except Political Economy” (Marx in Geras op. cit.: 208). Thus, “vulgar economy”, as Marx puts it, “everywhere sticks to appearances in opposition to the law which regulates and explains them” (in Geras op. cit.: 207) and consequently merely constitutes a theoretical apologia or rationalisation for the existing economic forms.

In the case of political economy, then, ideology is the reflection in ideas of the material interests of a ruling class, a reflection in which the outward appearances of the economic forms expressing those interests are seen and presented in mystified fashion as naturalised, as the product of ‘human nature’ (in our genes, perhaps), as eternally valid, universal ‘civilised values’. This viewpoint “is of course consolidated, nourished and inculcated by the ruling classes by all means available” (*Grundrisse*: 165), by the vulgar fetishisation of the immediate forms of appearance of economic processes, but also by more sophisticated ‘philosophical’ attacks on the very possibility of scientific knowledge capable of penetrating appearances to get at the inner interconnections within the system. A materialist science of society is premised on “the necessity of constructing reality against appearances” (Geras op. cit.: 209), a theoretical viewpoint which coincides with the practice of that social class exploited by capital and therefore struggling

6. Compare Geras (op. cit.: 217) “If then the social agents experience capitalist society as something other than it really is, this is fundamentally because capitalist society *presents itself* as something other than it really is.”

against it. The result of Marx's empirical economic analysis was a system of theoretical categories expressing the "inner nature of capital" (Marx in Geras, *ibid.*) — 'use-value', 'exchange-value', 'labour power', 'concrete and abstract labour', 'surplus value', 'capital' etc. — through which the law-governed movement of the economic system as a whole, including those forms in which the workings of the system manifest themselves to immediate experience, could be theoretically reproduced and stripped of its ideological appearance as rational and necessary.

4. Cognitive linguistics and social theory

What social theory informs cognitive linguistic treatments of ideology? To my knowledge, no explicit exposition of a social theory exists, but it is possible to infer one from claims made in the CL literature. Lakoff, for example, argues:

Governments are real. They exist. But they exist only because human beings conceived of them and have acted according to that conceptualization. In short, the imaginative products of the human mind play an enormous role in the creation of reality...In the case of social and cultural reality, epistemology precedes metaphysics, since human beings have the power to create social institutions and make them real by virtue of their actions. (1987: 208)

This view appears to attribute priority to human conceptualisation in the overall dynamic of the social process: ideas ('epistemology') arise which guide actions which produce social structures ('metaphysics'); social consciousness determines social being, the inverse of the Marxist proposition.⁷ This implicit social theory appears to be common to many CL discussions of ideology. Bruce Hawkins (1999: 209), arguing that "making sense of the sociopolitical phenomenon of oppression is a task for the historian and the political scientist", sees the cognitive scientist's role as involving "see[ing] oppression as a conceptualized social order imposed upon a particular sociopolitical formation. That social order emerges from a belief system in the mind

7. My interpretation of the passage is arguably a little unfair (Tim Rohrer, personal communication). What Lakoff has to say about the creative role of the mind in social development is actually perfectly acceptable in Marxian materialist terms. But the Marxist approach would look for the source and power of such ideas themselves in material social practices, something that Lakoff does not do.

of the oppressor". Similarly, Willem Botha (2001: 54) argues that ideology "emanates from a person's (group of persons) cognitive system", and Harry Howard (This volume) sees ideological biases in the expression of gender relations as the result of a vector-space representation that the central nervous system imposes on cognition. The social theory implicit in such claims is itself ideological, in Marxist terms, precisely because it turns upside down the relationship between ideas and social reality, seeing in the former the cause or source of the latter. In some cases this leads to an ahistorical and naturalistic view of ideas as the product of the body or brain independently of social circumstances.

Nevertheless, despite these differences, there may be sufficient congruence and complementarity between the two traditions to allow a productive engagement. For CL, human experience in the world is the source and motivation for 'imaging' and thinking processes, rather than innate biological mechanisms. CL makes the claim that cognition is not based on language, but rather, "language is ... based on cognition" and "depends upon the nature of thought" (Lakoff 1987: 291). It follows that language cannot constitute a barrier, boundary or limit to human thinking (as is the case with some idealist philosophical trends), although the distinctive properties and processes of human language are themselves a constituent of human cognitive activity and influence and shape cognitive processes in many ways. These propositions are, within limits, commensurable with a Marxist perspective in which human cognitive activity, whether embodied in language, artistic images or some other mode, is viewed as a form of "ideal" (Ilyenkov 1977) or conceptual 'modelling' of the natural and social worlds which arises from and is inseparably connected with human activity in the world.

Similarly, there may well be common ground in the understanding and treatment of metaphor, whatever differences may exist on the role of metaphor in cognition. In fact, the Marxist tradition, unlike forms of 'objectivism' attacked in Lakoff (1987) and Lakoff and Johnson (1999), has always recognised, and emphasised, the social significance of cognitive functions,

including metaphor, as in the remarkable work by Paul Lafargue (1975)⁸ dealing with “the origin of abstract ideas”. Lafargue’s general claim is that

Language holds too great a place in the development of the intellect for the etymological formation of words and their successive meanings to fail of reflecting the conditions of life and the mental state of the men who created and used them. (1975: 151)

Noting that “often one and the same word is used to designate an abstract idea and a concrete object” (loc. cit.) he proceeds to investigate this state of affairs with two research questions in mind: “first, have the abstract and the ideal been degraded into the concrete, or have the material and concrete transformed themselves into the ideal and abstract? — and how has this trans-substantiation been accomplished?” (1975: 152). Lafargue argues categorically that “The history of successive meanings of words solve the first difficulty; *it shows the concrete meaning always preceding the abstract meaning*” (loc. cit. my emphasis), supporting his case with detailed analysis. As for the second question, Lafargue demonstrates that historical investigation is necessary since “the link which attaches the abstract meaning to the concrete meaning is not always apparent” (loc. cit.). Lafargue discusses the role of a number of conceptual processes in this “trans-substantiation”, including metaphor (“one of the principal ways by which the abstract penetrates into the human brain”, 1975: 156). However, while insisting on the irreducible contribution of the structure of the human brain and of human mental processes to the movement from concrete to abstract meaning, Lafargue, in keeping with Marx’s materialistic conception of history, is concerned to show that this movement is essentially a *socio-historical* phenomenon, a response to the developing needs of a community, part of the carrying through of necessary changes in the *social practices* of that community. From a Lafarguian perspective, then, to acknowledge the role of (e.g.) metaphor in the cognitive process is not to imply that what is thought, if metaphorical or metaphorically expressed, is ipso facto *imaginary* in the subjectivist sense, or that such forms of thinking “do not mirror nature” as the CL tradition has it (Lakoff 1987: 371).

8. Paul Lafargue (1842–1911), married to Marx’s daughter Laura, was a leading Marxist and socialist activist in France. Unfortunately the edition of his work referred to in this text does not give the date of the original manuscript.

However, CL philosophy appears to be effecting a shift in emphasis on the role of metaphor as a cognitive instrument. Thus, Lakoff and Johnson (1999) repeatedly stress that philosophy and science cannot do without metaphor and, consequently, to “set out the defining metaphors of a philosophy is not necessarily to critique it. ... Identifying philosophers’ metaphors does not belittle them” (1999: 542–543). “Justification for this attitude is based on a notion of ‘aptness’ for metaphors in the sense that “metaphoric theories can have literal, basic-level entailments” (op. cit.: 91), “they can entail *non-metaphorical predictions* that can be *verified* or *falsified*” (ibid., my emphasis). In other words, metaphor involves not simply a relation between ‘cognitive’ elements, i.e., a language-internal, semantic relation between expressions, but is caught up in a more complex relationship between cognitive or conceptual systems (e.g. science) on the one hand and, on the other, the real phenomena cognised. That relationship is subject not merely to logico-linguistic or aesthetic analysis and appreciation, but to the scientific *practices* of verification and falsification on the basis of engagement with the real processes outside our heads. On this basis the claim that metaphor provides simple and clear evidence against an ‘objectivist’ view would need to be looked at more closely. In particular, the ostensibly ‘non literal’ content of a metaphorical expression should be viewed in terms of the relationship between that expression and the entire system of theoretical knowledge, embodying claims about reality, to which that expression belongs. In this connection, the following comment by Lakoff and Johnson (1999: 104) on the use of metaphor within ‘cognitive science’ would cause few objections from an adherent of materialist philosophy:

When we speak of “neural circuitry”, we are, of course, using an important metaphor to conceptualise neural structure in electronic terms. The circuitry metaphor is used by the neuroscience community at large and is taken as providing crucially important insights into the behaviour of the brain. “Truths” about the neural level are commonly stated in terms of this metaphor. We mention this because the neural level is seen quite properly as a “physical” level, and yet much of what we take as true about it is stated in terms of the metaphor of neural circuitry, which abstracts away from ion channels and glial cells.

Here we appear to be seeing a shift in emphasis from the link between metaphorically expressed ideas and ‘bodily experience’ to the theoretical soundness of such ideas in relation to ‘converging evidence’ from as many

independent domains of scientific investigation as possible. The following comment by Lakoff and Johnson (1999: 89) is in quite the same vein and, with its implication that some scientific results are in fact absolute, again appears quite unproblematic from a materialist standpoint:

Many scientific results are stable ... This is also true of the science of the mind. We are not likely to discover that there are no neurons or neurotransmitters... We maintain that they deserve to be called “results” because of all the converging evidence supporting them. The existence of so many forms of convergent evidence demonstrates that what we take as specific results are not merely the consequences of assumptions underlying a particular method of enquiry.

All in all, this new emphasis appears to bring the CL view of metaphor closer to that of other scientific realists, e.g., Harré:

The process by which originally metaphorical descriptions are subsequently shown, by “ontological experiment”, to constitute accurate factual accounts of how nature works is characteristic of progress in the natural sciences. (1961, quoted in Mühlhäusler 1995: 281)

Furthermore, perhaps the most significant point, for our purposes, is made in connection with such formulations as “a gene *for* aggression” in science writing. In their discussion of such cases, Lakoff and Johnson (1999: 217) argue: “There is, of course, a difference between conceptualizing and reasoning about the world according to this metaphor and actually believing that the metaphor is a truth”. Now, if one knows that the metaphor which one is using for “conceptualizing and reasoning” is untrue then this implies a critical distance between the thinking process in general and the linguistic (semantic-metaphorical) structure serving as the vehicle of thinking. This, again, is perfectly acceptable on a materialist view which would refuse to equate or directly identify the semantic network, including the metaphorical structure of concepts, with *cognition*, i.e., the reasoning process itself through which new knowledge develops. Just as we may say “the sun rose at 6 a.m. today” without compromising our commitment to a heliocentric view of the solar system, so may we put our metaphorical resources to a variety of cognitive uses. So, for example, the doctor who prescribes a *pick-me-up* — something to *get you back on your feet* — for the patient who is feeling *down* or *low* or *on the floor* — knows the difference between the biochemical processes set in motion by the drug and the bodily actions used metaphorically

to conceptualise those processes. Once again, the general issue at stake is the relationship between the ‘internal’, semantic or conceptual realm on the one hand and the reality of social practice on the other. From the Marxist standpoint, conceptualisation is a necessary ‘moment’ of all material social practices. And yet, these practices are not themselves conceptual and therefore cannot be reduced to, identified with, or explained by, their conceptual dimension, as appears to be the tendency in some CL work. In contrast, Marxism insists on the primacy within social life of such material practices and consequently gives them analytic priority in its investigation of social structures and processes and the role within them of ideas and ideology.

Nevertheless, despite the differences in overt philosophical stance discussed earlier, it may well be the case that there is more common ground between the Marxist and CL views of cognition than is apparent at first sight and, therefore, some reason to believe that a collaboration between the two might be possible in the area of analysis of ideology. There is, perhaps, a space for productive collaboration in the analysis of what Engels referred to as the ‘concept-material’, that is, the semantic structures and mechanisms, through which ideologies are expressed. Engels argued that:

Every ideology, however, once it has arisen, develops in connection with the given concept-material, and develops this material further; otherwise it would not be an ideology, that is, occupation with thoughts as with independent entities, developing independently and subject only to their own laws.

(*Selected Works*: 628)

Consequently, while Marxism and CL may well disagree on how to explain the social function of ideas — i.e., the origins and role of ideology, properly speaking — there may be scope for dialogue about how best to understand and analyse the internal semantic relations and resources from which this ‘concept-material’ is built. The distinction made by Purvis and Hunt (1993:476) between ‘discourse’ and ‘ideology’ may also be useful here:

If “discourse” and “ideology” both figure in accounts of the general field of social action mediated by communicative practices, then “discourse” focuses upon the *internal* features of those practices, in particular their linguistic and semiotic dimensions. On the other hand, “ideology” directs attention towards the *external* aspects of focusing on the way in which lived experience is connected to notions of interest and position that are in principle distinguishable from lived experience.

Thus, the concepts and methodology of CL could be seen as relating to the analysis of *discourse* rather than as a framework for the analysis of *ideology* as such, although it would be unwise to make an absolute distinction between these forms of analysis. Take, for example, the analyses of scientific and philosophical discourses in Lakoff and Johnson (1999). These analyses help to elucidate their (often implicit) metaphorical underpinnings and have critical value in so far as they make explicit the links between a particular scientific theory, say, and other conceptual systems, including pre-scientific and 'folk' beliefs. But this does not make for ideological analysis as such. For one thing, the metaphors employed in a given discourse, properly seen in the context of the theory to which they belong, may be quite apt. One must also recognise that what people believe (and what they say) is not the same as what they do; people do not, in fact, live by metaphors. Therefore even literally false systems of belief (such as religion) may serve as the conscious form in which oppressed classes or nations rouse themselves to collective action in the defence of their economic or political interests. On the other hand, we might suggest that such CL methods, insightfully applied to the *internal* semantic resources of ideological discourse, could usefully augment and concretise the Marxist analysis of ideologies in terms of historically specific *external* relations between conceptualisations (social consciousness) and social practice (social being).

5. Ideology and the Gulf War

Finally, let us turn to a comparison of CL-based and Marxist analyses of ideology and its role in the Gulf War (January–February 1991). Lakoff (1992) presents an interesting analysis of "the metaphor system used to justify war in the Gulf" (1992: 463), although it should be noted that he does not use the term 'ideology' in his discussion. Lakoff shows that US policy and military strategy were presented for public consumption via a series of metaphorical constructions of the motives of and relations between the different parties to the conflict — the USA and Iraq, Iraq and Kuwait, Saddam Hussein and Iraq, etc. Lakoff is concerned to show that the non-metaphorical realities of "pain, dismemberment, death, starvation, and the death and injury of loved ones", potentially afflicting "hundreds of thousands of real human beings, whether Iraqi, Kuwaiti, or American" (1992: 463–464)

were hidden “in a harmful way” (1992: 463) by these metaphorical constructions. Such general metaphor systems as ‘the State-as-Person system’, when applied to this particular event, serve to mask, suppress, or render invisible some aspects of the real relations between the parties while foregrounding (and putting a particular spin on) those which serve as the overt pretext for US action. Thus, the ‘State-as-Person’ metaphor effectively obscures the “internal structure of the state”, including its “class structure” along with “ethnic composition, religious rivalry, political parties, the ecology, and the influence of the military and or corporations (especially multi-national corporations).” (1992: 477) This metaphor, when combined with the classic fairy tale narrative structure, is used to present Kuwait as innocent victim, Saddam Hussein as villain, and America as hero (1992: 466–467), with the colonial history of Kuwait and Iraq and past US support for Saddam Hussein against Iran as well as internal opposition conveniently passed over. Lakoff argues that the ‘State-as-Person’ metaphor also underlies a further metaphorical concept — that of the ‘national interest’, a concept that “hides exactly whose interests would be served and whose would not” (1992: 477). The definition of this ‘national interest’ is “influenced more by the rich than by the poor, more by large corporations than by small business, and more by developers than ecological activists” (1992: 477).

There is much in Lakoff’s discussion that a Marxist could agree with. His insightful application of CL methods to the relevant discourse reveals a whole series of overlapping (although also conflicting) semantic networks variously mobilised to promote the strategic and shifting tactical targets of US policy. His analysis of the ‘concept material’ of the ‘national interest’ metaphor, most especially, takes us to the heart of the role of ideology in the Gulf War since it exposes what is the central element of capitalist ideology in general, namely the (false) idea of the commonality or identity of interest of exploiter and exploited. At the same time, Lakoff’s treatment overall raises a number of issues which are problematic from a Marxist point of view, to which we now turn.

By this systematic recounting of the kind of facts ‘missing’ in the official version of events, Lakoff implies — although he does not explicitly state — his opposition to US policy and the action it seeks to justify. Indeed, he does not explicitly evoke or employ any particular system of social or political concepts in a discussion which emphasises the ‘humanitarian’, as opposed to political, implications of the conflict. Lakoff, then, does not

provide an alternative analysis or evaluation of the conflict as such, and at the end of his powerful exposé of the hypocrisy, distortions, and mendacity of official US accounts he does not advocate any kind of action in response to it, apart from that implied by his final objection to “the failure to think imaginatively about what new metaphors might be more benign” (1992: 481) than those used to justify the war, although no such “more benign” (or more ‘apt’?) metaphors are offered, nor is any criterion suggested for judging the ‘benignness’ of metaphors in this connection.

The first issue, then, is that Lakoff implies by his ‘objection’ that such a conflict is the result of cognitive failures, of the lack of self-awareness or self-criticism (on the part of the protagonists) in relation to the workings of an “unconscious system of metaphors” (1992: 481). In other words, if people would only think differently, such disasters could be avoided. Here we have precisely the question of the relationship between social being and social consciousness discussed above. For Lakoff, it would seem, it is the social consciousness of the American architects and defenders of the war which is the source of the problem and the object of his critical attack. For the Marxist position, on the other hand, this consciousness of the political and military leaders (and the subservient intelligentsia and media ‘professionals’) corresponds to the real economic and social interests (i.e., US capitalist) which it expresses. The ruling political elite of US capitalism (for reasons and by techniques analysed in detail in, amongst other places, Chomsky 1992, 1996) *cannot think otherwise*. Therefore, the idea that this consciousness could be altered (under the pressure of external argument or self-critique) to serve humanitarian goals is itself an ideological position which inverts the relation of social consciousness to social being. For Marxism, the struggle against the metaphorical constructions of US policy is not essentially a struggle against forms of thinking but a struggle against these real relations and forces of exploitation and oppression which are expressed in such thought forms.

Secondly, Lakoff’s own discussion makes it clear that the analysis of conceptual metaphor in itself tells us nothing at all about the war, its causes, motives or ideological justification, or about what we should do in response. Only when such metaphors are analysed against the facts — the reality — of the war and its conduct, as Lakoff (1992) indeed does, can we begin to see, and then critique, their *social* (including ideological) role in the whole business. But this presupposes a theoretical system and a method for

discovering, elucidating, selecting, interpreting and linking the 'facts' into a picture of the relevant phenomena coherent enough to serve as a basis for evaluating the 'benignness' or 'aptness' (or otherwise) of such metaphors. As noted earlier, Lakoff does not explain his selection, prioritisation, and reading of the facts hidden by official metaphor. Furthermore, these are not simply the brute ('embodied') facts of pain, death and dismemberment but such equally real *social* facts as class structure, and big business interests. The evocation of constructs such as these implies a sociological orientation, i.e., some kind of social theory, but this theory is not spelled out. The salient point here, in relation to the themes of this paper, is that analysis of metaphor is a form of discourse analysis, which focuses on the "internal" (Purvis and Hunt 1993) "concept-material" (Engels) of communicative practices. But the analysis of *ideology* requires orientation towards the 'external' (non-discursive) social practices only in respect to which can the *social* function of such 'concept-material' be understood and illuminated.

This issue can perhaps be illustrated more concretely if we consider once more the 'State-as-Person' metaphor system. As noted, Lakoff's critique of the system in its use in the war amounts to showing how it serves, for instance, to identify the state with its ruler (e.g. Iraq with Saddam Hussein), thereby hiding social antagonisms within states. One implication of this critique is that we should not blame or punish the Iraqi *nation* for the crimes and follies of its ruler, something which a Marxist would wholeheartedly agree with. On the other hand, such an obvious conceptual distinction between ruler and ruled hardly does full justice to the complex reality of nation states or the nature of political representation and organisation within them. More specifically, in this case it does not get us very far in understanding the nature and significance of the national aspirations of the Iraqi people in relation to the interconnectedness of all economic and political processes within the global capitalist system. Within this perspective, a Marxist would be obliged to see in the conflict between the USA and Iraq a struggle between an exploiting nation (i.e., the predatory economic forces of big, globally dominant, capitalist or 'imperialist' interests) and an exploited (small, ex-colonial, dominated and dependent) nation. Consequently, the struggle led by Hussein and his regime against US forces represents, in however distorted a form, a national resistance to the domination and extension of big capitalist interests. This national resistance would be encouraged and defended unconditionally — i.e. *whatever the character of*

the ruling regime in Baghdad — against the actions of the dominant US capitalist interests, *whatever the social class composition of the armed forces* (cf. Lakoff 1992: 477–478). From this perspective, a US attack on Saddam and his ruling circle would indeed constitute an attack on the Iraqi nation. This does not imply support for Saddam's regime within Iraq. But it makes the overthrow of his dictatorship a matter for the Iraqi people themselves. In the case of Iraq, as more recently in the NATO attack on Serbia, the 'humanitarian' goal of stopping the activities of a corrupt ruling elite serves as a pretext for the big capitalist powers to extend their economic, political and military interests to parts of the world from which they have been forcefully excluded in the past. Furthermore, the Marxist analysis would emphasise the essential *identity* of interests between the US working class and the Iraqi people and in practical terms would attempt to encourage both mutual understanding between them as well as whatever joint action may be possible. In sum, then, the CL analysis of the 'internal' conceptual structure of metaphor can become a useful tool in ideological analysis when informed by and positioned within a social theory (e.g. Marxism) capable of illuminating the 'external' connections between ideas and social practice as a whole.

It is worth, finally, commenting on Sandikcioglu's (2000) critique,⁹ from within the CL tradition, of Lakoff's treatment. Sandikcioglu argues that Lakoff overlooks the role of the "Orientalist" metaphor framework in his interpretation of the conflict. On the basis of detailed empirical studies, she argues that the "simplified and schematised conceptualisation of Iraq as part of the Orient thus justified a hard-line approach to the Gulf crisis which eventually led to war" (op. cit.: 20). A Marxist could not entirely agree with this conclusion, however. First of all, as in Lakoff, there is an implication that US action had as its cause and motivation a *conceptualisation* as opposed to the material interests of US capital. Secondly, appeal to general "Orientalist stereotypes" in the Western mindset (although we can agree with the author that such exist) cannot explain the whole history of US relations with Iraq (specifically, previous US support for Iraq and for Saddam's regime in particular, sometimes against internal opposition, noted by Lakoff) or the twists and turns of American foreign policy in the region. This does not mean that 'Orientalist' stereotypes cannot be used to *justify* US action or

9. Cf. also Sandikcioglu (1999).

to *incite* support for it amongst the general public or Western opinion. But it does mean that we must distinguish between the often cynical and calculatingly opportunist use of such stereotypes in political discourse and *the real reasons for the war* (cf. also Rohrer 1995, on 'press' versus 'politician' metaphors). Both Lakoff's account to some extent, as well as the much more detailed and searching analyses of the Gulf conflict in Chomsky (1996) demonstrate that the effectiveness and skill of US ideologists lies not in their adherence to one particular system of metaphors or stereotypes but in their cynical, pragmatically-driven fashioning of a whole series of often contradictory metaphorical constructions and scenarios for *justifying* military action at particular times. For this reason it would be a mistake to simply equate a particular metaphorical construction or stereotypical framework with the underlying *ideological* dimension of social practice.

However, there have also been attempts from a CL standpoint to draw out more explicitly the connections between discourse, ideology and social practice in the Gulf War (see particularly Rohrer 1995 and Voss, Kennet, Wiley and Schooler 1992). Such analyses of Gulf War discourse are informed by a political view on the springs and trends of US foreign policy which a Marxist would have some sympathy with. But there is clearly no intrinsic connection between CL analysis of discourse and any particular system of political thought. CL is, after all, a theory of language and its conceptual foundations and CL treatments of conceptual metaphor and other 'internal' semantic processes clearly have their place and value independently of social and political analysis. Analysis of *ideology*, on the other hand, involves taking up a position on the social function of ideas (or discourse); it requires an investigation of the source of ideas in social practice, and, furthermore, an evaluation of the adequacy, indeed, the *truth* of such ideas in relation to the causes and course of events which they represent. For this, a theory of social practice is necessary. The question, then, for practitioners of CL-based approaches to ideology looms large: what theory of social practice is presupposed by their analysis?

6. Conclusion and prospects

This paper has attempted to explore the relationship between a Marxist and a CL approach to the study of ideology. It has argued that the two approaches

differ markedly on such key philosophical and theoretical issues as the possibility of objective truth, and the source and role of ideas within the social process as a whole. More specifically, it has been suggested that no theory or analysis of ideology properly speaking is possible without a theory of the relationship between ideas and social practice, which raises serious questions about what social theory (if any) is implied or preferred by CL. It would appear that CL's philosophical inclination is towards a social theory diametrically opposed to that of Marxism, although this needs clarification. On the other hand, it has been argued that there is scope for productive engagement between Marxism and CL on the analysis of the 'concept-material' from which systems of belief, including ideologies, are constructed. The potential for productive engagement has been explored in relation to the analysis of conceptual metaphor in the Gulf War where it is argued that the CL approach to conceptual metaphor in US foreign policy discourse, while not in itself capable of identifying or analysing ideology, can usefully supplement and augment ideological analysis in the context of understanding the real social forces at work in such a conflict, in "constructing reality against appearances" (Geras 1990, cited above).

Acknowledgments

My sincere thanks to René Dirven and Esra Sandikcioglu for their encouragement and patience with my efforts on this paper. Particular thanks, too, to Tim Rohrer for a very helpful and constructive critique of an earlier version of this paper. Needless to say, I alone am responsible for the arguments presented here.

References

- Bhaskar, Roy. 1979. *The Possibility of Naturalism: A philosophical critique of the contemporary human sciences*. Brighton: Harvester.
- Bohm, David. 1957. *Causality and Chance in Modern Physics*. London: Routledge.
- Botha, Willem. 2001. "The deictic foundation of ideology with reference to African Renaissance". In R. Dirven, R. Frank and C. Ilie (eds), 51–76.
- Chomsky, Noam. 1992. *Detering Democracy*. London: Vintage.
- . 1996. *Powers and Prospects: Reflections on human nature and the social order*. London: Pluto Press.

- Dirven, René, Frank, Roslyn and Ilie, Cornelia (eds). 2001. *Language and Ideology. Vol. 2: Descriptive cognitive approaches*. Amsterdam and Philadelphia: John Benjamins.
- Geras, Norman. 1990. "Essence and appearance: Aspects of fetishism in Marx's *Capital*". In B. Jessop and C. Malcolm-Brown (eds), *Karl Marx's Social and Political Thought: Critical assessments*. London: Routledge.
- Harré, Rom. 1961. *Theories and Things*. London: Sheed and Ward.
- Hawkins, Bruce. 1999. "Matters of life and death: the role of iconographic reference in the language of oppression". In J. Verschueren (ed.), *Language and Ideology: Selected papers from the 6th International Pragmatics Conference, Vol. 1*. Antwerp: International Pragmatics Association, 206–271.
- Howard, Harry. This volume. "Age/gender morphemes inherit the biases of their underlying dimensions".
- Ilyenkov, Evald V. 1977. "On the concept of the 'ideal'". In *Problems of Dialectical Materialism*. Moscow: Progress.
- . 1982. *The Dialectics of the Abstract and the Concrete in Marx's 'Capital'*, Moscow: Progress.
- Johnson, Mark. 1987. *The Body in the Mind*. Chicago: The University of Chicago Press.
- Jones, Peter E. 1999. "The embodied mind: contrasting visions". *Mind, Culture, and Activity* 6,4: 274–285.
- Lafargue, Paul. 1975. *The Evolution of Property from Savagery to Civilization and Social and Philosophical Studies*. London: New Park Publications.
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things*. Chicago: The University of Chicago Press.
- . 1992. "Metaphor and war: The metaphor system used to justify war in the gulf". In M Pütz (ed.), *Thirty Years of Linguistic Evolution: Studies in Honour of René Dirven on the occasion of his sixtieth birthday*. Amsterdam and Philadelphia: Benjamins.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago: The University of Chicago Press.
- . 1999. *Philosophy in the Flesh: The embodied mind and its challenge to western thought*. New York: Basic Books.
- Lenin, Vladimir I. 1962. *Collected Works. Volume 14, 1908*. London: Lawrence & Wishart.
- Marx, Karl. 1973. *Grundrisse*. Harmondsworth: Penguin Books.
- Marx, Karl and Engels, Friedrich. 1969. *Selected Works, Vol. 1*. Moscow: Progress.
- . 1969. *Selected Works One. Selected Works in three volumes, Vol. 1*. Moscow: Progress.
- . 1983. "Letters on 'Capital'", London: New Park.
- Mühlhäusler, Peter. 1995 "Metaphors others live by". *Language and Communication* 15,3: 281–288.
- Purvis, P. and Hunt, A. 1993. "Discourse, ideology, discourse, ideology, discourse, ideology". *British Journal of Sociology* 44,3: 473–499.
- Rohrer, Tim. 1995. "The metaphorical logic of (political) rape revisited: The new wor(l)d order". *Metaphor and Symbolic Activity* 10 (2).

- . This volume. "Pragmatism, ideology and embodiment: William James and the philosophical foundations of cognitive linguistics".
- Sandikcioglu, Esra. 1999. "Orientalism: The ideology behind the metaphorical Gulf War". Paper presented at the "Metaphor and Politics" Symposium at the 22nd Annual Scientific Meeting of the International Society of Political Psychology, Amsterdam, July 18–21.
- . 2000. "More metaphorical warfare in the Gulf: Orientalist frames in news coverage". In A. Barcelona (ed.), *Metaphor and Metonymy at the Crossroads: A cognitive perspective*. Berlin and New York: Mouton de Gruyter.
- Voss, James, Kennet, Joel, Wiley, Jennifer and Schooler, Tonya. 1992. "Experts at debate: The use of metaphor in the U.S. Senate debate on the Gulf crisis". *Metaphor and Symbolic Activity*. 7,3–4: 197–214.

Linguistics and Ideology in 19th and 20th Century Studies of Language

E. F. K. Koerner
University of Ottawa, Canada

In the sciences, one confronts some puzzling facts and attempts to devise principles that will explain them. In ideological warfare, one begins with Higher Truths dictated from above. The task is to select the facts, or invent them, in such a way as to render the required conclusions not too transparently absurd — at least for properly disciplined minds. (Noam Chomsky)¹

Introductory Remarks

Within the context of the present volume on “Language and Ideology” I need not dwell on the history of the term ‘ideology’ at any length. If someone like the French non-Marxist sociologist-philosopher Raymond Boudon, in a 330-page monograph devoted to the origin and diverging uses of ‘idéologie’ (Boudon 1986), did not succeed in coming up with a universally accepted definition of the term, nor succeeded in rescuing it from its largely negative connotations, I shall not try to bore the audience with my own attempt. We know that when the French philosopher A. L. C. Destutt de Tracy (1754–1836) in 1796 coined ‘idéologie’, it was intended to refer to nothing more than a theory of ideas, conceived within a sensorialist view of mind in the tradition of Condillac with practical and socially beneficial

1. From Noam Chomsky, “Is Peace at Hand?”, *Zeta Magazine* (January 1988: 12).

intentions, notably in the arena of public education. Given the Republican convictions of Destutt and his followers, the *Idéologues* soon came under fire from Napoleon, who shifted the term to the political realm, accusing them of ignoring political reality for abstract ideas. Marx, in *The German Ideology* written during 1845–1846, followed up on Napoleon's negative slant and used the term to refer to a false consciousness that is contradicted by the reality found in everyday material life. 'Ideology' has since been much more a term of abuse than a well-defined concept of scholarly discourse. Given these connotations, it is doubtful that we will succeed in putting a more positive spin on both the concept and the term.

It has become fashionable during the 1990s to make use of the word 'ideology' in book titles (cf. Joseph and Taylor 1990; Simpson 1993; Huck and Goldsmith 1995; Schieffelin et al. 1998) — there is even a textbook on the subject (Eagleton 1991), and as far as I can see, in each case something different is meant by 'ideology', if it is given a definition at all. Kathryn Woolard (1998), for instance, while offering a fairly informative account of the different strands of uses of the term (5–9), states, discouragingly: "I use the terms 'linguistic ideology', 'language ideology', and 'ideologies of language' interchangeably [...], although differences among them can be detected in separate traditions of use" (p. 4). Maybe, given such a state of affairs, I should offer at least something like an operational definition for the present purpose after all?

As it will become obvious from what I am trying to say in this paper, the subject of my own paper differs significantly from most, if not all, of the papers included in this volume. I am not talking about *language* and ideology, but about *linguistics* and ideology, i.e., my focus is not on the use or abuse of language in the promotion of particular ideas or actions, but on specific, conscious or subconscious underpinnings of arguments made or maintained within the science of language, i.e., the field of linguistics, which is often presumed to be guided only by value-free scientific principles in the search of truth. In other words, my paper deals with the discipline, the profession of linguistics, not language uses and linguistic discourses of any kind, if 'linguistic' is interpreted in the sense of German *sprachlich* (French *langagier*), i.e., "pertaining to language", not *sprachwissenschaftlich* (French *linguistique*).

1. The place of ideology in linguistic historiography

At least since the establishment of the so-called ‘Boppian paradigm’ of comparative-historical linguistics, historians of the field have succeeded in presenting us with an image of the field as objective, value-free, in one word ‘scientific’. One looks in vain, in the textbook histories from Benfey, Delbrück, and others in the late 19th century until those by Robins, Malmberg, and others of the late 20th century, for any recognition of the fact that in the work of 19th-century scholars from the early Romantic era until and including the positivist era of the Neogrammarians and their successors we in fact encounter at least ideological latencies which in certain *conjonctures* of history have come to the fore in a manner for all to see, if such a general awareness exists.

When talking about ‘linguistics and ideology’, one may be thinking of Marrism, which from the late 1920s till the early 1950s held sway in the Soviet Union as perhaps the most obvious example. And still one does not find a chapter devoted to this phenomenon and this period in Russian linguistics of the first half of the 20th century generally in the regular historiographical literature until, *sauf erreur*, very recently. The idea of ideology in linguistics surfaces in two recent books, Černý’s *Historia de la Lingüística*, translated into Spanish by the author from his native Czech version of 1996 (Černý 1998), and in Andreas Gardt’s *Geschichte der Sprachwissenschaft in Deutschland* (Gardt 1999).

In Černý’s book the subject of “ideología en la lingüística” (p. 481) is mentioned in passing in various places, usually in conjunction with the name of Nikolaj Jakovlevič Marr (1865–1934) and/or Marxism (pp. 2, 170, 199–200, 298), and it is obvious that these few passages — about three pages altogether in a book of more than 500 pages — were motivated by his native country’s Communist past and the failed uprising in Czechoslovakia against the post-Stalinist regime in 1968 (see especially pp. 481–482). Nowhere in his book does the author attempt a definition of ‘ideology’ (which he seems to use as if it was a regular concept — probably meaning something like “political superstructure”) or an analysis of what this ideology meant in terms of the conduct of linguistic research.

The most recent publication that takes up the topic of my paper — though its author, again, nowhere defines the term ‘ideology’ — is Andreas Gardt’s *Geschichte der Sprachwissenschaft in Deutschland* (Gardt 1999), whose title is reminiscent of Theodor Benfey’s (1809–1881) well-known

book of 130 years ago, but it is also there where the parallel between the two accounts ends. Gardt's history is a much more modest undertaking and evidently the work of a Germanist, not an Indo-Europeanist. Yet Gardt's book contains passages that one could not expect to find in Benfey's voluminous study and which are of interest to scholars with an awareness that linguistics has always been, acknowledged or not, a discipline strongly influenced by external forces, intellectual, economic, and political. Although I believe that Gardt does not go far enough in his analysis of what he terms 'Sprachnationalismus' (1999: 301–319) — people like Weisgerber, who has in recent years been clearly indicted as culpable of various acts of 'mother tongue fascism' among others, does not receive more than a slap on the wrist (243–244) — one must welcome his effort to open up the discussion of a subject that has thus far been excluded from the historical record.

This general non-recognition of ideological considerations playing a role in linguistics and its methodology is deplorable not simply because of the lack of social consciousness and sense of intellectual responsibility which this attitude among scholars reveals, but also because linguists can be shown to have been particularly prone to cater, consciously or not, to ideas and interests outside their discipline and, as history shows, allowed at times their findings to be used for purposes they were not originally intended for or simply joined up with certain trends. The misuse of ideas coming from linguists with serious academic credentials during the Third Reich is usually mentioned, if at all, as an aberration — and then passed over, with no participant being mentioned by name, thus leaving the impression that we had to do with nothing but a hijacking of a field and the distortion of scholarly findings by in fact unqualified but politically well connected people (cf. most recently Hutton 1999, for a critical treatment). For those actually studying the scholarship during 1933–1945 in Germany and Austria, it may come as a shock to realise that the work published during those fateful years was not much different from what was done before, and that it did not take much to serve Nazi propaganda quite well.

The present paper deals with only three areas of long-standing scholarly research, namely, (1) 'mother tongue' studies, (2) linguistic typology, and, in particular, (3) the search for the original Indo-European homeland, in order to illustrate that these subjects were hardly ever argued without an ideological subtext. No suggestion is implied that 'modern' structural, including 'generative', linguistics has been free from any such dangers.

2. Illustrations of 'ideology' in linguistics

By choosing three particular areas of traditional linguistic research in which ideology appears to have played a significant role, I do not wish to imply that they represent the only ones. Indeed, it may well be the case that other linguistic subfields are even more prone to ideological bias than the ones that have been chosen for illustration of my general argument.

2.1 *Mother-tongue ideologies in linguistics*

Christopher Hutton, in his very recent *Linguistics and the Third Reich* (Hutton 1999) has focused his attention on the idea of 'mother tongue' — in fact he speaks of 'mother-tongue fascism' — in German linguistics and how this emotionally charged concept, advocated by seemingly respectable representatives in the field of *Germanistik* could find themselves supporting the agenda of an anti-Semitic and xenophobic regime. Hutton illustrates this phenomenon by delineating the careers of Heinz Kloss (1904–1987) — well known for his early work in sociolinguistics *avant la lettre* and his distinction between 'Abstand' and 'Ausbau' languages (e.g., Kloss 1929, 1952), Jost Trier (1894–1970) — widely recognised for his work in semantics and 'field' theory (e.g., Trier 1931, 1973), and Leo Weisgerber (1899–1985) — probably the best known scholar of the three (e.g., Weisgerber 1929, 1967), who all published works during 1933–1945 that cannot but be seen as much in accord with Nazi party thinking; compare such typical publications by these authors as Kloss (e.g., 1941a, 1941b), Trier (e.g., 1939, 1943a, 1943b), and Weisgerber (e.g., 1934, 1940, 1943, 1944). Their writings were by no means 'slips of the pen', as they have been careful to write in line with traditional scholarly standards, something which Hutton's research has made perfectly clear. Of course the learning, teaching, and protection of the language with which a society identifies itself has a much longer history, and Hutton is at pains to document this; the argument that the particular views expounded by these three scholars and many other linguists during the Third Reich period were nothing but a temporal aberration is not supported by the facts.

As Hutton demonstrates in individual chapters devoted to these three academics and the scholarly as well as political context within which they acted (1999: 86–187 *passim*), Kloss, Trier, and notably Weisgerber not only held those ideologically charged views, they also got themselves actively

involved during 1933–1945 in various government-sponsored programs designed to protect the national language against intrusions from those they felt did not really belong to the German speech community or in helping those who were in danger of losing their mother tongue, such as Germans who had emigrated to the United States, to maintain it — ‘diaspora’ was then and is still today one of those emotionally charged terms used among mother-tongue ideologues. That these activities were apt to support Nazi agenda of discrimination and persecution cannot escape those who familiarise themselves with the scholarly production and the political context of the period.

In order to illustrate ‘mother-tongue fascism’ to those more familiar with the present than the past, let me cite two current North American examples. I am thinking in particular of Quebec’s separatist movement and the ‘English only’ laws which certain states of the U. S. have passed in order to appease public anxieties that their politicians created in the first place for their own agenda. There, we have been witness to the kind of subtle and not so subtle propaganda that has been advanced by the advocates of mother-tongue protection to promote their — some may say — ‘racist’ politics. People are being made to feel that someone wants to take their language away from them, and prospects like this naturally make many members of the population whose language is supposedly threatened nervous, if not downright scared since so much of daily life, self-identification, and whatever passes as ‘culture’ is wedded to language. As we will surely realise, such ideologies fly in the face of what is really happening: in Canada, the support that has been given by the federal government for the promotion of French in public institutions, universities and schools has in fact added to the vitality and viability of French; in the United States, new immigrants are eager to learn English in order to increase their chances in advancing socially and economically.

Since this kind of manipulation in scholarship and politics has been so well documented in Hutton’s book, though only with regard to German linguistic thought from Humboldt to Weisgerber, I would like to simply refer to it and deal with two other areas in the history of linguistics that can be shown to have carried along with them in one form or another an ideological baggage from the early 19th century onwards, namely, language classification and the search for the Indo-European homeland.

2.2 *Language classification and typology*

Both last-named subjects have had a long history in linguistics. Indeed, it could be shown that they have antecedents well before the 19th century: The *ordre naturel* debate in 18th-century France, which was supposed to demonstrate the superiority of French over other European languages based on its strict syntactic order of subject–verb–object which, it was claimed, followed a cognitive, ‘rational’ pattern. Like the search for the Indo-European *Urheimat* (see Section 2.3. below), discussions about language (and what characteristics a ‘proper’ language should exhibit vs dialects, for instance) led to various kinds of nationalistic debate and eventual political exploitation during the period of the Third Reich.

Interestingly, embedded in the first 19th-century proposals of linguistic typology we find an implicit ideological underpinning. I may begin by referring to Friedrich Schlegel’s (1772–1829) scheme distinguishing between so-called ‘inflectional’ languages, i.e., the Indo-European languages, and those that have no inflection and are therefore called ‘isolating’ (as Chinese has usually been thought of) or use a morphological technique which puts strings of forms together, but does not allow for a modification of the root, i.e., the so-called ‘agglutinating’ languages (as American Indian languages are supposed to be like). This is found *in nuce* in Schlegel’s 1808 *Ueber die Sprache und Weisheit der Indier*, including the suggestion, albeit not explicit, of a ranking of the ‘inflectional’ languages as farther developed and, hence, superior to all others. We may say, when looking at later developments in the field: first the languages are the target, then their respective speakers. Friedrich Schlegel’s elder brother August Wilhelm (1767–1845) added the ‘synthetic’/‘analytic’ distinction in 1818, and we can find similar typological arguments in Wilhelm von Humboldt (1767–1835), in whose view the highest achievement of the human mind was that of the speakers of Ancient Greek.

However, neither in the works of the Schlegels nor of Humboldt could one find them actually arguing in favour of Indo-European superiority, cultural, moral or otherwise. No serious scholar today would want to characterise the Schlegel brothers or Humboldt as having paved the way for 20th-century fascism. In vain we would find them arguing in favour of superiority of one people over another, based on the differences of language structure. Accusing Humboldt, for instance, of ‘racism’ as Hans Aarsleff (1988: x, lxiii) has done, not only constitutes a cheap shot but, more

importantly, a rhetorical gesture that sets up roadblocks to an adequate understanding of Humboldt's linguistic argument, as Paul Sweet, the author of a two-volume biography of Humboldt, has pointed out (Sweet 1989; cf. now Joseph 1999, for details). There is no denying, however, that these early morphological typologies — and possible hierarchies — left the door open for later reinterpretation in a manner not intended by their original proponents.

The connection between language and the people who speak it has always been there, of course; it just needed to be argued that some languages — and hence their speakers — were more 'primitive' than others. For instance, Franz Bopp (1791–1867), the supposed 'founder' of comparative Indo-European linguistics, who, unlike his former student August Friedrich Pott (1802–1887) and later August Schleicher (1821–1868), argued against the use of the term *Indogermanisch* (Indo-Germanic) and in favour of 'Indo-European' as a more universal and, I suppose, 'neutral' term, could be shown to have made connections, if not a direct identification, between language structure and the cultural state of its speakers.

This particular view of Bopp's came to the fore in his review of Humboldt's posthumous *opus magnum* edited by J. C. E. Buschmann (1805–1880), Humboldt's former secretary and executor as well as an accomplished student of 'exotic' languages in his own right. Contrary to what Humboldt had argued for, namely, that the Melanesian languages constituted a language family unto itself, and one not at all related to Indo-European, Bopp (1840a) maintained, apparently being misled by the huge mass of loanwords found in these languages which could be traced back to Sanskrit, that they were indeed Indo-European. However, since the Melanesian languages showed, unlike Sanskrit, next to no inflection, Bopp remarked that their speakers had shed them — as they had shed their clothes! (Bopp 1840b; cf. Buschmann's 1842 reply). In other words, in what started out as a strictly linguistic analysis, a parallel was drawn between the people on these tropical islands and the structure of their language (cf. Mueller-Vollmer 1993, for a detailed account of this sordid story).

Similar, totally unqualified remarks could be found elsewhere in 19th-century linguistic scholarship. They were not systematic arguments, but they could be picked up by people with an antenna for them. For instance, in Schleicher's (1821–1868) *Die Sprachen Europas*, which contains important typological observations about languages throughout the world, not only Europe, we could also find the author passing a value judgement on English

— and by extension the English — for their ‘debased’ (*herabgesunken*) language (Schleicher 1850: 231, cf. Koerner 1995b: 156–158). In the works of Steinthal, Georg von der Gabelentz, and others who are often seen as opposing the view of Indo-European superiority, we could find negative remarks about other languages, too. Indeed, a careful study of language classification and the ‘genius’ of the people speaking particular languages would reveal that these value judgements and prejudices are by no means confined to German-speaking lands: France and the United States, for instance, have their fair share in this. Even the great American Sanskritist and general linguist William Dwight Whitney (1827–1894) cannot be excluded from criticism (Whitney 1867; cf. Hutton 1999: 269–271), at least from today’s vantage point. However, none of these scholars could be found expounding racial theories. Still, it must be said that strongly ideological pronouncements appear to have come more often than not from scholars outside the mainstream of 19th-century linguistics; we could mention the Philadelphia anthropologist Daniel Garrison Brinton (1837–1899) in *The American Race* (Brinton 1891), which is replete with remarks about the inferiority of the native tribes in comparison to the Caucasians, and lesser known American authors such as Albert Pike (1809–1891) and Charles Morris (1833–1922), who were clearly expounding ideas of ‘Aryan’ superiority (cf. Pike 1873; Morris 1888). Indeed, it seems that many of these ideas and prejudices were part and parcel of what the educated classes in the 19th and probably also the 20th century believed to be self-evident. It would be naive to think that articles like Erich Glässer’s (1938) paper on the world view supposedly reflected by Indo-European syntactic organisation was a rare exception to an otherwise ‘objective’ manner of looking at the structure of diverse languages. In a way, Glässer’s idea harks back to 18th-century French views.

2.3 *The search for the original Indo-European homeland*

Another subject, which interested me momentarily during the mid-1970s (cf. Koerner 1976, which included a revised version of Mallory’s 1973 survey of the earlier history of the *Urheimat* debate), has received more of my attention in my graduate teaching in historical linguistics during the 1990s; for instance, a 1991 seminar on the topic led to a master’s thesis by one of my students (Krell 1994) on the different hypotheses, linguistic and archaeological,

concerning the original home of the Indo-European peoples (cf. Mallory 1989, for a rather broad treatment of the subject). However, here again the focus in Mallory's (1976 [1973]) overview has been on the various theories, linguistic, archaeological or other (e.g., historical, cultural, religious) advanced since the 18th century, mostly deriving from linguistic endeavours, with extralinguistic considerations becoming more evident during the second half of the 19th century. Although it is obvious from his own account that a considerable number of authors had ideological, including at times religious and maybe even political, agenda, Mallory — and this includes his 1989 book — does not raise the issue of ideology, quite in line with traditional scholarly discourse, in which this aspect of scientific endeavour has been regularly ignored. A typical example for this traditional attitude is Edgar Polomé's recent survey of the development of Indo-European linguistics since the Neogrammarians, covering the period between 1870 and the present (Polomé 1994, 1995). In Polomé's account, the Nazi period is treated very briefly and, as usual, as little more than a *faux pas* on the part of some scholars (few are mentioned by name) than as a line of thinking which has had precedents in 19th-century and certainly pre-1933 Indo-European studies. The subject of the Indo-European *Urheimat* is discussed, but Polomé concentrates more on recent hypotheses, notably those advanced by Gimbutas (e.g., 1985), Gamkrelidze and Ivanov (e.g., 1985a, 1985b), and Renfrew (e.g., 1987).

Indeed, the assessment Polomé offers of the search for the origins of the Indo-Europeans up to and including Hitler's Germany and Stalin's Russia is interesting and bears citation:

Both linguists and archaeologists have been obsessed with the desire to pinpoint the location of the homeland of the Indo-Europeans since the beginning of our studies, and their search has unfortunately not always been devoid of political motivation: the Germany of the 1930s and 1940s was locating it within the frontiers of the Great Reich; after Stalin's discovery of "real" linguistics [in 1950], [...], some Soviet linguists placed it in the Slavic territory when dealing with the prehistory of the Russian language; [...]. (Polomé 1995: 281)

As we can see, to Polomé (and we may add, to all other writers of the history of 20th-century linguistics, if they mention this period at all) it is only the period under Nazism, Stalinism, or Fascism which appears to have produced politically motivated work, even though he hints later on that

Gamkrelidze's much more recent work may not be entirely free from such considerations (p. 305). Other recent authors with obvious, personal and national, agenda could be added, like Kilian (1983) arguing in favour of Central Europe, notably Lithuania, or Witold Mańczak (b.1924), in a variety of publications over the past twenty years, pleading for today's Poland as the location of the Indo-European homeland.²

Before turning to recent proposals, I would like to offer a quick survey of some earlier hypotheses, since this may give an idea of the relative continuity of scholarly discourse regarding the subject and help to dispell the frequently reiterated claim that linguistics in the Third Reich was markedly different of what was said and done before 1933.

Sir William Jones (1746–1794), in 1792, still adhered largely to traditional biblical scholarship, which set the date of the Flood as about 2,350 B.C.; his suggestion for the *Urheimat* was today's Iran (Persia). By the 19th century the idea of Hebrew as the *lingua Adamica* had been abandoned, and the Tower of Babel was no longer used as an explanation for the varieties of languages in the world, though some of these ideas lingered on among members of the educated public. For the first generation of comparative-historical linguists, the prevailing idea was that it must be sought in Asia, not Europe. For Friedrich Schlegel (1808) it was clear that the original home of the Indo-Europeans must have been India, and Bopp followed him on this as in many other ideas (cf. Koerner 1989b: 273–274). For Rask (1818) it was Asia Minor. The concept of *ex oriente lux* held sway for them and others at the time.

By the mid-19th century, the situation began to change. For instance, while Schleicher (1850) proposed the Caspian Sea area as a possible location of the original seat of the Indo-European peoples, the British — not German — scholar Robert Gordon Latham (1812–1888) argued in favour of Lithuania rather than the Indo-Iranian area (Latham 1851). And from about that time onwards we can see the number of possible homelands proposed, not always by linguists but also by archaeologists, cultural historians, and

2. I do not quite know what to make of Vennemann's recent proposals concerning the Indo-Europeans (e.g., Vennemann 1998), and why he thinks that his 'Atlantiker' from the northern tip of Africa who he believes migrated as far as Scandinavia should have been 'Semiten'. Certainly, the Berbers, who have occupied the territory for thousands of years, are not usually counted among them.

amateur writers, beginning to multiply: from Anatolia to the Balkans, from the southern Russian steppes to northern Europe, to central Europe, and eventually to Germany. The arguments in favour of a particular location were manifold, and varied according to the authors' expertise, personal interests or beliefs and, maybe, prejudices. They could be based on matters of climate, geography, history, archaeology, myth, religion, and of course language. More often than not, people seem to have picked a 'pet' location first, and then engaged in selecting their 'evidence' from any field in support of their particular 'theory'.

Adolphe Pictet's (1799–1875) introduction of 'paléontologie linguistique' into the discussion in 1859 added a few more arguments to the debate, not all of them beneficial to the subsequent history of the subject. Pictet made an effort to reconstruct, on the basis of what could be regarded as the common vocabulary of Indo-European before the separation of the common language into different subfamilies, indications of the shared experience, the flora and fauna, of these peoples, whose homeland he placed in India and Persia. Pictet used the term 'Aryan' — originally a linguistic term which the Indo-Iranians had applied to themselves (even though it is correct to say that it was meant by the Indo-Iranians to distinguish themselves from other ethnic groups) — to also characterise these people as representing a superior race.³ Of course, the subject of race was not Pictet's invention; Joseph Arthur, *comte de Gobineau* (1816–1882) had espoused those ideas several years earlier (cf. Pott 1856). But the subject was soon part of the package of the debate and was not going away even though linguists in the 19th century as well as the 20th, including the Nazi period, were insisting that language and race had to be kept apart and not be confused as there are numerous instances in history where people abandoned their original language in favour of another for a variety of reasons, social, political, cultural, and possibly other. So when the Romance scholar Edgar Glässer publishes an *Einführung in die rassenkundliche Sprachforschung* in 1939, much of what can be found there, including the chauvinism, follows much of long-standing scholarship. As Hutton (1999: 48) puts it, "Glässer has served as a convenient 'fall-guy' in

3. Cf. Trautmann (1997) on how British Orientalism reveals the mutual reinforcement of linguistics and race theory from Sir William Jones' Ninth Anniversary Discourse (1792) onward throughout the entire 19th century and beyond, just to dispel the idea that 'Aryanism' was a typically continental European idea.

various accounts of Nazi linguistics, but his 'racial' linguistics was no more or less chauvinist than the 'mother-tongue' linguistics of Kloss and Weisgerber."

To return to the 19th century for a moment, racialist and what we now would call 'white supremacist' views can be traced without any trouble in many scholarly writings, and to dispel the impression that it was largely a German affair, I could refer to books by American authors where we find such ideas expressed, one book entitled *Lectures on the Arya* (Pike 1873), another *The Aryan Race: Its origin and achievements* (Morris 1888), the latter affirming "all the savage tribes of the earth belong to the Negro or Mongolian race [...], the Caucasian is pre-eminently the man of civilization" (23–24), and that it were these Caucasians who had "perfected the Aryan method of language" (p. 51). (Let us remember, however, that 'Aryan' was widely used in lieu of 'Indo-European' in the Anglo-Saxon world and elsewhere, at least until the early 20th century, and certainly not always with 'supremacist' undertones.)

As we know, head shapes, skin pigmentation, hair colour and type (curly, straight, etc.) were taken as particular features to classify races or — as we might prefer to call them today — ethnic type, and we remember from Nazi propaganda that the so-called Nordic race was blond and supposedly exhibited an elongated head form (though it was only one of the race types admitted by the Nazis to the 'Aryan' fold.⁴) But such characteristics were discussed much earlier, in fact throughout much of the 19th and the early 20th century. The American anthropologist Brinton rejected the 'blond Aryan model', arguing that "at the earliest period, both in Europe and Asia, the majority of Aryan-speaking peoples were brunettes" (1890: 147), and that "the original inflected Aryan tongue arose from the coalescing of the two or more uninflected agglutinative or semi-incorporative tongues, the mingling of the speeches being accompanied, as always, by a mingling of blood and physical traits" (p. 149).⁵ For others, this was by no means an acceptable position. Some, frequently linguists, argued in favour of strict separation of particularities of language and matters external to them; others, often

4. In fact there were altogether six recognised categories — *nordisch*, *westisch*, *ostisch*, *dinarisch*, *ostbaltisch* and *fälisch* (Hutton 1999: 323 n.2) — how else could Hitler, Goering, or Goebbels themselves have satisfied the 'nordic' characteristics of blondness, trimness, or able-bodiedness unless all sorts of allowances were made in Nazi discourse?

5. Typically, these are all assertions; no evidence is supplied.

archaeologists and anthropologists, favoured the maintenance of a parallelism between language and race. The ‘historical’ anthropologist Theodor Poesche (1826–1899) for instance went so far to take blondness as a variation of albinism which was found as a frequent feature in the Baltic region, notably the Lithuanian swamps, and concluded that this must have been one indication as to where the original home of the Indo-Europeans ought to be sought; another indication was language. Since Lithuanian was the most archaic Indo-European language, it would have to be there where the original homeland should be found (Poesche 1878). As Mallory (1976 [1973]: xxxii) noted, “While many of the arguments of Poesche were ill received even in his own time, the introduction of physical anthropology ushered in a debate that would rage at least until the end of the Second World War.” But, no doubt, Poesche had followers in his time too (e.g., Penka 1883, 1886).

2.4 *Post-World War II theories of the Indo-European homeland*

Lest we might think that 1945 ended all of this and that from then on, linguistics generally and the discussion of the Indo-European *Urheimat* in particular has become a field entirely free from ideologically coloured arguments, I would like to briefly refer to at least one modern author specifically, whose place in historical-comparative linguistics is well established internationally. I am referring to the Georgian scholar Tomaz Gamkrelidze (b.1929) and his work, which includes proposals for the considerable change of the Proto-Indo-European consonantal system as well as of the location of the original home of the Indo-Europeans. Indeed, Gamkrelidze’s so-called Glottalic Theory is one of the major proposals on the market of ideas in the field, and his Caucasian homeland hypothesis is one of the main current contestants, next to the late Marija Gimbutas’ (1921–1994) Kurgan or Eurasian Steppe hypothesis and Colin Renfrew’s (b.1929) Anatolian Theory. So we cannot argue that we have here to do with a marginal author, outside the main field of Indo-European studies.

Briefly, Gamkrelidze’s argument rests upon a number of areas of investigation, linguistic, including palaeontological, and archaeological.⁶ The

6. I single out Gamkrelidze instead of also naming his one-time Russian collaborator Vjačeslav Vs. Ivanov as well, as it seems that the latter did not engage in the debate of the homeland

archaeological ones have been found rather weak by any authorities in the field I know of (cf. Polomé 1995: 280). The linguistic ones have received at least partial support, notably where the reconstruction of the Proto-Indo-European consonantal system is concerned, though not everybody in Indo-European linguistics agrees with his ancillary typological argument, never mind the apparently long-standing contact — and contact effects — between Indo-European and Kartvelian. What is perhaps more interesting to non-specialists are Gamkrelidze's palaeontological reconstructions as regards the words for fauna and flora supposedly shared by the Indo-Europeans and used in support of his argument in favour of the location of their homeland in the northern slopes of the Caucasus, incidentally at the doorsteps of Gamkrelidze's home country, Georgia.⁷ In her 1994 M. A. thesis, Katrin S. Krell has taken the time and effort to compare a series of lexical items reconstructed in Gamkrelidze and Ivanov (1994 [1984]) and cited in other publications of theirs with the various available etymological dictionaries of Proto-Indo-European reconstructions and/or available cognates (Buck 1949; Pokorny 1959; Mann 1984; Watkins 1992), and found that there are simply no such lexemes to support, for instance, the following affirmation made by these scholars:

Some of these animals [i.e., 'panther', 'lion', 'elephant', 'crab', 'monkey'] are specific to the southern geographic region, which rules out central Europe as a possible territory of habitation of the Indo-European tribes [...]. (Gamkrelidze and Ivanov 1985a: 11; Krell 1994: 41–42)

Likewise, reconstruction such as **Hwei-* 'bird', **k^her-* 'crow, raven', **t^het^h(e)r-* 'black grouse', and several other reconstructions by Gamkrelidze and Ivanov are not paralleled by any of the four above-cited authorities (Krell 1994: 42). As the authors make an all-out effort to support their argument that early Indo-Europeans were agriculturalists, not (as Gimbutas and others would have it) essentially pastoralists with animal raising as their

issue following the publication of Gamkrelidze and Ivanov (1984); seemingly later co-publications are usually translations from the Russian of earlier joint articles. Cf. Gamkrelidze (1987, 1990) for later contributions to the on-going discussion.

7. Not having had a soul-searching discussion with Prof. Gamkrelidze (whom I have known since we first met at the 1972 Bologna Congress of Linguists) about his possible motivation for locating the Indo-European homeland where he does, I cannot of course honestly attribute particular motives to him for doing so, but the coincidence is nevertheless striking.

major food supply, they offer an array of reconstructions such as the following: **solk^hu-* 'furrow', **serp^h-* 'sickle', **(e)s-en-* 'time of harvest', and **k'orau-* 'millstone',⁸ none of which are supported by Buck and the other scholars. By contrast, while there are indeed terms for 'to plow' and 'to sow' in the Indo-European lexicon in these dictionaries which would suggest that the Indo-Europeans had some familiarity with agricultural practice, there seem to be common words for 'pasture (noun and verb)', 'wool', and others not mentioned by Gamkrelidze and Ivanov, which are well attested in Pokorny (1959), Mann (1984), and Watkins (1992) such as those meaning such things as 'to break in a horse', 'to ride', and 'to milk' (Krell 1994: 45). Given these few examples, it would be rather difficult to decide, on palaeontological grounds, in favour of the claim that our Indo-European ancestors were indeed agriculturalists, as the archaeologist Renfrew (1987) has argued on different grounds, but which Gamkrelidze (1990) supported enthusiastically, although their relative chronologies are some two thousand years apart.

3. Desiderata in the linguistic historiography of past centuries

Recent publications in other fields such as archaeology (e.g., Arnold and Hassmann 1995) and folklore (e.g., Dow and Lixfeld 1994) have suggested to me that the field of linguistics likewise was in need of a similar kind of soul searching. Some efforts in this direction had previously been made, notably by Rõmer (1989), Olender (e.g., 1996) and, earlier, by Poliakov (1974, cf. Leopold 1977), but these authors focused almost exclusively on the subject of race and racism and their connections with linguistic theorising and political ideologies, a connection which by the mid-19th century most linguists — and not only since Saussure's *Cours* in 1916 — had come to regard as something that must be kept completely separate from linguistic matters, a view which was often maintained even during the fateful years of the Hitler regime (e.g., Wahle 1941; Siegert 1941/1942; Rohlf's 1943), even by scholars with Nazi sympathies or affiliations (as Hutton points out again and again throughout his book; cf., e.g., pp. 55–56, 257–258).

8. Interestingly, Gamkrelidze and Ivanov leave out, for instance, the reconstructions for 'hand mill' and 'kernel' found in Buck (1949) and the other three dictionaries mentioned earlier (cf. Krell 1994: 44).

In fact, Hutton's *Linguistics and the Third Reich* (1999) investigates by no means solely those horrendous twelve years of German history, but goes back well into the mid-19th century — and even as far back as Sir William Jones' famous 'philologist' passage of 1786 — in an attempt to explain what is generally — and erroneously — taken as an aberration in linguistics (and other disciplines) during the 1933–1945 period in Germany, where indeed we have to do with a complex of ideas and theories with a long scholarly tradition. Hutton's work brought home to me the urgency and heightened recognition that much more careful, detailed, and honest research needs to be undertaken in order to come to grips with what really happened in linguistics during the Nazi period and to what extent, apart from the particular external, political conditions which produced a certain number of careerists and a few charlatans, linguistics was indeed conducted along lines different from what had been done before. It is Hutton's (1998:3–4, 260–261) persuasively argued view that much of what was said and done in linguistics during the Third Reich, in historical-comparative Indo-European philology as well as in descriptive 'structuralist' linguistics, had its seeds in earlier, often quite respectable and well-established disciplinary practice and scholarly discourse, and was not all that much different from what was advocated and practised during 1933–1945. This recognition may come as a shock to many 20th-century historians of linguistics, few if any of whom have made an effort to actually study the scholarly production during the 1933–1945 period in Germany and Austria closely. In fact, in the standard histories of linguistics one usually draws a complete blank when it comes to dealing with the Nazi era; instead, the work in many other parts in Europe at the time, notably pre-war Prague, Copenhagen, Geneva, possibly Paris, and in North America, is treated at length in these textbook accounts.

In other words, lest linguistic historiography be regarded as an exercise which takes 'the high road' and chooses to leave difficult issues out of its (often 'triumphalist') narrative, the field must learn to accept that linguistics, past and present, has never been 'value free', but has often been subject to a variety of external influences and opinions, not all of them beneficial to either the discipline itself or the society that sustains it. In the final analysis, it comes to a matter of *prise de conscience* and of intellectual honesty and responsibility that linguists must become aware of the possible uses and abuses to which their research posture and their findings have been or could be put. Let us not be misled: the 'generative paradigm' of so-called 'modern

linguistics' associated with the name of Noam Chomsky, both in its theoretical claims (e.g., 'universal grammar') and its research practice is far from being devoid of ideological content. To demonstrate this, however, would amount to more than another paper.

Acknowledgments

I would like to thank three anonymous readers of an earlier version of this paper for their critical comments; if I have not followed all of their suggestions, I am the only one to blame for all remaining blemishes.

References

- Aarsleff, Hans. 1988. "Introduction". In W. von Humboldt, *On Language: The diversity of human language structure and its influence on the mental development of mankind*, transl. by Peter Heath, vii-lxv. Cambridge: Cambridge University Press.
- Amsterdamska, Olga. 1987. *Schools of Thought: The development of linguistics from Bopp to Saussure*. Dordrecht: Reidel.
- Arnold, Bettina and Hassmann, Henning. 1995. "Archaeology in Nazi Germany: The legacy of the Faustian bargain". In P. Kohl and C. Fawcett (eds), *Nationalism, Politics and the Practice of Archaeology*. Cambridge: Cambridge University Press, 70–81.
- Benfey, Theodor. 1869. *Geschichte der Sprachwissenschaft und orientalischen Philologie in Deutschland seit dem Anfange des 19. Jahrhunderts, mit einem Rückblick auf die früheren Zeiten*. Munich: J. G. Cotta. (Repr. New York: Johnson, 1965.)
- Bopp, Franz. 1840a. "Review of Humboldt (1836–1939)". *Jahrbücher für wissenschaftliche Kritik* (Berlin) Jahrgang 1840, Band 2, cols. 697–741 (Nov.).
- . 1840b. "Über die Verwandtschaft der malayisch-polynesischen Sprachen mit den indisch-europäischen". *Abhandlungen der Königlich-Preussischen Akademie der Wissenschaften; Philologische und historische Classe* 1839, 187–272. (Separate publication, Berlin: Ferdinand Dümmler, 1839. Also repr. in *Kleine Schriften zur vergleichenden Sprachwissenschaft: Gesammelte Berliner Abhandlungen, 1824–1854*, 235–310. Berlin: Zentralantiquariat der DDR, 1972.)
- Boudon, Raymond. 1986. *L'idéologie ou l'origine des idées reçues*. Paris: Fayard.
- Brinton, Daniel Garrison. 1890. *Essays of an Americanist*. Philadelphia: Porter and Coates.
- . 1891. *The American Race: A linguistic classification and ethnographic description of the native tribes of North and South America*. New York: N. D. C. Hodgers.
- Buck, Carl Darling. 1949. *A Dictionary of Selected Synonyms in the Principal Indo-European Languages: A contribution to the history of ideas*. Chicago: The University of Chicago Press.

- Buschmann, Johann Carl Eduard. 1842. "Asiatischer Archipelagus und Australien: Der malayische Sprachstamm". *Magazin für die Literatur des Auslandes* (Berlin) Nr. 26, 2 March 1842, cols.1–2.
- Černý, Jiří. 1998. *Historia de la Lingüística*. Cáceres: Universidad de Extremadura.
- Collinge, N.E. 1995a. "History of Comparative Linguistics". Koerner and Asher, 195–202.
- . 1995b. "History of Historical Linguistics". Koerner and Asher, 203–212.
- Delbrück, Berthold. 1882 [1880]. *Introduction to the Study of Language: A critical survey of the history and methods of comparative philology of Indo-European languages*. Leipzig: Breitkopf and Härtel. (New ed., with an introduction by E. F. K. Koerner, Amsterdam and Philadelphia: John Benjamins, 1974; 2nd printing, 1989.)
- Dow, James and Lixfeld, Hannjost (eds). 1994. *The Nazification of an Academic Discipline: Folklore in the Third Reich*. Bloomington, Ind.: Indiana University Press.
- Eagleton, Terry. 1991. *Ideology: An introduction*. London and New York: Verso.
- Einhauser, Eveline. 1996. "Grammatikschreibung in der Tradition der Historischen Grammatik: Ein Ausblick auf das 20. Jahrhundert". Schmitter: 216–243.
- Gamkrelidze, Thomas V. 1987. "Neueres zum Problem der indogermanischen Ursprache und der indogermanischen Urheimat". *Zeitschrift für vergleichende Sprachforschung* 100,2: 336–377.
- . 1990. "On the problem of an Asiatic homeland of the Proto-Indo-Europeans". Markey and Greppin 1990: 5–14.
- Gamkrelidze, Thomas V. and Vs. Ivanov, Vjačeslav. 1984. *Indoevropskij Jazyk i Indoevropejcy: Rekonstrukcija i istoriko-tipologičeskij analiz prajazyka i protokul'tury* [Indo-European and the Indo-Europeans: A reconstruction and historical typological analysis of a protolanguage and a protoculture]. 2 vols. Tbilisi, Georgia: Publishing House of the Tbilisi State University.
- . 1985a. "The migration of the tribes speaking the Indo-European dialects from their original homeland in the Near East to their historical habitations in Eurasia". *Journal of Indo-European Studies* 13: 49–91.
- . 1985b. "The problem of the original homeland of the Indo-European languages". *Journal of Indo-European Studies* 13: 176–184.
- . 1994 [1984]. *Indo-European and the Indo-Europeans*. Transl. from Russian by Johanna Nichols. 2 vols. Berlin: Walter de Gruyter. [Volume II constitutes a — rather dated — bibliography on the subject.]
- Gardt, Andreas. 1999. *Geschichte der Sprachwissenschaft in Deutschland: Vom Mittelalter bis ins 20. Jahrhundert*. Berlin and New York: Walter de Gruyter.
- Gimbutas, Marija. 1985. "Primary and secondary homeland of the Indo-Europeans". *Journal of Indo-European Studies* 13: 185–202.
- Glässer, Edgar. 1938. "Das Weltbild des indogermanischen Satzbaues". *Wörter und Sachen: Zeitschrift für indogermanische Sprachwissenschaft, Volksforschung und Kulturgeschichte*, Neue Folge, 1: 94–115.
- . 1939. *Einführung in die rassenkundliche Sprachforschung: Kritisch-historische Untersuchungen*. Heidelberg: Carl Winter.

- Huck, Geoffrey J. and Goldsmith, John A. 1995. *Ideology and Linguistic Theory: Noam Chomsky and the deep structure debates*. London and New York: Routledge.
- Humboldt, Wilhelm von. 1836. *Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts*. Berlin: Ferdinand Dümmler.
- . 1836–1839. *Über die Kawi-Sprache auf der Insel Java nebst einer Einleitung über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts*. Ed. by Joh. Carl Ed. Buschmann, 3 vols. Berlin: Druckerei der Königlichen Akademie.
- Hutton, Christopher M. 1999. *Linguistics and the Third Reich: Mother-tongue fascism, race and the science of language*. London: Routledge.
- Jankowsky, Kurt R. 1972. *The Neogrammarians: A Re-evaluation of their place in the development of linguistic science*. The Hague: Mouton.
- Joseph, John E. 1999. "A matter of *Consequenz*: Humboldt, race and the genius of the Chinese language". *Historiographia Linguistica* 26,1/2: 89–148.
- Joseph, John E. and Taylor, Talbot J. (eds). 1990. *Ideologies of Language*. London: Routledge.
- Kilian, Lothar. 1983. *Zum Ursprung der Indogermanen: Forschungen aus Linguistik, Prähistorie und Anthropologie*. Bonn: Rudolf Habelt.
- Kloss, Heinz. 1929. *Nebensprachen: Eine sprachpolitische Studie über die Beziehungen eng verwandter Sprachgemeinschaften (Niederländisch, Deutsch, Jiddisch, Afrikaans, Friesisch, Pennsylvaniadeutsch)*. Wien: Braumüller.
- . 1941a. *Brüder vor den Toren des Reiches: Vom volksdeutschen Schicksal*. (= *Nationalpolitische Aufklärungsschriften*, herausgegeben mit Einvernehmen mit dem deutschen Ausland-Institut, Stuttgart, Heft 18.) Berlin: Paul Hochmuth. (2nd printing, 1942.)
- . 1941b. "Der sprachliche Rahmen der Nationalitätenfrage in Grossbritannien und Irland". *Zeitschrift für Geopolitik* 18: 324–328.
- . 1952. *Die Entwicklung neuer germanischer Kultursprachen von 1800 bis 1950*. München: Pohl. (2nd ed., 1978.)
- Koerner, E. F. K[onrad]. 1975 [1972]. "European structuralism — early beginnings". In T. A. Sebeok (ed.), *Current Trends in Linguistics*, Vol. XIII: *Historiography of Linguistics*. The Hague: Mouton, 717–827.
- . (ed.). 1976. *Victor Hehn: Cultivated plants and domesticated animals in their migration from Asia to Europe: Historico-linguistic studies*. (= *Amsterdam Classics in Linguistics 1800–1925*, 7.) Amsterdam and Philadelphia: John Benjamins.
- . 1981a. "Observations on the sources, transmission, and meaning of 'Indo-European' and related terms in the development of linguistics". *Indogermanische Forschungen* 86: 1–31. (Repr. in Koerner 1989b: 149–177.)
- . 1981b. "Schleichers Einfluß auf Haeckel: Schlaglichter auf die wechselseitige Abhängigkeit zwischen linguistischen und biologischen Theorien im 19. Jahrhundert". *Zeitschrift für vergleichende Sprachforschung* 95,1: 1–21. (Repr. in Koerner 1989b: 211–231.)

- . 1982. "The Schleicherian paradigm in linguistics". *General Linguistics* 22: 1–39. (Revised and extended version republished in Koerner 1989b: 325–375.)
- . 1987. "Friedrich Schlegel and the emergence of historical-comparative grammar". *Lingua e Stile* 22,3: 341–365.
- . 1989b. *Practicing Linguistic Historiography: Selected essays*. (= *Studies in the History of the Language Sciences*, 50.) Amsterdam and Philadelphia: John Benjamins.
- . 1993. "The natural-science background to the development of historical-comparative linguistics". In H. Aertsen and R. J. Jeffers (eds), *Historical Linguistics 1989: Papers from the 9th International Conference on Historical Linguistics (Rutgers University, August 1989)*. Amsterdam and Philadelphia: John Benjamins, 1–25. (Revised version published as Chapter 3 in Koerner 1995b: 47–76.)
- . 1995a. "History of typology and language classification". Koerner and Asher 1995: 212–217.
- . 1995b. *Professing Linguistic Historiography*. (= *Studies in the History of the Language Sciences*, 79.) Amsterdam and Philadelphia: John Benjamins.
- . 1996. "Toward a history of linguistic typology". In J. Fisiak (ed.), *Linguistic Reconstruction and Typology*. Berlin and New York: Mouton de Gruyter, 1–23.
- . Forthcoming. "Ideology in 19th and 20th century historical-comparative Indo-European linguistics, notably in Germany". *Indogermanische Forschungen* 105, 1.
- Koerner, E. F. Konrad and Asher, R. E. (eds). 1995. *Concise History of the Language Sciences: From the Sumerians to the Cognitivists*. Oxford and New York: Pergamon Press.
- Krell, Kathrin Susanne. 1994. Modern Indo-European homeland hypotheses: A critical examination of linguistic arguments. M. A. thesis, University of Ottawa, Ottawa, Canada.
- Kress, Gunther R. and Hodge, Robert. 1993 [1979]. *Language as Ideology*. 2nd ed. London: Routledge.
- Latham, Robert Gordon. 1851. *The Germania of Tacitus, with Ethnological Dissertations and Notes*. London: Taylor, Walton and Maberly.
- Leopold, Joan. 1977. "Review of Poliakov (1974)". *Historiographia Linguistica* 4, 3: 401–406.
- Mallory, James P. 1973. "A short history of the Indo-European problem". *Journal of Indo-European Studies* 1: 21–65. (Revised version published in Koerner 1976: xii–lxxv.)
- . 1989. *In Search of the Indo-Europeans: Language, Archaeology, and Myth*. London: Thames and Hudson.
- Malmberg, Bertil. 1991. *Histoire de la linguistique de Sumer à Saussure*. Paris: Presses Universitaires de France.
- Mann, Stuart Edward. 1984. *An Indo-European Comparative Dictionary*. Hamburg: Helmut Buske.
- Markey, Thomas L. and Greppin, John A. C. (eds). 1990. *When Worlds Collide: Indo-Europeans and Pre-Indo-Europeans*. Ann Arbor, Mich.: Karoma Press.
- Morris, Charles. 1888. *The Aryan Race: Its origin and achievements*. Chicago: Griggs.

- Mueller-Vollmer, Kurt. 1993. *Wilhelm von Humboldts Sprachwissenschaft: Ein kommentiertes Verzeichnis des sprachwissenschaftlichen Nachlasses*. Mit einer Einleitung. Paderborn: Ferdinand Schöningh.
- Olender, Maurice. 1996. "Der arisch-semitische Streit zu Beginn der modernen Sprachwissenschaft". In M. Dascal et al. (eds), *Sprachphilosophie/Philosophie du langage/Philosophy of Language*, Vol. II. Berlin and New York: Walter de Gruyter, 943–952.
- Pedersen, Holger. 1931 [1924]. *Linguistic Science in the Nineteenth Century*. Transl. from Danish by John Webster Spargo. Cambridge, Mass.: Harvard University Press. (Repr., under the title 'The Discovery of Language', Bloomington, Ind.: Indiana University Press, 1962.)
- Penka, Karl. 1883. *Origines Ariacae: Linguistisch-ethnologische Untersuchungen zur ältesten Geschichte der arischen Völker und Sprachen*. Vienna and Teschen: Prochaska.
- . 1886. *Die Herkunft der Arier: Neue Beiträge zur historischen Anthropologie der europäischen Völker*. Vienna and Teschen: Prochaska.
- Pictet, Adolphe. 1859–1863. *Les Origines Indo-européennes; ou, les Aryas Primitifs: Essai de paléontologie linguistique*. 2 vols. Paris: Cherbuliez. (2nd ed., 3 vols., Paris: Sandoz and Fischbacher, 1877.)
- Pike, Albert. 1873. *Lectures on the Arya*. Louisville, Kentucky: The Standard Printing Co.
- Poesche, Theodor. 1878. *Die Arier: Ein Beitrag zur historischen Anthropologie*. Jena: Hermann Cosenoble.
- Pokorny, Julius. 1959. *Indogermanisches etymologisches Wörterbuch*. 2 vols. Berne: Francke.
- Poliakov, Léon. 1974. *The Aryan Myth*. London: Chatto Heinemann/Sussex University Press.
- Polomé, Edgar. 1994. "Indo-European studies since the Neogrammarians". In G.E. Dunkel et al. (eds), *Früh-, Mittel-, Spätindogermanisch: Akten der IX. Fachtagung der Indogermanischen Gesellschaft vom 5. bis 9. Oktober 1992 in Zürich*. Wiesbaden: Ludwig Reichert, 295–314.
- . 1995. "The development of Indo-European studies 1870–1933 [actually: 1993]". In K. R. Jankowsky (ed.), *History of Linguistics 1993: Papers from the Sixth International Conference on the History of the Language Sciences (ICHoLS VI)*. Amsterdam and Philadelphia: John Benjamins, 265–290.
- Pott, August Friedrich. 1856. *Die Ungleichheit menschlicher Rassen hauptsächlich vom sprachwissenschaftlichen Standpunkte, mit besonderer Berücksichtigung von des Grafen von Gobineau gleichnamigen Werke. Mit einem Ueberblick über die Sprachverhältnisse der Völker. Ein ethnologischer Versuch*. Lemgo and Detmold: Meyer.
- Raumer, Rudolf von. 1870. *Geschichte der germanischen Philologie*. Munich: J. G. Cotta. (Repr., New York: Johnson, 1965.)
- Renfrew, Colin. 1987. *Archaeology and Language: The puzzle of Indo-European origins*. London: Jonathan Cape; New York: Cambridge University Press, 1988.
- Robins, Robert H. 1997 [1967]. *A Short History of Linguistics*. 5th ed. London: Longman.

- Rohlf, Gerhard. 1943. "Bibliographie mit kurzen Anzeigen (Französisch)". *Archiv für das Studium der Neueren Sprachen* 183: 58–64.
- Römer, Ruth. 1989 [1985]. *Sprachwissenschaft und Rassenideologie in Deutschland*. 2nd rev. ed. Munich: Wilhelm Fink.
- Schieffelin, Bambi B., Woolard, Kathryn A. and Kroskrity, Paul V. (eds). 1998. *Language Ideologies: Practice and theory*. (= *Oxford Studies in Anthropological Linguistics*, 16.) New York and Oxford: Oxford University Press.
- Schlegel, Friedrich. 1808. *Ueber die Sprache und Weisheit der Indier: Ein Beitrag zur Begründung der Alterthumskunde*. Heidelberg: Mohr and Zimmer. (New ed., with an introduction by Sebastiano Timpanaro, Amsterdam: John Benjamins, 1977.)
- Schleicher, August. 1850. *Die Sprachen Europas in systematischer Uebersicht*. Bonn: H. B. König. (New ed., with an introduction by Konrad Koerner, Amsterdam and Philadelphia: John Benjamins, 1983.)
- Schmitter, Peter, ed. 1996. *Sprachtheorien der Neuzeit II: Von der Grammaire de Port-Royal (1660) zur Konstitution moderner linguistischer Disziplinen*. Tübingen: Gunter Narr.
- Schneider, Gisela. 1973. *Zum Begriff des Lautgesetzes in der Sprachwissenschaft seit den Junggrammatikern*. Tübingen: Tübinger Beiträge zur Linguistik.
- Siebert, Hans. 1941/1942. "Zur Geschichte der Begriffe 'Arier' und 'arisch'". *Wörter und Sachen: Zeitschrift für indogermanische Sprachwissenschaft, Volksforschung und Kulturgeschichte*, N. F. 4: 73–99.
- Simpson, Paul. 1993. *Language, Ideology and Point of View*. London: Routledge.
- Sweet, Paul R. 1989. "Review of Aarsleff (1988)". *Historiographia Linguistica* 16: 387–392.
- Townson, Michael. 1992. *Mother-Tongue and Fatherland: Language and politics in German*. Manchester: Manchester University Press.
- Trautmann, Thomas R. 1997. *Aryans and British India*. Berkeley: University of California Press.
- Trier, Jost. 1931. *Der deutsche Wortschatz im Sinnbezirk des Verstandes: Die Geschichte eines sprachlichen Feldes*. Part I: *Von den Anfängen bis zum Beginn des 13. Jh.* Heidelberg: Carl Winter.
- . 1939. "Warum studieren wir die Geschichte unserer Muttersprache?". In A. Huhnuser, A. Pudewil and K. Jacoby (eds), *Beiträge zum neuen Deutschunterricht* (= *Deutsche Volkserziehung; Schriftenreihe für Erziehung und Unterricht*, Heft 4.) Frankfurt am Main: Diesterweg, 3–10.
- . 1943a. "Vorgeschichte des Wortes 'Reich'". *Göttingische Gelehrte Anzeigen* 205: 423–426.
- . 1943b. "Der Name Germanen". *Die Welt als Geschichte* 9: 83–86.
- . 1973 [1968]. "Altes und Neues vom sprachlichen Feld". In A. van der Lee and O. Reichmann (eds), *Aufsätze und Vorträge zur Wortfeldtheorie*. The Hague: Mouton, 179–187.
- Vennemann, Theo. 1998. "Basken, Semiten, Indogermanen: Urheimatfragen in linguistischer und anthropologischer Sicht". In W. Meid (ed.), *Sprache und Kultur der Indogermanen: Akten der X. Fachtagung der Indogermanischen Gesellschaft*,

- Innsbruck, 22. — 28. September 1996. Innsbruck: Institut für Sprachwissenschaft der Universität, 119–138.
- Wahle, Ernst. 1941. *Zur ethnischen Deutung frühgeschichtlicher Kulturprovinzen.* (= *Sitzungsberichte der Heidelberger Akademie der Wissenschaften*; Phil.-historische Klasse, 3:2 [1936–1940].) Heidelberg: Carl Winter.
- Watkins, Calvert. 1992. "Indo-European roots appendix". *The American Heritage Dictionary of English Language.* Boston–New York–London: Houghton Mifflin, 2081–2134.
- Weisgerber, Johann Leo. 1925. "Wortfamilien und Begriffsgruppen in den indo-germanischen Sprachen". Probevorlesung vor der Philosophischen Fakultät der Rheinischen Friedrich-Wilhelms-Universität Bonn am 23. Mai 1925. Bonn. (Repr. in Weisgerber 1964.15–35.)
- . 1929. *Muttersprache und Geistesbildung.* Göttingen: Vandenhoeck and Ruprecht.
- . 1934. "Sprachgemeinschaft und Volksgemeinschaft und die Bildungsaufgabe unserer Zeit". *Zeitschrift für Deutsche Bildung* 10: 289–303.
- . 1940. "Theudisk": *Der deutsche Volksname und die westliche Sprachgrenze.* (= *Marburger Universitätsreden*, 5.) Marburg: Elwert.
- . 1943 [1939]. *Die volkhaften Kräfte der Muttersprache.* 3rd ed. Frankfurt am Main: Moritz Diesterweg. [Originally published in *Beiträge zum neuen Deutschunterricht.* Herausgegeben von Ministerialrat Dr. Huhnhäuser. Frankfurt am Main: Diesterweg, 1939.]
- . 1944. "Deutsch und Welsch: Die Anfänge des Volksbewusstseins in Westeuropa". (= *Antrittsvorlesungen der Rheinischen Friedrich-Wilhelms-Universität Bonn am Rhein*, Heft 27.) Bonn: Bonner Universitäts-Buchdruckerei.
- . 1964. *Zur Grundlegung der ganzheitlichen Sprachauffassung: Aufsätze 1925–1933.* Ed. by Helmut Gipper. Düsseldorf: Schwann.
- . 1967. *Die Sprachgemeinschaft als Gegenstand sprachwissenschaftlicher Forschung.* Cologne: Westdeutscher Verlag.
- Whitney, William Dwight. 1867. *Language and the Study of Language: Twelve lectures on the principles of linguistic science.* New York: Charles Scribner and Co.
- Wilbur, Terence H., ed. and introd. 1977. *The Lautgesetz-Controversy: A documentation (1885–1886).* Amsterdam and Philadelphia: John Benjamins.
- Woolard, Kathryn A. 1998. "Introduction: Language ideology as a field of inquiry". In Schieffelin et al. 1998: 3–47.

Cultural and Conceptual Relativism, Universalism and the Politics of Linguistics

Dilemmas of a would-be progressive Linguistics

Christopher Hutton
University of Hong Kong

1. Introduction

This paper seeks to make a contribution to the understanding of linguistics as ideology and to the politics of ‘world view’. It investigates the tensions between a cultural relativism frequently imagined as politically enlightened and a universalism conceived of as scientifically sanctioned or objective. Both relativism and universalism in various forms have proved attractive to linguists, either as explicit intellectual positions or as implicit or background assumptions to linguistic theorising. For example, the claim to represent a relativistic position, to respect the ‘world views’ of different cultures, is frequently presented as politically liberal or progressive, particularly in the context of language ecology and language rights advocacy. However other approaches — not necessarily in fundamental contradiction — rely on an objective standpoint gained through linguistic analysis. Ideological criticisms of metaphor in public discourse, exemplified in analyses of the language of politicians and media, rely on the availability of linguistic analysis as a universal meta-language. Clearly, distortion and manipulation can only be identified by reference to some form of objectivity. But distortion and manipulation are also pejorative terms for ‘world view’. How do we distinguish legitimate differences in world view between cultures from pathological or manipulative forms of discourse?

2. Whorf: World view relativist or objectivist?

One of the more celebrated exemplary tales in the history of 20th-century linguistics is Benjamin Whorf's (1897–1941) description, in his essay "The relation of habitual thought and behaviour to language", of how the label *empty*, when applied to a gasoline drum, became a fire-hazard (Whorf 1956 [1941]: 135):

Physically the situation is hazardous, but the linguistic analysis according to regular analogy must employ the word 'empty', which inevitably suggests lack of hazard. The word 'empty' is used in two linguistic patterns: (1) as a virtual synonym for 'null and void, negative, inert'; (2) applied in analysis of physical situations without regard to, e.g. vapor, liquid vestiges, or stray rubbish, in the container.

A single term, *empty*, can be used to describe a diverse set of phenomena in the world. This illustrates how the linguistic 'map' is much simpler than the 'territory'; to forget this by allowing one's direct awareness of reality to be dulled is to be vulnerable to the map's limitations.

The practical orientation of the opening section of Whorf's essay soon gives way to consideration of more philosophical issues such as plurality, number, quantity, etc. English has 'real plurals and imaginary plurals' since we say not only *ten men* but also *ten hours*, making a false analogy between two different ontological realms. How does this come about? "Just as in the case of the fire-causing errors, from the fact that our language confuses the two different situations, has but one pattern for both" (1956: 139). The Hopi language does not share this defect (1956: 140): "In Hopi there is a different linguistic situation. Plurals and cardinals are used only for entities that form or can form an objective group."

Whorf's work as a whole seems to take a political stance in defending conceptual relativism and native American cultures from the charge of being 'primitive' in the pejorative sense of that term. But it also points towards a merger of science and culture and a rational alignment of language, thought and reality. In this spirit, it offers a sustained critique of what Whorf termed Standard Average European (SAE) as a model of reality, and suggests that Hopi is superior. This judgement is based on Whorf's overall understanding of Hopi as less prone to false reifications, false abstractions and misleading metaphorical conversions between different ontological realms. Flux,

subjectivity, a relative understanding of time are juxtaposed to the essentialism and false oppositions found in English and other European languages.

One could argue for two quite separate cultural-political positions and call both of them 'Whorfian'. The first view runs as follows. Human beings are strongly influenced in their understanding of the world by the language they learn as a child; these understandings may vary widely between different cultures and also in respect of their level of abstraction. Modern science teaches us that the world is made up of energy fields in flux; the concrete reality we see before us is an illusion; categories like time and space cannot be reduced to our common sense understandings. The conclusion to be drawn here is that in order to understand the world we should strive to merge science and culture. Being modern may make us think more like the Hopi, but that is only because the world-view Hopi offers is — ironically — much closer to that offered by modern science. The Hopi have been spared the scholasticism of Western culture, its reifications and two-valued logic; they are naive scientists who have escaped the deadening effects of Western language culture. The conclusion to draw from this is that Western thought can use Hopi as a corrective to our thinking, but that this corrective can also be found by attending to the advances in modern science and in applying deconstructive techniques to SAE languages.

The second would be an ecology argument, now familiar in language rights and 'endangered language' advocacy. Different languages offer us special insights into how the world works; they have their own understandings of time and space; they have complex taxonomies of the natural world; they have rich and complex systems of exchange which enable them to manage conflict. From this point of view, there is no theory-neutral stance from which to view the world; there are no grounds to assert the superiority of one cultural point of view over another. We should therefore strive to protect the diversity of the world's languages, just as we strive to protect its diversity in other spheres. Lakoff (1987: 337) puts this as follows: "Just as the gene pool of a species needs to be kept diverse if the species is to survive under a wide variety of experiences, so I believe that diverse ways of comprehending experience are necessary to our survival as a species. I believe that vanishing cultures and languages need to be protected just as vanishing species do."

The first view might be considered universalistic; the second represents one of the possible forms of cultural relativism. At least superficially, this

looks like a clash between modernity and cultural diversity.¹ For the view that culture and science should merge is at odds with the ecological view of linguistic diversity. We could similarly distinguish between a feminist linguistics that seeks to promote a levelling of difference, or at least a therapeutic awareness of difference (e.g. Tannen 1990), and one which seeks to recover, reconstruct, create and celebrate women's language as representing an autonomous culture (Spender 1990; Daly 1994).

3. Universalistic tendencies in critical language awareness

The promotion of therapeutic awareness of how language constructs the world for us has been the aim of a movement called General Semantics. This movement is associated with Alfred Korzybski (1879–1950), Charles Morris (1901–1979), S.I. Hayakawa (1906–1992), Anatol Rapoport (1911–) and Stuart Chase (1888–1985). General Semantics offers a critique of Western thought (as exemplified in the philosophy of Aristotle), and in particular of the so-called 'law of identity', the proposition that 'A is A'. Chase (1955: 145) explained this principle as recognition that "no two events in nature are identical", adding: "This proposition is accepted by modern scientists. It runs counter to the 'is of identity' in Indo-European languages and to the 'A is A' of formal logic." Whorf's cautionary tales of fire accidents are very much in the spirit of General Semantics, but so also are his more philosophical criticisms of English. In General Semantics, therapeutic awareness of language takes the form of attending to the level of abstraction of the concepts one is using and of taking direct note of the reality to which they are referring. Whorf's influence is apparent in Chase's claim that (1955: 146)

[e]vents in nature are four-dimensional. Modern physicists, as well as the Hopi Indians, think in terms of space-time. Some other languages are structured for three dimensions, and those who speak them have difficulties with the concept of time.

1. In this paper, I distinguish between modernity, which I associate with modern secular societies, mass media, Western-style democracy, the welfare state, white-collar values, consumerism, and the institutions investigated by Foucault: clinics, prisons, schools, etc., and modernism, by which I mean primarily an avant-garde movement in the arts and literature. Many modernists were in this sense anti-modernity and embraced fascism and militarism as a life-enhancing attack on 'bourgeois soul-death'.

The scientific realism is apparent in the key slogan that “a map is not the territory”, which is explained by Chase as the view that “[o]ur words are not nature but their structure should correspond to the structure of nature if we are to understand the world.”²

In this deconstruction of the categories of Western thought, not only Native American languages but also Eastern languages, particularly Chinese, were adduced as evidence. English and other Western languages were alleged to employ simplistic dualities (antonymies) that did not allow for the complex nature of reality. Eastern languages were ‘multi-valued’. This is how Chase explains the contrast between East and West (1955: 106):

Linguists have [...] emphasized that Chinese is a ‘multi-valued’ language, not primarily two-valued like English and Western languages generally. We say that things must be ‘good’ or ‘bad’, ‘right’ or ‘wrong’, ‘clean’ or ‘dirty’, ‘capitalistic’ or ‘socialistic’, ‘black’ or ‘white’ — ignoring shades of gray. [...] Speakers of Chinese set up no such grim dichotomies; they see most situations in shades of gray, and have no difficulty in grasping the significance of a variety of middle roads. As a result, Chinese thought has been traditionally tolerant, not given to the fanatical ideologies of the West. Racial, religious, and doctrinal conflicts have been hard to maintain in China, because a Chinese speaker does not possess an unshakable confidence that he is totally right and that you are totally wrong. Observe that this is not a moral judgment, but structural in the language.

Chase then considered the prospects for Marxism in China, noting that the Chinese leadership had accepted it (1955: 106–107):

Marxism in China? [...] Russian is an Indo-European language, and the two-sided choice is readily accepted by its speakers. The choice was accepted, too, by top leaders of the Chinese communists today, for they went to Moscow to be indoctrinated, and to learn the Russian language. But 400 hundred million Chinese have not been to Moscow or learned Russian or any other Indo-European language. [...] In any event, the language barrier to Marxism is formidable.

This view of non-Western languages found something in common between Chinese and Native American languages. Much suspicion was directed at the

2. Whorf was less than enthusiastic about Chase and anxious not to be associated with him (Lee 1996: 16).

verb *to be*, for it was held that this verb was often misleading because it asserts a false identification. Chase continues (1955: 107):

The Wintu Indians of North America are even more shy of the law of identity (A is A) than the Chinese, says D[orothy] D. Lee, writing in the *International Journal of American Linguistics*. We say, 'this is bread', but in Wintu they say, 'we call this bread'. They avoid the 'is of identity', and so are less likely to confuse words with things. When a Wintu speaks of an event not within his own experience, he never affirms it but only suggests, 'perhaps it is so'.

The attack on the categories of Western languages can be seen as a fundamental tendency in Western thought in the 20th-century and it is closely tied to the academic and popular reception of Eastern thought. (On Orientalism, see discussion below.) Deconstruction within literary theory, with its attacks on the foundational dichotomies of Western thought, and its logophobia, is one of its many intellectual manifestations. Deconstruction — not least through Heidegger (1889–1976) — also has links to what could be termed Western Taoism, the complex popular and academic reception of Taoist and Zen Buddhist thought in the West. For example, during the summer of 1946 Heidegger — now banned from teaching as a former Nazi Party member — retired to his mountain cabin at Todtnauberg in the Black Forest and worked once a week with Paul Hsiao on a translation of the *Tao Te Ching* (Hsiao 1990).³

What these currents have most strongly in common is a rejection of Western language structures and the associated world-view. Daisetz Suzuki (1870–1966) formulated the contrast between West and East as follows (1963: 10):

In the West, 'yes' is 'yes' and 'no' is 'no'; 'yes' can never be 'no' or vice versa. The East makes 'yes' slide over to 'no' and 'no' to 'yes'; there is no hard and fast division between 'yes' and 'no'. It is in the nature of life that it is so. It is only in logic that the division is ineradicable. Logic is human-made to assist in utilitarian activities.

Writing in *Etc.: A review of General Semantics*, Morris (1951: 3) discussed the similarities and differences between Korzybski's view of language and Zen Buddhism as interpreted by Suzuki:

3. Hsiao Shih-yi had come to Germany after studies in China and Italy, and audited Heidegger's lectures during the war. This is not to suggest that Heidegger's interest in East Asian thought began after the war. In particular his interest in Chuang-tzu was longstanding (Parkes 1990: 105).

In their attitude towards language, the general semanticist Korzybski and the Zen Buddhist Suzuki have indeed much in common. Both are aware of the inadequacies and pitfalls of conceptualization; both stress the need for keeping language simple, concrete, flexible; both admonish man to master his symbols rather than being mastered by them; both believe that this attitude releases human spontaneity, wholeness, and sanity. And yet there is a difference of emphasis between the general semanticist and the Zen Buddhist in the use of words which is of great interest and deserves to be brought to the focus of our attention.

That difference lay in the stressing of science by the general semanticist, who sees "the task of language to be an ever more adequate mapping of the world". Zen Buddhism, while not hostile to science, "insists that there is an important kind of experience (*satori*, Zen experience) for which the language of paradox and contradiction is the natural, appropriate and necessary form of expression" (1951: 4). Morris quotes the following Zen utterances invoked by Suzuki: "Empty-handed I go, and behold the spade is in my hands: I walk on foot, and yet on the back of an ox I am riding; When I pass over the bridge Lo, the water floweth not, but the bridge doth flow."

In a subsequent edition of *Etc.*, Sheldon Klein developed parallels between Zen Buddhism and Western thinkers such as Whorf and Wittgenstein. Klein concluded, however, that the similarities were largely contingent and the aims were different (1957: 97):

For Zen, the knowledge that the world of abstraction is an 'illusion' is almost an end in itself, a means to 'self-realization'. The goal is to acquire a complete disassociation from such an 'illusory' world, and to 'exist' on the level of noumena, or beyond (?).

General Semantics aimed at the minimisation of the confusion that arises through language (*ibid.*):

In one sense, the new Western philosophy was necessitated by the results of modern physics, which demanded a new logic and understanding of language for their comprehension. The function of Zen general semantics is to abandon the 'illusion', while that of the Western philosophy is to manipulate it.

One crucial aspect of General Semantics is scrutiny of labels such as ethnic designations or social categories. If we say that *John is a criminal* we seem to label John absolutely, although John may have many other attributes (*John is a father, is 39 years old, is nice to animals, etc.*). By using the word

criminal, we link murderers and violent bank-robbers with less serious forms of crime, and construct an identity rather than applying a contingent label. A general semanticist would prefer to say *John committed a crime* or *John committed the crime of theft* rather than simply label John as *a criminal*. General Semantics therefore has links to 20th-century critiques of political propaganda and media language, with their scrutiny of rhetorical devices such as personification (*Clinton is bombing Saddam Hussein*), depersonification (e.g. talking of the enemy's *war-machine*), etc. Terms such as 'collateral damage' with a history of use from the Vietnam war to the present are condemned as euphemistic; legal jargon and advertising slogans are analysed; dichotomies are deconstructed.

This form of critical analysis has been practised by linguists such as George Lakoff who are also — broadly speaking — in the Whorfian tradition. The critique assumes the existence of a level of abstraction appropriate for the context, and the possibility of a corrective to the bias introduced by metaphor (Lakoff 1992: 481): "Reality exists. So does the unconscious system of metaphors that we use without awareness to comprehend reality. [...] Because of the pervasiveness of metaphor in thought, we cannot always stick to discussions of reality in purely literal terms."

Whether cognitive linguistics as a whole can be placed within a broad tradition of therapeutic linguistics in the 20th-century, one which includes both university academics and freelance language pundits, is open to question. One area where there does seem to be a strong relation is in the application of its techniques to metaphor, but the extent to which these analyses actually draw on the findings of cognitive science is again open to question. As an example, one could take Lakoff's study of world view in public life in the United States, *Moral Politics* (1996). Lakoff argues that contrasting parenting styles serve as source domains for the contrasting metaphorical systems that constitute the respective conceptual worlds of conservatives and liberals (see also interview with Lakoff, This volume: 30, 35, 40ff.). Conservatives follow a 'Strict Father morality', whereas liberals follow that of the 'Nurturant Parent' (Lakoff 1996: 35). While it is asserted that cognitive science is 'apolitical' (1996: 17), that very claim to objectivity makes it a tempting source of political authority: "Strict Father morality requires a view of human thought that is at odds with what we know about the way the mind works" (Lakoff 1996: 337). Lakoff summarises the Strict Father view of the world as involving belief in unambiguous and context-free

moral rules expressed in literal concepts to which everyone has equal access. The categories found in each rule “must have fixed definitions and precise boundaries, set for all time and the same in all cultures” (Lakoff 1996: 366–367). Presented in this form, Strict Father morality becomes vulnerable to criticism from cognitive linguistics. Cognitive linguistics, with its roots in cognitive science, can be shown to be in conflict with political conservatism, given that “[m]oral absolutism requires conceptual absolutism” (Lakoff 1996: 368). Following a familiar trope in therapeutic linguistics, Strict Father morality is associated by Lakoff with a rigid conceptual dualism:

It sets up good vs. evil, us vs. them dichotomies and recommends aggressive punitive action against ‘them’. [...] Strict Father morality thereby breeds a divisive culture of exclusion and blame. It appeals to the worst of human instincts, leading people to stereotype, demonize, and punish the Other — just for being the Other.

Lakoff appeals to cognitive linguistics as making available a culture-neutral meta-language within which social and political conflicts can be objectively described, better understood and even resolved. The need for this meta-language arises because ordinary language use is shaped by metaphorical systems of which participants are often unaware (Lakoff 1996: 385):

There are no neutral concepts and no neutral language for expressing political positions within a moral context. Conservatives have developed their own partisan moral-political concepts and partisan moral-political language. Liberals have not. The best that can be done for the sake of a balanced discourse is to develop a meta-language — a language about the concepts and language used in morality and politics.

This sets a difficult task for the meta-language, given the stated lack of ‘neutral concepts’ and a ‘neutral language’. It asks for impartiality, whilst recognising the impossibility of a totally neutral and objective meta-language. The objectivity implied by Lakoff is defined by Mark Johnson as follows (1987: 212):

Objectivity consists, then, in taking up an appropriately publicly shared understanding or point of view. This involves rising above our personal prejudices, idiosyncratic views, and subjective representations. On the account I have sketched, objectivity is thus made possible by the public nature of image-schematic and basic-level structures of understanding, and the metaphoric

and metonymic projections based upon them. Objectivity does not require taking up God's perspective, which is impossible; rather, it requires taking up appropriate shared human perspectives that are tied to reality through our embodied imaginative understanding.

This form of objectivity is held to contrast with the disembodied understanding of language and symbols offered in classical Objectivism, where "the *humanness* (the human embodiment) of understanding has no significant bearing on the nature of meaning and rationality" (1987: x). Within this framework, "meaning is regarded as objective, because it consists only in the relation between abstract symbols and things (with their properties and relations) in the world" (1987: x).

Within this objective — not Objectivist — framework, cultural difference can be recognised and represented. Lakoff and Johnson, in discussing the commodification of time in Western culture, note that the *TIME IS MONEY* metaphor is pervasive in many social institutions: "These practices are relatively new in the history of the human race, and by no means do they exist in all cultures" (Lakoff and Johnson 1980: 8). Johnson remarks that "we have found that the conceptions of space and time upon which certain non-Western languages are structured is radically different in kind from the conceptions on which familiar Indo-European languages are structured" (Johnson 1987: xiii).

Interestingly, Lakoff seems concerned to distance himself from Whorf, in spite of this apparent endorsement of Whorf's cultural politics: "He was not a total relativist and his actual views do not sanction total moral relativism. In fact, his work has the opposite force: it explicitly contradicts Nazi theories of Aryan superiority" (Lakoff 1987: 330). For Lakoff, Whorf is also an objectivist (1987: 324):

Whorf was certainly a relativist with respect to fact. He believed that languages, as a matter of fact, had different and incommensurable conceptual systems. But with respect to value, he was an objectivist. He believed that there was an objectivist reality, and he thought that some but not other conceptual systems built into language were capable of fitting it with reasonable preciseness. [...] He thought that Hopi was better equipped to fit external reality — physical reality — than English.

According to Lakoff, Whorf saw English as suffering from an over-developed metaphorical system, and he viewed Hopi as being superior in lacking

metaphor(see also interview with Lakoff, This volume: 27 ff.). Whorf's 'objectivism' derives from his studies of chemical engineering at MIT and from the fact that he was a 'fundamentalist Christian' (1987: 324–325).⁴ However one might argue that Lakoff's assertion that the language of US liberals is in harmony with what cognitive science teaches about categories and the mind is equally 'objectivist' in this sense.

Another angle on the question of objectivism is offered by Jones (1999, this volume) in which a Marxist understanding of ideology is contrasted with that offered within cognitive linguistics. The Marxist commitment to historical materialism seemingly puts it at odds with cognitive linguistics (CL): "In CL terms, Marxism is unacceptably 'objectivist' while, from the Marxist point of view, CL, despite its claims to realism, occupies positions considered to be typical of relativism and idealism" (Jones, This volume: 230). Marxism sees economic relations, particularly relations of production, as primary and Marxist analysis can be seen as being constituted by an objectivist 'contrasting frame' between appearance and reality: "Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking." (Marx, *Selected Works* I: 25, quoted in Jones, This volume: 234). This is not to say that ideologies can be simply reduced to economic relations; rather "there is an interaction which takes place upon the basis of the economic necessity which ultimately asserts itself" (Marx and Engels, *Selected Works* I: 701, quoted in Jones, This volume: 234). A Marxist critique of ideology thus takes the form of unmasking the true economic and class interests underlying naturalised systems of knowledge based on notions such as human nature or universal values.

Cognitive linguistics, by contrast, adheres to the notion that "social consciousness determines social being, the inverse of the Marxist proposition" (Jones, This volume: 237):

4. This last claim is disputed by Lee (1996: 21), who quotes Whorf's daughter as having no memory of his being a fundamentalist Christian. She also points to Whorf's interest in theosophy (On this, see Hutton and Joseph 1998).

The social theory implicit in such claims is itself ideological, in Marxist terms, precisely because it turns upside down the relationship between ideas and social reality, seeing in the former the cause or source of the latter and, furthermore, in some cases leading to an ahistorical and naturalistic view of ideas as the product of the body or brain independently of social circumstances. This view is in fact characteristic of many schools of thought whose primary focus is the study of ideology by linguistic means (e.g. Teun van Dijk's *Critical Discourse Analysis*).

However, Jones envisages cognitive linguistic analysis as able to provide 'auxiliary conceptual' tools for Marxist ideological critiques, although it is Marxism that provides the fundamental orientation which determines whether concepts have been stretched beyond their legitimate scientific limits. This convergence of method is possible because both cognitive linguistics and Marxism share the desire to unmask particular conceptual systems or Idealised Cognitive Models (ICMs).

Similarly, one might argue, Freudian psychoanalysis is based on the possibility of the therapeutic unmasking of ICMs. In *Totem and Taboo*, Freud makes an analogy between primitive thought and paranoia; the primitive believer in demons and spirits "turns his emotional cathexes into persons, he peoples the world with them and meets his internal processes again outside himself — in just the same way as the intelligent paranoiac" (Freud 1913 [1966: 92]). Jameson speaks of neo-Freudian nostalgia for "some ultimate moment of *cure*, in which the dynamics of the unconscious proper rise to the light of day and of consciousness and are somehow 'integrated' in an active lucidity about ourselves and the determinations of our desires and our behaviour." He compares this to the 'equivalent mirage' within a Marxian analysis: "the vision of a moment in which the individual subject would be somehow fully conscious of his or her determination by class and would be able to square the circle of ideological conditioning by sheer lucidity and the taking of thought" (Jameson 1981: 283).

It is evident that there is a familiar philosophical problem here for these various strands of critical language awareness, namely the possibility of justifying the critique as more than merely subjective, as more than mere opinion. In Freudian analysis, awareness and lucidity are therapeutic as they break, or at least weaken, the hold of an illusory or pathological world view; Marxist analyses of ideology also presumably make this assumption. This therapeutic element is shared with General Semantics and with the political

critiques of public discourse offered within cognitive linguistics. However, within cognitive linguistics, an ambivalence about claiming a ‘God’s eye view’, and a desire to celebrate the diversity of metaphorical systems in the world’s cultures, is in tension with this therapeutic agenda. In simplified terms, we could rate cognitive linguistics as ambivalently pro-metaphor and Marxism in essence as anti-metaphor, its recognition of “the social significance of the cognitive functions, including metaphor” (Jones, This volume: 238–239), notwithstanding. In Marxist terms, metaphors require some grounding in the scientifically real, or they are ideologically suspect (‘the fetishism of the commodity’). For cognitive linguists, respect for diversity of cultural world view might seem to preclude any such requirement for the objective grounding or justification of metaphor. In *Moral Politics*, Lakoff seeks to avoid the problem of moral relativism by grounding his political beliefs in the ‘facts’ or ‘reality’ of human cognition and the nature of linguistic/conceptual categories.

4. Relativistic tendencies in critical language awareness

Deconstruction, while fundamentally a universalistic technique of reading against the grain, of de-reification, coexisted uneasily with radical political assertions of difference put forward in postcolonial theory and radical feminism. These attempts to use deconstruction to dismantle oppressive power structures faced the problem that deconstruction could be applied just as well to alternative narratives and cultural formations. This attack on Western rationalism and ‘the Enlightenment project’ within post-structuralism and deconstruction should be linked to anti-universalistic trends within linguistics, particularly the attack on so-called ‘linguistic imperialism’ launched by Robert Phillipson (1992). Phillipson’s diagnosis of the world’s linguistic ills informs Mühlhäusler’s defence of linguistic ecology (1996: 338):

Apart from the moral considerations that would seem to force linguists to speak up for the preservation of linguistic and conceptual diversity we should also realise that this is the last chance for Western linguists to learn from the numerous alternative philosophical and conceptual systems that may be hidden in the small languages of the Pacific area. They should be seen as a reservoir of human knowledge, as examples of the ability of humans to create rules, create explanations and accommodate a wide range of circumstances. So long

as we cannot be certain that the progress we are experiencing is progress in the right direction, to discard diversity for seemingly progressive uniformity seems a very dangerous gamble.

Accompanying this view is scepticism about progress, suspicion of modernity, fear of the levelling of identities and assimilation, a rejection of implicit claims for universal validity. Linguistic ecology is predicated on the existence of and value of language structures as world-views; the promotion of language rights presupposes a model of identity in which the native speaker's mother tongue is central.

The threat of modern states, their urban cultures and school systems to the ecology of language is the underlying theme in Dixon's recent *The Rise and Fall of Languages* (1997: 104–105):

Once schooling was introduced, instruction was generally in the prestige language of the nation. Children whose parents spoke Irish or Welsh or the Yorkshire dialect of English were schooled in the London dialect of English and punished for any deviation from this norm. This applies just about everywhere in the world. For instance, I lived in 1985 for some months in the Boumaa region of Fiji which has its own dialect, mutually intelligible with the standard language, Bau.

Dixon recalls that he used to attend a church service which was being held in Bau. On one occasion he was asked to say a prayer and used the local Boumaa dialect: "For this I received a reprimand — God, the Christian priests had said, only likes to be addressed in Bau" (1997: 105). In the light of the possible negative impact of missionaries, "[c]ountries which do allow linguistic missionaries to work among their indigenous peoples should pay close attention to the type of people undertaking this work" (1997: 145fn.). Dixon's book is a plea for linguists to devote their energies to recording languages on the brink of extinction (1997: 144): "Each language encapsulates the world-view of its speakers — how they think, what they value, what they believe in, how they classify the world around them, how they order their lives. Once a language dies, a part of human culture is lost forever."

Language rights rhetoric stresses naturalness, richness, and diversity; it is holistic, evoking the totality of particular cultures and language, autonomy, and the value of difference. Both Mühlhäusler and Dixon evoke a non-hierarchical, non-competitive pre-modern social order, and point to the destructive impact of colonialism, missionary activity, modernisation and

now globalisation (Dixon 1997: 113fn.). Mühlhäusler in particular suggests that pre-modern diversity should not be understood in terms of discrete languages, and as there having been no oppressive power relations between languages (1996: 148): “in pre-colonial days there appears to have been a relatively egalitarian attitude toward language”. The effect of missionary promotion of vernacular writing-systems for Bible translation and the importation of Western languages is perceived as disrupting that egalitarian ecology where individual languages were not clearly defined and language variation existed along a continuum with no clear boundaries.

5. Linguistics and the rejection of modernity

Modernity can be presented as progressive: it offers medicine, schools, writing systems, elections, passports, rights. Yet the modern state, enlightenment humanism and its institutions have been attacked by the followers of Michel Foucault (1926–1984). That attack has been extended by postcolonial theorists who have pointed to the links between Western thought and colonial expansionism. The history of modern linguistics — often traced to the work of Sir William Jones (1746–1794) — is coextensive with that of high colonialism and inextricably tied to it. Linguistics as a mapping enterprise can be seen as no less an expression of the obsession of the colonial power/knowledge nexus than imperial geography, anthropology and law. From this point of view, linguistic analysis is intrinsically invasive and transforming in their encounter with ‘the other’. The practices of descriptive linguistics require forms of privileged social access, and the attempt to set up a typology in which the relationships between the world’s languages are laid out is an expression of a universal ‘panoptic’ vision.

Two strands that meet in the intellectual rejections of modernity in the 20th-century are Orientalism and Fascism. Orientalism—in Edward Said’s terms (Said 1979) — is the imposition of a dualistic way of thinking on cultural difference: the Self is civilised, the Other is primitive; the West is democratic, the East is totalitarian. These oppositions can be termed ‘contrasting frames’ (Sandikcioglu 2001), and can serve as a metaphorical framework within which political actions by individuals or states can be justified (see discussion of the Gulf War and Orientalism in Sandikcioglu 2001). However, one striking variant of Orientalist dualistic thinking is one

that sees the West as conceptually rigid and Eastern thought as open-ended and flexible. This contrasting frame is no less dualistic, but it defines an opposition between a dualistic West and a non-dualistic East. Said to an extent accepts the first half of this, in that he sees Western thought as constructed out of a set of unexamined dichotomies within Orientalism, but he does not subscribe to the corresponding idealisation of the East.

As an illustration of this (superficially) anti-Western variant of Orientalism, one could take the careers of diverse figures such as Daisetz Suzuki, Ezra Pound (1885–1972), and Martin Heidegger.⁵ Orientalist deconstruction serves to strip away the layers of reification stifling Western thought, liberating the vital and original concepts beneath. It is analogous to primitivism in the visual arts within modernism, and has links to the fascist assault on the stifling nature of bourgeois modernity. Within linguistics, a striking example of this nexus between Fascism and Orientalism is the work of sociologist of language, Heinz Kloss (1904–1987). In addition to his work on assimilation and ethnic survival as a language rights theorist, Kloss was a follower of the Orientalist theorist of biogenesis, Ernst Fuhrmann (1886–1956), and a member of the Nazi Party (Kloss 1929; Hutton 1999).

While language rights or mother-tongue rights are often defended in the context of discussions of levelling effects of modernity and the increasing dominance of English and powerful national standard languages in many societies, this identity model also implies rejection of belief systems such as Judaism, Christianity, Hinduism, Buddhism, and Islam. The modern concept of mother-tongue has little place in these belief systems in their traditional forms. Moreover, the history of conceptual relativism within linguistics is bound up with the ethnic politics of 20th-century Europe. The issues that arise can be illustrated by looking at the place of the German neo-Humboldtian school of thought within intellectual and political history. That school (or intellectual trend) is associated primarily with the name of Leo Weisgerber (1899–1985), but might also be said to include — leaving their differences to one side — linguists such as Jost Trier (1894–1970), Walter Porzig (1895–1961), and André Jolles (1874–1946). In the pre-WWII period, these

5. Suzuki's defense of Japanese militarism is documented in Brian Victoria's *Zen at war* (1997). For Ezra Pound's vitalistic attack on the decadence of western languages, see Pound and Fenellosa (1936). On Heidegger and Nazism, see for example Ott (1994).

scholars were associated with a neo-structuralist approach to the study of word meaning often termed 'word field theory' (*Wortfeldtheorie*). In 1959 a Festschrift in honour of Leo Weisgerber's 60th birthday appeared (ed. Gipper 1959). The majority of the contributors were drawn from the intellectual circles associated with neo-Humboldtianism in Germany; there was however one North American contributor, Harry Hoijer.

This association between the Boas-Sapir-Whorf North American tradition and the German neo-Humboldtians is, from one point of view, a natural one, given their common assumptions and their common intellectual roots. The twist in the tale comes if one looks more closely at the German contributors to the Weisgerber Festschrift. They include at least five former members of the Nazi Party, namely E. Rothacker, W. Porzig, H. Brinkmann, J. Trier, L. Mackensen, as well as two others who have been criticised (fairly or not) for complicity with Nazism (H. Moser, G. Deeters). Weisgerber himself played an important (some would argue, central) role in the linguistics of the Third Reich, though the exact nature of that role is highly controversial (Hutton 1999: 106–143).

While neo-Humboldtianism can be read as an expression of liberal nationalism and enlightened cultural relativism, it must thus also be seen in the context of the anti-universalism of National Socialist scholarship. That anti-universalism involved a reaction against positivist methodologies in science and against the ethical void that modern materialist science was perceived to have created. Within linguistics, this led to a rejection of Neogrammarian uniformitarianism, and an emphasis on each language as constructing an autonomous world-view for its speakers, and on the dynamic way in which a language constructs a meaningful world for its speakers. In Nazi Germany, the ideology of mother tongue and the promotion of world-view linguistics was associated with an attack on Judaism and Jews (who were perceived as having no 'natural' sense of mother-tongue loyalty), on Catholicism and Judeo-Christian claims to universal validity and truth. It also underlay attacks on Basic English and the spread of English as a world language (Hutton 1999: 4, 201).

Defenders of language rights will no doubt argue that the advocacy of language rights must be seen in its political context; it may be chauvinist or reactionary in one context and progressive in another. In Mühlhäusler's terms, however, as a stage in the evolution of language ecology it is already too late. The paradox of Mühlhäusler's position is that the pre-modern diversity, the

natural ecology that is under threat, cannot be named or described. For the very process of labelling brings artificial distinctions to that natural continuum. Yet without that labelling one cannot speak of saving 'languages', since the concept of discrete language is an artificial product of modernity. One cannot have language rights without languages; the call for mother-tongue rights is a revolt against an already established modernity. Dixon's call for linguists to describe languages under threat of extinction is similarly paradoxical, since it requires increased access by representatives of modernity to those domains in which the linguistic eco-system is still intact. This paradox is further encapsulated in the Western linguist consciously violating the norms of a Fijian church service in the name of a Western 'vernacularist' ideology.

From one point of view, anti-universalism is an expression of sensitivity to cultural difference. It underlies modern multi-culturalism and demands for cultural tolerance. Yet the attack on Enlightenment universalism was also a key element in Nazi thought, and the rejection of Western liberal (universalising) modernity (including democracy) has been part of reactionary and fascist modernism as exemplified in the works of Ernst Jünger (1895–1998), Ludwig Klages (1872–1956) and Martin Heidegger.

6. Dilemmas of a would-be progressive linguistics

Cultural relativism, no less than imperialism, consumer capitalism and rationalism, is a Western ideology. Mother-tongue vernacularism has its roots in Protestant nationalism; it is one side of Europe's ambiguous linguistic heritage to the world. In addition to the linguistic imperialism that promoted English, one could with equal justification talk of missionaries and linguists promoting mother-tongue or vernacular imperialism. Linguistic theories that claim to represent the relativity of world views and to draw political conclusions from that claim can at best be described as pseudo-relativistic, caught in the paradox of an attempt to represent and defend cultural difference through the universalistic meta-language of linguistics. But what of linguistics as a universal objective descriptive meta-language, a claim implicit in the term 'General Linguistics'? Attempts to ground political and moral analyses of metaphor in the objectivity (however defined) of cognitive linguistics are vulnerable to the criticism that the objectivity appealed to is a convenient construct and that the ideological conclusions are underdetermined

by the linguistic analysis. This objection applies no less to the notion of linguistic analysis as a corrective to thought, one that is implicit in many theories of meaning and explicit in the work of Whorf.

Linguists, in marked contrast to race theorists, their discredited intellectual cousins, generally associate their discipline and the practice of linguistic analysis with a vague form of liberal progressiveness. But this view begs many questions, the answers for which lie outside the boundaries of linguistics as it is presently understood. Further, this view of linguistics is both politically naive and historically blind, and stands in the way of a fuller understanding of the political impact of linguistic theorising on the modern world.

References

- Chase, Stuart (In collaboration with Marian Tyler Chase). 1955. *Power of Words*. London: Phoenix House.
- Daly, Mary. 1994. *Webster's First New Intergalactic Wickedary of the English Language*. San Francisco: Harper.
- Dixon, Robert. 1997. *The Rise and Fall of Languages*. Cambridge: Cambridge University Press.
- Freud, Sigmund. 1960. *Totem and Taboo*. Translated by James Strachey. London: Routledge, Kegan Paul. First published, 1913.
- Gipper, Helmut (ed.). 1959. *Sprache — Schlüssel zur Welt: Festschrift für Leo Weisgerber*. Düsseldorf: Schwann.
- Hsiao Shih-yi, Paul. 1990. "Heidegger and our translation of the Tao Te Ching". In G. Parkes (ed.), *Heidegger and Asian Thought*. Honolulu: University of Hawaii Press, 93–103.
- Hutton, Christopher. 1999. *Linguistics and the Third Reich: Mother tongue fascism, race and the science of language*. London and New York: Routledge.
- Hutton, Christopher and Joseph, John. 1998. "Back to Blavatsky: The impact of theosophy on modern linguistics". *Language and Communication* 18: 181–204.
- Jameson, Fredric. 1982. *The Political Unconscious: Narrative as a socially symbolic act*. Ithica, New York: Cornell University Press.
- Jones, Peter. This volume. "Cognitive linguistics and the Marxist approach to ideology".
- Joseph, Joseph. 1996. "The immediate sources of the 'Sapir-Whorf hypothesis'". *Historiographia Linguistica* 23: 365–404.
- Johnson, Mark. 1987. *The Body in the Mind: The bodily basis of meaning, imagination and reason*. Chicago: The University of Chicago Press.
- Klein, Sheldon. 1957. "Zen Buddhism and General Semantics". *Etc.: A review of General Semantics* 14,2: 88–97.

- Kloss, Heinz. 1929. *Wort und Zahl: Ansätze zu ihrer Deutung*. Stuttgart: Im Selbstverlag [self-published].
- Lakoff, George. 1987. *Women, Fire and Dangerous Things: What categories reveal about the mind*. Chicago: The University of Chicago Press.
- . 1992. "Metaphor and war: The metaphor system used to justify the war in the gulf". In M. Pütz (ed.), *Thirty Years of Linguistic Evolution: Studies in honour of René Dirven on the occasion of his sixtieth birthday*. Amsterdam and Philadelphia: John Benjamins, 463–481.
- . 1996. *Moral Politics: What conservatives know that liberals don't*. Chicago: The University of Chicago Press.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we Live by*. Chicago: University of Chicago Press.
- Lee, Penny. 1996. *The Whorf Theory Complex: A critical reconstruction*. Amsterdam and Philadelphia: John Benjamins.
- Morris, Charles. 1951. "Comments on mysticism and its language". *Etc.: a review of General Semantics* 9,1: 3–8.
- Mühlhäusler, Peter. 1996. *Linguistic Ecology: Language change and linguistic imperialism in the Pacific Region*. London and New York: Routledge.
- Ott, Hugo. 1994. *Martin Heidegger: A political life*. London: Fontana.
- Parkes, Graham. 1990. "Thoughts on the way: *Being and Time* via Lao-Chuang". In G. Parkes (ed.), *Heidegger and Asian Thought*. Honolulu: University of Hawaii Press, 105–144.
- Phillipson, Robert. 1992. *Linguistic Imperialism*. Oxford: Oxford University Press.
- Pound, Ezra and Fenellosa, Ernest. 1936. *The Chinese Character as a Medium for Poetry*. San Francisco: City Lights. First published, 1920.
- Said, Edward. 1978. *Orientalism*. New York: Vintage Books.
- Sandikcioglu, Esra. 2000. "More metaphorical warfare in the Gulf: Orientalist frames in news coverage". In A. Barcelona (ed.), *Metaphor and Metonymy at the Crossroads: A cognitive perspective*. Berlin and New York: Mouton de Gruyter.
- . 2001. "Otherness of the Orient: Politico-cultural implications of ideological categorisations". In R. Dirven, R. Frank and C. Ilie (eds.), *Language and Ideology Vol. 1: Descriptive cognitive approaches*. Amsterdam and Philadelphia: John Benjamins.
- Spender, Dale. 1980. *Man Made Language*. London: Pandora Press.
- Suzuki, Daisetz T. 1963. "Lectures on Zen Buddhism". In *Zen Buddhism and Psychoanalysis*. New York: Grove Press, 1–76.
- Tannen, Deborah. 1990. *You just don't Understand: Women and men in conversation*. New York: William Morrow, Ballatine.
- Victoria, Brian. 1997. *Zen at war*. New York and Tokyo: Weatherhill.
- Whorf, Benjamin Lee. 1956. *Language, Thought and Reality: Selected writings of Benjamin Lee Whorf*. Carroll, John B. (ed.). Cambridge, Mass.: MIT Press.

Index

- Africa 16, 143-146, 149-159, 161, 163, 164, 265
- Afrocentricity v, 15, 16, 141-145, 148, 149, 154, 156-158, 160-163
- age v, 16, 17, 31, 79, 86, 105, 165, 166, 169, 170, 172, 173, 175, 176, 177-184, 183, 184, 186, 185, 187, 186-193, 208, 226, 252
- analytical linguistics 92
- Arabic 152, 154, 155, 157-160
- archaeology 266, 270, 272, 275, 276
- augmentative 207, 208, 210
- Bantu 152, 155, 160, 163
- biological reality 85-89, 102
- bourgeois ideology 8, 230, 237
- categorisation 11, 38, 64, 87, 118, 141, 145, 173-175, 179, 180, 187, 194, 195, 196, 210, 214, 217, 218, 225
- categorisation network 210, 214
- cognition 12, 13, 17, 27, 37, 46, 47, 53-56, 59-61, 65, 70, 72, 75, 76, 78-81, 84, 88, 93, 94, 99, 104, 106, 118, 140, 141, 145, 166, 174, 176, 193-196, 227, 240, 243, 244, 291
- cognitive construction 111, 122, 123, 129, 133, 137
- cognitive linguistics v, 1-4, 8, 11-16, 18-22, 24, 41, 44-46, 49, 50, 52, 53, 54, 58, 60, 61, 63, 64, 66, 71, 72, 74-78, 81, 83, 84, 85, 87, 88, 90-96, 100, 102-106, 109, 144, 145, 163, 205, 229, 231, 239, 253, 286, 287, 289-291, 296, 297
- cognitive science 4, 10, 13, 14, 25, 26, 40, 41, 45, 49, 50, 54, 55, 57, 64, 65, 64, 74-76, 78, 80, 81, 84, 85, 87, 91-95, 102,

- 103, 242, 286, 287, 289
- comparative linguistics 268, 273, 275
- conceptual and procedural meaning 108, 116, 117
- conceptual relativism vi, 20, 105, 233, 279, 280, 294
- conceptualisation 110, 111, 114, 133-135, 154, 239, 244, 249
- critical language awareness 282, 290, 291
- cultural contributions 61
- cultural relativism 279, 281, 295, 296
- culture 10, 27, 30, 32-35, 47, 59, 61, 64, 79-81, 130, 145, 148, 154, 155, 160, 164, 205, 227, 235, 252, 260, 280-282, 287, 288, 292
- declension 17, 197-199, 198, 199, 201-207, 210-213, 215, 218-222, 224-227
- declensional class 201, 226
- deconstruction 283, 284, 291, 294
- deixis 110, 118
- dialectical materialism 252
- dimensional conflation 189, 192
- diminutive 171, 172, 201, 203, 208, 210
- discourse 3, 9-12, 15, 16, 18, 19, 22, 25, 39, 45, 46, 65, 87, 107, 109, 110, 115, 116, 118, 122, 123, 129, 130, 132-134, 136, 139, 140, 145, 146, 148, 161-163, 229, 244, 245, 246, 248, 250-252, 256, 264-267, 271, 279, 287, 290, 291
- domain-of-experience principle 224
- embodiment v, 11, 38, 49, 53, 54, 58-63, 65, 74, 76, 81, 106, 231, 253, 288
- Eurocentrism 142, 144, 146, 147, 155, 161-163
- exemplar 173-175, 177-181, 194-196
- experiential realism 231, 232
- false consciousness 6, 8, 237, 256
- fascism 258-261, 264, 274, 282, 293, 294, 297
- figure/ground gestalt 15, 107, 109, 113-117, 137
- focus 5, 12-17, 19, 20, 23, 26, 29, 36, 66, 107-109, 114, 116, 118-121, 123, 129-131, 133, 135-137, 151, 202, 223, 256, 264, 285, 290
- frames of reference 12, 13, 49-56, 59, 60, 62, 65, 64, 66-68, 70-74, 76-80

- functionalism 105, 144, 160
- gender v, 16, 17, 79, 105, 154, 165-168, 167-170, 172, 173, 175,
176, 177-186, 185, 187, 186-194, 196, 198-201, 215, 220,
226, 240, 252
- General Semantics 20, 282, 284-286, 290, 297, 298
- God's truth 85-87, 89, 102, 104, 105
- Gulf War 231, 245, 246, 250, 251, 253, 293
- historical-comparative linguistics 268, 275
- hocus-pocus 85-87, 102, 104, 105
- hypocoristic 202
- idealism 232, 236, 289
- ideological ground v, 14, 19, 107, 129, 131, 135, 137
- idéologie 8, 255, 272
- ideology 1, i, iii, v, vi, 1-12, 14, 16, 18-23, 29, 32, 34, 36-38, 49,
78, 81, 103, 106, 109, 117, 137, 139, 141, 142, 144-146,
148, 154, 160, 162-164, 166, 215, 226, 229-232, 235-240,
244-246, 248, 250-253, 255-257, 259, 264, 273-275,
277-279, 289, 290, 295-298
- indeterminacy 111, 112, 130
- Indo-European homeland 20, 258, 260, 263, 265, 268, 269, 275
- Indo-European languages 261, 272, 273, 282, 288
- inference 41, 110-112, 121, 129, 131, 147
- innateness 95, 96, 104
- Islamophile 156-158, 160
- Islamophobe 158, 160, 161
- Islamophobia 156, 159
- Kiswahili 16, 146, 149, 151, 154-161
- Kwanzaa 149-154
- language acquisition 17, 28, 57, 165
- language and ideology 1, i, iii, v, 2-6, 10, 19, 21, 23, 36, 78, 81,
103, 106, 139, 141, 160, 166, 252, 255, 256, 298
- language classification 260, 261, 263, 275
- language ecology 279, 295
- language rights 279, 281, 292, 294-296
- linguistic typology 20, 55, 65, 258, 261, 275
- Marxism 18, 229, 231, 232, 244, 247, 249, 251, 257, 283, 289-291
- materialism 231-233, 252, 289

- materialistic conception of history 231, 235, 241
- mental space 15, 46, 107, 109, 110, 112, 118, 120, 121, 123, 124, 130, 132, 133, 137
- metaphor 12, 14, 24, 26, 27, 30-32, 35, 36, 38-47, 50, 56, 57, 62-64, 75, 80, 81, 87-89, 92, 95, 102, 105, 113, 176, 195, 210, 226, 240-243, 245-253, 279, 286, 288, 289, 291, 296, 298
- mind/brain 88
- modularity 56, 57, 95, 96, 99, 104
- mother-tongue fascism 259, 260, 274
- Nazism 264, 294, 295
- neural Darwinism 96, 98, 104
- neural theory of language 11, 25-27, 62, 88
- neurocognitive linguistics 90, 92, 93, 98, 100, 103
- neuroscience 40, 41, 53, 55, 57, 70, 71, 74-77, 79-81, 88, 91, 92, 101, 103, 242
- nurturant morality 41
- nurturant parent 35, 43, 286
- Objectivism 232, 240, 288, 289
- Orientalism 253, 266, 284, 293, 294, 298
- paléontologie linguistique 266, 276
- Pan-Africanism 16, 142-144, 151, 155, 156, 159
- parallelism between language and race 268
- patriarchy 166, 191-193
- philosophical foundations v, 11, 49, 106, 253
- philosophy 11, 12, 22, 24, 25, 28, 34, 39, 46, 61, 65, 75, 76, 78-81, 105, 140, 163, 164, 216, 221, 231, 235, 242, 252, 276, 282, 285
- political think 43
- polysemy 25, 39, 92, 100, 104
- pragmatism v, 11, 49, 50, 76, 79, 106, 232, 253
- propaganda 258, 260, 267, 286
- propositional attitude 116
- prototype 14, 62, 89, 102, 103, 173, 174, 196
- psychoanalysis 290, 298
- psycholinguistics 44, 54
- psychological reality 14, 87, 102, 103
- racism 33, 34, 152, 261, 270

- radial category 18, 197
- relativism vi, 20, 92, 105, 144, 145, 160, 233, 279-281, 288, 289, 291, 294-296
- relevance theory 108, 122, 123
- salience 107, 114, 115, 118, 213
- scale 15, 59, 62, 64, 70, 112, 117, 124, 126, 128-131, 136, 144, 153, 175, 176, 177, 180, 187, 188, 204-207, 209, 210, 212, 213, 214, 224, 236
- scientific theory 39, 234, 245
- seriation 190, 194
- sexism 18, 33, 34, 197, 198, 202, 215, 219, 220, 222-226
- sexist v, 17, 18, 165, 197-199, 213, 215, 217, 219-222, 224, 225
- social practice 18, 229, 230, 233, 237, 244, 245, 249-251
- social theory 18, 19, 21, 229, 231, 235, 239, 240, 248, 249, 251, 290
- Sprachnationalismus 258
- strict father morality 36, 41, 286, 287
- Swahiliphilia 156, 159
- theory of mind 26
- therapeutic linguistics 286, 287
- Third Reich 258, 259, 261, 265, 271, 273, 274, 295, 297
- truth 11, 13, 20, 24, 61, 85-87, 89, 93, 99, 102, 104, 105, 111, 122, 125, 126, 136, 148, 219, 231-234, 243, 250, 251, 256, 295
- universal concepts 27-30
- Urheimat 261, 263-265, 268, 273
- viewpoint 15, 29, 38, 40, 53, 107, 116, 118-121, 123, 129, 130, 132, 133, 134-137, 238
- Whorfian hypothesis 27, 28
- 'world view' 279
- Zen Buddhism 284, 285, 297, 298

CURRENT ISSUES IN LINGUISTIC THEORY

E. F. K. Koerner, Editor
Department of Linguistics, University of Ottawa
OTTAWA, Canada K1N 6N5
koerner@uottawa.ca

The *Current Issues in Linguistic Theory* (CILT) series is a theory-oriented series which welcomes contributions from scholars who have significant proposals to make towards the advancement of our understanding of language, its structure, functioning and development. CILT has been established in order to provide a forum for the presentation and discussion of linguistic opinions of scholars who do not necessarily accept the prevailing mode of thought in linguistic science. It offers an alternative outlet for meaningful contributions to the current linguistic debate, and furnishes the diversity of opinion which a healthy discipline must have. In this series the following volumes have been published thus far or are scheduled for publication:

1. KOERNER, Konrad (ed.): *The Transformational-Generative Paradigm and Modern Linguistic Theory*. 1975.
2. WEIDERT, Alfons: *Componential Analysis of Lushai Phonology*. 1975.
3. MAHER, J. Peter: *Papers on Language Theory and History I: Creation and Tradition in Language*. Foreword by Raimo Anttila. 1979.
4. HOPPER, Paul J. (ed.): *Studies in Descriptive and Historical Linguistics. Festschrift for Winfred P. Lehmann*. 1977.
5. ITKONEN, Esa: *Grammatical Theory and Metascience: A critical investigation into the methodological and philosophical foundations of 'autonomous' linguistics*. 1978.
6. ANTILA, Raimo: *Historical and Comparative Linguistics*. 1989.
7. MEISEL, Jürgen M. & Martin D. PAM (eds): *Linear Order and Generative Theory*. 1979.
8. WILBUR, Terence H.: *Prolegomena to a Grammar of Basque*. 1979.
9. HOLLIEN, Harry & Patricia (eds): *Current Issues in the Phonetic Sciences. Proceedings of the IPS-77 Congress, Miami Beach, Florida, 17-19 December 1977*. 1979.
10. PRIDEAUX, Gary D. (ed.): *Perspectives in Experimental Linguistics. Papers from the University of Alberta Conference on Experimental Linguistics, Edmonton, 13-14 Oct. 1978*. 1979.
11. BROGYANYI, Bela (ed.): *Studies in Diachronic, Synchronic, and Typological Linguistics: Festschrift for Oswald Szemérenyi on the Occasion of his 65th Birthday*. 1979.
12. FISIÁK, Jacek (ed.): *Theoretical Issues in Contrastive Linguistics*. 1981. Out of print
13. MAHER, J. Peter, Allan R. BOMHARD & Konrad KOERNER (eds): *Papers from the Third International Conference on Historical Linguistics, Hamburg, August 22-26 1977*. 1982.
14. TRAUGOTT, Elizabeth C., Rebecca LaBRUM & Susan SHEPHERD (eds): *Papers from the Fourth International Conference on Historical Linguistics, Stanford, March 26-30 1979*. 1980.
15. ANDERSON, John (ed.): *Language Form and Linguistic Variation. Papers dedicated to Angus McIntosh*. 1982.
16. ARBEITMAN, Yoël L. & Allan R. BOMHARD (eds): *Bono Homini Donum: Essays in Historical Linguistics, in Memory of J. Alexander Kerns*. 1981.
17. LIEB, Hans-Heinrich: *Integrational Linguistics. 6 volumes. Vol. II-VI n.y.p.* 1984/93.
18. IZZO, Herbert J. (ed.): *Italic and Romance. Linguistic Studies in Honor of Ernst Pulgram*. 1980.
19. RAMAT, Paolo et al. (eds): *Linguistic Reconstruction and Indo-European Syntax. Proceedings of the Colloquium of the 'Indogermanische Gesellschaft'. University of Pavia, 6-7 September 1979*. 1980.
20. NORRICK, Neal R.: *Semiotic Principles in Semantic Theory*. 1981.
21. AHLQVIST, Anders (ed.): *Papers from the Fifth International Conference on Historical Linguistics, Galway, April 6-10 1981*. 1982.

22. UNTERMANN, Jürgen & Bela BROGYANYI (eds): *Das Germanische und die Rekonstruktion der Indogermanischen Grundsprache. Akten des Freiburger Kolloquiums der Indogermanischen Gesellschaft, Freiburg, 26-27 Februar 1981*. 1984.
23. DANIELSEN, Niels: *Papers in Theoretical Linguistics*. Edited by Per Baerentzen. 1992.
24. LEHMANN, Winfred P. & Yakov MALKIEL (eds): *Perspectives on Historical Linguistics. Papers from a conference held at the meeting of the Language Theory Division, Modern Language Assn., San Francisco, 27-30 December 1979*. 1982.
25. ANDERSEN, Paul Kent: *Word Order Typology and Comparative Constructions*. 1983.
26. BALDI, Philip (ed.): *Papers from the XIIth Linguistic Symposium on Romance Languages, Univ. Park, April 1-3, 1982*. 1984.
27. BOMHARD, Alan R.: *Toward Proto-Nostratic. A New Approach to the Comparison of Proto-Indo-European and Proto-Afroasiatic*. Foreword by Paul J. Hopper. 1984.
28. BYNON, James (ed.): *Current Progress in Afro-Asiatic Linguistics: Papers of the Third International Hamito-Semitic Congress, London, 1978*. 1984.
29. PAPROTTÉ, Wolf & René DIRVEN (eds): *The Ubiquity of Metaphor: Metaphor in language and thought*. 1985 (publ. 1986).
30. HALL, Robert A. Jr.: *Proto-Romance Morphology. = Comparative Romance Grammar, vol. III*. 1984.
31. GUILLAUME, Gustave: *Foundations for a Science of Language*.
32. COPELAND, James E. (ed.): *New Directions in Linguistics and Semiotics*. Co-edition with Rice University Press who hold exclusive rights for US and Canada. 1984.
33. VERSTEEGH, Kees: *Pidginization and Creolization. The Case of Arabic*. 1984.
34. FISIAK, Jacek (ed.): *Papers from the VIth International Conference on Historical Linguistics, Poznan, 22-26 August. 1983*. 1985.
35. COLLINGE, N.E.: *The Laws of Indo-European*. 1985.
36. KING, Larry D. & Catherine A. MALEY (eds): *Selected papers from the XIIIth Linguistic Symposium on Romance Languages, Chapel Hill, N.C., 24-26 March 1983*. 1985.
37. GRIFFEN, T.D.: *Aspects of Dynamic Phonology*. 1985.
38. BROGYANYI, Bela & Thomas KRÖMMELBEIN (eds): *Germanic Dialects: Linguistic and Philological Investigations*. 1986.
39. BENSON, James D., Michael J. CUMMINGS, & William S. GREAVES (eds): *Linguistics in a Systemic Perspective*. 1988.
40. FRIES, Peter Howard (ed.) in collaboration with Nancy M. Fries: *Toward an Understanding of Language: Charles C. Fries in Perspective*. 1985.
41. EATON, Roger, et al. (eds): *Papers from the 4th International Conference on English Historical Linguistics, April 10-13, 1985*. 1985.
42. MAKKAI, Adam & Alan K. MELBY (eds): *Linguistics and Philosophy. Festschrift for Rulon S. Wells*. 1985 (publ. 1986).
43. AKAMATSU, Tsutomu: *The Theory of Neutralization and the Archiphoneme in Functional Phonology*. 1988.
44. JUNGRAITHMAYR, Herrmann & Walter W. MUELLER (eds): *Proceedings of the Fourth International Hamito-Semitic Congress*. 1987.
45. KOOPMAN, W.F., F.C. Van der LEEK, O. FISCHER & R. EATON (eds): *Explanation and Linguistic Change*. 1986.
46. PRIDEAUX, Gary D. & William J. BAKER: *Strategies and Structures: The processing of relative clauses*. 1987.
47. LEHMANN, Winfred P. (ed.): *Language Typology 1985. Papers from the Linguistic Typology Symposium, Moscow, 9-13 Dec. 1985*. 1986.
48. RAMAT, Anna G., Onofrio CARRUBA and Giuliano BERNINI (eds): *Papers from the 7th International Conference on Historical Linguistics*. 1987.
49. WAUGH, Linda R. and Stephen RUDY (eds): *New Vistas in Grammar: Invariance and*

- Variation. *Proceedings of the Second International Roman Jakobson Conference*, New York University, Nov.5-8, 1985. 1991.
50. RUDZKA-OSTYN, Brygida (ed.): *Topics in Cognitive Linguistics*. 1988.
 51. CHATTERJEE, Ranjit: *Aspect and Meaning in Slavic and Indic*. With a foreword by Paul Friedrich. 1989.
 52. FASOLD, Ralph W. & Deborah SCHIFFRIN (eds): *Language Change and Variation*. 1989.
 53. SANKOFF, David: *Diversity and Diachrony*. 1986.
 54. WEIDERT, Alfons: *Tibeto-Burman Tonology. A comparative analysis*. 1987
 55. HALL, Robert A. Jr.: *Linguistics and Pseudo-Linguistics*. 1987.
 56. HOCKETT, Charles F.: *Refurbishing our Foundations. Elementary linguistics from an advanced point of view*. 1987.
 57. BUBENIK, Vit: *Hellenistic and Roman Greece as a Sociolinguistic Area*. 1989.
 58. ARBEITMAN, Yoël. L. (ed.): *Fucus: A Semitic/Afrasian Gathering in Remembrance of Albert Ehrman*. 1988.
 59. VAN VOORST, Jan: *Event Structure*. 1988.
 60. KIRSCHNER, Carl & Janet DECESARIS (eds): *Studies in Romance Linguistics. Selected Proceedings from the XVII Linguistic Symposium on Romance Languages*. 1989.
 61. CORRIGAN, Roberta L., Fred ECKMAN & Michael NOONAN (eds): *Linguistic Categorization. Proceedings of an International Symposium in Milwaukee, Wisconsin, April 10-11, 1987*. 1989.
 62. FRAJZYNGIER, Zygmunt (ed.): *Current Progress in Chadic Linguistics. Proceedings of the International Symposium on Chadic Linguistics, Boulder, Colorado, 1-2 May 1987*. 1989.
 63. EID, Mushira (ed.): *Perspectives on Arabic Linguistics I. Papers from the First Annual Symposium on Arabic Linguistics*. 1990.
 64. BROGYANYI, Bela (ed.): *Prehistory, History and Historiography of Language, Speech, and Linguistic Theory. Papers in honor of Oswald Szemérenyi I*. 1992.
 65. ADAMSON, Sylvia, Vivien A. LAW, Nigel VINCENT and Susan WRIGHT (eds): *Papers from the 5th International Conference on English Historical Linguistics*. 1990.
 66. ANDERSEN, Henning and Konrad KOERNER (eds): *Historical Linguistics 1987. Papers from the 8th International Conference on Historical Linguistics, Lille, August 30-Sept., 1987*. 1990.
 67. LEHMANN, Winfred P. (ed.): *Language Typology 1987. Systematic Balance in Language. Papers from the Linguistic Typology Symposium, Berkeley, 1-3 Dec 1987*. 1990.
 68. BALL, Martin, James FIFE, Erich POPPE & Jenny ROWLAND (eds): *Celtic Linguistics/ Ieithyddiaeth Geltaidd. Readings in the Brythonic Languages. Festschrift for T. Arwyn Watkins*. 1990.
 69. WANNER, Dieter and Douglas A. KIBBEE (eds): *New Analyses in Romance Linguistics. Selected papers from the Linguistic Symposium on Romance Languages XVIII, Urbana-Champaign, April 7-9, 1988*. 1991.
 70. JENSEN, John T.: *Morphology. Word structure in generative grammar*. 1990.
 71. O'GRADY, William: *Categories and Case. The sentence structure of Korean*. 1991.
 72. EID, Mushira and John MCCARTHY (eds): *Perspectives on Arabic Linguistics II. Papers from the Second Annual Symposium on Arabic Linguistics*. 1990.
 73. STAMENOV, Maxim (ed.): *Current Advances in Semantic Theory*. 1991.
 74. LAEUFER, Christiane and Terrell A. MORGAN (eds): *Theoretical Analyses in Romance Linguistics*. 1991.
 75. DROSTE, Flip G. and John E. JOSEPH (eds): *Linguistic Theory and Grammatical Description. Nine Current Approaches*. 1991.
 76. WICKENS, Mark A.: *Grammatical Number in English Nouns. An empirical and theoretical account*. 1992.
 77. BOLTZ, William G. and Michael C. SHAPIRO (eds): *Studies in the Historical Phonology of Asian Languages*. 1991.

78. KAC, Michael: *Grammars and Grammaticality*. 1992.
79. ANTONSEN, Elmer H. and Hans Henrich HOCK (eds): *STAEF-CRAEFT: Studies in Germanic Linguistics. Select papers from the First and Second Symposium on Germanic Linguistics, University of Chicago, 24 April 1985, and Univ. of Illinois at Urbana-Champaign, 3-4 Oct. 1986*. 1991.
80. COMRIE, Bernard and Mushira EID (eds): *Perspectives on Arabic Linguistics III. Papers from the Third Annual Symposium on Arabic Linguistics*. 1991.
81. LEHMANN, Winfred P. and H.J. HEWITT (eds): *Language Typology 1988. Typological Models in the Service of Reconstruction*. 1991.
82. VAN VALIN, Robert D. (ed.): *Advances in Role and Reference Grammar*. 1992.
83. FIFE, James and Erich POPPE (eds): *Studies in Brythonic Word Order*. 1991.
84. DAVIS, Garry W. and Gregory K. IVERSON (eds): *Explanation in Historical Linguistics*. 1992.
85. BROSELOW, Ellen, Mushira EID and John MCCARTHY (eds): *Perspectives on Arabic Linguistics IV. Papers from the Annual Symposium on Arabic Linguistics*. 1992.
86. KESS, Joseph F.: *Psycholinguistics. Psychology, linguistics, and the study of natural language*. 1992.
87. BROGYANYI, Bela and Reiner LIPP (eds): *Historical Philology: Greek, Latin, and Romance. Papers in honor of Oswald Szemerényi II*. 1992.
88. SHIELDS, Kenneth: *A History of Indo-European Verb Morphology*. 1992.
89. BURRIDGE, Kate: *Syntactic Change in Germanic. A study of some aspects of language change in Germanic with particular reference to Middle Dutch*. 1992.
90. KING, Larry D.: *The Semantic Structure of Spanish. Meaning and grammatical form*. 1992.
91. HIRSCHBÜHLER, Paul and Konrad KOERNER (eds): *Romance Languages and Modern Linguistic Theory. Selected papers from the XX Linguistic Symposium on Romance Languages, University of Ottawa, April 10-14, 1990*. 1992.
92. POYATOS, Fernando: *Paralanguage: A linguistic and interdisciplinary approach to interactive speech and sounds*. 1992.
93. LIPPI-GREEN, Rosina (ed.): *Recent Developments in Germanic Linguistics*. 1992.
94. HAGÈGE, Claude: *The Language Builder. An essay on the human signature in linguistic morphogenesis*. 1992.
95. MILLER, D. Gary: *Complex Verb Formation*. 1992.
96. LIEB, Hans-Heinrich (ed.): *Prospects for a New Structuralism*. 1992.
97. BROGYANYI, Bela & Reiner LIPP (eds): *Comparative-Historical Linguistics: Indo-European and Finno-Ugric. Papers in honor of Oswald Szemerényi III*. 1992.
98. EID, Mushira & Gregory K. IVERSON: *Principles and Prediction: The analysis of natural language*. 1993.
99. JENSEN, John T.: *English Phonology*. 1993.
100. MUFWENE, Salikoko S. and Lioba MOSHI (eds): *Topics in African Linguistics. Papers from the XXI Annual Conference on African Linguistics, University of Georgia, April 1990*. 1993.
101. EID, Mushira & Clive HOLES (eds): *Perspectives on Arabic Linguistics V. Papers from the Fifth Annual Symposium on Arabic Linguistics*. 1993.
102. DAVIS, Philip W. (ed.): *Alternative Linguistics. Descriptive and theoretical Modes*. 1995.
103. ASHBY, William J., Marianne MITHUN, Giorgio PERISSINOTTO and Eduardo RAPOSO: *Linguistic Perspectives on Romance Languages. Selected papers from the XXI Linguistic Symposium on Romance Languages, Santa Barbara, February 21-24, 1991*. 1993.
104. KURZOVÁ, Helena: *From Indo-European to Latin. The evolution of a morphosyntactic type*. 1993.
105. HUALDE, José Ignacio and Jon ORTIZ DE URBANA (eds): *Generative Studies in Basque Linguistics*. 1993.
106. AERTSEN, Henk and Robert J. JEFFERS (eds): *Historical Linguistics 1989. Papers from the 9th International Conference on Historical Linguistics, New Brunswick, 14-18 August 1989*. 1993.

107. MARLE, Jaap van (ed.): *Historical Linguistics 1991. Papers from the 10th International Conference on Historical Linguistics*, Amsterdam, August 12-16, 1991. 1993.
108. LIEB, Hans-Heinrich: *Linguistic Variables. Towards a unified theory of linguistic variation*. 1993.
109. PAGLIUCA, William (ed.): *Perspectives on Grammaticalization*. 1994.
110. SIMONE, Raffaele (ed.): *Iconicity in Language*. 1995.
111. TOBIN, Yishai: *Invariance, Markedness and Distinctive Feature Analysis. A contrastive study of sign systems in English and Hebrew*. 1994.
112. CULIOLI, Antoine: *Cognition and Representation in Linguistic Theory*. Translated, edited and introduced by Michel Liddle. 1995.
113. FERNÁNDEZ, Francisco, Miguel FUSTER and Juan Jose CALVO (eds): *English Historical Linguistics 1992. Papers from the 7th International Conference on English Historical Linguistics*, Valencia, 22-26 September 1992. 1994.
114. EGLI, U., P. PAUSE, Chr. SCHWARZE, A. von STECHOW, G. WIENOLD (eds): *Lexical Knowledge in the Organisation of Language*. 1995.
115. EID, Mushira, Vincente CANTARINO and Keith WALTERS (eds): *Perspectives on Arabic Linguistics. Vol. VI. Papers from the Sixth Annual Symposium on Arabic Linguistics*. 1994.
116. MILLER, D. Gary: *Ancient Scripts and Phonological Knowledge*. 1994.
117. PHILIPPAKI-WARBURTON, I., K. NICOLAIDIS and M. SIFIANOU (eds): *Themes in Greek Linguistics. Papers from the first International Conference on Greek Linguistics*, Reading, September 1993. 1994.
118. HASAN, Ruqaiya and Peter H. FRIES (eds): *On Subject and Theme. A discourse functional perspective*. 1995.
119. LIPPI-GREEN, Rosina: *Language Ideology and Language Change in Early Modern German. A sociolinguistic study of the consonantal system of Nuremberg*. 1994.
120. STONHAM, John T.: *Combinatorial Morphology*. 1994.
121. HASAN, Ruqaiya, Carmel CLORAN and David BUTT (eds): *Functional Descriptions. Theorie in practice*. 1996.
122. SMITH, John Charles and Martin MAIDEN (eds): *Linguistic Theory and the Romance Languages*. 1995.
123. AMASTAE, Jon, Grant GOODALL, Mario MONTALBETTI and Marianne PHINNEY: *Contemporary Research in Romance Linguistics. Papers from the XXII Linguistic Symposium on Romance Languages*, El Paso/Juárez, February 22-24, 1994. 1995.
124. ANDERSEN, Henning: *Historical Linguistics 1993. Selected papers from the 11th International Conference on Historical Linguistics*, Los Angeles, 16-20 August 1993. 1995.
125. SINGH, Rajendra (ed.): *Towards a Critical Sociolinguistics*. 1996.
126. MATRAS, Yaron (ed.): *Romani in Contact. The history, structure and sociology of a language*. 1995.
127. GUY, Gregory R., Crawford FEAGIN, Deborah SCHIFFRIN and John BAUGH (eds): *Towards a Social Science of Language. Papers in honor of William Labov. Volume 1: Variation and change in language and society*. 1996.
128. GUY, Gregory R., Crawford FEAGIN, Deborah SCHIFFRIN and John BAUGH (eds): *Towards a Social Science of Language. Papers in honor of William Labov. Volume 2: Social interaction and discourse structures*. 1997.
129. LEVIN, Saul: *Semitic and Indo-European: The Principal Etymologies. With observations on Afro-Asiatic*. 1995.
130. EID, Mushira (ed.) *Perspectives on Arabic Linguistics. Vol. VII. Papers from the Seventh Annual Symposium on Arabic Linguistics*. 1995.
131. HUALDE, Jose Ignacio, Joseba A. LAKARRA and R.L. Trask (eds): *Towards a History of the Basque Language*. 1995.

132. HERSCHENSOHN, Julia: *Case Suspension and Binary Complement Structure in French*. 1996.
133. ZAGONA, Karen (ed.): *Grammatical Theory and Romance Languages. Selected papers from the 25th Linguistic Symposium on Romance Languages (LSRL XXV) Seattle, 2-4 March 1995*. 1996.
134. EID, Mushira (ed.): *Perspectives on Arabic Linguistics Vol. VIII. Papers from the Eighth Annual Symposium on Arabic Linguistics*. 1996.
135. BRITTON Derek (ed.): *Papers from the 8th International Conference on English Historical Linguistics*. 1996.
136. MITKOV, Ruslan and Nicolas NICOLOV (eds): *Recent Advances in Natural Language Processing*. 1997.
137. LIPPI-GREEN, Rosina and Joseph C. SALMONS (eds): *Germanic Linguistics. Syntactic and diachronic*. 1996.
138. SACKMANN, Robin (ed.): *Theoretical Linguistics and Grammatical Description*. 1996.
139. BLACK, James R. and Virginia MOTAPANYANE (eds): *Microparametric Syntax and Dialect Variation*. 1996.
140. BLACK, James R. and Virginia MOTAPANYANE (eds): *Clitics, Pronouns and Movement*. 1997.
141. EID, Mushira and Dilworth PARKINSON (eds): *Perspectives on Arabic Linguistics Vol. IX. Papers from the Ninth Annual Symposium on Arabic Linguistics, Georgetown University, Washington D.C., 1995*. 1996.
142. JOSEPH, Brian D. and Joseph C. SALMONS (eds): *Nostratic. Sifting the evidence*. 1998.
143. ATHANASIADOU, Angeliki and René DIRVEN (eds): *On Conditionals Again*. 1997.
144. SINGH, Rajendra (ed): *Trubetzkoy's Orphan. Proceedings of the Montréal Roundtable "Morphophonology: contemporary responses (Montréal, October 1994)*. 1996.
145. HEWSON, John and Vit BUBENIK: *Tense and Aspect in Indo-European Languages. Theory, typology, diachrony*. 1997.
146. HINSKENS, Frans, Roeland VAN HOUT and W. Leo WETZELS (eds): *Variation, Change, and Phonological Theory*. 1997.
147. HEWSON, John: *The Cognitive System of the French Verb*. 1997.
148. WOLF, George and Nigel LOVE (eds): *Linguistics Inside Out. Roy Harris and his critics*. 1997.
149. HALL, T. Alan: *The Phonology of Coronals*. 1997.
150. VERSPOOR, Marjolijn, Kee Dong LEE and Eve SWEETSER (eds): *Lexical and Syntactical Constructions and the Construction of Meaning. Proceedings of the Bi-annual ICLA meeting in Albuquerque, July 1995*. 1997.
151. LIEBERT, Wolf-Andreas, Gisela REDEKER and Linda WAUGH (eds): *Discourse and Perspectives in Cognitive Linguistics*. 1997.
152. HIRAGA, Masako, Chris SINHA and Sherman WILCOX (eds): *Cultural, Psychological and Typological Issues in Cognitive Linguistics*. 1999.
153. EID, Mushira and Robert R. RATCLIFFE (eds): *Perspectives on Arabic Linguistics Vol. X. Papers from the Tenth Annual Symposium on Arabic Linguistics, Salt Lake City, 1996*. 1997.
154. SIMON-VANDENBERGEN, Anne-Marie, Kristin DAVIDSE and Dirk NOËL (eds): *Reconnecting Language. Morphology and Syntax in Functional Perspectives*. 1997.
155. FORGET, Danielle, Paul HIRSCHBÜHLER, France MARTINEAU and María-Luisa RIVERO (eds): *Negation and Polarity. Syntax and semantics. Selected papers from the Colloquium Negation: Syntax and Semantics. Ottawa, 11-13 May 1995*. 1997.
156. MATRAS, Yaron, Peter BAKKER and Hristo KYUCHUKOV (eds): *The Typology and Dialectology of Romani*. 1997.
157. LEMA, José and Esthela TREVIÑO (eds): *Theoretical Analyses on Romance Languages. Selected papers from the 26th Linguistic Symposium on Romance Languages (LSRL XXVI), Mexico City, 28-30 March, 1996*. 1998.
158. SÁNCHEZ MACARRO, Antonia and Ronald CARTER (eds): *Linguistic Choice across Genres. Variation in spoken and written English*. 1998.

159. JOSEPH, Brian D., Geoffrey C. HORROCKS and Irene PHILIPPAKI-WARBURTON (eds): *Themes in Greek Linguistics II*. 1998.
160. SCHWEGLER, Armin, Bernard TRANEL and Myriam URIBE-ETXEBARRIA (eds): *Romance Linguistics: Theoretical Perspectives. Selected papers from the 27th Linguistic Symposium on Romance Languages (LSRL XXVII)*, Irvine, 20-22 February, 1997. 1998.
161. SMITH, John Charles and Delia BENTLEY (eds): *Historical Linguistics 1995. Volume 1: Romance and general linguistics*. 2000.
162. HOGG, Richard M. and Linda van BERGEN (eds): *Historical Linguistics 1995. Volume 2: Germanic linguistics. Selected papers from the 12th International Conference on Historical Linguistics, Manchester, August 1995*. 1998.
163. LOCKWOOD, David G., Peter H. FRIES and James E. COPELAND (eds): *Functional Approaches to Language, Culture and Cognition*. 2000.
164. SCHMID, Monika, Jennifer R. AUSTIN and Dieter STEIN (eds): *Historical Linguistics 1997. Selected papers from the 13th International Conference on Historical Linguistics, Düsseldorf, 10-17 August 1997*. 1998.
165. BUBENÍK, Vit: *A Historical Syntax of Late Middle Indo-Aryan (Apabhramśa)*. 1998.
166. LEMMENS, Maarten: *Lexical Perspectives on Transitivity and Ergativity. Causative constructions in English*. 1998.
167. BENMAMOUN, Elabbas, Mushira EID and Niloofar HAERI (eds): *Perspectives on Arabic Linguistics Vol. XI. Papers from the Eleventh Annual Symposium on Arabic Linguistics, Atlanta, 1997*. 1998.
168. RATCLIFFE, Robert R.: *The "Broken" Plural Problem in Arabic and Comparative Semitic. Allomorphy and analogy in non-concatenative morphology*. 1998.
169. GHADESSY, Mohsen (ed.): *Text and Context in Functional Linguistics*. 1999.
170. LAMB, Sydney M.: *Pathways of the Brain. The neurocognitive basis of language*. 1999.
171. WEIGAND, Edda (ed.): *Contrastive Lexical Semantics*. 1998.
172. DIMITROVA-VULCHANOVA, Mila and Lars HELLAN (eds): *Topics in South Slavic Syntax and Semantics*. 1999.
173. TREVIÑO, Esthela and José LEMA (eds): *Semantic Issues in Romance Syntax*. 1999.
174. HALL, T. Alan and Ursula KLEINHENZ (eds): *Studies on the Phonological Word*. 1999.
175. GIBBS, Ray W. and Gerard J. STEEN (eds): *Metaphor in Cognitive Linguistics. Selected papers from the 5th International Cognitive Linguistics Conference, Amsterdam, 1997*. 1999.
176. VAN HOEK, Karen, Andrej KIBRIK and Leo NOORDMAN (eds): *Discourse in Cognitive Linguistics. Selected papers from the International Cognitive Linguistics Conference, Amsterdam, July 1997*. 1999.
177. CUYCKENS, Hubert and Britta ZAWADA (eds): *Polysemy in Cognitive Linguistics. Selected papers from the International Cognitive Linguistics Conference, Amsterdam, 1997*. 2001.
178. FOOLEN, Ad and Frederike van der LEEK (eds): *Constructions in Cognitive Linguistics. Selected papers from the Fifth International Cognitive Linguistic Conference, Amsterdam, 1997*. 2000.
179. RINI, Joel: *Exploring the Role of Morphology in the Evolution of Spanish*. 1999.
180. MEREU, Lunella (ed.): *Boundaries of Morphology and Syntax*. 1999.
181. MOHAMMAD, Mohammad A.: *Word Order, Agreement and Pronominalization in Standard and Palestinian Arabic*. 2000.
182. KENESEI, István (ed.): *Theoretical Issues in Eastern European Languages. Selected papers from the Conference on Linguistic Theory in Eastern European Languages (CLITE)*, Szeged, April 1998. 1999.
183. CONTINI-MORAVA, Ellen and Yishai TOBIN (eds): *Between Grammar and Lexicon*. 2000.
184. SAGART, Laurent: *The Roots of Old Chinese*. 1999.
185. AUTHIER, J.-Marc, Barbara E. BULLOCK, Lisa A. REED (eds): *Formal Perspectives on Romance Linguistics. Selected papers from the 28th Linguistic Symposium on Romance Languages (LSRL XXVIII)*, University Park, 16-19 April 1998. 1999.

186. MIŠESKA TOMIĆ, Olga and Milorad RADOVANOVIĆ (eds): *History and Perspectives of Language Study*. 2000.
187. FRANCO, Jon, Alazne LANDA and Juan MARTÍN (eds): *Grammatical Analyses in Basque and Romance Linguistics*. 1999.
188. VanNESS SIMMONS, Richard: *Chinese Dialect Classification. A comparative approach to Harngjou, Old Jintarn, and Common Northern Wu*. 1999.
189. NICHOLOV, Nicolas and Ruslan MITKOV (eds): *Recent Advances in Natural Language Processing II. Selected papers from RANLP '97*. 2000.
190. BENMAMOUN, Elabbas (ed.): *Perspectives on Arabic Linguistics Vol. XII. Papers from the Twelfth Annual Symposium on Arabic Linguistics*. 1999.
191. SIHLER, Andrew L.: *Language Change. An introduction*. 2000.
192. ALEXANDROVA, Galina M. and Olga ARNAUDOVA (eds.): *The Minimalist Parameter. Selected papers from the Open Linguistics Forum, Ottawa, 21-23 March 1997*. 2001.
193. KLAUSENBURGER, Jürgen: *Grammaticalization. Studies in Latin and Romance morphosyntax*. 2000.
194. COLEMAN, Julie and Christian J. KAY (eds): *Lexicology, Semantics and Lexicography. Selected papers from the Fourth G. L. Brook Symposium, Manchester, August 1998*. 2000.
195. HERRING, Susan C., Pieter van REENEN and Lene SCHØSLER (eds): *Textual Parameters in Older Languages*. 2000.
196. HANNAHS, S. J. and Mike DAVENPORT (eds): *Issues in Phonological Structure. Papers from an International Workshop*. 1999.
197. COOPMANS, Peter, Martin EVERAERT and Jane GRIMSHAW (eds): *Lexical Specification and Insertion*. 2000.
198. NIEMEIER, Susanne and René DIRVEN (eds): *Evidence for Linguistic Relativity*. 2000.
199. VERSPOOR, Marjolijn H. and Martin PÜTZ (eds): *Explorations in Linguistic Relativity*. 2000.
200. ANTILA, Raimo: *Greek and Indo-European Etymology in Action. Proto-Indo-European *ag-*. 2000.
201. DRESSLER, Wolfgang U., Oskar E. PFEIFFER, Markus PÖCHTRAGER and John R. RENNISON (eds.): *Morphological Analysis in Comparison*. 2000.
202. LECARME, Jacqueline, Jean LOWENSTAMM and Ur SHLONSKY (eds.): *Research in Afroasiatic Grammar. Papers from the Third conference on Afroasiatic Languages, Sophia Antipolis, 1996*. 2000.
203. NORRICK, Neal R.: *Conversational Narrative. Storytelling in everyday talk*. 2000.
204. DIRVEN, René, Bruce HAWKINS and Esra SANDIKCIOGLU (eds.): *Language and Ideology. Volume 1: cognitive theoretical approaches*. 2001.
205. DIRVEN, René, Roslyn FRANK and Cornelia ILIE (eds.): *Language and Ideology. Volume 2: cognitive descriptive approaches*. 2001.
206. FAWCETT, Robin: *A Theory of Syntax for Systemic-Functional Linguistics*. 2000.
207. SANZ, Montserrat: *Events and Predication. A new approach to syntactic processing in English and Spanish*. 2000.
208. ROBINSON, Orrin W.: *Whose German? The ach/ich alternation and related phenomena in 'standard' and 'colloquial'*. 2001.
209. KING, Ruth: *The Lexical Basis of Grammatical Borrowing. A Prince Edward Island French case study*. 2000.
210. DWORKIN, Steven N. and Dieter WANNER (eds.): *New Approaches to Old Problems. Issues in Romance historical linguistics*. 2000.
211. ELŠIK, Viktor and Yaron MATRAS (eds.): *Grammatical Relations in Romani. The Noun Phrase*. 2000.
212. REPETTI, Lori (ed.): *Phonological Theory and the Dialects of Italy*. 2000.
213. SORNICOLA, Rosanna, Erich POPPE and Ariel SHISHA-HALEVY (eds.): *Stability, Variation and Change of Word-Order Patterns over Time*. 2000.
214. WEIGAND, Edda and Marcelo DASCAL (eds.): *Negotiation and Power in Dialogic Interaction*. n.y.p.

215. BRINTON, Laurel J.: *Historical Linguistics 1999. Selected papers from the 14th International Conference on Historical Linguistics, Vancouver, 9-13 August 1999*. 2001.
216. CAMPS, Joaquim and Caroline R. WILTSHIRE (eds.): *Romance Syntax, Semantics and L2 Acquisition. Selected papers from the 30th Linguistic Symposium on Romance Languages, Gainesville, Florida, February 2000*. n.y.p.
217. WILTSHIRE, Caroline R. and Joaquim CAMPS (eds.): *Romance Phonology and Variation. Selected papers from the 30th Linguistic Symposium on Romance Languages, Gainesville, Florida, February 2000*. n.y.p.
218. BENDJABALLAH, S., W.U. DRESSLER, O. PFEIFFER and M. VOEIKOVA (eds.): *Morphology 2000. Selected papers from the 9th Morphology Meeting, Vienna, 25-27 February 2000*. n.y.p.
219. ANDERSEN, Henning (ed.): *Actualization. Linguistic Change in Progress. Selected papers from the Workshop on Patterns of Actualization in Linguistic Change, Vancouver, B.C., 14 August 1999*. n.y.p.
220. CRESTI, Diana, Christina TORTORA and Teresa SATTERFIELD (eds.): *Current Issues in Romance Languages. Selected papers from the 29th Linguistic Symposium on Romance Languages (LSRL), Ann Arbor, 8-11 April 1999*. n.y.p.