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Eco-Linguistics: A Framework

1. Introduction: Applied Linguistics & Eco-Linguistics

Applied linguistics and many linguists have been engaged in a language game in which language and linguistics are presented as neutral phenomena. There are many reasons for this mistake and false ideology, one being the wish to imitate the success of natural sciences.

Traditional linguistics presupposes,

- (i) that if linguistics wants to be accepted as a genuine science, it has to imitate the natural or formal sciences;
- (ii) that the natural and formal sciences are objective and neutral;
- (iii) that only the natural and formal sciences have methods that guarantee both objectivity and neutrality.

We, however, participate in a different language game in which language and linguistics are not considered or treated as if they were neutral. Language and linguistics are considered to be part of a social activity constituted by and constituting a social praxis, and therefore part of a meaningful and value-based process.

Consequently, Applied Linguistics is a partisan enquiry into the various language games with the intention to stabilize and change (i) the ways we use language and (ii) our views on the way we use language.

Linguistics and applied linguistics are social activities that either confirm or criticise social praxis. Applied linguistics is an intervention in the social praxis, i.e. an intervention in a meaningful and value-constituted problematic. Therefore, any change of our use of language is at the same time a change of the social praxis.

Social praxis is constituted by some core contradictions that both constrain and condition every social activity including language use and linguistics. Any phenomenon in our social praxis is dialectically determined by a conjuncture of all the core contradictions although one being dominant.

One of the core contradictions is "culture-nature" and in our time it is part of an ecological crisis. The ecological crisis co-determines the place and function of language and linguistics. Consequently, applied linguistics cannot escape being involved in the crisis.

Because applied linguistics is an enquiry into the actual and possible use of language, the research object of applied linguistics comprises the dialectical determination of both language and linguistics ("pure" and applied).

2 Some Models for Eco-Linguistics

Ecolinguistics is the part of critical, applied linguistics concerned with the ways in which language and linguistics are involved in the ecological crisis. Ecolinguistics is a critical theory of language/linguistics and is both partisan and objective.

2.1. A Model of Core Contradictions

Language and ecolinguistics are parts of a culture, a social formation, and a praxis; therefore, language and linguistics are constituted by the core contradictions of our social praxis.

Fig.1: Core Contradictions of Social Praxis

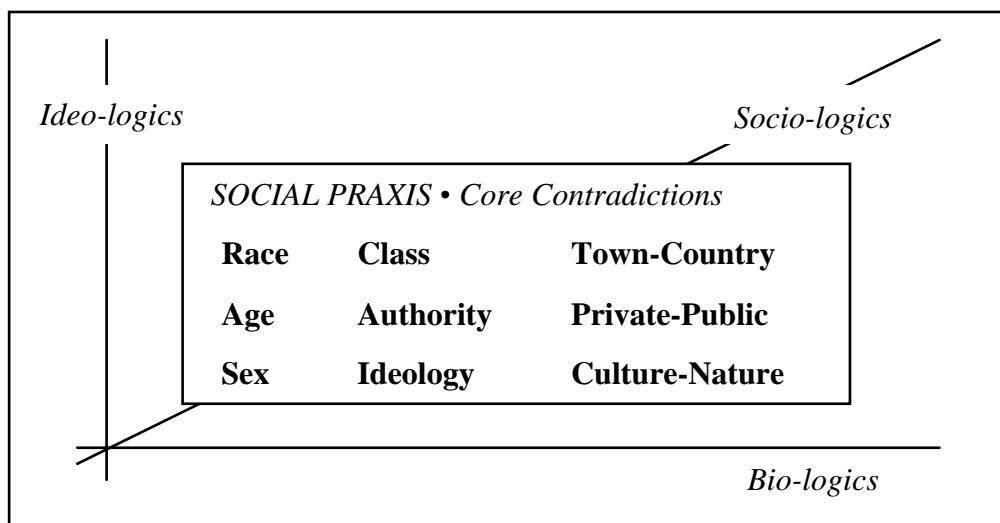
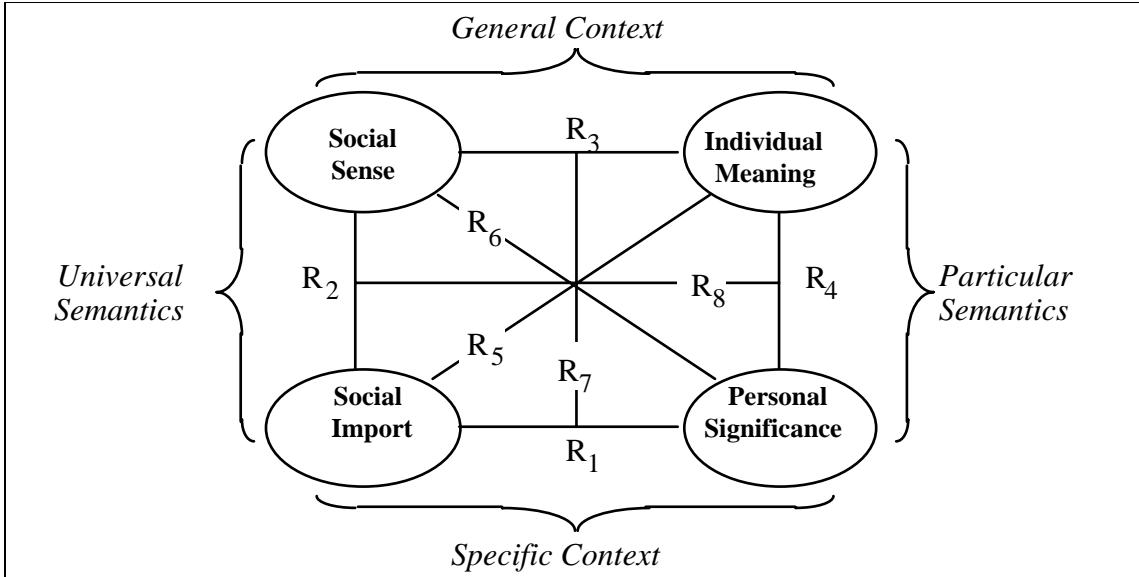


Fig. 1 is one of our models that determine and define *the scenario of, and for a critical theory of language/linguistics*.

2.2. A Model of Semantics

Our second model of and for a dialectical, ecological theory of language/linguistics is an explication of a semantic matrix. The matrix consists of four semantic constituents that constrain and condition any language use.

Fig. 2: Semantic Matrix



We have called the first constituent the **social sense** of a text. It is a diachronic dimension of the semantics of a text, and you normally find it in standard dictionaries. The social sense of Danish words are to be found in *Ordbog over det danske Sprog* (Vol. 1-28, København, 1918-56) and *Nudansk Ordbog* (1-2, 14. ed. København, 1990).

The two dictionaries contain the traditional and standard semantics of Danish words. They register the use of words in a selection of written material, they identify the ways a word traditionally is used, and at the same time they establish a standard meaning, the social sense. The relative invariance of social sense is an effect of, and causes, the relative stability of social praxis.

The dictionaries present a cultural canon which is socially transmitted and transformed in primary, secondary and further education.

They are objective in the sense that they describe some aspects of the normal uses of words, and they are partisan in the sense that they are selective and that they function as norms for the educational system and other state apparatus.

The second constituent of our semantic matrix is the **individual meaning** of a text. Both social sense and individual meaning are constituents of the diachronic dimension of a text. For the individual language user the individual meaning is the usual or normal way in which the user produces a

text and understands a text. The individual meaning differs from social sense and establishes the individual as a person and not a machine/computer.

My normal and standard use of words like "freedom, matter, and mind" differs from the social sense of the words, and still there are sufficient similarities to the social sense, so that I am understood when I participate in dialogues.

The individual meaning of a word/text is (i) the normal way I use a word/text, and (ii) the interpretation I habitually use in my understanding of other persons' use of the word/text.

Individual meaning is (i) relatively invariant for a longer time of my personal history, and (ii) relatively invariant through different situations at different time and places. Therefore, the system of my individual meanings are in a dialectical relationship to my *topos*.

In one sense my individual meaning of some key words/texts determine my personality, and co-determine my social identity. So, although the individual meaning differs from the social sense, and individualizes me, *principium individuationis*, then at the same time I am classified as belonging to a type of individuals that normally use a text in a certain way that differs from its social sense. I might be typified as an ecologist, a Marxist or a pacifist.

The third constituent of our semantic matrix is the **social import**. It is a synchronic aspect which is conditioned by the participants' identification and acceptance of the communicative context of the dialogue. The context could be a court room or an AILA congress.

The court room context defines a specific semantic interpretation of a text. Being a judge of peace myself, I am aware of the specific semantics of certain words that in some sense is generated by the particular context. My use of the word "to know" is different in the court room from my use of the same word in my family life or in my professional life. The polysemy of "to know" is not a case of "dealing merely with multiple meanings for a single word but rather with multiple related meanings" (Mark Johnson 1987: 193). Some indications of the correct use, the social import, of the key terms are to be found in law texts.

There is of course no sharp separation between the synchronic and the diachronic aspect of the contextual meaning, the social import. The law text and recorded law cases are clear examples of the diachronic aspect of social import, but the important thing is, that the synchronic dimension

dominates the social import. The reason is that the conjuncture of social import and personal significance constitutes the foreground, the actual use of the text, whereas the social sense and the individual meaning are the background.

We have dictionaries that determine the social import of certain terms. If the context is an AILA congress then we have dictionaries that guide the social import of our key terms, e.g. David Crystal, *A Dictionary of Linguistics and Phonetics*. Oxford, 1985; O. Ducrot, T. Todorov, *Dictionnaire encyclopédique des sciences du langage*. Paris, 1972, and W.A. Koch, *Perspektiven der Linguistik Bd I-II*. Stuttgart, 1973.

Social import definitions may become social sense definitions; e.g. the word **organic** is in *The Penguin Pocket English Dictionary* (Fourth edition 1990: 589f) defined: "[...] of or being food produced using fertilizer solely of plant or animal origin without the aid of chemical fertilizers, pesticides, etc [...]" Cf. the EEC-text in *Appendix B*.

Personal significance is the fourth aspect of our semantic matrix. It is the unique and personal contribution to the use and development of the language; therefore it is defined and limited by the actual situation in which the dialogue takes place. It comprises all the aspects Chomsky tries to eliminate. Simply stated, Chomsky's research-object is not language, because language presupposes both personal similarities and differences. It is because we are not identical twins that there is a reason for linguistic communication. Secondly, it is because we are different and some differences are conditioned by the change in our environment that language changes and that we can use language creatively.

2.3. A Dialogue Model

The third model illustrates the fact that the *prototypical* situation for the use, understanding, and enquiry of language is a dialogue. Consequently, our theory differs from *duological* models such as those of *Cours de linguistique générale* and Chomsky. The traditional model from *Cours* shows two identical heads between which something is transmitted from brain-mouth to ear-brain. There is "no body" and "nobody", and the two heads are symmetrical:

The communication model from Cours (1972: 27)



This dualistic model is to the best of our knowledge incompatible with a critical ecological theory.

Chomsky describes his model beautifully :

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance.

(Chomsky 1965 : 3)

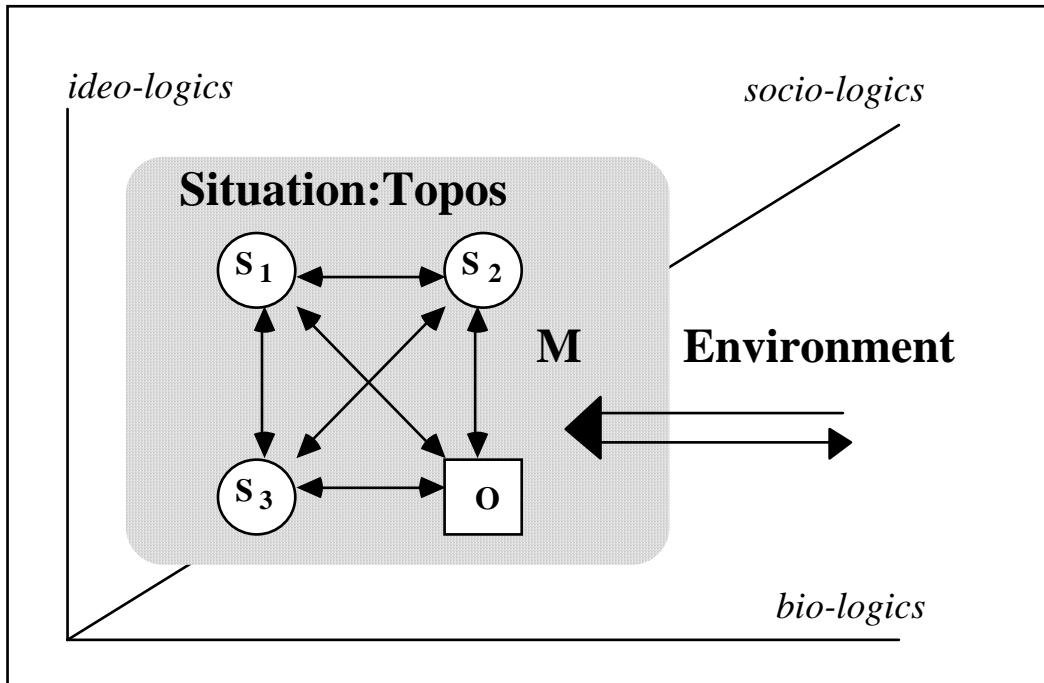
There is one essential feature shared by *Cours* and Chomsky. In reality their models are not duological but *monological* models. The reason is that the speaker and the listener are not two *different* persons.

The mistake committed by *Cours* and Chomsky is that their idealizations reduce, (i) the object of research to something which is not language, and (ii) the environment (in which the linguistic communication takes place) to a dead environment, deprived the conditions for meaningfulness.

Linguistic communication presupposes, (a) differences that makes a difference between the participants, and (b) a living, heterogeneous environment.

We have produced a model that is intended to be sensitive to linguistic communication in natural situations.

Fig.3 : Dialogue Model



Signatures:

S:	Subject/Subjects
M:	Medium/Media
O:	Object/Objects
\times :	Dialectic relation = \leftrightarrow
Topos:	Space, Time & Place

First, our model differs from *Cours* and Chomsky because it models a **dialogue**, i.e. a linguistic communication between three persons. In the prototypical situation the three persons constitute a heterogeneous speech community.

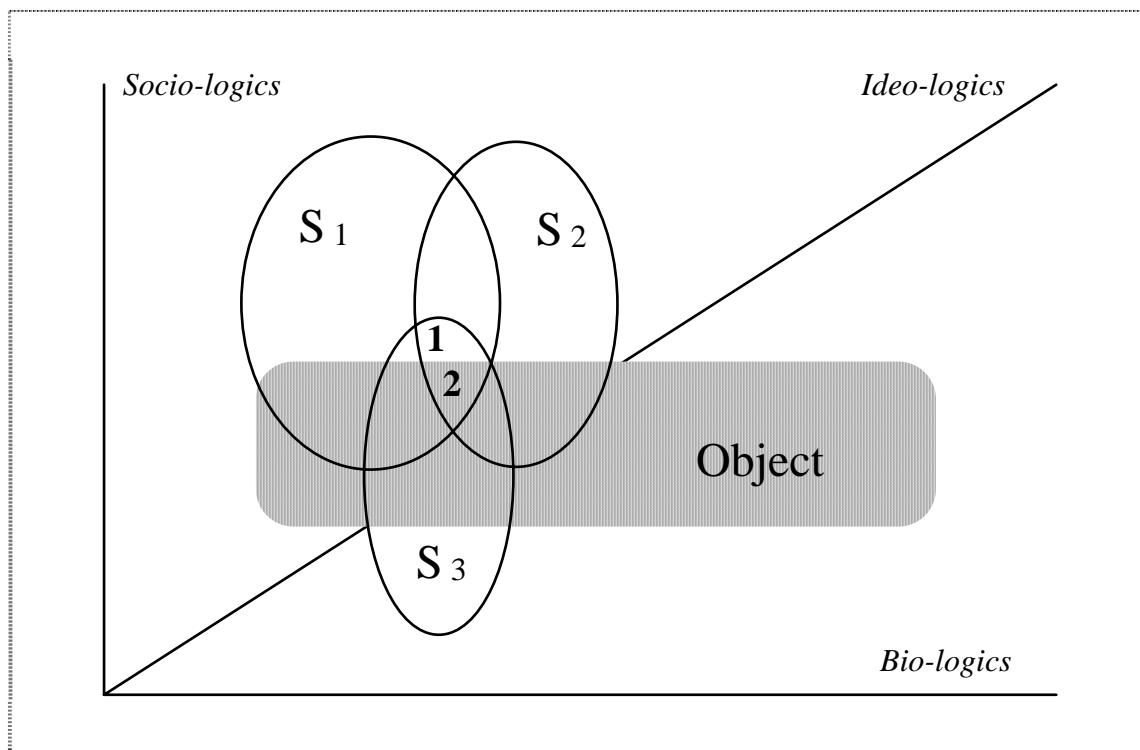
The fact that we learn the mother tongue in the family illustrates clearly that the speech community is heterogeneous and that the heterogeneity is explained by the core contradictions. The participants in a family dialogue are different in e.g. the following ways: (i) sex-contradiction: mother, father, and daughter; (ii) age: adults and a child; (iii) class: the father belongs to object-class (brick-layer), the mother is part of the middle-class (office assistant), and the child is a member of the residual class.

If we apply the model to language learning in the educational system, one participant is a teacher, another a pupil, and the third is a censor who might be present or absent and in both cases controls what is acceptable. The role of the censor illustrates an authority contradiction.

Secondly, the **medium** is to be understood as an umbrella term. The medium might indicate the specific language used. The medium might also be a fax or television.

Thirdly, the **object** might be anything from a text to an abstract idea, from an individual person to the EEC. We presuppose, however, that the "*O*" which the three persons actually share is not identical with *O*. In the optimal case it represents a genuine aspect of *O*:

*Fig. 4: The object – *O* – of the dialogue*



The shared aspect of *O* (let us assume that *O* is a text) could be:

- (a) Part 1 + Part 2, i.e. a partly adequate conception (a too broad interpretation of the text)
- (b) Part 1, i.e. an inadequate conception, (a misinterpretation of the text), or
- (c) Part 2, i.e. an adequate conception in the sense that it covers a genuine aspect of *O* (a reasonable interpretation of a text).

Fourthly, the relationship between the **situation** and the **environment** is a dialectical relationship. The environment is here to be interpreted as both an ideological, a sociological and a biological environment.

2.4. A Model of Deixis

Our dialectical theory of language is a kind of contextualism, i.e. syntactical and semantical questions are embedded in the context and the situation, and the situation is conceptualized as a dialogue in a heterogeneous speech community. Therefore, the phenomenon of deixis has an essential and vital role in our theory of language. Language and linguistics cannot be understood unless they are understood in their dialectical relationship with the environment. A traditional definition of deixis is:

deixis (deictic) A term used in LINGUISTIC theory to subsume those features of LANGUAGE which refer directly to the personal, temporal or locational characteristics of the SITUATION within which an UTTERANCE takes place, whose MEANING is thus relative to that situation; e.g. *now/then, here/there, I/you, this/that* are deictics ('**deictic**' or EXOPHORIC words). [...]
(Crystal 1985: 86)

Our semantic matrix, however, says that it is not only deictic terms that "refer to" the historic characteristics of the situation. Every word, every text gets some part of its meaning, and its semantic force, from the situation. (Cf. Hurford & Heasley 1983:63). There is no context-free or situation-free meaning. Linguistics and theories of languages that are founded on such freedoms are really *atopical* theories, i.e. both historically and logically impossible ways of understanding language. Every understanding is situational and historically determined.

It is a traditional assumption and prejudice that a genuine theory formulates the relationship among context-free elements in terms of abstract laws. The laws make use of the logical constants, and the logical relations between the ahistorical elements are considered ahistorical, context-free, too.

From our point of view, both the elements *and* the relations are context- and situation-determined; therefore, **deictical indicators are those features of the text which refer to the situational (and/or contextual) persons, objects, time, place and their logical connections.** Terms like *either-or, if-then, both-and, all/some, one/many, because, therefore* are thus logical deixis, determined by the semantic matrix, the universe of discourse and the situation.

Languages are understood, used, learned, and developed in situations. Language is part of our existence; and the nature of our existence is such that we have no access to a "point of view from nowhere". Therefore, there is no part or subset of language that has a context-free meaning or use. But

words are more or less *explicitly* dependent on context and situation. Even though every word, morpheme, sentence etc. is determined by both the grammatical and semantical representation and the situational presentation, there are morphemes, words and sentences that are considered as *explicit* deixis. They are, so to speak, lexicalized as conveying deictical reference.

In fig. 5 we define the deictic dimension of reference as one of three dimensions involved in the use of every word, sentence, text etc. Every linguistic phenomena are determining and determined as part of a language (the *lexical* dimension), part of a text (the *anaphoric* dimension), and part of a context and situation (the *deictic* dimension).

Fig. 5: Reference Model

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	C-prod C-comm C-cons C-derivated	Persons Time Place Logics

Social sense and *individual meaning* are less sensitive to the specific features of the situation—the deictic dimension—than are *social import* and *personal significance*. It is impossible to grasp the semantic force of a text unless you understand the social import and personal significance of the text.

Let us consider an example,

(Ex1) We can't now because I have to earn a living.

In order to offer a deixis-analysis of (Ex1), we suggest the following questions:

- Q1: Which **persons** participate in the dialogue? (Who is the "I", the implied "you" etc.?)
- Q2: Which **topos** (time-place) is "now" indicating?
- Q3: Which **logic**, or conjunction of logics are indicated by the conjunct "because".

From a dialectical point of view the questions are *conditio sine qua non* for an understanding of the text.

The essential differences between our form of deixis-analysis and a traditional one are,

- (1) We include the logical terms in the group of deictical features,
- (2) Our theory of semantics is not founded in a propositional theory, because we do not suppose that there is or must be some permanent, ahistorical matrix or framework to which we ultimately can appeal in determining the nature of the semantic dimension of a text.
- (3) The logical terms are constituted and constitute the praxis in which they mean something, e.g. the semantics of "because" in our example is necessarily determined as part of capital logic.

We think that John Lyons (1977) is right: "Upon reflection, it appears that almost all sentences are indexical."¹

The category "Subject"

The eminent linguist M.A.K.Halliday makes an useful distinction between three different interpretations around the Subject notion. He illustrates his points in relation to an analysis of the clause:

(Ex2) The duke gave my aunt this teapot

Halliday operates with three different kinds of subject, i.e. (i) psychological Subject = *Theme*, (ii) grammatical Subject = *Subject*, and (iii) logical Subject = *Actor*.

- (i) that which is the concern of the message
- (ii) that of which something is being predicated [...]
- (iii) the doer of the action.

(Halliday 1985: 33)

In (Ex2), "it is reasonable to claim that *the duke* is, in fact, the Subject in all these three senses" (*ibid.*). In (Ex3) all three kinds are separated:

¹ Deixis = indexical = shifter = signature

(Ex3) This teapot my aunt was given by the duke.

In this example, *this teapot* is said to be the Theme or the psychological Subject; *my aunt* is the (grammatical) Subject; *the duke* the logical Subject or Actor.

Halliday defines "as a working approximation" the three terms in relation to "the three principal **kinds of meaning** that are embodied in the structure of a clause":

- (i) The Theme is a function in the CLAUSE AS A MESSAGE. It is what the message is concerned with: the point of departure for what the speaker is going to say.
 - (ii) The Subject is a function in the CLAUSE AS AN EXCHANGE. It is the element that is held responsible: in which is invested the success of the clause in whatever is its particular speech function.
 - (iii) The Actor is a function in the CLAUSE AS A REPRESENTATION (of a process). It is the active participant in the process: the one that does the deed.
- (Halliday 1985: 36f)

Deixis analysis, however, implies a fourth kind of Subject or Actor. The word *my* refers to somebody who utters the clauses. (The word *this* indicates that the clause is uttered to somebody who is in the situation where the teapot is present; the word *the (the duke)* indicates that the clause is said to somebody who has the relevant duke in the mind from the context.)

However, we cannot know from Halliday's text, or the example, whom the *my* refers to (or who is the implied addressee). The fourth kind of Subject or Actor, the deictic Subject, implies a fifth kind of Subject, namely the speaker/writer in the actual situation, i.e. M.A.K.Halliday. We do not know if the aunt actually is Halliday's aunt, or she is the aunt of somebody else, a fictitious or real person in the universe of discourse that is established by Halliday. In order to explicate the different Subject-levels we make a distinction between three levels of Subject, namely Pragmatic, Semantic, and Syntactic Subject.

Our analysis of the clause has the following form:

in the situation of communication	M.A.K.Halliday writes,	that	Pragmatic	Person	Halliday
in the universe of discourse (context)	X says/said/writes/wrote,		Semantic		
in the text	<i>The duke gave my aunt this teapot</i>		Syntactic		
					X
					The duke

So, by using a dialogue-model it becomes evident that the term "my" indicates the speaker or actor in a speech act. However, we do not know if it refers to the 'I' of the actual situation of communication, i.e. the S₁ of the situation. The clause is presented without explicit indications of the relation between the speaker/writer/actor in our communication (Halliday) and the speaker/writer/actor in the universe of discourse. The person X, who should be responsible for a part of the situational meaning of the clause, might be a fictitious person or a real person. The syntactic configuration is said to function as a message and an exchange, but we are not offered sufficient informations or indications to identify the social import and the personal significance. However, we have—from the situation in which Halliday and we are communicating—knowledge about a social import convention, or habit, saying that the traditional grammar writer is free to construct the examples. We think that it is a bad habit because it makes the grammar scholars and students blind or unaware about the importance of the situational meanings and functions, i.e. language in its original and natural environment.

From the traditional rules of the social import (cf. the genre), we are quite sure that the speaker X of the clause (Ex2) is not identical with the speaker in our situation, Halliday, and that nobody can be held responsible for the utterance. From our point of view the clause misses a fundamental and vital condition for being meaningful and informative.

There are at least three logical Subjects/Actors/Persons, "the duke", the person that said "my", and the present writer, Halliday.

Halliday and the tradition seem to misunderstand the importance of what we call **the deictic subject**. As shown, the deictic word *my* in the (Ex2) might refer to a person in a context (a universe of discourse) that is not made available for the present readers in the situation of communication, i.e. us and you. We think that it is important to raise the awareness concerning the co-ordination of the syntactic, the semantic and the pragmatic subjects/actors.

Our point is that if you use a dialogue-model as the model of, and for, linguistic analyses, it becomes easy to identify the essential and vital terms of the text. If you follow our dialectical methods and models, the functions of the various parts of the text become clear. An identification of the subject-conjunction of the clause becomes more direct if you look for its deictical features, e.g. the term "this" gets its syntactico-semantic forces from being

related to the "tea-pot" and the participants of the dialogue, the pragmatic, semantic and syntactic Actors, Subjects and Themes.

3. Eco-linguistic analysis of law texts about organic production

In this part we present only a few observations from our deixis analysis of two law texts. The texts are reproduced in

Appendix A : "ACT ON ORGANIC FARM PRODUCTION" (Act no. 363 of June 10th, 1987). (In Danish, *Lov om økologisk jordbruksproduktion*²)

Appendix B : "COUNCIL REGULATION (EEC) No. 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs."

These text examples are constitutive parts of the ecological situation and context in which we are involved; they are not context- or situation-free examples.

3.1. Logical deixis

International, national and local awareness of the increasing ecological problems has now reached a legal level. An example of this trend is the Danish *Act no 363 of June 10th, 1987*.

The *Act* determines one aspect of logical deixis by the following statement:

(§1.1) The aim of this Act shall be to promote organic farm production.

Logical deixis comprises not only the logical terms (*all, none, some, one, many, if-then, both-and, either-or, because*), but also modality, *The aim shall be*.

The *Act* articulates a deictical logic; however, it is silent about the fact that this logic is subsumed both capital logic and bureaucratic logic but contradicts them. The *Act* says:

(§1.2) The purpose of organic farm production is to set up stable and harmonic farming systems in which the methods of production are arranged with a view to facilitating the integration of the individual productions into a natural biological cycle in the fields and in the stables.

² The label: '**Organic**' = '**Eco-**' in Danish, in Spanish and in German; = '**Bio-**' in Greek, in French, in Italian, in Dutch and in Portuguese. The different roots may imply different semantics in the European countries. Cf. the different implications of the term 'Eco-linguistics'.

The aim contradicts the capital logic; and both Denmark and EEC are capitalistic formations. The aim of capital logic is to produce surplus value/profit and extend the power of capital with no respect for a "natural biological cycle"; unless it is the most profitable and in accordance with the interest of capital.

The contradiction between the logic of the *Act* and the capital & bureaucratic logic is further explicated in one of the co-texts, the *EEC Council Regulation no 2092/91 of 24 June 1991*:

+	-
demand from consumers a new market less intensive use of land protection of the environment conservation of the countryside produced organically conditions for fair competition ensure compliance subject to inspection a regular inspection system	use of synthetic chemicals detrimental effects on the environment

The language of the *Act* covers the contradictions between the aims of natural, biological production (and ways of life) on one hand, and on the other, the interests of capital and trans-national industries.

The *Act* defines a distinction between two kinds of production which are indicated by the following predicates:

- (a) "the natural, the biological, the organic, the ecological", and
- (b) "the industrial".

The *Act* states its aim as the promotion of the first kind of production:

+	-
organic stable harmonic integration natural biological	industrially produced

3.2. Who is the Subject and Actor of the sentence

- (1) The aim of this Act shall be to promote organic farm production

and how is the semantics of the "subject" to be determined?

The first question: "Who is the subject" is to be interpreted as the complex question: "Who or what is the syntactical, semantical and pragmatical subject/actor/person/theme?" (Cf. part 2)

We shall not undertake a syntactical analysis, but instead explicate the semantic principles that has to govern an eco-linguistically interesting analysis, i.e. to indicate an answer to the second part of our question, "how is the semantics of the "subject" to be determined?"

The three kinds of "subject" get their semantic force³ from being embedded in social praxis.

Our conditions for understanding the theme, subject, and actor of the text are the core contradictions of the social praxis. Both "Actor" and "Theme" are determined by a conjunction of core contradictions: the subjects that "promote organic farming" are situated in

- (i) specific class contradictions,
- (ii) authority contradictions (the Macht/Herrschaft-relations in Danmark, in EEC, and between Danmark and EEC
- (iii) nature-culture contradictions, and
- (iv) town-country contradictions.

If we do not determine the subject in relation to the core contradiction it is not possible to give an adequate syntactic or semantic description of the sentence and the whole text. If you follow the process indicated here, it becomes clear and evident that the *Act* does not make any determination of the success criteria. Is the aim that organic farming shall be

- (i) the only way of production,
- (ii) the dominant way of producing, or
- (iii) a sort of exotic niche-production?

If these determinations are vague or open, then the definition of logical deixis is undetermined.

A deixis analysis makes it clear that the *Act* is a political intervention in the growing contradiction between ecological production and capitalistic-industrial production.

From a linguistic point of view the important thing is to be aware of the fact, that if deixis is not only limited to "the use of demonstratives, first and second person pronouns, tense, specific time and place adverbs like *now*

³ We use the term "semantic force" because we regard semantic phenomena as dynamically oriented and orienting. The term "semantic value" indicates a static product-point-of-view.

and *here*", but also comprises logical deixis (logical terms and modality), then the notion "contradiction" is necessary for the understanding, interpretation and use of language.

3.3. The semantic web around the ecological actors

The individuals who produce organically, the Danish *Act* defines by the terms *applicants for grants* (§ 5,1) and *the recipient* (§ 6):

Applicants for grants [...] shall upon request produce evidence that the conditions for the grant have been fulfilled. (§ 5.1)

Thus the farmer is reduced from being a producer to be a consumer of public grants. Furthermore, the farmer is subjected, or subsumed, to an inspection system that is an authorized controlling part of the State apparatus (the Ministry of Agriculture):

The Minister of Agriculture, or anyone authorized by the Minister, shall at any time without a court order and on proof of identity have access to farms etc. [...] to inspect the farms etc. as well as the accounts and books etc. (§ 7.1)

The *Act* defines the Ministry, the Council, and the authorized inspectors as the actors in the process of fulfilling the aim, "to promote organic farm production".

Conclusion & Invitation

The sketch of an ecological theory of language presented here is produced under similar conditions as the project *Environmental Ethics*.

One part of the research community tries to handle the serious ethical problematic of our ecological crisis by applying traditional and well-established ethical theories and concepts to ecological problems.

Another part of the research community has realized that traditional ethics is part of the problematic and are co-producers of ecological contradictions and dilemmas. Therefore, what is needed is a fresh approach to ethics and the ethical dimension of the ecological crisis.

Our theory of language & linguistics is a critique both of the culture that produces the ecological crisis and of its traditional theories of language. It is important from our point of view to express clearly, that there are many possible alternatives to traditional theories of language, and, consequently, our theory is just one of a family of critical theories.

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