

ISSN 2074-9864 (online)

vienna  english working papers

views

VIENNA ENGLISH WORKING PAPERS

[HTTP://ANGLISTIK.UNIVIE.AC.AT/VIEWS/](http://anglistik.univie.ac.at/views/)

VOLUME 25

2016

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English in the linguistic landscape of Vienna, Austria (ELLViA):
Outline, rationale, and methodology of a large-scale empirical project on
language choice on public signs from the perspective of sign-readers

Published online: 1 June 2016

English in the linguistic landscape of Vienna, Austria (ELLViA):

Outline, rationale, and methodology of a large-scale empirical project on language choice on public signs from the perspective of sign-readers

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This paper reports on the ongoing (2014-2018), large-scale project 'English in the linguistic landscape of Vienna, Austria (ELLViA)', which investigates (English) language choice on written signs in Viennese public space, and the concomitant meaning-making strategies sign-readers can be assumed to engage in. The paper describes the theoretical foundations as well as the methodology of the project, both of which draw on the integration of contemporary constructionist-interactional, third-wave variationist, socio-perceptual, social psychological, and cognitive sociolinguistic approaches. The project is structured in the form of three modules, of which the first is set to locate and describe English language use in the Viennese linguistic landscape (LL), while the other two focus on the perceptual differentiation of English and German, and concomitant associations of social meanings, respectively, as prerequisites for sign-readers' interpretive processes. In addition to outlining the project, its design, and modules, the paper also provides an overview of its current status, early findings, and upcoming steps.

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1. Introduction¹

In the second decade of the 21st century, it has become a truism to say that English is everywhere. Propelled by globalization and mass-media phenomena, the English language has achieved an unprecedented spread and reach that have made it a ubiquitous player in language contact situations around the world. But what role exactly does it play in such situations? Why is it that the English language has been so readily allowed to 'infiltrate' the various domains of public life around the globe? The project 'English in the linguistic landscape of Vienna, Austria (ELLViA)' is set to illuminate these grand-scale questions by anchoring them in a local study of how and why the use of English creates meaning in the linguistic landscape (LL) of Vienna, Austria. The central purpose of the present article is to outline the rationale of this project (section 2), its setting (section 3), as well as its methodology (section 4). Because research is still under way at the time of writing (the project is scheduled to run from 2014-2018), the article closes with a report on the project's current status and an outlook on things to come (section 5).

2. The rationale of ELLViA

2.1 Basics

The definition of 'linguistic landscape' applied in ELLViA is the one provided by Landry and Bourhis (1997: 25), which has set the agenda for most LL research published to date:

The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region, or urban agglomeration.²

In short, like most LL projects, ELLViA focuses on written language use in public space. A central point of interest in LL research has been the study of language choice on written public signage, as a means of mapping the 'ecologic' system languages form in a given urban setting (Shohamy 2006; Spolsky 2009; Hult 2009). In this line, the focus of ELLViA is the choice of English on written signs in the Viennese LL. Following Kachru (e.g. 1992), Vienna is located in the 'expanding circle' regarding the spread of English, where it is mainly a

¹ The project described in this article is financed by the Austrian Science Fund FWF (Project Nr. V394-G23; funding period: 2014-2018). For reference and updates, see:

<http://homepage.univie.ac.at/barbara.soukup/ellvia.html> (May 3, 2016).

I cordially thank current and former colleagues at the University of Vienna, especially at the English Department, as well as Sylvia Moosmüller of the Austrian Academy of Sciences, Malgorzata Fabiszak of Adam Mickiewicz University in Poznań, and Natalie Schilling of Georgetown University for their very helpful comments and feedback on earlier versions of this paper. All remaining shortcomings are, of course, my own.

² Other, broader conceptualizations of LL, which, however, do not centrally inform the agenda of the present project, are for example Scollon and Scollon's (2003) 'geosemiotics', or Jaworski and Thurlow's (2010) notion of a 'semiotic landscape'.

'foreign' language.³ The choice of English on public signs is therefore arguably marked and lends itself well to acts of strategic display, whereby certain (symbolic) messages are communicated.⁴ On this basis, the project investigates the role and perspective of the sign-reader in the communication of such messages. In other words, the immediate goal is to trace and describe how a Viennese public 'makes sense' out of English language use on signs within the Viennese LL. This 'audience' perspective is still vastly under-researched in the study of LLs but also of language choice (variation) at large. It is investigated here by application of a matrix of empirical investigations that maps the steps involved in the audience's meaning-making via English language choice in the LL of Vienna. For illustration of these steps, consider Figure 1:



Figure 1: Signage above an entrance to a Viennese café (photograph: B. Soukup)

Figure 1 instantiates the choice of English in the name of a café as well as in its slogan and sales pitch, as found in the Viennese LL. (Incidentally, the company proclaims itself to be "ein österreichisches Familienunternehmen" – 'an Austrian family business'.)⁵ The present project focuses on how a Viennese public⁶ commonly realizes meaning from the choice of English on signage like this which occurs in their surroundings. In the example of Figure 1, this meaning-making process can be deconstructed as follows:

³ But see i.a. Bruthiaux (2003), Jenkins (2009), Seidlhofer (2011) for a critical discussion of Kachru's model, which, however, exceeds the scope of this article.

⁴ See e.g. Papen (2012) for an LL study in Berlin that finds 'expanding circle' evidence for such symbolic uses of English in a Germanophone setting, albeit focusing on the sign-producers' perspective.

⁵ Source: Coffeeshop Company. <http://www.coffeeshopcompany.com/10-dinge-ueber-uns> (May 3, 2016).

⁶ For operationalization of this term see section 4. For reasons of scope, the main focus is on Viennese L1 German speakers. Other sign-readers (e.g. other L1 speakers) also use the Viennese LL, of course.

- (1) The signage is encountered in the Viennese LL.
- (2) "Coffeeshop Company", "Coffee to go!", and "Hot coffee specialities • Iced coffee drinks" are perceived as English language use.
- (3) This English language use evokes the common social meanings (attitudes, ideologies, symbolisms) the English language is associated with in a commercial context.
- (4) Common social meanings of English in a commercial context are for example 'modernity', 'internationalism', 'dynamism', 'youth', and 'prestige'.⁷
- (5) Hence, the fully contextualized interpretation of the signage's message is that the establishment it relates to is a modern, international, dynamic, young, prestigious company that sells modern, international (etc.) products.

Within the tradition of LL study on which this project draws (represented notably by Gorter 2006; Backhaus 2007; Shohamy & Gorter 2009; Shohamy, Ben-Rafael & Barni 2010), it is common to assume and discuss a direct connection between sign displays of English language choice and the output of messages like the one described in (5). However, how exactly this connection works on the ground and the intermediate steps that are involved have not yet been charted in any systematic scheme of empirical investigation. The present project addresses this gap via an interdisciplinary methodological strategy combining the tools and theorizing of contemporary constructionist-interactional, third-wave variationist, socio-perceptual, social psychological, and cognitive sociolinguistics. The details of this approach are discussed in the following sections, starting with a presentation of the general model of communication that underpins its conception.

2.2 Locating ELLViA in a broader research context

The rationale of ELLViA, whereby meaning-making in the LL proceeds in the steps outlined in the example of Figure 1 above, is based in a social constructionist account of human communication, by which meaning is regarded as constructed in an interactive, dialogic process of anticipation, interpretation, and negotiation (Bakhtin 1986[1952-53]; Goffman 1959; Gumperz 1982, 2001; Erickson 1986; Tannen 1989, 2004). In other words, in a communicative exchange, both 'speaker' and 'listener' are equally implicated as active participants who jointly make sense of what is going on.

The relationship between 'speaker' and 'listener' is held to be dialogical in the sense that it is of a two-way nature: Where speakers design their utterances 'strategically' in anticipation of listeners' responses, trying to influence these responses (i.e. trying to 'push' certain communicative messages), listeners in turn are not merely passively influenced by speakers' utterances but also actively shape these utterances through their responsive stance and uptake. Bakhtin famously outlined this process as follows:

⁷ Kelly-Holmes (2000, 2005) and Piller (2001, 2003) are frequently referenced in LL study for this. Their research is, however, conducted from a production and not a perception perspective.

When constructing my utterance, I try to actively determine [the listener's] response. Moreover, I try to act in accordance with the response I anticipate, so this anticipated response, in turn, exerts an active influence on my utterance [...]. When speaking I always take into account the apperceptive background of the addressee's perception of my speech: the extent to which he [sic!] is familiar with the situation, whether he has special knowledge of the given cultural area of communication, his views and convictions, his prejudices (from my viewpoint), his sympathies and antipathies - because all this will determine his active responsive understanding of my utterance. These considerations also determine my choice of a genre for my utterance, my choice of compositional devices, and, finally, my choice of language vehicles, that is, the style of my utterance (Bakhtin (1986[1952-53]: 95-96).

Erickson (1986: 316) very effectively captures the same idea in his observation that "talking with another person [...] is like climbing a tree that climbs back."

Contemporary research in the field of variationist sociolinguistics has appropriated this constructionist, dialogical perspective on meaning-making in a strand of investigation that focuses in particular on speakers' strategic, interactional uses of language choice (styling, style-shifting, code-switching). Studies within this strand (Eckert's 2012 'third wave' of variation studies, and Schilling's 2013 'Speaker Design' studies) analyze how the choice of a particular way of speaking can be harnessed to produce certain communicative meanings and effects ('messages'), like projections of interactional identities and relationships (see e.g. Eckert 2000; Schilling-Estes 2004; Auer 2007a; Coupland 2007; Soukup 2009). ELLViA is directly affiliated with this strand, and thus takes a 'third-wave variationist' approach to the study of English language choice in the Viennese LL ecology.

A theoretical concept that can help explain exactly *how* the strategic deployment of language choice may achieve certain communicative effects is Gumperz' (1982, 2001) notion of the 'contextualization cue'. A contextualization cue is a signaling device "which, when processed in co-occurrence with symbolic grammatical and lexical signs, serves to construct the contextual ground for situated interpretation and thereby affects how constituent messages are understood" (Gumperz 2001: 221). The set of these cues comprises i.a. prosody, backchannels, body language, and specifically also language choice (variation). Speakers use these devices to index certain aspects of interactional context (on any order level on the micro-macro scale) as relevant for interpretation of their message. In turn, these cues allow listeners to infer which aspects of context they may want to retrieve in their situated interpretation of a speaker's message.

One kind of context activated via language choice are the social meaning(s) associated with the language or variety used for expression. In other words, choosing (varying) between different languages or varieties draws the respective social meanings (ideologies, attitudes, stereotypes) into the interactional meaning-making process (see Auer 2007b, 2013; Coupland 2007; Eckert 2008; Schilling 2013; Soukup 2009, 2013). However, because under a constructionist perspective communication is regarded as a dialogic enterprise and meaning as *interactionally achieved* rather than 'transmitted', the success of contextualization strategies, such as agentive language choice, is inherently contingent upon listeners' activities of situated interpretation ('inference' – Gumperz 1982). Put differently, no message is communicated, no identity or relationship projected, no joint interactional

meaning created *unless* some listener realizes a contextualized interpretation to this effect (see also Soukup 2011).

Recognizing the central role the addressee plays in interactional meaning-making, researchers within the constructionist (third-wave) strand of variationist sociolinguistics have begun to incorporate methods of empirical *perception* study in their investigative schemes (for reviews see e.g. Thomas 2002; Campbell-Kibler 2010; Drager 2010). Typically, tools from psycholinguistics and the social psychology of language (language attitude study) are harnessed for the undertaking. Such procedure actually dovetails with the development of cognitively-oriented sociolinguistic theories and models whereby the interpretation of language choice is conceptualized as a metonymic cognitive process involving both perceptual differentiation of linguistic systems and situated association of social meanings (Kristiansen 2008; Soukup 2013; see also i.a. Purschke's 2011, 2014 modeling of these two aspects as 'salience' and 'pertinence').

While the communicative model as outlined here was conceived with spoken interaction in mind, and most of the relating research has arisen in this context, the model arguably also applies to the realm of written language, in the sense that, although the medium is different, there, too, an interaction is taking place, namely between an author on the one hand, and a reader (addressee) on the other – whether the latter be real or imagined by the author, close by or distant (by time and/or space).⁸ It is along these lines that the interactional sociolinguistic model of communication serves as the foundation for the ELLViA project. Written text in the linguistic landscape (LL) is regarded as the physical manifestation of a dialog between a sign-originator and a sign-reader, wherein sign originators use language choice to push certain communicative messages (via contextualization processes), trying to both anticipate and influence reader response. Sign-readers, although typically physically and temporally displaced from originators, partake in this dialog by inferencing sense from the featured texts in certain ways, also engaging in contextualization practice (based on recognizing language choice and its social meanings). In short, in the LL, both authors and readers of written signage play a constitutive part in meaning-making, such as the propagation of communicative effects via language choice.

Indeed, the importance of the audience (target group) of signage for meaning-making in the LL has repeatedly been emphasized by theorists of the field (Scollon & Scollon 2003; Gorter 2006; Huebner 2009; Spolsky 2009; Ben-Rafael, Shohamy & Barni 2010). Yet empirical research in this regard is only beginning to emerge (see e.g. Garvin 2011, who uses an ethnographic walking tour to capture locals' responses to the LL of Memphis, Tennessee). In particular, the application of the kinds of empirical tools variationist sociolinguists and social psychologists of language draw on in their study of perceptions of language choice in spoken language is as yet quite unprecedented in an LL context. Furthermore, as already stated, concomitant cognitive- and interactional-sociolinguistic theorizing is yet to be expounded here. ELLViA's central contribution to sociolinguistic LL

⁸For a helpful review of literature on the interactional and cognitive processes concomitant with reading written language, see Reichl (2009).

study, then, is to integrate and pioneer the tools and theorizing of contemporary constructionist-interactional, third-wave variationist, and cognitive sociolinguistics in application to an LL research agenda – more particularly, in the context of researching the LL of Vienna. The operationalization of this strategy is outlined in more detail further below (in section 4), subsequent to a brief presentation of the local context in which the study is set: Vienna.

3. The study setting of ELLViA: Vienna, Austria

Located geographically and metaphorically in the heart of Europe, Vienna today has a population of close to 1.8 million (=around 20% of Austria's 8.6 million).⁹ Of these, around 75% are Austrian nationals; and the largest non-Austrian national groups are constituted by other EU citizens (11%), as well as by citizens of Serbia/Montenegro (4%), and Turkey (3%). Only 0.5% of Viennese residents are nationals of 'inner circle' English countries (e.g. UK, USA, Canada – see again Kachru 1992).¹⁰ Numbers regarding the population's 'Umgangssprache' (commonly used language) were last featured in the 2001 census results; back then, 75% indicated using only German. Of those indicating another language either additionally or exclusively, 10% reported a language based in former Yugoslavia (Bosnian, Croatian, Serbian, or Macedonian), 5% reported the use of Turkish, and 2% of English.¹¹

Vienna has a long history of internationalism that spans seven centuries of Habsburg Empire and more recently a post-World War II period under Allied Forces control, which segued into the Cold War era, when Vienna served as a gateway to Eastern Europe – a role it retains into the present. Today, Vienna hosts international organizations like the UN and OPEC; and it is consistently in the world's top ranks regarding the number of international congresses held per year.¹² Around 5% of Vienna's overall regional economic output is generated through the tourism industry.¹³ In terms of per-capita Regional Gross Domestic Product, the city ranks twelfth out of 273 regions within the EU and lies 59% above EU average.¹⁴ All of these factors introduce a significant element of internationalism, economic

⁹ Source: Statistik Austria.

http://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bevoelkerung/volkszaehlungen_regist_erzaehlungen_abgestimmte_erwerbsstatistik/bevoelkerungsstand/078392.html (May 3, 2016).

¹⁰ Source: Statistik Austria.

http://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bevoelkerung/volkszaehlungen_regist_erzaehlungen_abgestimmte_erwerbsstatistik/bevoelkerungsstand/078392.html (May 3, 2016).

¹¹ Source: Statistik Austria.

http://www.statistik.at/wcm/idc/idcplg?IdcService=GET_PDF_FILE&RevisionSelectionMethod=LatestReleased&dDocName=007138 (May 3, 2016).

¹² Source: International Congress and Convention Association.

<http://www.iccaworld.com/dcps/doc.cfm?docid=1789> (May 3, 2016).

¹³ Source: Austrian Institute of Economic Research (WIFO).

http://www.wifo.ac.at/jart/prj3/wifo/main.jart?rel=de&content-id=1454619331110&publikation_id=58148&detail-view=yes&sid=1 (May 3, 2016).

¹⁴ Source: eurostat. <http://ec.europa.eu/eurostat/documents/2995521/6839731/1-21052015-AP-EN.pdf/c3f5f43b-397c-40fd-a0a4-7e68e3bea8cd> (May 3, 2016).

dynamism, and cultural diversity into Viennese public life. The question arises, then, in how far this might be reflected in the use of English in the LL.

The numbers (together with the extensive role English language teaching plays in Austrian school education) suggest that the majority of Viennese residents belong in the 'expanding circle' of EFL speakers (Kachru 1992); there is thus presumably a similarly high propensity for symbolic uses of English for and by them as that attested in other expanding-circle settings (see notably Backhaus' 2007 large-scale study of Tokyo). At the same time, tourist numbers and other aspects of internationalization indicate that English may also serve as a lingua franca in public contexts (see Seidlhofer 2011 for reference). Identifying the functions and domains of English language use that *predominate* in the Viennese LL is in fact an important goal of ELLViA.

Vienna has hitherto not been the site of any large-scale LL research, although interest in the topic has recently picked up. The city receives mention in Scollon and Scollon (2003), though mainly in anecdotal fashion and for illustrative purposes. Schlick's (2002, 2003) LL studies include some Viennese data; but these are very limited in scope, comprising only 45 establishment names from a shopping street. Dorner and Vasiljev (2010) report some anecdotal data on Italian in the Viennese LL. Kral (2012) is an ethnographic study of a local Viennese market ('Brunnenmarkt'). Piritidis (2014) uses a quantitative study of the LL of a downtown Vienna street ('Westbahnstraße') as a springboard in a discussion and exploration of methodological issues in LL research. Mann (2015) is a comparative study of the LLs and related language policies at a Viennese and a Copenhagen university.

LL research is still in an early stage of theory building in which the accumulation of case studies from a variety of settings around the world plays an essential, constitutive role (Ben-Rafael, Shohamy & Barni 2010). While the overarching purpose of ELLViA is to investigate meaning-making in the LL from the sign-readers' perspective, the LL data and findings generated in the local context of Vienna also contribute an original case study to the body of LL knowledge. The insights from this case study should facilitate further generalization, comparison, and synthesis, thus advancing the agenda of LL theorizing.

4. The methodology of ELLViA

As illustrated at the outset with Figure 1, the types of perceptual and interpretive activities that LL sign-readers engage in under a constructionist perspective on communication can be deconstructed into the following steps:

- (1) Encountering signage in the LL
- (2) Perceiving language choice (variation) on the signage
- (3) Associating the language(s) chosen with certain social meanings (contextualized interpretation)

ELLViA addresses each of these steps in a matrix of research activities. Communicative meaning-making is always inherently situated in a specific local interactional context

(Gumperz 1982); these activities are thus explicitly anchored in the local setting of the LL of Vienna, Austria (see section 3 above). Accordingly, the project consists of the following modules:

Module 1: 'Locating and describing English language use in the Viennese LL'

Module 2: 'Establishing what constitutes English language use to Viennese LL sign-readers'

Module 3: 'Establishing the social meanings Viennese LL sign-readers commonly associate with English language use'

In the following, the methodology applied will be discussed for each of these Modules in turn. Because Module 1 is the only one for which research is already well advanced, it receives the most space, while Modules 2 and 3 are presented in the form of mere previews.

4.1 Module 1: 'Locating and describing English language use in the Viennese LL'

The purpose of Module 1 is twofold: (1) to generate empirical input (stimuli) for the perception study Modules 2 and 3, and (2) to provide the grounds for applying the findings from Modules 2 and 3 later on, in view of comprehensively charting English language use in the Viennese LL.

The central activity under Module 1 is the compilation, annotation, and analysis of a large-scale data corpus consisting of instances of Viennese LL signage, recorded via photography. Design and methodology of Module 1 are derived from the principles and standards of variationist sociolinguistics – to the point where its approach can be dubbed 'variationist linguistic landscape study' (VaLLS).

Variationist projects are typically quantitative in nature, exploring the "inevitable" (Fasold 1990: 223) interaction between linguistic and social structures and dynamics by way of (statistically) analyzing the distributional patterns of particular variants of linguistic 'variables' ("alternative ways of 'saying the same thing'" – Labov 1969: 738) across social contexts (see e.g. Chambers 2008; Fasold 1990; Guy 1993; Kiesling 2011; Meyerhoff, Schlee & MacKenzie 2015; Milroy & Gordon 2003; Tagliamonte 2006, 2012; Walker 2010). Resulting evidence regarding "the likelihood of co-occurrence of a variable form and any one of the contextual features in which we are interested" (Bayley 2002: 118) is taken to allow for detailed descriptive and, ultimately, explanatory statements about the very nature of the relationship between language and social life, and how they mutually shape each other.

It follows that two basic issues defining any variationist project are that of what to investigate (defining the unit of analysis in which to look for linguistic variation), and where to investigate it (establishing the social contexts to be featured in the study as independent variables). For ELLViA, the unit of analysis is the LL 'sign'; the focus of investigation being the language choice (variation) manifested there (with a particular eye on English). The basic

definition of 'sign' is taken from Backhaus (2007: 66), where it is held to be "any piece of written text within a spatially definable frame [...] including anything from the small handwritten sticker attached to a lamp-post to huge commercial billboards outside a department store". The following types of artifacts are, however, excluded (see Backhaus 2007: 67): (1) texts directly written on merchandise/price tags attached to it; (2) signs inside shops or behind shop windows unless attached/in direct proximity to the window pane (i.e. perceptibly 'in the shop window'); (3) all non-stationary objects (e.g. newspapers, menus, texts on buses or cars, clothes, tattoos); and (4) items without text (pictures, emblems, logos, pictograms). Contrary to Backhaus (2007), graffiti and small tags on vending machines are, however, included in ELLViA – as are, in fact, even objects as small as screws, if they bear text on them.

Regarding the identification of social contexts which are to be recorded, the most basic decision-making in LL research concerns staking out a meaningful survey area. While introducing a clear limitation in scope, this step is necessary because "[i]t is challenging to the point of being unfeasible to survey an entire city or town" (Blackwood 2015: 41). Proposing to resolve an issue that has plagued quantitative LL since its inception and has not yet been satisfactorily settled (see further discussion in Blackwood 2015), ELLViA uses the innovative approach of applying the common variationist technique of hypothesis-driven stratified judgment sampling for survey area selection. As Sankoff (2005) explains, this kind of sampling may be the best compromise for a variationist study regarding both the need to keep data collection manageable, and to satisfactorily capture the linguistic diversity in a given sociolinguistic setting. The procedure is to assure

[...] that whatever auxiliary variables we suspect may be correlated with some aspect or other of linguistic variation, such as age, sex, place of birth, etc., are represented as fully as possible in the sample. To accomplish this, a stratified design is set up prior to sampling. The idea is to divide the population into a number of strata, each of which contains only individuals falling into a restricted range on one or more of the auxiliary variables. Thus, one stratum might contain all women of a certain age range born in a certain district. For each stratum, a sampling quota is fixed, and speakers falling into the stratum are sampled at random until the quota is filled (Sankoff 2005: 1001).

Needless to say, the identification of "whatever auxiliary variables we suspect may be correlated with some aspect or other of linguistic variation" (see quote above) is equivalent to the process of setting up hypotheses about the interaction of language choice and social context that are to be tested in a data sample (hence the term 'hypothesis-driven stratified judgment sampling').

In the case of ELLViA, the relevant hypotheses concern correlations of certain social factors with the choice of English on public signage. The factors assumed to have some bearing on this language choice are: (1) the age of the local audience of sign-readers (as English is often associated with youth language – see e.g. Grau 2009; Pitkänen-Huhta & Nikula 2013); (2) the cultural and linguistic background of the local audience of sign-readers (specifically as regards potential uses of English as a lingua franca in multilingual settings); (3) the presence of tourists (see e.g. Bruyèl-Olmeido & Juan-Garau 2009); and (4) the

dominance of commercial vs. non-commercial activity (particularly as regards the use of English on shop signs and in advertizing – see e.g. Backhaus 2007). Accordingly, hypothesis-driven stratified sampling was operationalized by selecting pairs of administrative districts in Vienna that load especially high/low on one particular one of the first three demographic variables (but not on any of the others).¹⁵ The relevant demographic data were compiled from information, publications, and statistics available mainly from Statistik Austria and Magistrat Wien, particularly the Jahrbuch Wien 2014,¹⁶ featuring statistics on (1) residents' age; (2) their citizenship and country of birth, used here as proxies for residents' level of multilingualism, together with comprehensive survey data on multilingualism in Viennese elementary schools collected by Katharina Brizic (Brizic 2013; Brizic & Hufnagl 2011; Brizic p.c.); and (3) the presence of tourists (using number of visitors according to accommodation data and museum visits as proxies). The following districts were selected by this procedure, paired according to the relevant independent variable and matched also with regard to socioeconomic criteria: the 8th district (+ young residents, aged 20-29) and the 19th district (+ older residents, aged 65+); the 16th district (+ multilingual) and the 21st district (– multilingual); as well as the 1st district (+ tourists) and 18th district (– tourists).¹⁷

The fourth hypothesis about English correlating with commercial activity was operationalized by selecting in each district two streets: one shopping street and one residential street. Selection was based on a list ranking the streets in each district according to the number of business establishments per meter (using data provided by Herold Business Data GmbH and Magistrat Wien). In each district, the street with the highest ratio was chosen as the shopping street to be featured in the survey; and a residential street was chosen from the lowest end (under additional consultation of demographic statistics from Magistrat Wien/Statistik Austria detailed for small-scale census districts).

In each street (survey area), a 200m section was then selected, centered on the length-wise midpoint. In all, twelve survey areas were thus established (two in each of the six districts, see Table 1):

¹⁵ It bears to recall at this point that the underlying assumption that a local audience of sign-readers bears an influence on language choice on LL signage is derived directly from the logic of an interactional model of communication (see section 2).

¹⁶ See <https://www.wien.gv.at/statistik/publikationen/jahrbuch.html> (last retrieved under this address on April 3, 2015). The publication has recently been replaced with the Jahrbuch Wien 2015 (May 3, 2016).

¹⁷ District selection was checked and confirmed by Christoph Reinprecht, urban sociologist at the University of Vienna, whom I thank for his kind support.

	+ young	+ old	+ multi-lingual	– multi-lingual	+ tourists	– tourists
Shopping street	<i>Josefstädter Straße</i>	<i>Döblinger Hauptstraße</i>	<i>Thaliastraße</i>	<i>Am Spitz</i>	<i>Graben</i>	<i>Währinger Straße</i>
Residential street	<i>Stolzenthalergasse</i>	<i>Pfarrwiesengasse, Iglaseegasse*</i>	<i>Thalhaimergasse</i>	<i>Kinzerplatz</i>	<i>Blutgasse, Domgasse, Grünangergasse, Kumpfgasse*</i>	<i>Plenergasse</i>

* The survey area was split over more than one street due to street length requirements.

Table 1: Streets selected as ELLViA survey areas

Data collection in these survey areas took place from April to September 2015, in a team of two (one photographer, one fieldnote-taker).¹⁸ In line with the axiomatic variationist 'Principle of Accountability' (Labov 1969), data collection proceeded in a 'count-all' fashion, capturing in the corpus any and all written signs (put more simply: items with written text on them), in all languages, shapes, and sizes, within the selected survey areas.

The Principle of Accountability is indeed a fundamental doctrine for variationist sociolinguistic studies, in that it puts a firm check on over- or understating occurrences of variants by way of anecdotal and selective reporting (e.g. due to the allure of their markedness, exceptionality, non-standardness, or categorical non/fit; see Labov 1969: 737-738). The principle holds that "any variable form (a member of a set of alternative ways of 'saying the same thing') should be reported with the proportion of cases in which the form did occur in the relevant environment, compared to the total number of cases in which it might have occurred" (Labov 1969: 738; original formatting omitted). Or, as Tagliamonte (2006: 13) reformulated it, "you cannot simply study the variant forms that are new, interesting, unusual or non-standard [...]. You must also study the forms with which such features vary in all the contexts in which either of them would have been possible." The goal of this procedure is to be able to provide a standardized and normalized measure of the frequency with which a variant occurs on average in a data sample, where this frequency is expressed as the proportion (typically: percentage) of occurrences of the particular variant within the entire set of occurring variants of the same linguistic variable (i.e. the set of all attested and relevant alternative ways of 'saying the same thing' – see above). It is this very procedure that paves the way for investigating the interaction between the choice of linguistic variants and aspects of social context by means of statistically comparing the different rates of occurrence of particular variants across different contexts.¹⁹ If it is then

¹⁸ I cordially thank Kathrin Dolmanitz, who functioned as the note-taker together with me as the photographer, for her invaluable help and work on the project in general and with fieldwork in particular.

¹⁹ Note that a basic tenet of variationist sociolinguistics is that distributions of linguistic variants across contexts are rarely marked by perfect categorical complementarity, but rather that the likelihoods of one variant occurring over another change across contexts. This is because heterogeneity (rather than categoricity) is seen

found that one variant is more likely to occur (i.e. occurs at a higher rate) in one particular type of social context than in another, this provides evidence and a basis for discussion of the meaning of this association – i.e., how it may reflect and/or construe broader social dynamics.

Under application of the count-all procedure following from the Principle of Accountability, fieldwork for the ELLViA project collected a total of 17,214 LL items across the twelve survey areas. Records on these items, in addition to the relevant photo numbers, include their location (street, street number, whether or not it is featured in an ensemble such as a shop, traffic sign, on the sidewalk, etc.), approximate size, how the text was applied (printed, etched, handwritten, etc.), the materiality of the object on which the text was applied (wood, metal, glass, etc.), and whether or not items are movable (e.g. product information, posters on stands, etc.). The records were digitized via entry into an Excel spreadsheet.²⁰

At the time of writing (2016), and with data collection finished, ELLViA Module 1 has proceeded to the data coding phase, with language choice as the main variable for which the compiled items are to be coded. The current round of coding draws on classic linguists' tools (dictionary codification and etymology) to identify and categorize (German, English, and other) language use. Following the project's overall logic of basing language categorization centrally on readers' perceptions, a phase of re-coding is to be carried out at a later stage in the project and prior to final data analysis, on the basis of the perceptual findings from Module 2 (see 4.2. below).

As mentioned at the outset of this section, the goal of Module 1 is to produce a comprehensive picture of the particularities of (English) language choice in the Viennese LL, by means of a quantitative sociolinguistic analysis of relations between the coded linguistic and social variables in an annotated corpus of naturally occurring language use in the context of the Viennese LL. In accordance with contemporary practice in sociolinguistic variation study, patterns of co-variation among related variables will be taken into account (for example, in an LL context, language choice and a sign's function are likely to be related). Multidimensional statistical modeling will be applied for this purpose (see e.g. Baayen 2008; Tagliamonte & Baayen 2012; Lohmann 2013). This tool has not yet been much applied in LL research and will thus be pioneered in ELLViA, albeit only towards the end of the project and subsequent to completion of the other two Modules, which are presented in the following.

as an intrinsic feature of all language use, albeit a 'structured' feature that can be investigated for its probabilistics (see Weinreich, Labov & Herzog 1968; as well as discussion in e.g. Chambers 2008; Kiesling 2011; Tagliamonte 2006, 2012; Walker 2010).

²⁰ I cordially thank Christina Schuster (as well as, for a short period of time, Sophie van der Meulen from the University of Groningen) for her invaluable help and work on data entry and coding, which is still ongoing at the moment of writing.

4.2 Module 2: 'Establishing what constitutes English language use to Viennese LL sign-readers'

The goal of ELLViA's Module 2 is to empirically establish what Viennese LL sign-readers nowadays actually perceive to be 'English'. In practice, this means investigating the cornerstones of perceptual differentiation between English on the one hand, and German, as the majority and 'official' language in the Viennese LL, on the other. This is operationalized in a lexical decision task featuring language switches.

The idea of using 'folk' (non-linguists') perceptions to distinguish between English and German language choice may seem unusual at first, given the general linguistic distance between the two systems (Gooskens & Heeringa 2004). In fact, code identifiability has typically gone unquestioned as a basis for researchers' analyses of language choice. However, recent theorizing and study of the way in which the global spread of English is concomitant with phenomena of local appropriation, or the integration of 'raw material' from the English language into other linguistic systems, suggests that compartmentalizations within speakers' linguistic repertoires are today more in flux than ever (Blommaert & Rampton 2011; Seidlhofer 2011). Put simply, it is nowadays questionable whether words and expressions that have become frequent in the Viennese LL, like sticker, design, event, styling, and internet, or 'pseudo-Anglicisms' like Handy ('cell phone'), or hybrids like Prepaid-Karte and scannen (all of which appeared in a small-scale pilot for the present project) still evoke an English, or rather a German point of reference in the Viennese public, and what the implications of this are. In an investigation of LL meaning-making via language choice, it is therefore crucial to establish perceptual boundaries between language systems on an empirical basis, rather than to draw solely on a linguist's methods of data categorization and delimitation. As discussed in section 2.2., no message is communicated by language choice on an LL sign, no interactional meaning thus created, unless some reader realizes a contextualized interpretation to this effect. And this interpretation is contingent upon perceiving language variation (here: an alternation between German and English) as such.

In Module 2 of ELLViA, the investigation of the perceptual boundaries between English and German is operationalized via an experiment that derives its logic from the 'switch' paradigm within the psycholinguistic study of bilingualism. Research under this paradigm has found that there is a cognitive processing cost to switching between languages, both in perception and production (Bullock & Toribio 2009; Gullberg, Indefrey & Muysken 2009). Experimental studies often measure this cost in terms of the reaction times (RTs) in a task that pits blocks of trials where language switching occurs against blocks where it does not occur. The premise is that a longer RT indicates a higher processing cost incurred; and longer RTs have indeed been attested for switched vs. non-switched trial blocks (see review in Thomas & Allport 2000). Explications largely turn on priming effects: If a previous trial evoked one language, this language serves as a 'prime' for the subsequent trial. If the languages match, facilitation (speeding of reactions) occurs; if they do not, cognitive readjustment has to take place, so that there is inhibition (slowing of reactions).

Though the exact modeling of switch costs is still debated, the main point of relevance here is that there is such a cost. Using this effect, one can arguably reconstruct perceptions of language shifts.

Under this logic, Module 2 empirically investigates where Viennese LL sign-readers draw the linguistic boundaries between English and German. The protocol used is that of a visually-based 'lexical decision task': Participants are asked to indicate as quickly as possible whether a word they see on a computer screen is a real, existing word or not, and RTs are measured accordingly (see the bilingual lexical decision tasks reported in von Studnitz & Green 1997 and Thomas & Allport 2000, which serve as models here). The central premise is that if RTs on test items (=the dependent variable) increase, this indicates the cost of language shifting (other effects being controlled). In other words, whenever an increased RT occurs between two items in the experimental task, it is deduced that the participant perceived a language shift to have occurred.

Single-word items 'formally' considered either English or German are to be presented in various alternations in the task, interspersed with English- and German-like constructed non-word items (see also von Studnitz & Green 1997). The test words will be selected from the compiled corpus (Module 1), so that perception is investigated with reference to naturally occurring language choice on Viennese LL signs. Items of different morphological complexity and composition will be selected, also taking frequency and context of occurrence in the corpus into account. 'Formal' language category of the selected words (English or German) is the main independent (manipulated) variable in the experiment. For the outcome, the central focus is on any instances where 'folk' perceptions of shifts (measured RT increases) are found to run counter to a classic linguistic categorization.

The participant sample for the experiment will be stratified to include Viennese L1 German speakers of two different age groups (under 30 and over 50), to investigate the potential role of age in the perceptual differentiation of English and German (or change over 'apparent time' – Bailey 2002). Further, participants' level of competence in English will be assessed and integrated into the model of analysis, because level of bilingualism has been found to influence switch costs (van Hell & Tanner 2012).

The analysis of results and generation of findings will be based on statistical processing of the experimental outcome (mainly, RT measures and error rates). Statistical analyses will use linear mixed effects models (e.g. Baayen 2008). Participants' age and English competence constitute independent variables to be explored; effects to be controlled include the arrangement of test stimuli and filler items as well as issues involving cognates, homographs, orthographic neighbors, semantic categories, and the perceived linguistic affiliation of non-words (cf. von Studnitz & Green 1997; Thomas & Allport 2000).

The operationalization of language shifts via a lexical decision task involving single-word items constitutes an acknowledged limitation of scope of the experiment. Similarly, using Viennese L1 German speakers as proxy for a 'Viennese public' that is in reality quite diverse (see section 3) is a known limitation nevertheless dictated by experimental practicalities and rigor. Yet, within these limits, the output of Module 2 is expected to be an

empirically generated point of reference by which to gauge the 'folk' perceptual delimitation of English and German by Viennese LL sign-readers.

Following the integrated research design of ELLViA across its three modules, results of Module 2 constitute the basis of a final re-coding and analysis of the data collected under Module 1 (see above). Results furthermore feed directly into the design of Module 3, presented below.

4.3 Module 3: 'Establishing the social meanings Viennese LL sign-readers commonly associate with English language use'

The main goal of Module 3 is the elicitation of the social meanings (ideologies, symbolisms, attitudes) sign-readers are likely to associate with the use of English in the local context of the Viennese LL. Two types of methodology are used for this purpose, in order to triangulate the findings; Module 3 is thus structured into two parts (3a and 3b).

For Module 3a, the methodology is drawn from the social psychological 'speaker evaluation' paradigm (for review see Garrett 2010). While this paradigm is typically applied in the elicitation of evaluations (i.e. 'language attitudes') regarding variation in spoken language, it can be and has been adapted to investigate reactions to written language use (e.g. Buchstaller 2006). The common procedure in the paradigm is to present study participants with samples of language production that differ mainly/only in that aspect of language variation that is of interest to the researcher. Typically, participants are asked to rate these different samples on 'semantic-differential scales' (Osgood, Suci & Tannenbaum 1957) in a questionnaire. It is postulated in the field that, due to this study design (a.k.a. the 'matched-guise technique' – see Lambert et al. 1960), any ratings differences can be attributed directly to the variation in language use.

For the purposes of the present project, this methodology will be adapted in such a way as to use manipulated images of signage as stimuli (see also Gerritsen et al. 2010, who use print ads). More specifically, LL signs will be extracted from the Module 1 corpus in which the English language is featured either in combination with German or by itself. Identification of 'English' vs. 'German' will be based on the perceptual findings from Module 2. A second version of the signs, translated/manipulated so as to feature only German, will be created with the software package Adobe Photoshop (in a then-current version). Both the original and the manipulated versions of the signs will be juxtaposed in the test protocol, in order to elicit study participants' potentially differentiated reactions. Responses will be recorded via semantic-differential scales that comprise, and thus test, the kinds of social meanings commonly held to be associated with English language use in LL research, such as 'modernity', 'internationalism', 'dynamism', 'youth', and 'prestige' (Kelly-Holmes 2000, 2005; Piller 2001, 2003; these associations also emerged in the preparatory interview to this project at a Viennese advertising agency). Further scale items will be added drawing on language attitude literature, on findings from Module 1 (regarding patterns and contexts of English language use specific to the Viennese LL), but notably also taking potential social

meanings of the German language into account (e.g. that it may appear more 'natural' or 'artificial' by comparison). The response format is a paper-based questionnaire.

In keeping with Module 2, the sample of study participants will consist of Viennese L1 German speakers, stratified according to age. Participants will be recruited mainly by approaching them on the street ('street-intercept survey'). Convenience samples of students at the University of Vienna as well as participants in public lectures – the latter typically featuring an older adult population – will also be included.

Analysis of the outcome will compare the mean ratings received by the English and German signs on each scale item, to record differences attributable to language choice. Effects of participants' age on the ratings will be explored. Statistical computation of the findings will follow common practice in the speaker evaluation paradigm, using multivariate comparisons of mean ratings. In addition, any comments delivered by the participants in the course of the rating task will be subjected to content analysis.

The application of primarily quantitative scale-based methods in the elicitation of attitudes has been challenged from a constructionist perspective (e.g. Potter & Wetherell 1987). However, as Soukup (2012, 2015) discusses, the appropriateness of this method must be judged in relation to the research goals, namely what types of evaluations are to be elicited. The fact that scale-based methods deliver the common, average, stereotypical evaluations across a large sample of respondents is indeed considered appropriate and beneficial in the context of the present project, where the common meaning-making practices of a general Viennese public of LL sign-readers (rather than individuals) are the desired output (see sections 1 and 2).

Yet, in order to triangulate the findings from Module 3a from a more qualitative, ethnographic perspective, its counterpoint, Module 3b, is enjoined, which uses focus-group discussions (e.g. Schulz, Mack & Renn 2012) to further explore what types of social meanings and messages a Viennese public realizes from English language choice on LL signs. Signs as they were originally recorded under Module 1 will again serve as starting points, presented here via PowerPoint projection. Although the focus-group discussions will be steered by the central question of what meanings participants realize from English language use on these signs, any further pertinent issues, ideologies, and evaluations introduced and debated by the participants will also be explored, for the ultimate purpose of testing and contextualizing the findings generated within the project overall.

Parallel to Modules 2 and 3a, Viennese L1 German speakers of both sexes and from two age groups (under 30 and over 50) will be recruited for the focus groups. The resulting data will be subjected to content analysis, with a particular focus on comparing and enriching the findings from Module 3a.

The output of Module 3 is expected to constitute a map or 'indexical field' (Eckert 2008) of the social meanings (symbolism, attitudes, ideologies) in terms of which a Viennese audience of sign-readers contextualize English language use in the Viennese LL. As suggested throughout, this kind of 'inference' of interpretations (i.e. of the 'message') by sign-readers arguably constitutes a central motivation for occurrences of English in the Viennese

LL as found under Module 1. In other words, its analysis provides the cap to ELLViA's enterprise of investigating how and why the use of English creates meaning in the linguistic landscape of Vienna, Austria.

5. The project ELLViA: Current status and outlook

As mentioned at the outset, research on the project ELLViA is still ongoing at the time of writing (2016), with the project being in its second year of funding out of four. Because the central focus so far has been the detailed design and practical implementation of fieldwork for Module 1, and full data coding still has quite a way to go, results are as yet fairly limited. However, early contributions to the field of LL research have already emerged, particularly concerning the development, description, and field testing of VaLLS methodology. Thus, Soukup (2016) presented ELLViA's innovative approach to survey area selection, following the logic of hypothesis-driven stratified judgment sampling (see 4.1.), to an international audience of LL researchers at the 37th International LAUD Symposium in Landau, Germany. On the same occasion, Amos and Soukup (2016) made a call for and critically discussed the development of a standard-setting common canon of (independent) variables to be featured in and across quantitative LL research, for the purposes of facilitating meta-analysis and cross-comparison of studies in various settings around the world, which, at the moment, is severely hampered by the vast multiplicity of approaches. Soukup and Schuster (2016) then presented first quantitative and qualitative results from Module 1 at the 8th Linguistic Landscapes International Workshop in Liverpool, in the form of a preliminary investigation of a sub-corpus consisting of the 'transgressive' LL items contained in the ELLViA dataset (i.e. items that are placed in the LL illegally/without any authorization – see also Cindark & Ziegler *forthc.* 2016). Results show that transgressive items make up just below 10% of the total of LL items, with stickers predominating over graffiti, particularly in the commercial streets. With almost all stickers at a size of DIN A6 or smaller, the transgressive part of the Viennese LL is furthermore shown to typically play out on a noticeably small scale. Ongoing analysis on the types of discourses featured on stickers evidences a clear trend towards commercialization of this medium (promotion of events, artists, services), to the point where even the transgressive LL is subjected to the mainstream logic of an economic marketplace.

It is expected that future ELLViA project output under all three Modules will follow this avenue of informing LL research, but also variationist and interactional sociolinguistics at large, on the methodological, theoretical, and descriptive level. At the same time, the project is also set up for more widespread dissemination, as results should be of interest to professionals and researchers in the context of marketing (regarding advertising strategies that make use of English) as well as to the public (as the target of such strategies). The topic of English language use in a German context has in fact been shown to be of great public interest in Austria, as evidenced for example in the discussion following the publication of an 'Index of Anglicisms' (by the so-called 'Verein Deutsche Sprache', whose potential

affiliation with extreme-right political ideology has been a matter of debate) in early 2013.²¹ Media coverage triggered lively and controversial online-forum commentaries, ranging from calls for acceptance of 'Anglicisms' as a fact of life, all the way to claiming connections between German-language purists and Nazi-ideology. ELLViA output will include a topical press kit and science-to-public communication in this regard, in order to contribute a well-founded, academic assessment of the status quo regarding English in the Viennese LL to such public discussion.

And ultimately, research and awareness-raising regarding ('foreign') language use in public space can also be tied in with and made productive for foreign language learning in and outside the classroom, as discussed and exemplified for example by Cenoz and Gorter (2008) and Malinowski (2015). As Malinowski (2015) argues, the LL affords the introduction of "situated discourses and lived experiences in the city" into the classroom (p. 96), with the potential "to lead students to critically juxtapose their experiences reading about, observing, and walking amidst the signs" (p. 97) – and languages, as I would add.

Written language in public space is all around us. Designing, perceiving, and interpreting it is both an everyday process of assessment, interaction, and interpretation of our environment, as well as an engagement with covert and overt public language policies, ideologies, and ecologies (see also Shohamy 2006). The project ELLViA is set to illuminate, explicate, and make accessible to reflection these practices with regard to English language choice in the linguistic landscape of Vienna, Austria, over the years to come.

References

- Amos, H. Will; Soukup, Barbara. 2016. "Towards a canon of variables in quantitative LL research". Paper presented at the 37th International LAUD Symposium, Landau, Germany, April 4-6.
- Auer, Peter (ed.). 2007a. *Style and social identities: Alternative approaches to linguistic heterogeneity*. Berlin: Walter de Gruyter.
- Auer, Peter. 2007b. "Introduction". In Auer, Peter (ed.). *Style and social identities*. Berlin: Walter de Gruyter, 1-21.
- Auer, Peter. 2013. "The social meaning of bilingual talk". *Freiburger Arbeitspapiere zur Germanistischen Linguistik (FRAGL)* 13. <http://portal.uni-freiburg.de/sdd/fragl/2013.13> (May 3, 2016).
- Baayen, Rolf H. 2008. *Analyzing linguistic data: A practical introduction to statistics using R*. Cambridge, UK: Cambridge University Press.
- Backhaus, Peter. 2007. *Linguistic landscapes: A comparative study of urban multilingualism in Tokyo*. Clevedon: Multilingual Matters.
- Bailey, Guy. 2002. "Real and apparent time." In Chambers, J.K.; Trudgill, Peter; Schilling-Estes, Natalie (eds.). *The handbook of language variation and change*. Malden, MA: Blackwell, 313-332.

²¹ See <http://www.vds-ev.de/anglizismenindex> (May 3, 2016).

- Bakhtin, Mikhail. 1986 [1952-53]. "The problem of speech genres". In Emerson, Caryl; Holquist, Michael (eds.). *Speech genres and other late essays* (transl. by Vern W. McGee). Austin, TX: The University of Texas Press, 60-102.
- Bayley, Robert. 2002. "The quantitative paradigm". In Chambers, J.K.; Trudgill, Peter; Schilling-Estes, Natalie (eds.). *The handbook of language variation and change*. Malden, MA: Blackwell, 117-141.
- Ben-Rafael, Eliezer; Shohamy, Elana; Barni, Monica. 2010. "Introduction: An approach to an 'ordered disorder'". In Shohamy, Elana; Ben-Rafael, Eliezer; Barni, Monica (eds.). *Linguistic landscape in the city*. Clevedon: Multilingual Matters, xi-xxviii.
- Blackwood, Robert. 2015. "LL explorations and methodological challenges". *Linguistic Landscape* 1(1/2), 38-53.
- Blommaert, Jan; Rampton, Ben. 2011. "Language and Superdiversity". *Diversities* 13(2), 1-20.
- Brizic, Katharina. 2013. "Grenzenlose Biografien und ihr begrenzter (Bildungs-)Erfolg". In Deppermann, Arnulf (ed.). *Das Deutsch der Migranten*. Berlin: Mouton de Gruyter, 223-242.
- Brizic, Katharina; Hufnagl, Claudia Lo. 2011. *"Multilingual Cities" Wien: Bericht zur Sprachenerhebung in den 3. und 4. Volksschulklassen*. Wien: ÖAW. http://www.academia.edu/1826419/Brizi%C4%87_K._and_Hufnagl_Claudia_Lo_2011_Multilingual_Cities_Vienna.Preliminary_school_report_on_a_home-language_survey_in_Viennese_primary_schools_in_German_.Austrian_Academy_of_Sciences.Online (May 3, 2016).
- Bruthiaux, Paul. 2003. "Squaring the circles: issues in modeling English worldwide". *International Journal of Applied Linguistics* 13(2), 159-178.
- Bruyèl-Olmeido, Antonio; Juan-Garau, Maria. 2009. "English as a lingua franca in the linguistic landscape of the multilingual resort of S'Arenal in Mallorca". *International Journal of Multilingualism* 6(4), 386-411.
- Buchstaller, Isabelle. 2006. "Social stereotypes, personality traits and regional perception displaced: Attitudes towards the 'new' quotatives in the U.K.". *Journal of Sociolinguistics* 10(3), 362-381.
- Bullock, Barbara E.; Toribio, Almeida Jacqueline. 2009. "Themes in the study of code-switching". In Bullock, Barbara E.; Toribio, Almeida Jacqueline (eds.). *The Cambridge handbook of linguistic code-switching*. Cambridge, UK: Cambridge University Press, 1-17.
- Campbell-Kibler, Kathryn. 2010. "Sociolinguistics and perception". *Language and Linguistics Compass* 4, 377-389.
- Cenoz, Jasone; Gorter, Durk. 2008. "The linguistic landscape as an additional source of input in second language acquisition". *International Review of Applied Linguistics in Language Teaching (IRAL)* 46, 267-287.
- Chambers, J.K. 2008. *Sociolinguistic theory*. (2nd edition). Oxford: Wiley-Blackwell.
- Cindark, Ibrahim; Ziegler, Evelyn. (forthc. 2016). "Mehrsprachigkeit im Ruhrgebiet: Zur Sichtbarkeit sprachlicher Diversität in Dortmund". In Ptashnyk, Stefaniya; Beckert, Ronny; Wolf-Farré, Patrick; Wolny, Matthias (eds.). *Gegenwärtige Sprachkontakte im Kontext der Migration*. Heidelberg: Winter.
- Coupland, Nikolas. 2007. *Style: Language variation and identity*. New York: Cambridge University Press.
- Dorner, Daniela; Vasiljev, Ivo. 2010. "Linguistic landscapes' versus economic participation in multilingual cities". In Hülmbauer, Cornelia; Vetter, Eva; Böhringer, Heike (eds.) *Mehrsprachigkeit aus der Perspektive zweier EU-Projekte: DYLAN meets LINEE*. Frankfurt: Peter Lang, 97-112.

- Drager, Katie. 2010. "Sociophonetic variation in speech perception". *Language and Linguistics Compass* 4, 473-480.
- Eckert, Penelope. 2000. *Linguistic variation as social practice: The linguistic construction of identity in Belten High*. Oxford: Blackwell.
- Eckert, Penelope. 2008. "Variation and the indexical field". *Journal of Sociolinguistics* 12(4), 453-476.
- Eckert, Penelope. 2012. "Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation". *Annual Review of Anthropology* 41, 87-100.
- Erickson, Frederick. 1986. "Listening and speaking". In Tannen, Deborah; Alatis, James E. (eds.). *Languages and linguistics: The interdependence of theory, data, and application*. Washington, DC: Georgetown University Press, 294-319.
- Fasold, Ralph. 1990. *The sociolinguistics of language*. Oxford: Blackwell.
- Garrett, Peter. 2010. *Attitudes to language*. Cambridge, UK: Cambridge University Press.
- Garvin, Rebecca Todd. 2011. "Emotional responses to the linguistic landscape in Memphis, Tennessee: Visual perceptions of public spaces in transition". PhD dissertation, Indiana University of Pennsylvania.
- Gerritsen, Marinel; Nickerson, Catherine; van Hooft, Andreu; van Meurs, Frank; Korzilius, Hubert; Nederstigt, Ulrike; Starren, Marianne; Crijns, Rogier. 2010. "English in product advertisements in non-English-speaking countries in Western Europe: Product image and comprehension of the text". *Journal of Global Marketing* 23(4), 349-365.
- Goffman, Erving. 1959. *The presentation of self in everyday life*. New York, NY: Doubleday.
- Gooskens, Charlotte; Heeringa, Wilbert. 2004. "The position of Frisian in the Germanic language area". In Gilbers, Dicky; Schreuder, Maartje; Knevel, Nienke (eds.). *On the boundaries of phonology and phonetics*. Groningen: University of Groningen, 61-87.
- Gorter, Durk (ed.). 2006. *Linguistic landscape: A new approach to multilingualism*. Clevedon: Multilingual Matters.
- Grau, Maike. 2009. "Worlds apart? English in German youth culture and in educational settings". *World Englishes* 28(2), 160-174.
- Gullberg, Marianne; Indefrey, Peter; Muysken, Pieter. 2009. "Research techniques for the study of code-switching". In Bullock, Barbara E.; Toribio, Almeida Jacqueline (eds.). *The Cambridge handbook of linguistic code-switching*. Cambridge, UK: Cambridge University Press, 21-39.
- Gumperz, John J. 1982. *Discourse strategies*. Cambridge, UK: Cambridge University Press.
- Gumperz, John J. 2001. "Interactional sociolinguistics: A personal perspective". In Schiffrin, Deborah; Tannen, Deborah; Hamilton, Heidi E. (eds.). *The handbook of discourse analysis*. Malden: Blackwell, 215-228.
- Guy, Gregory R. 1993. "The quantitative analysis of linguistic variation". In Preston, Dennis R. (ed.). *American Dialect Research*. Philadelphia, PA: John Benjamins, 223-249.
- Huebner, Thom. 2009. "A framework for the linguistic analysis of linguistic landscapes". In Shohamy, Elana; Gorter, Durk (eds.). *Linguistic landscape: Expanding the scenery*. New York, NY: Routledge, 70-87.
- Hult, Francis M. 2009. "Language ecology and linguistic landscape analysis". In Shohamy, Elana; Gorter, Durk (eds.). *Linguistic landscape: Expanding the scenery*. New York, NY: Routledge, 88-103.
- Jaworski, Adam; Thurlow, Crispin (eds.). 2010. *Semiotic landscapes: Language, image, space*. London: Continuum.
- Jenkins, Jennifer. 2009. *World Englishes*. (2nd edition). New York: Routledge.
- Kachru, Braj B. 1992. "Teaching World Englishes". In Kachru, Braj B. (ed.). *The other tongue: English across cultures*. (2nd edition). Urbana, IL: University of Illinois Press, 355-366.

- Kelly-Holmes, Helen. 2000. "Bier, parfum, kaas: Language fetish in European advertising". *European Journal of Cultural Studies* 3(1): 67-82.
- Kelly-Holmes, Helen. 2005. *Advertising as multilingual communication*. New York: Palgrave Macmillan.
- Kiesling, Scott. 2011. *Language variation and change*. Edinburgh: Edinburgh University Press.
- Kral, Claudia Elisabeth. 2012. "Marktges(ch)ehen – Sprachregime Brunnenmarkt? Ein ethnographischer Zugang zur Linguistic Landscape". Mag. phil. thesis, University of Vienna.
- Kristiansen, Gitte. 2008. "Style-shifting and shifting styles: A socio-cognitive approach to lectal variation". In Kristiansen, Gitte; Dirven, René (eds.). *Cognitive sociolinguistics*. Berlin: Mouton de Gruyter, 45-88.
- Labov, William. 1969. "Contraction, Deletion, and Inherent Variability of the English Copula". *Language* 45(3): 715-762.
- Lambert, Wallace E.; Hodgson, Richard; Gardner, Robert C.; Fillenbaum, Samuel. 1960. "Evaluational reactions to spoken languages". *Journal of Abnormal and Social Psychology* 60(1), 44-51.
- Landry, Rodrigue; Bourhis, Richard Y. 1997. "Linguistic landscape and ethnolinguistic vitality". *Journal of Language and Social Psychology* 16(1), 23-49.
- Lohmann, Arne. 2013. "Is tree hugging the way to go? Classification trees and random forests as an alternative to regression models in linguistic study". *Views* 22, 1-15.
- Malinowski, David. 2015. "Opening spaces of learning in the linguistic landscape." *Linguistic Landscape* 1(1/2), 95-113.
- Mann, Rosa-Marie. 2015. "The linguistic landscapes of two universities: A comparative study". Mag. phil. thesis, University of Vienna.
- Meyerhoff, Miriam; Schlee, Erik; MacKenzie, Laurel. 2015. *Doing sociolinguistics*. Oxon, UK: Routledge.
- Milroy, Lesley; Gordon, Matthew. 2003. *Sociolinguistics: Method and interpretation*. Malden: Blackwell.
- Osgood, Charles E.; Suci, George J.; Tannenbaum, Percy H. 1957. *The measurement of meaning*. Urbana, IL: University of Illinois Press.
- Papen, Uta. 2012. "Commercial discourses, gentrification and citizens' protest: The linguistic landscape of Prenzlauer Berg, Berlin". *Journal of Sociolinguistics* 16(1), 56-80.
- Piller, Ingrid. 2001. "Identity constructions in multilingual advertising". *Language in Society* 30, 153-186.
- Piller, Ingrid. 2003. "Advertising as a site of language contact". *Annual Review of Applied Linguistics* 23, 170-183.
- Piritidis, Katherina. 2014. "The linguistic landscape of Vienna's 'Westbahnstraße': A comparison of methods". Mag. phil. thesis, University of Vienna.
- Pitkänen-Huhta, Anne; Nikula, Tarja. 2013. "Teenagers making sense of their foreign language practices: Individual accounts indexing social discourses". In Benson, Phil; Cooker, Lucy (eds.). *The applied linguistic individual: Sociocultural approaches to autonomy, agency and identity*. Sheffield: Equinox, 101-120.
- Potter, Jonathan; Wetherell, Margaret. 1987. *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage.
- Purschke, Christoph. 2011. *Regionalsprache und Hörerurteil: Grundzüge einer perzeptiven Variationslinguistik*. Stuttgart: Steiner.
- Purschke, Christoph. 2014. "'I remember it like it was interesting': Zur Theorie von Salienz und Pertinenz". *Linguistik Online* 66(4/14), 31-50.

- Reichl, Susanne. 2009. *Cognitive principles, critical practice: Reading literature at university*. Göttingen: V&R unipress.
- Sankoff, David. 2005. "Problems of Representativeness/Probleme der Repräsentativität". In Ammon, Ulrich; Dittmar, Norbert; Mattheier, Klaus J.; Trudgill, Peter (eds.). *Sociolinguistics/Soziolinguistik*. Vol. 2. (2nd edition). Berlin: Walter de Gruyter, 998-1002.
- Schilling, Natalie. 2013. "Investigating stylistic variation". In Chambers, J.K.; Schilling, Natalie (eds.). *The handbook of language variation and change*. (2nd edition). Oxford: Wiley, 325-349.
- Schilling-Estes, Natalie. 2004. "Constructing ethnicity in interaction". *Journal of Sociolinguistics* 8(2), 163-195.
- Schlick, Maria. 2002. "The English of shop signs in Europe". *English Today* 18(2), 3-7.
- Schlick, Maria. 2003. "The English of shop signs in Europe". *English Today* 19(1), 3-17.
- Schulz, Marlen; Mack, Birgit; Renn, Ortwin. 2012. *Fokusgruppen in der empirischen Sozialwissenschaft*. Wiesbaden: Springer VS.
- Scollon, Ron; Scollon, Suzie Wong. 2003. *Discourses in place*. New York, NY: Routledge.
- Seidlhofer, Barbara. 2011. *Understanding English as a Lingua Franca*. Oxford: Oxford University Press.
- Shohamy, Elana. 2006. *Language policy: Hidden agendas and new approaches*. New York: Routledge.
- Shohamy, Elana, Ben-Rafael, Eliezer; Barni, Monica (eds.). 2010. *Linguistic landscape in the city*. Clevedon: Multilingual Matters.
- Shohamy, Elana; Gorter, Durk (eds.). 2009. *Linguistic landscape: Expanding the scenery*. New York, NY: Routledge.
- Soukup, Barbara. 2009. *Dialect use as interaction strategy: A sociolinguistic study of contextualization, speech perception, and language attitudes in Austria*. Vienna: Braumüller. <https://phaidra.univie.ac.at/view/o:364100> (May 3, 2016).
- Soukup, Barbara. 2011. "Austrian listeners' perceptions of standard-dialect style-shifting: An empirical approach". *Journal of Sociolinguistics* 15(3), 347-365.
- Soukup, Barbara. 2012. "Current issues in the social psychological study of 'language attitudes': Constructionism, context, and the attitude-behavior link". *Language and Linguistics Compass* 6(4), 212-224.
- Soukup, Barbara. 2013. "Austrian dialect as a metonymic device: A cognitive sociolinguistic investigation of Speaker Design and its perceptual implications". *Journal of Pragmatics* 52, 72-82.
- Soukup, Barbara. 2015. "Mixing methods in the study of language attitudes: Theory and application". In Prikhodkine, Alexei; Preston, Dennis R. (eds.). *Responses to language varieties: Variability, processes and outcomes*. Amsterdam: John Benjamins, 55-84.
- Soukup, Barbara. 2016. "Variationist LL study and the question of the survey area: a report from the project 'English in the linguistic landscape of Vienna, Austria' (ELLViA)". Paper presented at the 37th International LAUD Symposium, Landau, Germany, April 4-6, 2016.
- Soukup, Barbara; Schuster, Christina. 2016. "'Transgressive' signs in the LL of Vienna, Austria". Paper presented at the 8th Linguistic Landscapes International Workshop, Liverpool, UK, April 27-29.
- Spolsky, Bernard. 2009. "Prolegomena to a sociolinguistic theory of public signage". In Shohamy, Elana; Gorter, Durk (eds.). *Linguistic landscape: Expanding the scenery*. New York, NY: Routledge, 25-39.
- Tagliamonte, Sali A. 2006. *Analysing sociolinguistic variation*. Cambridge, UK: Cambridge University Press.
- Tagliamonte, Sali A. 2012. *Variationist sociolinguistics*. Malden, MA: Wiley-Blackwell.

- Tagliamonte, Sali A.; Baayen, Rolf H. 2012. "Models, forests and trees of York English: *Was/were* variation as a case study for statistical practice". *Language Variation and Change* 34, 135-178.
- Tannen, Deborah. 1989. *Talking voices*. Cambridge, UK: Cambridge University Press.
- Tannen, Deborah. 2004. "Interactional sociolinguistics / Interaktionale Soziolinguistik". In Ammon, Ulrich; Dittmar, Norbert; Mattheier, Klaus J.; Trudgill, Peter (eds.). *Sociolinguistics/Soziolinguistik*. Vol. 2. (2nd edition). Berlin: Walter de Gruyter, 76-88.
- Thomas, Erik R. 2002. "Sociophonetic applications of speech perception experiments". *American Speech* 77(2), 115-147.
- Thomas, Michael S.C.; Allport, Alan. 2000. "Language switching costs in bilingual visual word recognition". *Journal of Memory and Language* 43, 44-66.
- van Hell, Janet G.; Tanner, Darren. 2012. "Second language proficiency and cross-language lexical activation". *Language Learning* 62 (Suppl.2), 148-171.
- von Studnitz, Roswitha E.; Green, David W. 1997. "Lexical decision and language switching". *International Journal of Bilingualism* 1(1), 3-24.
- Walker, James A. 2010. *Variation in linguistic systems*. New York, NY: Routledge.
- Weinreich, Uriel; Labov, William; Herzog, Marvin I. 1968. "Empirical Foundations for a Theory of Language Change". In Lehmann, W.P.; Yakov, Malkiel (eds.). *Directions for historical linguistics*. Austin: University of Texas Press, 95-188.