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Anna Kristina Hultgren

# Lexical variation at the internationalized university: Are indexicality and authenticity always relevant?<sup>1</sup>

## 1 Introduction

When people communicate they convey meaning on more than one level. They exchange information (transactional/referential meaning) and they negotiate social relationships (interactional/social meaning) (Brown & Yule 1983; Lakoff 1989; Kasper 1990). Thus, when a lecturer of Computer Science at a Danish university chooses the term *regular expressions* over the co-existing Danish equivalent *regulære udtryk*, they not only inform students of the topic of the class, their choice may also be socially meaningful – it may have indexical value. As social meaning is multiple, variable and contextually contingent, it cannot be established *a priori* of careful contextual analysis. Thus, in choosing the English over the Danish lexical variant in the example above, the lecturer may try to signal that they are cosmopolitan, trendy and globally-oriented, but they may well be perceived by hearers as being pretentious, uncultivated or even ridiculous. Or possibly, as I shall argue in this chapter, their choice may not be associated first and foremost with any social meaning at all. While both referential and social meanings co-exist in any given utterance, it is probably fair to say that most linguistic scholars (pragmaticians, linguistic anthropologists and sociolinguists, e.g. Wilson & Smith 1992; Silverstein 2003; Eckert 2008) have been primarily interested in social meaning, perhaps perceiving of the other as too self-evident or uninteresting to warrant any serious scholarly attention.

In this chapter, I shall make a case for keeping referential meaning firmly within the analytic and theoretical toolkit of linguists of all sub-disciplines. I shall base this argument on qualitative data in the form of English/Danish lexical variation in the scientific vocabulary of Computer Science, Chemistry and Physics

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<sup>1</sup> The author wishes to thank the organizers and the participants of the conference “Indexing Authenticity: Perspectives from linguistics and anthropology” held in Freiburg, 25<sup>th</sup>–27<sup>th</sup> of November 2011, for their feedback on an oral version of this paper. The Danish Research Council for Independent Research (grant number 09–070588) is gratefully acknowledged for financial support and the research participants who gave so generously of their time are warmly thanked.

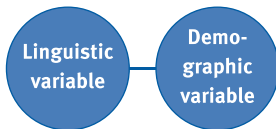
in spoken Danish. Because English is widely used as an international language of science (Ammon 2001), many scientific terms, especially in the relatively recent discipline Computer Science, exist only in English, or in both English and Danish. When there is a choice between an English and a Danish lexical variant, current theory on indexicality would assume that the choice is socially meaningful. While this is certainly corroborated by my data, it does not appear to account for what goes on in all cases. More specifically, I shall show that when asked about their rationale for choosing a Danish over an English term or vice versa, the scientists themselves seem to place greater emphasis on referential meaning (specifically, communicative efficiency) than social meaning. I shall suggest that this may be explained by two factors: 1) that the goal-orientedness (Drew & Heritage 1992) of the type of talk that is focused on here (institutional talk) inherently prioritizes referential over social meaning, and 2) that the epistemological orientation of this chapter, which accords greater significance to participants' own interpretations of their language use than to those of the analyst, also entails that greater priority is assigned to referential than social meaning.

Having first provided an account of the theoretical and socio-cultural context of the study, I shall describe my data and methodology, making an important distinction between emic (insider) and etic (outsider) perspectives. I shall then proceed to test my data on the current theory of indexicality. The main part of this section will be devoted to showing how the theory is well-suited to account for a considerable proportion of the data. This shall be followed by a shorter section providing some examples which do not seem to fit into the current theoretical framework. This imbalance is deliberately intended so as not to deny the significance of social meaning but to take on the role of the devil's advocate and point out some examples which do not first and foremost seem to be captured by an explanation in terms of social meaning. I shall consider some possible explanations for why these examples do not fit the theory before I go on, in the conclusion, to ask whether a theory of indexicality should be able to account also for cases in which the choice between two linguistic variants may not primarily be socially motivated.

## 2 Theoretical background

### 2.1 A state of the art of the theory of indexicality

In the early days of modern sociolinguistics, scholars were typically concerned with correlating linguistic variables with demographic variables (see Figure 1).<sup>2</sup> Thus, in Labov's (1966) classic New York department store study, the linguistic variable postvocalic rhoticity was correlated with the demographic variables class and socio-economic status of the speaker. Since the early 2000s, however, there has been a consolidated theoretical move away from such direct correlations between linguistic and demographic variables to a more indirect correlation, instigated jointly by variationist sociolinguists and anthropological linguists: "Variables index demographic categories not directly but indirectly (Silverstein 1985), through their association with qualities and stances that enter into the construction of categories" (Eckert 2008: 455). Such associated meanings are referred to in different ways, e.g. as qualities, stances (Eckert 2008) or attributes (Agha 2005), but here I shall use the term *associated meaning* because it is broader and allows for an interpretation of meaning that does not necessarily have anything to do with speaker qualities, stances or attributes, which I shall demonstrate later on. First, though, to illustrate more concretely the theoretical reorientation from demographic variables to associated meanings, I shall use the example of the speech style prescribed to call centre agents.



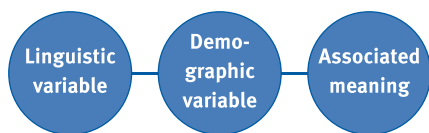
**Figure 1:** The semantic relationship between linguistic and demographic variables in early sociolinguistics

The speech style which call centre agents are instructed (by their managers and in communication training courses) to use in their interaction with customers has

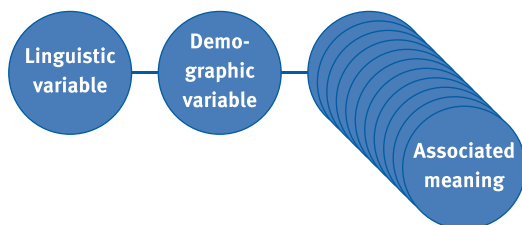
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<sup>2</sup> Where variationist sociolinguists and some linguistic anthropologists typically work with a restricted set of variants for each variable given their focus on phonological, lexical or morphosyntactic variation, I include in this category also pragmatics and discourse analysts who work with infinite sets of variants. Nevertheless the latter group too will assume that the preference of a speaker to say *something* in favour of something else will be socially meaningful if one way or another.

many features in common with what has traditionally been associated with the demographic variable white, Anglo-Saxon, heterosexual woman. For instance, call centre agents are supposed to ask questions, show empathy, create rapport and use expressive intonation (Cameron 2000). In the early days of research into language and gender, a subfield of sociolinguistics, this way of speaking was interpreted as a normative woman's way of speaking (Lakoff 1973). In current theory, it is more common to relate it, not to the demographic variable woman, but indirectly to the stances or qualities that are associated with women by social convention. In this interpretation, call centre agents are supposed to speak this way, not to show that they are women (indeed, many men work as call centre agents too), but to signal or index that they are caring, nurturing and empathetic (Cameron 2000). Thus, in current theory, the social meaning (or indexicality) of a linguistic variable is interpretable *qua* its indirect association with the demographic variable it also indexes (see Figure 2).



**Figure 2:** The semantic relationship between linguistic variables and meaning in modern sociolinguistics



**Figure 3:** The multiplicity and variability of associated social meanings in modern sociolinguistics

The second identifying feature of current theories of indexicality is that the associated meanings are multiple and variable and contextually contingent: “[T]he meanings of variables are not precise or fixed but rather constitute a field of potential meanings – an *indexical field*, or constellation of ideologically related meanings, any one of which can be activated in the situated use of the variable” (Eckert 2008: 453). Johnstone and Kiesling point out that “[T]he indexical meanings of speech features can vary widely within a community, and we illustrate the danger of confusing the meaning assigned by hearers to a linguistic form with the

meaning users would assign to it (2008: 5). To illustrate this with an example: the two lexical variants *regulære udtryk* and *regular expressions* are in free variation in spoken Danish. While the speaker may have wished to come across as cool in their choice of an English lexical variant over a Danish one, the hearer may well have interpreted this stance as something entirely different, e.g. pretentious. This variability – an entire “field” of potential meanings (Eckert 2008) – means that the analyst must be aware of a range of different possible meanings of any linguistic variant.

To sum up, I have suggested that there are two particularly important features of the current theory of indexicality. First is an explicit concern with associated meanings of linguistic variables over demographic categories. Second is a recognition that such associated meanings are multiple, variable and contextually contingent. Underlying these explicitly declared interests, there is, I suggest, in current theory a tacit assumption that linguistic variables *have* a social meaning. It is assumed, in other words, that given the choice between two variants, a speaker’s decision in favour of one of those variants will be socially meaningful (Silverstein 2003). Very little, if any attention, is devoted in current theory to discussions about whether the variants actually have any social meaning at all. This is, of course, to a certain extent to be expected of a field which self-identifies as being primarily concerned with the social uses of language, but in this article, questions shall be raised about whether this assumption is always valid. I shall ask, more precisely, if there are situations in which a non-social meaning, such as referential meaning, takes precedence.

## 2.2 Delimitation of terms: Lexical variation and authenticity

In this paper, I shall test the theory of indexicality on instances of Danish/English lexical variation in the scientific vocabulary of spoken Danish. Lexical variation is here understood as Danish-speaking computer scientists’ choice between using an English or a Danish variant for concepts such as the following: *regular expression* vs. *regulært udtryk*, *source code* vs. *kildekode*, *curly brackets* vs. *tuborgklammer* in undergraduate teaching sessions.<sup>3</sup> I shall use the term lexical variants instead of code-switching as the latter normally implies that the choice between

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<sup>3</sup> In the first two of these sets, the Danish variant is a literal translation of the English variant. In the last one, *tuborg* is a jocular, colloquial way of referring to *curly* by alluding to the curly-shaped logo printed on Danish Tuborg beer bottles.

codes (in this case Danish and English) has social significance (Myers-Scotton 1988), which I shall argue is not necessarily the case.

It may be argued that in testing the theory of indexicality on instances of *inter-language* variation, i.e. cases in which lexical candidates come from two different languages, I am overstepping my mark. Indeed, it may be objected that the theory of indexicality has been built on evidence of *intra-lingual* variation only, particularly perhaps, that on the phonological level (e.g. Eckert 2008; Johnstone & Kiesling 2008). In line with an increased realization of the artefactual nature of language boundaries<sup>4</sup>, however, there have been calls for considering instances of language mixing – or to use a term from the literature: hybridity – as the unmarked norm (Otsuji & Pennycook forthcoming; see also Auer 2007). Attention in such work is drawn to the fact that nameable languages are historical constructs that do not necessarily agree with the way in which code-switchers themselves consider the situation. Analysing instances of workplace talk between highly proficient English-Japanese speakers in a Japanese company, Otsuji and Pennycook (2013) argue that these speakers sometimes do not even realize that they switch codes and that there seems to be no special meaning attached to using one or the other. (Though they do point out the methodological issue that this lack of awareness does not necessarily mean that the choice is not meaningful, merely that the participants are not able in follow-up interviews to recall any meaning attached to it.) Auer and Eastman too argue for according priority to code-switchers' own interpretations of their language use and suggest amending Gumperz's definition of code-switching thus "the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or sub-systems *which the participants perceive as such*" (2010: 86, emphasis added). In other words, if it is accepted that boundaries between languages are ideologically constructed artefacts that do not necessarily have any empirical or cognitive reality, it may be argued that *inter-lingual* lexical variation should be equally well captured by a theory of indexicality.

A final notion that needs to be considered briefly before we turn to the analysis proper is authenticity. This is a notion which has received attention (see, e.g. special issue in the *Journal of Sociolinguistics* (Coupland 2003) and the present volume) but it sits somewhat uneasily within the theoretical framework of indexicality. While indexicality moves away from the stasis implied by demographic

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<sup>4</sup> This is of course a truism which has always underpinned sociolinguistics (Haugen 1972), but it seems that it is only relatively recently in the context of intensified global interconnectedness that it has become more exposed and consequently accorded the attention that it deserves (see, e.g. Heller 2008; Blommaert 2010; Pennycook 2010).

variables, authenticity is, arguably, contingent upon such stasis. Authenticity is only meaningful, in other words, if there is something static to evaluate it against. A speaker can speak more or less authentically as, say, a Dane or a Brit, but in every case, authenticity is evaluated against the demographic category that it is thought to be authentic of, in this case the category of nationality. When the notion of authenticity is drawn upon in this paper, it is because there is evidence to suggest that it has gained increased significance. This is especially true, perhaps, of the authenticity that relates to the demographic variable of place, which appears to have become more salient as a result of intensified global interconnectedness and mobility. For instance, Johnstone, Andrus, and Danielso (2006) argue that the dialect of Pittsburghese is now primarily interpreted as a marker of regional place rather than of socio-economic class as it was before. As we shall see, the data which forms the basis of this chapter also (partly) suggests an interpretation of authenticity, specifically in relation to the demographic variable of nationality.

### **3 Socio-political background: Internationalized universities of Denmark**

In order to understand why English/Danish lexical variation is an issue at Danish universities, it is necessary to briefly describe the socio-political background. Over the past 15–20 years universities across the Western world have undergone significant transformation (Hazelkorn 2011; Guruz 2008; Becher & Trowler 2001). Universities today are significantly affected by the neoliberal ideology which promotes competition and reduces governmental interference. This happens across the world but the linguistic consequences are arguably particularly noticeable in countries in the "expanding circle" (Kachru 1985) in which English is not the official language but is increasingly being used in certain areas of society. In Northern Europe and in the Netherlands, e.g., the neoliberalist practice to allocate funding on the basis of measurable research output prompts researchers with other first languages than English to publish in high-ranking international, *de facto* English-medium, journals. Moreover, the common European framework for higher education, established to make the EU competitive vis-à-vis the US, has led to increased intra-European mobility and necessitated a common language, which again defaults to English. In Northern Europe, the linguistic consequences of this political ideology is that in some disciplines, notably in the natural, technical and medical sciences, English is now being used increasingly alongside the local national languages as the language of publication and teaching above graduate level (Bolton and Kuteeva 2012).



The widespread use of English in higher education and research has prompted concerns in the Nordic countries over whether the national Nordic languages will eventually cease to be “*komplet og samfundsbærende* [complete and society-bearing]”, i.e. equipped to serve all societal functions (Nordic Council of Ministers 2007: 11, emphasis in original). Such concerns have been expressed across Scandinavia and are reflected in an upsurge of language policy documents (Norwegian Department of Cultural and Ecclesiastic Affairs 2008; Danish Ministry of Culture 2008; Swedish Department of Culture 2002). Despite a frequent overt denial in Nordic language policy discourses that lexical borrowing from English is ominous, there is plenty of evidence in the language policy documents to suggest that an underdeveloped terminological repertoire in the national language is a problem in need of rectification. Indeed, a cornerstone of the notion of a “complete” and “society-bearing” language is to ensure that the local languages have a well-developed scientific vocabulary (Danish Ministry of Culture 2008). In Denmark and in Norway, there have been suggestions to create terminological databases to ensure that national terminological equivalents are established and updated as alternatives to English ones (Danish Ministry of Culture 2008; Norwegian Department of Cultural and Ecclesiastic Affairs 2008). In Denmark, the focus of this chapter, a lack of national terms has been considered, by influential linguists, a problem either in its own right (Davidsen-Nielsen 2005) or because it may eventually reinforce the dominance of English as speakers will prefer to speak a language which provides them with the lexical items they require (Kirchmeier-Andersen 2008).

## 4 Presentation of data and methods

### 4.1 Etic and emic data

The data that informs the analysis in this chapter can be divided into two types: etic and emic (see Table 1). This refers to a distinction originally made by the linguist Kenneth Pike (1967) between, respectively, an outsider and an insider perspective of human behaviour. The rationale for including both types of data in the study is to develop an understanding of possible differences in the way in which the much-talked about phenomenon of English in Danish higher education and research is viewed by outsiders on the one hand and insiders on the other. The outsiders in this case are those who have commented on the situation in national newspapers and contributed to the development of language policies.

They include leaders of the Danish Language Council<sup>5</sup> and of the Danish Language and Literature Society<sup>6</sup>, other professional linguists and a few politicians. The insiders are those who represent the focus of discussion: 10 scientists in the three disciplines physics, chemistry and computer science at the University of Copenhagen. Each type of data will be further described below.

Etic data	Emic data
62 newspaper contributions in national and regional Danish newspapers on the topic of language policy in higher education and research	10 recordings and transcripts of undergraduate teaching sessions delivered by chemists, physicists and computer scientists at the University of Copenhagen
4 key Danish language policy documents issued by the Danish government	7 open-ended questionnaires with the recorded scientists

**Table 1:** Etic and emic data drawn on in this study.

#### 4.1.1 Etic data and methods

62 newspaper contributions in major Danish national and regional newspapers were extracted through a publically available database using keywords related to the topic of English at Danish universities. The articles were written between the 1<sup>st</sup> of August 2000 and the 1<sup>st</sup> of August 2010. The corpus was analysed qualitatively (by coding articles thematically) and quantitatively by extracting a list of keywords (i.e. words that occur with a higher frequency than would be expected by chance in comparison with a reference corpus) to cross-check the qualitative coding. In combination, the methods used can be described as a corpus-assisted discourse analysis, which exploits the claim to objectivity afforded by the corpus linguistic keyword analysis while also making use of the uniquely human capacity to interpret tokens in their appropriate socio-political context (Baker et al. 2008). The policy documents, four in total, are: *Sprog på Spil [Language at Stake]* and *Sprog til Tiden [Language in Time]* published in 2003 and 2008, respectively, and written by expert committees appointed by the Danish Ministry of Culture as

<sup>5</sup> The Danish Language Council is a governmental unit in Denmark whose most important tasks consist of monitoring the development of the Danish language, publish and update the most authoritative Danish dictionary for orthography, and to provide telephonic and email guidance to people who contact them about language-related questions.

<sup>6</sup> The Danish Language and Literature Society publishes and documents Danish language and literature from the olden days to now.

well as two follow-up documents written by the Danish Ministry of Culture published in 2004 and 2009. The policy documents were analysed critically with the aim to expose hidden and taken-for-granted assumptions about language and its social meaning.

#### **4.1.2 Emic data and methods**

A total of ten undergraduate teaching sessions conducted in Danish and spread out across the three disciplines physics, chemistry and computer science were recorded in November and December 2010 at the University of Copenhagen. The teachers included both permanent staff and graduate students. As is customary for highly-educated Danes, all participants had high oral proficiency in English. The teaching sessions were partially transcribed and analysed for instances of lexical variation. This required determining whether a lexical item has a counterpart with which it is in free variation, which is a matter of judgment. More specifically, the decision on whether to consider something a lexical variable was taken through a combination of introspection, Internet searches and consultancy with the participants. Open-ended, tailor-made questionnaires were sent out to the speakers subsequent to the recordings to shed further light on their reasons for favouring one lexical variant over another. Online questionnaires were favoured over face-to-face interviews to allow more time for the participants to reflect upon their practices. The questionnaires were tailor-made to the specific scientist enabling the researcher to ask specific questions about their prior linguistic behaviour. They were also open-ended, thus enabling the scientists to comment on the situation in their own words. In addition to this, respondents often provided additional examples of Danish/English lexical variation which did not occur in the specific teaching session which was recorded. In this way, it was possible to build up a picture of the underlying rationale for choosing one lexical variant in favour of another.<sup>7</sup>

## **5 Testing data on theory**

### **5.1 Where the theory fits: The variability of associated social meanings**

In this section, I shall provide examples from the data which support the previously described features of the theory of indexicality, i.e. the shift away from

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<sup>7</sup> Seven out of ten invitees responded to the questionnaire..

demographic variables to the social meanings that are indirectly associated with them and a recognition that such associated meanings are multiple and contextually variable. Drawing on the notion of authenticity, I shall begin, however, by arguing that despite the move away from the stasis implied in demography, there is evidence to suggest that it gains renewed appreciation in light of increased transnationalism, global interconnectedness and mobility.

In a contribution to a national Danish newspaper, the then chairman of the Danish Language Council, Niels Davidsen-Nielsen, responds to a charge by a professor of biochemistry (Olesen Larsen) that the Council are too complacent in their position towards the English influence on Danish scientific terminology.

Olesen Larsen wants systematic work to bring *international/English* scientific vocabulary into the *Danish* language to avoid a mixture of *English* and *Danish* which will eventually be so confusing that *Danish* will be dispreferred when scientists talk and write about the sciences [...] what the author wants is an adaptation of the words so that they are spelled, pronounced and inflected in *Danish* and that they thereby cease to be *foreign* (Davidsen-Nielsen 2005: 12, my emphasis).

In this citation, the chairman makes an unquestioned assumption about lexical variants being either authentically Danish or not (all words which refer explicitly to national origin have been italicized). It is clear to the author not only that orthographic, phonological and morphological assimilation of international/English/foreign words into Danish is *desirable*, but also that it is indeed possible to make an operational distinction between Danish and non-Danish words, despite considerable problems associated with this (see Hultgren 2013). Just to mention one problem, it will depend on how far back in history one goes, a decision which is ultimately, however well justified, arbitrary. The view expressed here is not idiosyncratic but reflects the aforementioned idea of a “complete” and “society-bearing language”, which underpins Danish language policy discourses, and which rests on an idea that the Danish language should be fully elaborated in all registers. It is possible to interpret this quotation as corroboration of the importance accorded to authenticity in current theory (see, e.g. Coupland 2003; Johnstone, Andrus & Danielson 2006). More specifically, it would seem that in the context of increased mobility and trans-nationalism, the choice of an authentically Danish lexical variant over an inauthentically English one is perceived to be inherently preferable.

An obvious next question is what social meaning is assigned to, respectively, Danish and English variants. Why is it perceived to be important, in other words, to use a Danish variant in favour of an English one if both, referentially, denote the same? To understand this, we need to consider the underlying ideologies associated with using each language. The Danish debate on the use of English at

Danish universities can be described as being a struggle between three political/ideological positions (see, e.g. Thøgersen 2009). This is in spite of the fact that, overtly, there is wide agreement on the importance of *parallellilingualism*, i.e. to ensure an equitable use of English and Danish without the former encroaching on the latter. Those who favour English typically include universities themselves and the right-wing and liberal political parties in Denmark. Their ideological orientation and economic rationale favour elitism, economic gain, a free market, free movement, international benchmarking and European standardization. In contrast, those who favour Danish typically include two internally heterogenous groups. One includes the Danish Language Council, the Danish Language and Literature society, intellectuals (including professional linguists) and politicians left of the political centre. Their political ideology typically attributes less importance to economic gain and acknowledges other values, such as cultural and linguistic diversity. They also often invoke egalitarianism as an ideal arguing that the increasing use of English constitutes a threat to democracy by disenfranchising large segments of the population whose English proficiency is not sufficiently high. The other group is constituted by the far right nationalist parties who advocate Danish on more or less explicitly pronounced xenophobic grounds. In the Danish debate on the use of English at Danish universities, language has become, as is not unusual, the centre of an ideological and political battle (Cameron 1995; Blommaert 1999; Duchêne & Heller 2007).

It seems that on word-level too, these ideological associations are at work. Thus, there is emic evidence to support the interpretation of the use of Danish lexical variants as connoting traditionalism, national pride and intellectualism.

I min studietid var normen, at der blev brugt danske fagtermer, og det har jeg forsøgt at holde, selv om jeg ikke er helt konsekvent. F.eks. [...] siger jeg *tabel* i stedet for *array*, *lager* i stedet for *memory*, *tegn* i stedet for *character* [...], *kant* og *knude* i stedet for *edge* og *node* (i grafer), *oversætter* og *fortolker* i stedet for *compiler* og *interpreter*, *beregning* i stedet for *evaluation* osv.

When I was a student [at DIKU, the Institute of Computer Science at the University of Copenhagen], the norm was to use Danish terms, and I have tried to maintain this though not entirely consistently. For instance [...], I say *tabel* instead of *array*, *lager* instead of *memory*, *tegn* instead of *character* [...], *kant* and *knude* instead of *edge* and *node* (in graphs), *oversætter* and *fortolker* instead of *compiler* and *interpreter*, *beregning* instead of *evaluation*, etc. (Lecturer in computer science).

[u]den for DIKU (blandt alm. nørder og på arbejdsmarkedet) blander man bare engelsk ind lige så meget man vil.

[o]utside of DIKU (among ordinary nerds and at the job market) you just mix it up with English as much as you want]. (Teaching assistant in computer science).

These quotations suggest that Danish lexical variants are preferred over English at the Institute of Computer Science at the University of Copenhagen. This was repeatedly pointed out to me during my observations and informal talk with participants, who talked about their pride in using Danish terms, a tradition, I was told, which dates back to the establishment of the Institute in 1970. Interestingly, the preference for Danish terms was often contrasted with practices at comparable institutions: “outside of DIKU (among ordinary nerds and at the job market) you just mix it up with English as much as you want”. The reported preference for using Danish variants over English ones is supported by evidence from language use; in cases where there is more than one way of referring to the same thing, it is consistently the Danish variant that is used. It is possible to interpret this widespread preference for and apparent pride in using Danish variants as a way for participants to distance themselves from the more market-driven and applied rationale of other computer science institutions and professions. Compared to the IT University of Denmark, for instance, the Institute of Computer Science at the University of Copenhagen is more academically than vocationally oriented, its scientific foundation more pure than applied, something which employees at this institution may take pride in.

This apparent local pride in Danish variants at DIKU might be explained by invoking Michael Silverstein’s notion of “higher order indexicality”, which is well-developed in his description of oinoglossia, or “wine talk” (Silverstein 2003). Against the backdrop of “first” and “second order indexicalities”, which may be broadly understood as, respectively, referential and social meanings, Silverstein describes wine talk as drawing on “higher order indexicalities” where the meaning of certain words is neither referential nor social (in the sense of being shared by most people) but very specific to that particular context and the particular language users in it. Thus, when wine tasters refer to a specific wine as having, say, “blueberry aromas merging with touches of spice, vanilla and chocolatey notes”, this is a highly conventionalized register, in which the words have very specific meanings with which few others than oenologists are familiar. While the preference for Danish over English terms by computer scientists at DIKU is slightly different in that most terms used would probably be familiar also to people outside of DIKU, there are certain commonalities with Silverstein’s oinoglossia in that the register is “professionally terminologized” (2003: 226), i.e. the words used are associated with a particular profession which appears to self-identify with a certain degree of pride.

Importantly, though, the apparent prestige accorded to Danish variants at the Institute of Computer Science at the University of Copenhagen may be restricted to this particular local context. Many participants pointed out that they would be wary of using Danish terms outside of the institute. One pointed out that

this might make him come across as “eccentric”. Examples in which English variants are preferred are certainly both plentiful and well-documented (Rathje 2010; Heidemann Andersen 2004; Preisler 1999). Thus, since the social meaning of a given variable is multiple and variable, where one may perceive an English variant as trendy, cosmopolitan and outward-looking, others might see as pretentious, uncultivated, or even ridiculous (see, e.g. Davidsen-Nielsen 2009).

Above, I have tried to show that as regards the three identifying features of the theory of indexicality, they are all empirically corroborated by the data analysed here. Firstly, authenticity seems to be important if we understand this as lexical items being perceived to be authentically or inauthentically Danish. Secondly, the choice between Danish and English lexical variants clearly has more than referential meaning; it matters whether one uses the Danish or the English variant. The choice may be seen to be associated with a range of ideological meanings, which are always contestable and contextually variable. Having now focused on the way in which the data supports current theory, the remainder of the data section will consider some examples in which the theory is not supported.

## 5.2 Where the theory does not fit:

### The importance accorded to referential meaning

In this second and final data section, I shall provide evidence from the emic perspective to suggest that social meaning is not always relevant or at least not the primary type of meaning in all situations. Three extracts from the open-ended questionnaires suggest instead that the primary factor motivating the choice between an English and a Danish variant seems to have to do, not primarily with *social* but with *referential* meaning. Thus, when asked whether it is important to find Danish equivalents of new (often English) scientific terms in their field of research, a teaching assistant in chemistry replies:

Nej det er ikke vigtigt for mig, da jeg ikke mener at det er det centrale. Det vigtige er at blive forstået, men hvilke ord man bruger er i princippet underordnet synes jeg!

No, it is not important to me, because I don't think it is central. The important thing is to be understood, but which words you use are in principle unimportant, I think! (Teaching assistant in chemistry)

This teacher apparently places emphasis on the need to be understood and does not accord any significance to whether an English or a Danish term is used. Asked the same question, a teaching assistant in computer science replies

[...] hvis en dansk oversættelse til et begreb er oplagt, men [...] en som ingen benytter [...] [ville det] være svært at formidle informationen om emnet uden at inkludere det engelske ord. For eksempel det engelske ord *tag*, som kan oversættes til *mærkat*. [...] Jeg kunne bruge [det ord] men hvis jeg siger *tagge* (udtalt engelsk) er en hel kontekst givet uden meget forklaring.

[...] if a Danish equivalent of a concept is obvious, but [...] one that no one uses it would be difficult to communicate information about that topic without including the English word. For example, for the English word *tag*, which is translatable as *mærkat*. [...] I could use this word but if I say *tagge* (pronounced in English) a whole context is given without a lot of explanation. (Teaching assistant in computer science)

Again, what is emphasized here is communicative efficiency as a guiding principle in the choice between a Danish and an English variant. The teaching assistant suggests that he would use the English word *tagge* instead of the Danish co-existing term *mærkat* because the former would exempt him from having to explain the context. Thus, it seems that communicative efficiency is valued higher here than any social meaning in spite of the aforementioned pride accorded to Danish variants. The final example is offered in response to the researcher's request for examples in which an English lexical variant would be preferred over a Danish and why:

*Editor* eller *teksteditor* i stedet for *tekstredigeringsværktøj*, *CPU* i stedet for *centralberegningseenhed*, *harddisk* i stedet for *fastpladelager*. I disse (og andre) tilfælde er oversættelsen ikke særligt kendt, eller god.

*Editor* or *text editor* instead of *tekstredigeringsværktøj*, *CPU* instead of *centralberegningseenhed*, *harddisk* instead of *fastpladelager*. In these (and other) cases the translation is not particularly well-known or good. (Teaching assistant in computer science)

The teaching assistant here refers to the importance of a Danish variant to be "well-known" or "good" if it is to be considered a viable alternative. This again is interpretable as a way of prioritizing communicative efficiency since if a term is not established, it might threaten communicative success. All in all, then, despite the possibility to assign social meaning to the respective use of Danish and English variants, what seems to be pivotal in these extracts is referential meaning, more specifically, the potential of a given variant to hinder or enhance communication.

One possible explanation for the apparent concern with referential meaning in these examples has to do with the type of talk investigated. This is describable as institutional rather than casual talk, more specifically as a technical register. It is to be expected that such talk is more referentially than socially oriented (Partington 2006), given its goal-orientedness (Drew and Heritage 1992). In connection with the use of English as a Lingua Franca, House (2003) has made a distinction between "languages for identification" and "languages for commu-



nication”. Although this is perhaps a distinction which partly falls into the same trap as current theory, namely of assuming that social and referential meaning can be teased apart, it certainly seems to be useful in explaining how English is perceived by Danish university employees. Many of those taking part in this study regarded English as a tool for communication first and foremost. The observation that workplace talk has been much less studied by sociolinguists than, e.g. community or education talk (Roberts 2012) may help explain why referential meaning has received far less attention than social meaning.

Another possible explanation for why referential meaning is given priority here has to do with epistemological orientation, i.e. what we count as valid ways of obtaining knowledge. The interpretation in terms of the referential meaning argued for here, accords greater priority to participants’ own interpretation of their language use than to the analysts. It also rests on the assumption that it is possible to take at face value what participants express in open-ended questionnaires, which is of course debatable (Talmy 2010). It may be objected, for instance, that just because participants themselves do not think of social meaning as the primary (or, put in a weaker form: do not communicate this in the questionnaires), it does not mean that social meaning may not be accorded to the choice *post hoc* (by the analyst or indeed by the participants themselves.) Nor can it be denied that the sociolinguist expert will possess knowledge, skills and analytic tools and theories to interpret language behaviour at a higher level than non-experts. Nonetheless, it seems to me that in a theoretical framework which emphasizes fluidity of meaning, it should be possible to at least consider the possibility that the choice between two linguistic variables may not for all types of talk or from all perspectives be socially meaningful.

## 6 Conclusion:

### The negligence of referential meaning in current theory

In this study, I set out to test the most central features of the theory of indexicality on data in the form of Danish/English lexical variation at the internationalized University of Copenhagen. While I suggested that it is certainly possible to interpret the choice between English and Danish variants in terms of social meaning, there were also examples in which the most important factor guiding the choice was not primarily social but whether the variant in question hindered or enhanced communicative efficiency. This came across in participants’ own accounts of their reasons for favouring one term over another. While this does not of course invalidate the theory of indexicality, it does perhaps raise questions about the assumption that when there is more than one way of saying the same

thing the choice will be socially meaningful. Whilst it is perhaps unsurprising that sociolinguists' deliberate dissociation from the Chomskyan cognitive and structural paradigm has made them primarily interested in the social aspects of language, it seems that, if the findings in this studies are anything to go by, we should keep an eye out for the potential of referential meaning to, in some contexts at least, override the importance of social meaning. At the very least, the findings suggest that teasing apart social from referential meaning, which current theory to a certain extent relies upon, may not be tenable (a point also made by Eckert 2008). Rather, social and referential meaning always co-exist and which one is granted interpretative priority depends on a range of factors, including as we have seen here type of talk (institutional vs. casual) and epistemological orientation (emic or etic).

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