

1 Language, ecology and society: An introduction to Dialectical Linguistics

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1 Introduction

This book is about Language, Ecology and Society; not as three disparate areas but as a complex multi-dimensional whole that comprises (i) the ways we use language in communication; (ii) the reality of our global capitalist societies; and (iii) the current ecological crisis that threatens the sustainability of human and non-human life forms.

The main thesis in this book is that there are *dialectical relations* between these three aspects of our existence. That is, our language and our communicative interactions influence and are influenced by the way our societies are organized, which in turn influences and is influenced by our environmental surroundings, which in turn influence and are influenced by our language and our communicative interactions.

The approach presented in this book takes a starting point in one single axiom, namely that every aspect of existence is dialectically interrelated to every other aspect of existence. Because of this insistence on dialectical relations, the approach is known as *dialectical theory*. When these theoretical considerations take an explicit starting point in language and communication, we use the term *Dialectical Linguistics*.

Dialectical Linguistics is a tradition which investigates all aspects of language and communication by using a holistic approach that explores the interrelations between language, ecology and society. We cannot separate or isolate any of these areas, neither in our everyday life nor in our theoretical activities, just as we cannot separate our theoretical activities from the world in which and about which we theorize.

1.1 *The history of Dialectical Linguistics*

Dialectical Linguistics has been developed by the two Danish scholars Jørgen Christian Bang and Jørgen Døør since the late 1960s. Bang and Døør both worked at the University of Southern Denmark (formerly Odense University) and the tradition is also known as *The Odense School*. Døør (b. 1933) was associate professor at the Department of Philosophy from 1966 until his

retirement in 1998, except for the last few years where he joined the Institute of Language and Communication. Bang (b. 1946) is still associate professor in this institute.

The history of Dialectical Linguistics is also the history of the development of progressive movements within the linguistic community. It is thus a decisive feature of Dialectical Linguistics that Bang and Døør have always sought their collaborators and dialogue partners in those environments most eagerly engaged in developing alternative linguistic theories and alternative societal praxes.

These practical and theoretical environments constitute the conceptual frames which through the years have constrained and conditioned Bang and Døør's linguistic production, just as every scientist works within a conceptual frame that constrains and conditions what can be said if you want to participate in a continuous scientific dialogue.

In the 1970s these environments were found within the broad array of *Marxist* and *feminist* schools. Dialectical Linguistics was undoubtedly among these schools, but not a part of the mainstream Marxism of the period. However, it shared two important features with traditional Marxist thought: (i) it acknowledged a revolutionary axiology of science, i.e. it saw – and sees – science as a way of changing reality; and (ii) it shared the Marxist belief in the principle of *totality*, although the prime influence on the dialectical notion of totality or holism was Eastern philosophy – for example, Taoism, Hinduism and Buddhism. These Eastern roots were never explicitly stated in the 1970s, presumably because the dominant frame of theoretical discussions was Marxism.

The 1980s witnessed a shift in the international linguistic society. The Marxist discussions on class issues gradually lost momentum while one of the other major theoretical concerns of the 1970s, *feminism*, became a focus point for linguistic innovation. Dale Spender's 1980 eye opener *Man Made Language* is a landmark for this feminist turn. Bang and Døør's main interest in the 1980s was to demonstrate the patriarchal ways of thinking in the linguistic institutions. In a number of analyses they demonstrated what Spender termed 'women's negative semantic space' (cf. the traditional semantic definition of 'female' as 'minus male'). Bang and Døør also made a number of text analyses (e.g. of Fay Weldon's novel *Puffball*, cf. Chapter 8 of this volume) showing the patriarchal dominance in society and in language.

In my view, the essential contribution made by Bang and Døør to feminist linguistics is twofold. First, a non-dualist dialectical theory easily overcomes the barren discussions between Marxists and feminists whether the class society or the patriarchate is most fundamental or most important. The dialectical answer is that the two co-exist and support each other and consequently both must be changed. The other important contribution is that not only women are oppressed in a patriarchate but also children and men. It is important to notice that Bang and Døør add the age contradiction (child:adult) to the sex contradiction (male:female), thus emphasizing the family (father:mother:child) as the starting point for the discussion of patriarchal relations, instead of isolated sex/gender relations.

In the late 1980s and the 1990s an ecological turn took place within Dialectical Linguistics. This turn was marked by the publication of Bang (1987a): *Antydninger af en Økologisk Sprogteori* (*Outlining an Ecological Theory of Language*). The ecological concern did not arise on behalf of the critique of the patriarchy that in its turn did not arise on behalf of the critique of the capitalist economy. Rather the latter is more like a leitmotif through the various periods, the ecological crisis being an implication of a capitalist mode of production.

This new orientation coincided with the blooming of *ecolinguistics*, the science of *language and ecology*, which took place under the auspices of applied linguistics and the AILA organization (*Association Internationale de Linguistique Appliquée*). This coincidence between the emergence of ecolinguistics and the ecological turn of Dialectical Linguistics makes it reasonable to approach Dialectical Linguistics by outlining the field of ecolinguistics.

2 Roots of ecolinguistics

When the German biologist Ernst Haeckel in 1866 coined the term *ecology*, he did not have language in mind. To Haeckel, ecology was:

die gesammte Wissenschaft von den Beziehungen des Organismus zur umgebenden Aussenwelt, wohin wir im weiteren Sinne alle, Existenz-Bedingungen' rechnen können. (Haeckel 1866: 286)

the total science of the organism's relations to the surrounding environment to which we can count in a wider sense all 'conditions of existence'

But a century later, the Norwegian-American linguist Einar Haugen (cf. Haugen 1972) made a successful transference of Haeckel's concept to the sphere of language, probably under the influence of his famous compatriot, and father of deep ecology/ecological philosophy (or ecosophy), the Norwegian philosopher Arne Næss. In a talk given in 1970, Haugen defined the ecology of language as:

the study of interactions between any given language and its environment. (Haugen 2001: 57)

Haugen understood language ecology as an approach to or dimension of linguistics and his roots in sociolinguistics and bilingualism are very visible when one considers his use of the term ecology:

The true environment of a language is the society that uses it as one of its codes. [...] Part of its ecology is therefore psychological: [...] Another part of its ecology is sociological. (ibid.)

Through the 1970s and 1980s the Haugenian approach spread steadily, especially in the US, within such fields as language acquisition, bilingualism and multilingualism and language diversity, death and revitalization

(cf. Crystal 2000). This approach favours the study of the co-existence of languages, whether in human minds (micro-ecology) or in human societies (macro-ecology).

But in the late 1980s and early 1990s, a new dimension of language ecology or as it was now widely termed, *ecolinguistics*, grew forward. In this approach, the focus is on our biological environment:

Meanwhile, according to some scientists, a deeper crisis is at hand, no less than the threatened destruction of the entire planet as a habitable environment. This too we can investigate linguistically as a site for possibly deconstructing reality through the grammar. (Halliday 2001: 197)

The reference to Halliday is due to the fact that Halliday in his plenary talk to the ninth world congress of AILA in Thessaloniki, Greece, in 1990 – 20 years after Haugen's talk – said that:

[. . .] classism, growthism, destruction of species, pollution and the like – are not just problems for the biologists and physicists. They are problems for the applied linguistics society as well. (Halliday 2001: 199)

Today, the two talks by Haugen and Halliday mark two main approaches within the field of ecolinguistics. According to the brilliant Austrian linguist Alwin Fill, ecology in the Haugenian approach is:

understood metaphorically and transferred to 'language(s) in an environment'. (Fill 2001: 43)

Similarly, in the Hallidayan approach:

'ecology' is understood in its biological sense; the role of language in the development and aggravation of environmental (and other societal) problems is investigated; linguistic research is advocated as a factor in their possible solution. (ibid.)

Bang and Døør attended the AILA congress in Thessaloniki. Here they came in contact with the American environmental sociologist Frans C. Verhagen (cf. his historical overview in Verhagen 2000) who organized a number of meetings in Greece. In this way the AILA IX congress marked the institutionalization of ecolinguistics as a recognized discipline in the linguistic society, to a large degree due to Bang and Døør's efforts.

Another important incident in 1990 was the establishment of the Ecology, Language and Ideology (ELI) Research Group at Odense University. In the following decade or so a number of researchers and students have been involved in the work of the ELI Research Group and a number of prominent ecolinguists all over the world have been corresponding members of the ELI Research Group.

Through the 1990s, ecolinguistics developed into an institutionalized field in its own right primarily within the framework of *applied linguistics*, especially under the auspices of AILA and the German *Gesellschaft für Angewandte Linguistik* (GAL).

The first section on ecolinguistics was held at the tenth AILA world congress in Amsterdam in 1993 (see Alexander *et al.* 1993), and in 1996 the first scientific committee on ecolinguistics was established at the congress in Jyväskylä, Finland – with the participation of Bang and Døør (see Bang *et al.* 1996). At the following AILA meetings – 1999 in Singapore, 2002 in Tokyo and 2005 in Madison – there have been sections on ecolinguistics. In 2008 Essen (Germany) will host another ecolinguistics section at AILA XV.

Although AILA has turned out to be a regular and powerful institutional setting for the assemblies of the world's ecolinguists, the association with applied linguistics is not unproblematic, since many ecolinguists attempt to develop new ecological *theories* and not just applications of language, grammar and discourse. This very book is an example of such activities.

Simultaneously, ecolinguistic activities have appeared in universities all over the world, for instance at the University of California at Berkeley, where a large group of scholars, including Dan Slobin, Claire Kramsch, William Hanks and Leanne Hinton, has investigated the ecology of language. California also hosts Leo van Lier from the Monterey Institute of International Studies, who has contributed to the study of language ecology (cf. van Lier 2004). In Adelaide, Australia, Peter Mühlhäusler has established one of the most promising teaching centres of ecolinguistics, and in Europe vivid ecolinguistic communities have arisen in Graz (Austria), Bielefeld (Germany), Odense (Denmark) and also at a number of other universities.

2.1 *Dialectical Linguistics in the ecolinguistic landscape*

In the overall landscape of ecolinguistics, Dialectical Linguistics has traditionally been associated with the so-called 'Eco-Critical Discourse Analysis'. (This is the term used in Fill *et al.* 2002.) However, Dialectical Linguistics is not just an application of some pre-established theoretical framework for discourse analytical ends, but rather a theory-*cum*-application development of a new linguistic paradigm. This may be the reason why in recent publications (Fill *et al.* 2002) containing papers from the ecolinguistic conferences in Graz (December 2000) and Passau (September 2001) 'Dialectical Ecolinguistics' constitutes a whole section on its own, on a par with sections on 'The Pillars of Ecolinguistics', 'Language Contacts' (i.e. ecolinguistics in the Haugenian sense) and 'Eco-Critical Discourse Analysis' (i.e. ecolinguistics in the Hallidayan sense).

3 Two ecolinguistic dogmas

Any field of research can be characterized by its central dogmas. Within the ecolinguistic community two dogmas have evolved in the last one or two decades. The first dogma is that Haugen and Halliday were the instigators of the two lines of ecolinguistics, as described above; the second is that ecolinguistics today comprises a metaphorical (Haugenian) and a non-metaphorical (Hallidayan) notion of ecology. Both, however are doubtful.

Regarding the first dogma, Haugen himself pointed out that already Voegelin *et al.* (1967) had already made use of a concept of linguistic ecology. And similarly, as Verhagen notices, ‘two organizing meetings were held [at the 1990 AILA conference] before Halliday presented his keynote address’ (Verhagen 2000: 35). What Haugen and Halliday did was to articulate thoughts and feelings circulating at these particular points in history.

Regarding the second dogma, the distinction between metaphorical and non-metaphorical ecology was undoubtedly purposeful and beneficial in the early 1990s. By uniting two otherwise rather disparate fields, one affiliated with *sociolinguistics*, the other with *discourse analysis*, this distinction – since distinctions do not merely distinguish but also coordinate distinct concepts – created an understanding of shared interests in promoting such ecological principles as *peaceful co-existence*, *interdependence*, *small is beautiful*, etc. Hence, the most important aspect of this distinction is stated in the sentence immediately following it in Fill (2001: 43):

The two approaches are complementary rather than mutually exclusive.

But today the distinction has nevertheless served its purpose and there are convincing theoretical and practical reasons to abandon it.

I will give one example of the perils of this distinction, namely the way it is treated in Alastair Pennycook’s article *Language Policy and the Ecological Turn* (Pennycook 2004). In this article Pennycook recapitulates Fill’s distinction:

As Fill (2001) points out, there is a basic distinction to be made between the use of ecology as a metaphor and the reference to real ecologies. Thus, on the one hand, we may talk metaphorically about languages being in an ecological relationship with each other, while on the other we may be interested in how certain languages describe the natural environment. (Pennycook 2004: 217)

Now, what is a ‘real’ ecology? This term, as opposed to a ‘metaphorical’ ecology, implies that there are real and un-real ecologies, and language is not a part of any real ecology. This might be a widespread opinion in Western science but it is wrong for two reasons.

3.1 *Nature and culture as a Cartesian dichotomy*

The first reason why it is wrong to distinguish between ‘real’ and ‘unreal’ ecologies is that it reproduces the Cartesian dichotomy between culture, i.e. human culture, and nature. As Claire Kramsch has pointed out (personal communication), the phonetic similarities of the words *nature* and *culture*, and especially *nature* and *nurture*, have a seductive quality that tempt us to assume the existence of such *ontological* dichotomies as *nature–culture* and *nature–nurture*.

These Cartesian dichotomies in effect place human societies outside the biological order, as if human culture – or at least one part of this culture, namely

language – can develop without any implications for our natural environments. This ideology is also inscribed in Pennycook's use of the word *reference* which entails that a language is situated in the cultural order, independent of the natural order, and from this place in reality it points to another place, namely to the natural order.

As a non-dualist alternative, I propose to view nature and culture as inseparable *aspects* of a complex and dynamic system with certain self-organizing characteristics. Here languages also play their part in this complexity; of course, not independent of human beings, in the narrow sense that without human beings, there would be no language. But then again, without oxygen there would be no human beings. That something presupposes something else is evident in a deep ecological ontology in which everything in the universe is interrelated. According to this insight, it is wrong to presuppose an independent sphere of human culture as a mediator of language–nature relations; our use of language has implications for our social, ideological and biological environment. Let me give three examples:

- Modern chaos theory implies that even a very small, local activity can have dramatic effects globally. A butterfly flapping its wings in Brazil may create or contribute to the creation of a snow storm in Alaska. The powers of one person uttering one syllable are many times stronger than that of one butterfly flapping its wings once. When we talk we create physical and psychical vibrations in our environments, although we have no means of knowing beforehand how these vibrations will propagate in the universe. These are non-linear, complex and chaotic processes.
- Certain shamans are known to be able to arouse, by talk alone, different feelings of anxiety and ecstasy, etc. in their interlocutor. We may try to find some 'rational explanation' for this in terms of individual psychology, hypnosis, etc. But we often forget that (spoken) language is not only strings of hierarchically ordered concepts but also tones and rhythms, i.e. music or vibrations. We have all experienced how music can strike a rich palette of emotional chords in us. In this example outer vibrations resonate with inner vibrations which we detect as emotions. Music and speech do not just resonate on a socio-ideological level, but indeed also on a bio-logical level.
- In certain Aboriginal cultures in Australia it is, or sadly was, a widespread belief that the language *belonged* to that very place in the biosphere, that language was directly related to the habitat. We enlightened Westerners might reduce such beliefs to the sphere of superstition but the Chinese Zen Master Tung Shan teaches us: 'Although you do not hear it, do not hinder that which hears it' (quoted in Halifax 1990: 23). Please also remember the proverbial warning: 'Absence of proof is not proof of absence'.

How should we explain such phenomena? Which scientific, linguistic or other methods should we apply in order to grasp such phenomena, i.e. if we want to adopt a more scientific attitude than just relegating these phenomena to the realms of uninformed, even 'primitive' superstition?

These are in my view important practical and methodological questions for a caring and responsible ecolinguistic discipline, i.e. a linguistic discipline that does not reduce *ecology* to a catchy purr-word. My conjecture is that the immediate future will witness an emerging linguistic trans-discipline that takes such phenomena seriously and that attempts to explain them scientifically. Perhaps an appropriate name for such a discipline is *vibrational phonetics* or *eco-phonetics*, i.e. a kind of phonetics that takes seriously the insights of *vibrational medicine* (cf. Gerber 2001) and thus transgresses the limits of current positivist phonetics and phonology.

3.2 *Homogeneous ecology and heterogeneous ecology*

The second reason why Pennycook's distinction between real and un-real ecologies is wrong has to do with the concept of 'languages being in an ecological relationship with each other'. The problem is that this implies a monocultural or homogeneous use of *ecology* which indeed is a *contradictio in adjecto*, since Pennycook places a language in an '*intra-species*' ecology only, i.e. only in relation to other languages, and not to other cultural and natural phenomena. Furthermore, Pennycook talks about 'languages being in an ecological relationship with each other' as if this was implied by Fill's distinction. However, this is not the case. Fill does not use this alleged metaphor as a reference to the relation between languages. On the contrary, when discussing 'Ecology as Metaphor', Fill quotes the Haugen position as being about 'Interactions between any given language and its environment' (Fill 2001: 43; Haugen 2001: 57), and indeed Haugen is very explicit in defining the environment of a language as partly psychological, partly sociological.

Of all the authors in the 'Ecology as Metaphor' section of Fill and Mühlhäusler (2001), *not one* uses ecology in the 'monocultural' sense. Like Haugen, every author relates languages to various aspects of their psycho-social environments, and not to other languages alone.

Pennycook does have a point, though: if one conceives ecolinguistics as an organismic science, there is a dangerous risk of naturalizing linguistic changes, so as to hide the way in which political, economic and cultural forces cripple our mother tongues.

Such a view reproduces a nineteenth-century evolutionary metaphor that sees every and any linguistic change including the death of a language as a result of some pseudo-Darwinian process, making such changes inevitable and even 'natural'. Pennycook clearly and instructively discusses these organismic metaphors of the nineteenth-century comparative philologists (Pennycook 2004: 219), but then he turns to the twentieth-century language ecology, referring to this as 'the re-emergence of these analogies'. Thereby, Pennycook rhetorically construes an identity between the nineteenth-century organismic metaphor and the nineteenth-century ecological metaphor. He even classifies them under the same term, i.e. the 'biomorphic metaphors'.

Pennycook is quite right to warn against the re-emergence of the nineteenth-century metaphors, and quite wrong in claiming that there is in fact such a re-emergence taking place in ecolinguistics.

I consider Einar Haugen's discussion on this point sufficiently clear to prevent ecolinguists or language ecologists from returning to the nineteenth-century standpoint – and hopefully also sufficiently clear to prevent ecolinguists from being accused of lingua-Darwinism. Thus Haugen writes:

In writings of the nineteenth century it was common to speak of the 'life of languages,' because the biological mode came easily to a generation that had newly discovered evolution. Languages were born and died, like living organisms. They had their life spans, they grew and changed like men and animals, they had their little ills which could be cured by appropriate remedies prescribed by good grammarians. [...] Today the biological model is not popular among linguists. It was clearly a metaphor only, which brought out certain analogues between languages and biological organisms, but could not be pushed too far. Any conclusions drawn about language from this model were patently false. (Haugen 2001: 57ff.)

Perhaps Pennycook will appreciate the title of this book since the organistic fallacy might be impending as long as one discusses *language and ecology*, whereas a discussion on *language, ecology and society* inevitably transcends the organistic metaphor.

4 Status of ecolinguistics

One of the hot topics in ecolinguistic circles is whether ecolinguistics is a branch within the overall taxonomy of linguistics or whether it transcends this taxonomy.

Many excellent ecolinguists have placed ecolinguistics *within* the overall landscape of linguistics as well as distinguishing between different schools or directions of ecolinguistics. An early example of this is found in the first survey of the field (according to Kettemann and Penz 2000b: 9), Alwin Fill's *Ökologistik: eine Einführung* (1993). He writes:

Ökologistik ist jener Zweig der Sprachwissenschaft, der den Aspekt der Wechselwirkung berücksichtigt, sei es zwischen einzelnen Sprachen, zwischen Sprechern und Sprechergruppen, oder zwischen Sprache und Welt, und der im Interesse einer Vielfalt der Erscheinungen und Beziehungen für die Bewahrung des Kleinen eintritt. (Fill 1993: 4)

Ecolinguistics is that branch of linguistics that takes into account the aspect of interaction, whether it is between languages, between speakers, between speech communities, or between language and world, and that in order to promote diversity of phenomena and their interrelations, works in favour of the protection of the small. (my translation)

Here Fill, by defining ecolinguistics as another branch ('Zweig') of linguistics, reproduces the socio-cultural order of modern capitalist science, which is based on the bureaucratic logic embedded in the *division of labour* and the *everything-is-of-equal-value* attitude.

But at the same time Fill transgresses this order by emphasizing Wechselwirkung (mutuality) and the participatory scientist. Unfortunately, this transgression remains encapsulated in a scientific discipline which is placed on a par with reductionist and objectivist disciplines. This is indicated by the term *ecolinguistics* which is quite problematic in certain respects. Thus, a pre-modifier, like *ecological* or its short form *eco* places the modified object in the marked, i.e. the marginalized position, as compared to a non-modified object. *Milk* is milk, but *organic* or *ecological milk* is *a-kind-of-milk*, i.e. not just plain milk. If we rather, as some ecolinguists suggest, distinguished between *pesticide milk* (*pest milk* in short) and *milk*, *milk* being what we today know as *organic milk*, then the organic milk will be the unmarked variety. Similarly, by referring to ourselves as *ecolinguists* we subscribe to our marginalization.

However, pragmatically we cannot ignore that for the time being this way of doing linguistics is marginalized, even to the degree that many of our colleagues doubt that our activities are linguistics at all. In such a landscape of linguistics, it makes good sense to talk about *ecolinguistics*, even if it creates a picture of ‘*peaceful co-existence*’ between two incommensurable ways of doing linguistics.

Considering the early date of Fill’s publication (1993) his approach can be interpreted as a *strategic* formulation in order to make ecolinguistics accepted within the overall landscape of linguistics. Or perhaps it is just the case that:

Fill is more of a Taoist than we are in his preferring to evade confrontations with the traditionalists. (Bang and Døør 2000b: 55)

Whatever the reason ecolinguistics is now slowly becoming accepted as a legitimate way of doing linguistics, and there is no doubt that this is to a high degree due to Alwin Fill’s contributions to the field.

5 Ecolinguistics as a life science

As indicated by Fill, however, there is an alternative, namely to define a truly non-dualistic, non-objectivist, non-positivistic alternative to the current linguistics. This is arguably Bang and Døør’s main contribution to ecolinguistics: the awareness that linguistics can and ought to be done in a way that transcends the limits of traditional Western scientific ideology. This ideology does not just underlie Western science, but also the capitalist mode of production. Therefore this approach explicitly brings together the ecological crisis of Gaia, of mankind and of Western science.

Bang and Døør remind us that the scientific praxis is a partial social praxis with certain societal, political, cultural, moral, ethical and communicative implications:

Science or scientific praxis is nothing more or less than a particular historical, social praxis and part of a specific socio-cultural order. Different cultures create different forms of science and every dominant scientific praxis organizes its people and

problems in ways and by means that aim at the same ends as the culture as a whole. (Bang and Døør 2000a: 53)

According to this linguistics and science are not politically neutral nor morally neutral. This is not to be interpreted as a *deterministic* model of science, because ‘relations between scientific praxis and culture are dialectical’ (ibid.), not deterministic. Furthermore, one should remember that science or any other cultural segment is:

not a homogeneous phenomenon, but a heterogeneous one. It contains parts and relations that belong to former epochs and some that might dominate future cultural formations. (ibid.)

The majority of ecolinguists are not in consonance with the dominant economic, political and scientific praxes. Consequently, Bang and Døør invite them and us to re-orientate linguistics, rather than just position them within it. This re-orientation can be articulated in many ways, allowing us to experiment with different modes of communication. One of these many articulations is the following triad, which relates linguistics to the life sciences:

- Linguistics is a life science. Like *biology*, linguistics is ‘orientated towards living systems and their relationships with, and in the environment’ (Bang and Døør 2000a: 54). Please notice that language is not a ‘living system’ in its own right (the organistic metaphor!), only a *part* of and in living systems.
- Linguistics is a life science with an explicit axiological stance. Like *medicine*, which is ‘committed to try to enhance a healthy development of human beings and to restore the health of any human being’ (ibid.), linguistics is committed to enhance a healthy development of communicative and linguistic patterns and qualifications, so that ‘human beings are able to use language to create healthy cultures and life forms’ (ibid.).
- Linguistics contributes to the life sciences with the insight that a science based upon reductionism, dualism, positivism and non-participation distorts reality and our perceptions and conceptions of reality. Thus, the inclusion of linguistics within the life sciences is a radical transformation of the life sciences. The excellent German ecolinguist Peter Finke comments on the reductionism of the ecology:

Although we have learned a great number of things from conventional scientific ecology, this biological discipline has up to now failed to free itself from the physicalist boundaries which obstruct an adequate understanding of the psychic dimension of ecosystems. (Finke 2001: 85)

The conjuncture of the three characteristics of linguistics marks a *critical criterion* for a sound development of linguistics, and if just one of them is missing from our scientific praxis it ceases to be an alternative to current mainstream reductionist science. Luckily, the three criteria are mutually supportive. If you, for instance, adhere to a non-dualist view, it is impossible to

place the linguist in a neutral observer's role, because that implies a dualist view on the subject–object relation. I should add that the criteria are neither monistic nor universal, since the ways in which you can do responsible and participatory science are infinite in number.

In the light of these criteria, I prefer to understand ecolinguistics as one part of the overall scientific praxis that might become dominant in future cultural formations. For this reason I suggest the following definition of ecolinguistics:

Ecolinguistics re-orientates linguistics so that its practitioners become sensitive, responsible and active *sharetakers* – i.e. participants in the local, global and universal communities of humans and non-humans – whose point of departure is patterns of language and communication.

6 Linguistics, scientific revolutions and revolutionary science

Early twenty-first-century linguistics is on the threshold of a scientific revolution, in Thomas Kuhn's sense (Kuhn 1962). It is the faith of 'revolutionary science' to reformulate the key tenets and assumptions of the discipline in question, rather than just keep extrapolating their predecessors' axiomatic foundations. This changes the scientific discourse, since it has to address questions which to Kuhn's 'normal scientist' are not scientific questions, but rather philosophical or maybe even political.

In the mainstream of 'normal linguistics', it is customary to operate with a dichotomy between *fact* and *value* (cf. Putnam 2002), and between *descriptivity* and *normativity*. To Dialectical Linguistics, facts are values and values are facts. This approach excludes the possibility of being neutral because neutrality presupposes strict separation. Every description is normative and every norm is descriptive. Hence Dialectical Linguistics does not fall within the tight boundaries of 'normal scientific' approaches because it raises such questions as how language and communication contribute to the distortion of social relations and which role language and communication play in our current ecological and cultural crises.

In this way, Dialectical Linguistics addresses a number of questions of importance to our Western culture as a whole and not just in relation to linguistics or science. These questions include such basic considerations as: How should we organize our material production? How should we organize the education of our children and adolescents? How do we solve conflicts peacefully? How do we avoid human life forms that systematically exploit and devastate our living and loving host, Gaia?

To many 'normal scientific' linguists such questions are not *real* linguistic questions, and in a daring excursion outside of their field they might add that it is not science at all.

'Revolutionary science' linguists, however, will readily recognize such questions since they are raised to a still growing degree in the academic world. Conscious scientists in all avant-garde fields of traditional academia, and in the trans-disciplinary fields as well, consider how their own disciplines and

activities can contribute to a more peaceful future. This is also the case in linguistics. Within a range of linguistic communities – for example, social semiotics, feminist linguistics, critical discourse analysis, critical cognitive linguistics and critical applied linguistics – brilliant scholars untiringly work to share their insights on how language contributes to our current crises. Likewise, many excellent scientists, also within linguistics, communicate the results of their research outside the scientific community (e.g. Lakoff 2004).

This development indicates a rising global awareness of the irresponsibility and unsustainability of our current life forms to a degree where persons, groups and communities begin *acting* differently, rather than waiting for action directions from the dominant political and industrial systems. All over the world people focus on how to transform the personal and societal potentials of their *now-here* existence rather than await the *no-where* solutions of utopia.

The scientific reaction to such a development is to reformulate the respective disciplines in a *radical* way. The literal meaning of *radical* is that it goes to the *radix*, i.e. the root, of either the problem or the discipline. From these roots it is then possible to develop a true alternative that is not entangled in a development that no matter how promising it was and has been turns out as a literal threat to the continuance of our existence.

The root of the problem can be illustrated with a famous quotation by Albert Einstein:

We cannot solve our problems with the same thinking we used when we created them.

A radical approach investigates the roots of the problem, and with this as a starting point it develops a theoretical and practical reaction. A similar insight is formulated by M.A.K. Halliday who said that ‘what is beneficial at one moment in history may be lethal and suicidal at another’ (Halliday, personal communication, quoted in Alexander 1996: 20).

The root of the discipline presupposes that the discipline is viewed as a historical product. Any and every discipline has evolved as the result of complex interactions between personal, institutional and societal actors and inclinations. The result is a multifaceted sociological pattern, and in order to understand the discipline, its goals, means and values one has to understand it in its historical and social context. And in order to *change* one’s own scientific actions and inclinations, one needs to understand whence and how one’s discipline came to be as it is. This point of view resembles Marshall McLuhan’s *dictum* from 1947: ‘Only the traditionalist can be radical!’ (quoted after Kuhns [1996]).

The *raison d’être* of *radical science* is to approach the discipline’s foundational axioms, methods, values, styles and behaviours in the light of Einstein’s, Halliday’s and McLuhan’s insights. This re-evaluation of the discipline goes naturally hand in hand with a re-evaluation of how the discipline manages to handle the most pressing personal, societal, cultural and environmental problems. Furthermore, as Kuhn pointed out, it is also important to see how various disciplines manage to handle the cutting-edge empirical findings of the time (cf. Laszlo 2003), especially since such findings all too often are handled

with outright disregard. It is thus no coincidence that the two radical approaches often go hand in hand: if one feels that one's discipline at present is unable to cope with the most pressing problems, one is likely to be dissatisfied with that discipline.

7 Dialectical linguistics and the new science of language

Dialectical Linguistics is *trans-disciplinary*, *revolutionary* and *radical*. It is *trans-disciplinary* in that its heuristic frame presupposes an entangled reality where linguistic and communicative questions cannot be separated from philosophical, societal and practical questions. It is *revolutionary* in the Kuhnian sense, i.e. its goals and means differ from those of mainstream linguistics, and in the societal sense, i.e. it promotes alternative models, patterns and awarenesses of linguistic communication. Thus it advocates the urgent need of transforming the social praxis that frames these. Finally, Dialectical Linguistics is *radical* because it advocates the point of view that mainstream linguistics cannot contribute to the identification of, let alone the solution to, the most pressing problems at the dawn of the twenty-first century. And it is radical because it reframes such classical linguistic notions as deixis, dialogue, text, context, syntax, semantics, pragmatics, etc. in a new coherent frame of investigating problems of the discipline known as linguistics. Indeed the very concept of a *linguistic* science is profoundly different in Dialectical Linguistics, as compared to other normal scientific approaches in linguistics.

One way of expressing why Dialectical Linguistics is a new science of language is to formulate the main tenets or principles of the theory. However, in the case of Dialectical Linguistics, one and only one principle will suffice to crystallize the spirit of dialectics, namely the following Principle of Dialectical Holism:

Everything is dialectically interrelated!

This principle demonstrates the *family resemblances* (*pace* Wittgenstein) between dialectical theory and some of the major holistic traditions in Eastern and Western philosophy. This principle tells us that nothing can exist in isolation from the rest of the world, and that indeed in everything existing, the rest of the world is co-existing. This insight has finally made it into modern Western science – for example, in physics. Thus, David Bohm and B.J. Hiley write in *The Undivided Universe* (1993):

The essential features of the implicate order are [. . .] that the whole universe is in some way enfolded in everything and that each thing is enfolded in the whole. (Bohm and Hiley 1993: 382)

This formulation resembles a central tenet in Buddhism, Hinduism and Taoism expressed in this way by the Vietnamese monk Thich Nhat Hanh:

When we look into the heart of a flower, we see clouds, sunshine, minerals, time, the earth, and everything else in the cosmos in it. Without clouds, there could be no

rain, and there would be no flower. Without time, the flower could not bloom. In fact, the flower is made up entirely of non-flower elements; it has no independent, individual existence. It 'inter-is' with everything else in the universe. (Nhat Hanh 1995: 11)

(I think Thich Nhat Hanh would agree with me that 'non-flower elements' should be interpreted as 'not only flower elements', since 'non-flower' per se implies the same dualism as 'flower' per se.)

Quantum physics and its interpreters also tell us to dismiss the classical Newtonian model with matter and energy as two essentially separate spheres. Richard Gerber writes: 'Matter and energy are now known to be interchangeable and interconvertible' (Gerber 2001: 58). Or more poetically: *Matter is frozen light* (cf. Gerber 2001: 56).

According to this, it is clear that the dialectical principle is only an approximation, since 'thing' is actually a convenient reference to a density of interfering patterns of moving fields of energy. Bohm and Hiley term the totality of these fields, i.e. the universe, the *holomovement* (Bohm and Hiley 1993: 357), and they explain to us that 'All things found in the explicate order emerge from the holomovement and ultimately fall back into it' (382). In Buddhist terms this is called the doctrine of non-substantiality (*nissatta* or *nijjiva*) (cf. Kalupahana 1992; Kalupahana 1999).

Now, if things are *not*, then we must understand them as *events*, that is, as processes of *Arising, Being and Ceasing*, or 'the ABC of impermanence' (cf. the title of Kramsch 2002: '*How can we tell the dancer from the dance?*'). This point necessarily has implications for any theory of *causality*. Consider the Newtonian concept of same-cause-same-effect found in, for instance, modern medicine where a conjuncture of symptoms whenever present is interpreted as the effect of one and the same disease, provided that the physician is infinitely skilled in doing diagnostics. This disease, in turn, is interpreted as having one and only one cause. This cause can be eliminated, provided the correct medication is administered. This medication must be the same in every treatment, for which reason any reliance on the healing skills of the physician must be eradicated. Only chemical configurations are sufficiently stable to eradicate such personal dependencies, and therefore only pharmacological treatment is acceptable. Alternatives to such views can be found in modern physics (e.g. Bell's theorem, cf. Capra 1975; Bay *et al.* 2003), and in the Buddhist concept of dependent arising, *paticcasamuppada* (cf. Kalupahana 1992: 53–9).

Another dualist reductionism, or reductionist dualism, addressed by the holistic-dialectical principle is the widespread separation of *observer* and *observed*, or describer and described. In quantum physics this is described as the *Heisenberg Uncertainty Principle*, and in recent systems theory it is summed up by Prigogine and Stengers who write:

[The] experimental dialogue with nature discovered by modern science involves **activity** rather than passive observation. [...] Description is dialogue, communication, [...]. (Prigogine and Stengers 1984: 41, 300)

So, what we describe when we do science is not an object or a proposition ‘out there’, it is our *interactions* with our environment. In dialectical theory one of the implications of such a view is that *every description and interaction is also-already a self-description and self-interpretation*. This *relationalism* of science does not imply *relativism*. The reason is that there are normative criteria for health: not anything goes if we want to survive and live well. This goes for our physical health/wellbeing, our mental health/wellbeing and our social health/wellbeing. Or to introduce the following terms used in dialectical theory: *bio-logics*, *ideo-logics* and *socio-logics*.

A *logic* is a recurrent pattern; a *bio-logic* is, for instance, our breathing; an *ideo-logic* could be our theories of causality; and dominant *socio-logic* patterns are capitalism and bureaucracy. Of course, these are merely dimensions of our social praxis, and as such they are interrelated.

Finally, let me just mention some further conceptual dichotomies which are impossible within a dialectical understanding:

- The dichotomy between *facts* and *values*, with the former belonging to the sphere of ‘pure science’, the latter to the sphere of emotionality, religion, etc. What you consider a fact and how you understand a fact depends on your values and on the social frame within which your ‘factual activities’ are embedded.
- The dichotomy between *pure science* and *applied science*, – for example, within linguistics, or between *philosophy* and *science*. Whether we dub ourselves ‘pure scientists’, ‘applied scientists’ or ‘philosophers’, our activities are ‘grounded in and constituted by our individual and collective experiences and social and personal history and praxis’ (Bay *et al.* 2003: 32).
- The dichotomy between *universals* and *particulars*. A universal, i.e. an invariant pattern, presupposes permanence, and permanence presupposes unaffectedness, and unaffectedness presupposes non-relationality.
- The dichotomy between *mind* and *world*. In Eleanor Rosch’s words:

The world as perceived or categorized is [...] a seamless whole or seamless web, in which perceiver/categorizer and perceived/categorized are simply opposite poles of the same event. (Rosch 1999: 71)

8 Key models of Dialectical Linguistics

How are these general tenets incorporated in Dialectical Linguistics by Jørgen Christian Bang and Jørgen Døør? It has been a vital aspect of their linguistic praxis to develop a number of models for carrying out a linguistic analysis. The concept of a *model* is very different from one approach to another, and therefore it is necessary to understand the *status* of models within any given theory. Bang and Døør have explained their view as follows:

Models are specific and necessary instruments in and for theoretical discourse, but are precisely instruments. Their benefits and deficits depend first and last on how we and others use them. (Bang and Døør 1986: 49; my translation)

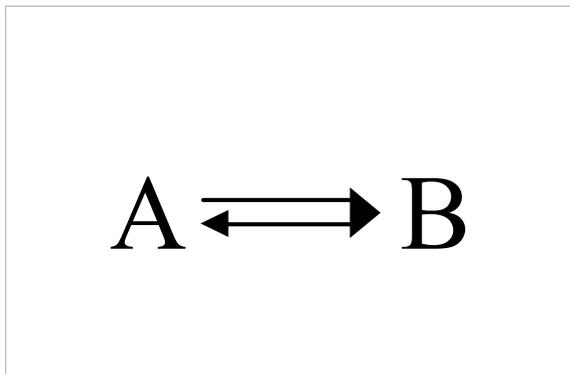


Figure 1.1 The Dialectical Arrow

It is a distinctive feature of dialectical models that they are meant to be used heuristically. They are search models that raise particular questions in relation to a certain heuristic frame, i.e. the set of problems which underlies the specific scientific investigation.

Before presenting the different models it is necessary to show a recurrent figure that can be found in most dialectical models, namely the graphic depiction of a *dialectical relation* found in Figure 1.1.

This figure is a symbol of a *dialectical relation* between A and B. A dialectical relation means that:

- A and B are *individualities*. They are relatively stable parts, within a whole;
- A and B are *interdependent* and *interconnected*. They exist in an incessant communication: without the one, the other would cease to exist;
- A and B are *unequal*. One of them, *in casu* A, dominates the relation;
- A and B are *interactional*. *Dominance* does not imply *determinacy*. The direction of the dominance determines the interactional patterns of both of them;
- A and B are *historical phenomena*. Through their actions they preserve and change the dominance of the relation; a dialectical relation is thus an impermanent result of its historical conditions, and therefore the subject of change.

Having established this key figure in dialectical models, let us see how it is enfolded and unfolded in Dialectical Linguistics.

3.1 *Deixis*

Today it is widely recognized outside of the sectarian circles of formalist hardliners that language depends on the *context*, i.e. the *conditions* for its *production*, *distribution* and *consumption*. But 30–35 years ago, when Bang and Døør started developing their theory of deixis, this was not so obvious and accepted.

If we want to investigate the dialectical relation between text and context, a reasonable starting point seems to be the phenomenon of *deixis* (or *shifters* or *indexicals*). The reason is that deictic phenomena in a text are semantically sensitive to the specific situational circumstances. For this reason a dialectical methodology for linguistic analysis takes a starting point in a *deixis analysis* (cf. this volume, Section II):

- (i) Which words refer to unique phenomena in the given communicative situation?
- (ii) Who/what do these words refer to?
- (iii) Who utters these words and why?
- (iv) What are the implications of this use of language?

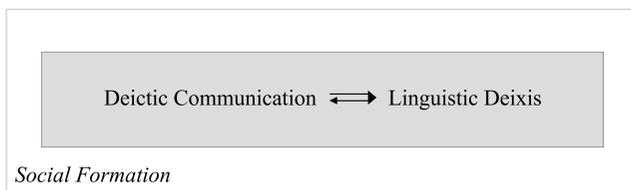


Figure 1.2 Deictic Communication and Linguistic Deixis

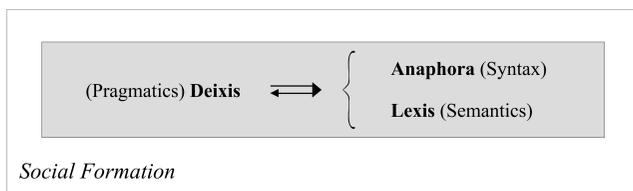


Figure 1.3 The Interdependency of Deixis, Anaphora and Lexis

Together with the Dutch linguist Harry Perridon, Bang and Døør described the phenomenon according to the models in Figure 1.2 and Figure 1.3 (see also this volume, Chapter 6).

Quite a few treatments of deixis unfortunately reproduce a reductionist logic by proceeding as if it is possible to isolate the deictic relations between text and context. To avoid such reductionisms Bang and Døør make it clear that extra-textual, i.e. deictic, elements only make sense in relation to intra-textual and inter-textual elements, cf. the following *Triple Model of Reference* in Figure 1.4.

Bang, Døør and Perridon write:

Our notion of *reference* makes it possible to talk about a general triple system of reference for any linguistic configuration, a system which consists of three interdependent parts, each of which may be more or less dominating. (Bang *et al.* 1991: 17ff., cf. this volume, Chapter 6)

Dimension of reference	Dominating reference	Reference to	
Lexical	Inter-textual	COtext	Social & Individual } { Lexicon & Grammar
Anaphoric	Intra-textual	INtext	Cataphoric (forward) Anaphoric (backward) Symphoric (simultaneous)
Deictic	Extra-textual	CONtext	Context of the producer(s) Context of the communicator(s) Context of the consumer(s) Derived contexts } { Persons Time Place Logics

Figure 1.4 The Triple Model of Reference

To make a sensitive and sensible text analysis implies that one accepts the fact that a given text implies different referential dimensions, i.e. that it has more than one rational analysis. Furthermore, one must accept that a text configuration has several meanings at the same time.

Traditionally (e.g. in Levinson 1983), deixis is said to comprise references to speaker, addressee, time and place. In dialectical theory, deixis comprises references to:

- Persons: Speaker, addressee and third persons;
- Objects: Things and media;
- Topos: Place and time;
- Logos: Logic, modality and lexis.

The argument for this expansion of deixis is that the dialogical implications of these are defined in relation to speaker, addressee, time and place. One example will suffice, namely *logos deixis*.

In their *Deixis Matrix* (cf. this volume, Chapter 6) Bang and Døør distinguish between three kinds of *logos* deixis: logical deixis, modality deixis and lexical deixis. According to Bang and Døør logical deixis:

indicates the kind of relationships that exist between individualities or the kind of coherence between individualities or relations (i.e. relations of relations) that is a particular historical fact. (Bang and Døør 1996: 102)

Consider the following example of logical deixis: a distinguished logician teaches a freshman course, *Introduction to Logic*, at an outstanding Ivy League university. The professor has been teaching and discussing the logic of bi-conditional propositions the whole day:

- (P1) $\alpha = 1$ if α is true
- (P2) $\beta = 1$ if β is true
- (C) $\alpha \leftrightarrow \beta = 1$ then ‘ α if and only if β ’ is true

But when she comes home after a long hard day, she has an argument with her husband who says to her: 'Well, I love you if and only if you love me!' The logician answers him that his sentence is nonsense and a violation of the logic of love, because true love is unconditional.

According to the logic of Logic, his utterance is true, if he loves her, and if she loves him. But according to the logic of Love, many would find his utterance illogical, because either you love someone, or you do not; it does not depend on whether your love is returned or not.

The point is that if logic in the classroom and logic in the bedroom are not the same, then logic is just as context sensitive as person reference, and then logic is a *deictic phenomenon*.

Similarly, it is possible to indicate the status of the language-reality relation. This is a matter of *modality deixis*. For instance, the logician could answer her husband: *I love you* or *I don't love you* or *I ought to love you* or *I will never love you*. In all three instances she establishes her love to him as a part of their dialogue situation, but she then indicates the way in which this is or becomes a part of their present situation. Her choice is not just a choice between paradigmatically interrelated propositions; it is a choice between worlds and life forms, and since it depends on her situational *origo*, the modality of her sentence is a deictic phenomenon.

Let me lastly give one example of the category of *lexical deixis*. A Marxist may claim that the bourgeoisie exploits the proletariat. However, a liberalist wishing to negate this claim may not simply choose a negation: the bourgeoisie does not exploit the proletariat. Rather, he might prefer to claim that the owner of the factory makes the workers prosper. Since the choice between these two utterances depends on the personal, situational and discursive frames, it is context sensitive, and therefore the utterance exhibits a deictic feature.

Bang and Døør's contribution to the theory of deixis is the insistence that any linguistic phenomenon that is sensitive to the language users' situational positions is a deictic phenomenon.

8.2 Dialogue

The phenomenon of deixis makes knowledge of the situational conditions a *conditio sine qua non* for a proper text interpretation. In other words, if we want to make a sensitive interpretation of a text or utterance, we must have a model for understanding its context, i.e. the *dialogue* that gives the text and utterance its life. The logical implication of this is that *the dialogue is the smallest unit of human communication*. You cannot interpret an utterance, a sentence, a word or a morpheme without doing so in relation to its dialogical background *or* in relation to an *implied* dialogical background, i.e. a dialogue as you imagine it. Therefore the smallest unit in text analysis is the dialogue, and therefore the modelling of the dialogue is crucial in Dialectical Linguistics. Bang and Døør's dialogue model is shown in Figure 1.5.

S₁ and S₂ are roughly equivalent to the traditional categories of speaker and addressee. The Object O can similarly be equated with the referential

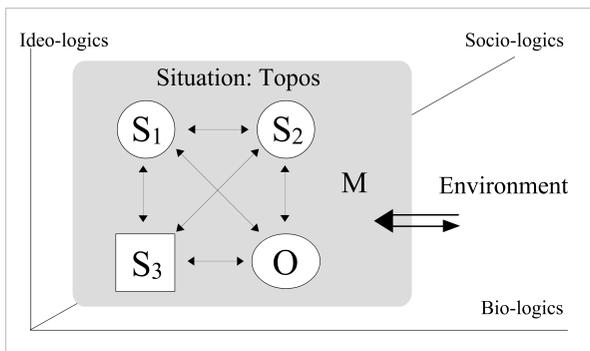


Figure 1.5 The Dialogue Model

of contextual objects and states of affairs that are discussed in the dialogue. The dialogue takes place in a situational *topos* on the background of a three-dimensional social praxis. It is facilitated by a conjuncture of certain *media* (e.g. language).

But there is a novel feature in the dialogue model. In the dialectical tradition we define a dialogue as ‘a verbal communication which takes place between at least three persons of different age and sex’ (Bay *et al.* 2003: 35):

Even when it seems as-if there is a monologue or duologue, and not a dialogue (in our sense) going on, we interpret the communication in relation to the normal dialogue, i.e. as a conversation between three persons. The dialogue has thus two derivatives, namely a monologue and a duologue. So, when we talk to ourselves, i.e. conduct an internal monologue, we treat such a use of language as explicable in relation to and presupposing a basic [dialogical] core experience. (*ibid.*)

Consider, for example, a general practitioner (GP) examining a boy in his consultancy. The boy is escorted by his father, and the three of them talk about the boy’s health problems. This is a *dialogue*. At a certain point in the dialogue, the father leaves the room to pick up a prescription, and the dialogue is transformed into a *duologue*. After the consultation, the GP reflects on the boy’s illness and the treatment of it. This is a *monologue*. But the duologue is also a continuation of the dialogue, and the monologue is a continuation of the duologue and the dialogue. That is, even after the father has left the room, he still influences, and is influenced by, the development of the conversation. And when the GP sits on his own, the voices of the father and son still contribute to the conversation. Hence, the monologue and the duologue are also *dialogues*.

Generally, dialogues are conditioned and constrained by the voices of persons and institutions not present in the situation. From first to last, a sensitive analyst also looks for the voices of the boy’s mother, the GP’s teachers and colleagues, the National Board of Health and the pharma-industrial complex.

Thus, it is in no way uncommon that the patient understands and describes his own health through the eyes, words and categories of his family, friends and colleagues. Similarly, it is not uncommon that a treatment strategy is neither decided by the GP nor by the patient and his/her relatives. Rather peer pressure, industrial greed or research interests forces the GP and the patient to choose a given treatment. Hence, if the analyst wants to analyse the conversation between the GP and the boy, s/he must be open to the possibility that the patient's utterances are dictated by his parents' worldview, while the GP's actions are dictated by the pharmaceutical industry.

Dialectical Linguistics also operates with an anonymous S_3 category as an integral dimension of the dialogue model:

There is always an anonymous third party present when we use language. The anonymous third expresses the cultural and social order that has pre-organized the language use to a certain degree. This means that the child learning a language is forced to consider the anonymous third. Often we do not reflect on these matters, because it is so tempting to believe that our inner speech is a conversation with ourselves and no-one else. We are tempted to believe that we are engaged in a 'free' conversation. But even the so-called monological situation contains a number of subjects. (Døør 1998: 40ff.; my translation)

The anonymous S_3 category comprises sociocultural constituents which the child internalizes through its language acquisition. Linguistically these can be articulated by the child's parents or teachers in the form 'everyone knows that' or 'we all know that'. The child acts out these socio-cultural expectations in its thought, actions and speech. I might add that when the GP attended medical school, s/he also learned a language and a discourse which also is co-formed and conformed by the anonymous third.

Finally, the relations between the dialogue's participants and its situational and practical settings are *dialectical* (in the model the \leftrightarrow arrows are to be interpreted as dialectical arrows, cf. Figure 1.1). It is often an open question who or what is acknowledged as dominating the dialogue.

8.3 *The principles of democratic dialogues*

The dialogue also has a morally normative aspect. Thus Bang and Døør have suggested a *dialogical experiment*, i.e. a method for conducting a dialogue in situations with conflicts of interests. The Principles of Democratic Dialogues are three principles for a rational and morally responsible dialogue:

The Principle of Sharing

Attempt to identify and explicate those conditions which the participants of the discourse necessarily have in common in the situation, whether they or we like it or not. Invite the partners of the dialogue to be a part of the process or the negotiations.

The Principle of Difference

Attempt to identify and explicate those situation specific differences that make a difference between you and your discourse partners. Invite the partners to participate in the process. Try to use formulations where the implications are quite clear.

The Principle of Experiments

Attempt to formulate the deepest possible changes in your own praxis which are both compatible with a development of the situation and where your identity and dignity are kept. Invite your counterparts, or con-parts, to formulate the smallest possible changes in their praxis where the changes still make a difference and such that they will oblige themselves to them. When this has been clearly established, invite your counterparts or con-parts to an experiment, delimited in time and place, in keeping with the obligations.

For a more detailed exposition of the Method of Democratic Dialogues see Chapter 10, this volume.

8.4 Core contradictions

Interpreting a text in order to explicate *how* it relates to the situation and to the social praxis presupposes that we have an understanding of the nature of the social praxis. The dialectical model of the social praxis is in many respects in consonance with that of *critical theory*. Alastair Pennycook describes this tradition in this way:

One of the crucial legacies of critical theory has been the insistence on a conflictual rather than a bourgeois liberal consensual view of society. While this was, in the first instance, always based on a view of the inherent conflicts of capitalism (a lesson we forget at our peril), it was later broadened to include the conflicts of gender, ethnicity, race, and so on. (Pennycook 2004: 222)

In dialectical theory these ‘fields of conflicts’ are termed *Core Contradictions*. They are symbolized in the dialectical model *Core Contradictions of the Social Praxis* in Figure 1.6.

I will not present each of the core contradictions in this context since these are laid out in detail in Chapter 4, below. The core contradictions should, of course, considering the dialectical frame, be interpreted as dialectically interdependent, i.e. there is no such thing as ‘a pure class contradiction’

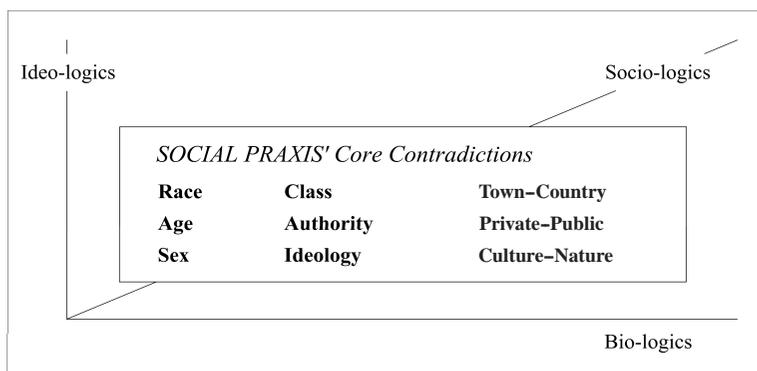


Figure 1.6 Core Contradictions of the Social Praxis

or ‘a pure sex contradiction’ (as some of our Marxist and feminist colleagues seem to assume). Furthermore, no core contradiction relates to only one logical dimension of the social praxis, which for instance the great Marxist Russian linguist V.N. Vološinov assumed in 1929: ‘The laws of language generation are *sociological* laws’ (Vološinov 1973: 98). Summing up these two aspects of the dialectical model of core contradictions, Bang and Døør write:

Although sex identity and relationship are of a biological nature they are always formed and transformed – or deformed – by the ‘second nature’ of socio- and ideologies. [...] On one hand there are no pure cases of sex contradiction, and on the other hand, all of the other core contradictions imply sex contradictions. (Bang and Døør 1990: 9)

The idea of a *conflictual* model of the social praxis is developed as an alternative to what Pennycook terms a ‘bourgeois liberal consensual view of society’. According to Pennycook, such a model is incompatible with ecological theories of language. Quoting one of the most prominent language ecologists, Peter Mühlhäusler (2000: 308), Pennycook writes that language ecologists have constructed a notion of ecology as:

A harmonious space in which notions of struggle for survival are replaced by ‘the appreciation of natural kinds and their ability to coexist and cooperate’ (Mühlhäusler, 2000: 308). [...] [Language ecology] operates with a utopian vision of ecological harmony that is ultimately anathema to critical theory. (Pennycook 2004: 222)

Pennycook’s argument is based on a dichotomist interpretation of ecolinguistics. First of all, Mühlhäusler does not write that ‘natural kinds’ *do* live together in co-existence and cooperation, only that they are *able* to. This discrepancy between what we can and what we do is acknowledged by most ecolinguists to be the result of certain societal patterns that pervert and distort ourselves, our Selves and our surroundings. These societal patterns can then be analysed in terms of *capitalism*, *patriarchy*, *bureaucracy*, etc.

In this way ecolinguistics and Dialectical Linguistics are a critical and revolutionary paradigm because they assume that society can be changed and that a new order can be developed. Thus, Dialectical Linguistics shares with critical theory the insistence that we as scientists ought to take our starting point in the most pressing conflicts here and now, and that we should not see ourselves as standing outside these conflicts, but rather commit ourselves to being participants in them so that we can contribute to the peaceful solution of them. And we also share with critical theory the view that we should avoid the utopia of permanent harmonious states.

But unlike most critical theoreticians, who replace the utopia of permanent harmony with a utopia of permanent conflict, Dialectical Linguistics does not adhere to the critical model of social development in terms of revolutionary transformations from one conflictual order to another, because this way of thinking actually naturalizes the societal conflicts, making them the permanent and natural order of things. Because there are no harmonious states in this worldview, it forces us to prefer ‘the dictatorship of the proletariat’ to

‘the dictatorship of the bourgeoisie’, ‘matriarchal tyranny’ to ‘patriarchal tyranny’ and ‘atheistic intolerance’ to ‘theistic intolerance’.

Our Buddhist tradition has taught us that nothing is permanent. Our Hindu tradition tells us that *maya* is that state of being where we think, hope and feel that nothing will change. Therefore we do not strive for permanent harmony, but a relatively stable order can be maintained for a certain period and on all levels: bio-logically in terms of ecological sustainability, socio-logically in terms of peaceful democracies and ideo-logically in terms of deep awareness and wisdom (cf. Rosch *in press*). Rather than the dichotomy between ‘permanent conflict’ and ‘permanent harmony’, Dialectical Linguistics suggests a notion of ‘impermanent harmony in conflict’. Thus, in Dialectical Linguistics, we prefer to distinguish between states, degrees and forms of conflict. What we should strive for is to transform the conflicts into creative conflicts, i.e. conflicts which have the potentials of leveraging both parts of the conflict into a more aware and wise state. Similarly, we should also do our utmost to avoid unnecessary cruelty.

8.5 *Semantics*

The final model I present in this context is a *semantic matrix*. I will present this model by referring to one of the key figures in *Cognitive Linguistics*, Ronald Langacker (cf. Steffensen, forthcoming). He presents the following example concerning the lexical item *cat*:

I know, for example, that two of my linguistic colleagues are allergic to cats, but I would hardly be justified in viewing this knowledge as part of the conventional meaning of *cat*, even though it enriches my understanding of the notion. (Langacker 1987: 159ff.)

Langacker uses this example to illustrate the distinction between different aspects of our encyclopedic knowledge of semantic meaning. In the cognitive model some aspects are *semantically central* – for example, ‘four legs’ and ‘fur’, while others are *semantically peripheral* – for example, ‘collegial allergy’:

The multitude of specifications that figure in our encyclopedic conception of an entity clearly form a gradation in terms of their **centrality**. (Langacker 1987: 159)

I would like to reformulate Langacker’s insight on this point: There is a *collective* meaning (Langacker’s ‘conventional’ and ‘central’), and there is an *individual* meaning (Langacker’s ‘enriched understanding’), and we always perceive semantics as a *both-and* relation of collective and individual meaning. But then Langacker commits a methodological mistake when he states:

From the practical standpoint, of course, sensible investigators focus their attention primarily on the more central [i.e. conventional] specification. (Langacker 1987: 159)

From a dialectical point of view, a linguistic analysis is an analysis of an actual dialogue. In that context it is just as important to excavate the individual semantic potentials of the dialogue participants. General *sensibility* cannot do without specific *sensitivity*. In order to do so, Bang and Døør distinguish between the *Social Sense* and the *Individual Meaning* of an expression:

- *Social Sense* is the semantics shared by the members of a speech community. It is normally found in standard dictionaries.
- *Individual Meaning* differs from social sense and establishes the individual as a person and not a machine/computer. It thus indicates personality and social identity.

These are co-existing dimensions of the text's semantic potentials, and not poles on a continuum where maximal *Social Sense* implies minimal *Individual Meaning*. However, one of them might in specific situations dominate the other.

If we again consider the example of the logician and her husband we see that the distinction between Social Sense and Individual Meaning is not enough to capture the differences between the semantics of the classroom and the semantics of the bedroom. What we need is a distinction between the semantics of *specific contexts*: *logic* in a classroom context means one thing and in a bedroom context another.

Of course, the semantic differences between specific contexts do not exclude the possibility of semantic similarities across different specific contexts. This aspect of trans-topic semantics is termed *general context* by Bang and Døør, and it includes both *Social Sense* and *Individual Meaning*, because both of them refer to either a person's or a group's trans-topic semantic interpretations. Consequently, both *Social Sense* and *Individual Meaning* have a *specific contextual* counterpart:

- The *specific contextual* dimension of *Social Sense* is termed the *Social Import*. Such specific contexts might be a football arena, a surgery, a ghetto, a linguistic congress, a courtroom, a school or a building site.
- The *specific contextual* dimension of *Individual Meaning* is termed *Personal Significance*. This is a sort of *resulting semantics* produced *in situ* and *in vivo* by each participant in the dialogue. It refers to the unique semantic interpretation arising for any person in every instant of any dialogue.

These distinctions are described in the *semantic matrix* (Figure 1.7) which transform the two distinctions into a model with four poles.

It must be kept in mind that the dialectical dynamics between the poles cause each pole to change historically. Furthermore, there are in any conflictual social praxis attempts at performing *semantic hegemony* (*pace* Gramsci) with the purpose of determining the social sense. Thus, the *social sense* of *democracy* and *freedom* is more in consonance with the social import of bourgeois social import than with socialist social import. Hence, semantics is also a matter of power, control and conflicting interests in social relations, although this is often hidden behind idealist references to *linguistic correctness*, which is nothing

but an attempt to hide or naturalize power positions. A similar insight was stated by Vološinov:

Class does not coincide with the sign community [. . .]. Thus various different classes will use one and the same language. As a result, differently oriented accents intersect in every ideological sign [i.e. in every word]. Sign becomes an arena of the class struggle. (Vološinov 1973: 23)

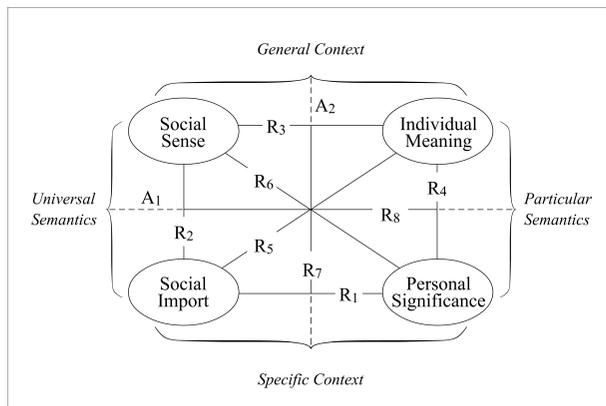


Figure 1.7 Semantic Matrix

9 The future of Dialectical Linguistics

Just as the past history of science is made up of personal, institutional, economical and societal threads interwoven into each other, so too will the future development of the scientific enterprise of Dialectical Linguistics depend on general societal developments and on persons acting within these constraints.

On a societal plane two contradictive tendencies prevail at the threshold of the twenty-first century. The first is the widespread spiritual, holistic or ecological movement (each name emphasizing important aspects of it). The growing awareness that human beings are a part of Gaia, rather than her masters, is radically changing – although still on a small scale – both our material behaviour and our consciousness: the production of goods and theories has been questioned, and Gaia’s cry out for another type of human behaviour has been answered by a worldwide ecological community of responsible human beings. At the same time, and in the same movement, we leave a Baconian-Cartesian-Newtonian era, and an alternative to its materialistic and monocausal way of thinking is growing forward. This development takes place both within and outside established universities. At the universities the scientific enterprise of the twenty-first century is intimately connected with the abandonment of Cartesian rationality, and this is, for example, anticipated by quantum physics, transpersonal psychology, integral medicine and integral field theories (e.g. Laszlo 2003).

The second movement is the still more intense development of capitalism, known as *globalization*. As the capitalist production becomes more and more technological, research is a still more important condition for production and profit maximization. Therefore capitalist governments and parliaments make their financial contributions to the public universities and research institutions dependent on whether these can contribute to the capitalist (re)production of private and public corporations. This is in no way a new development but a decisively new dimension, as the ideologeme of ‘free research’ will be replaced with the ideologeme of ‘societal utility’ which in reality is ‘capitalist utility’. The loss of the former is in no way lethal, since the ‘free research’ ideology mostly has been used as a cover for ‘useless research’, i.e. research that in no way has contributed to making life better, healthier or happier (and unfortunately much of linguistics belongs to this category). But the emergence of the latter can result in the final erasure of critical awareness at the universities, thus leaving no room for happiness and creativity in the development of alternative theories and praxes.

The future of Dialectical Linguistics depends on the ability of dialectical researchers to navigate in the environment of the second movement and to get in touch with and cooperate with other participants of the first movement. One way of doing the former is to explicitly make it a political question whether the public in the Western democracies want this development; and this can be done by demonstrating a vital alternative. In this way dialectical theory along with other congenial practices and theories, – for example, critical theory, organic production, Buddhism and *E-Sadhana* (spiritual practice for the electronic age) – is not just a matter of theory, but of praxis – this is a call for a democratization of science.

Such a democratization is necessary on a societal, institutional and personal plane, and it implies a democracy that goes deeper than the traditional bourgeois democracies; for example, it must incorporate a spiritual and ecological dimension, thus emphasizing a democratic, ecological and peaceful way of living, not just among human beings, but among every single aspect of the universe. Whether we should term this a *dialectical democracy*, an *ecological democracy* or maybe a *spiritual democracy* is not important as long as we live it!

A final factor in the future development of Dialectical Linguistics is its ability to reach a larger number of scholars. Theories do not survive by themselves and on their own, but only by being adopted and adapted by scholars and scientists who can see some perspectives in using them. So far, and this is no big secret, Dialectical Linguistics has not experienced a major breakthrough internationally, although its contribution to the development of ecolinguistics has been vital and has been acknowledged by other scholars. Hopefully this book can reach those linguists, scholars, scientists and activists who, like us, concern themselves with and are concerned about the state of linguistics and the state of Gaia.

This book is an *invitation*: it is an invitation to adopt a theory, but more importantly to *adapt* a theory. A theory’s vitality depends on how its practitioners are able to transform it into a time-space-relevant framework, and to

refrain from degenerating it into a rigid set of dogmas. It is my hope, the editors' hope and surely also the authors' hope that this invitation will be accepted in the same spirit as it was given: of concern and compassion for humanity, Gaia and its manifold inhabitants.

10 Postscript

This introduction is an elaborated version of my talk, *What is Dialectical Ecological Linguistics and what can it do for the language teacher?*, given at the Berkeley Language Center, University of California at Berkeley on 9 September 2005. I am deeply grateful to the director of the Berkeley Language Center, Professor Claire Kramersch, who invited me to give the talk and who hosted my research stay at Berkeley in September 2005.