



رواق العربية

Forum for Arabic Linguistics

Abstracts Booklet

Programme

	11.30		Reception open from 11.30am: foyer, Essex Business School	
	12.30	1.30	lunch	
Tues 28th July	<i>start</i>	<i>end</i>	<i>Session1 (room A)</i>	
	1.30	2	<i>Enam Al-Wer & Sam Hellmuth: Opening words and welcome</i>	
	2	2.30	Shaimaa ElSadek: Phasal Verbs in Egyptian Colloquial Arabic	
	2.30	3	Peter Glanville: Symmetry as a Unifying Conceptual Category	
	3	3.30	Maris Camilleri: Pseudo raising-to-OBJ constructions in Maltese	
	3.30	4	coffee	
	4	4.30	Fayssal Tayalati: (Non)autonomous entities and the choice between existential and possessive constructions in MSA	
	4.30	5	Noura Ramli: How many forms do you need to know to conjugate verbs in Transitional Libyan Arabic?	
	5	6	Louisa Sadler, University of Essex: <i>Some Thoughts on Some Sorts of Free Relatives</i>	
	6	8	<i>Evening reception (drinks and canapés): foyer, Essex Business School</i>	
Wed 29th July	<i>start</i>	<i>end</i>	<i>Session2 (room A)</i>	<i>Session3 (room B)</i>
	9	9.30	Mina Afkir: Arabic in the Moroccan Media Space: What Implications for Diglossia?	William Cotter: A heavy workload: (Q) as a marker of (supra) local identity in Gaza City
	9.30	10	Liesbeth Zack: Egyptian Railways Vocabulary	Abeer Hussain: Variation in the use of <i>Jīm</i> in Medini Arabic from a sociolinguistic perspective
	10	10.30	Abdullah Thalji: Systematic Polysemy in Arabic: A Generative Lexicon-based Analysis	Deema Al-Ammar: A sociolinguistic analysis of <i>Imāla</i> (final raising) in the dialect of Ha'il
	10.30	11	coffee	
	11	11.30	Rukayah AlHedayani: Investigating antonymy in an Arabic corpus	Saudi Sadiq: Vowel Convergence from Minia Arabic to Cairene Arabic
	11.30	12	Margherita Pallottino & Majid Askri: Aspectual "fi" in Tunisian Arabic	Areej Al-Hawamdeh & Enam El-Wer: Palatalisation of /k/ in Souf, Jordan
	12	1	Ahmed Al-Jallad, University of Leiden: <i>Arabic, upside down</i>	
	1	2	lunch	
	t			<i>Session 4 (room A)</i>

	2	3	Uri Horesh, Northwestern University Tutorial: Issues in (socio-)linguistic methodology.	
	3	3.30	Peter Trudgill, University of Agder Q&A Session with Early Career Researchers	
	3.30	4	coffee	
	4	4.30	Petr Zemánek & Jiří Milička: Al-qi:l wa-l-qa:l. Alliteration, Assonance and Recurrence in Arabic Medieval Texts	
	4.30	5	Christopher Lucas: Another look at the development of postverbal negation in dialectal Arabic	
	5	6	Jonathan Owens, University of Bayreuth: <i>Language history as policy, language history as imagined history and linguistic history: Is there a real Arabic, and if there is, how can we discern it?</i>	
	7	10	<i>Conference dinner:</i> <i>Fusion Restaurant (on Square 4 of Colchester campus)</i>	

	<i>start</i>	<i>end</i>	<i>Session5 (room A)</i>	<i>Session6 (room B)</i>
Thurs 30th July	9	9.30	Sunny Schomaker: Acquisition and (non)use of Arabic discourse markers in an immersion environment	Uri Horesh: Native speakers as historical linguists: Disentangling Palestinian Arabic
	9.30	10	Nour Kweider: Reading comprehension among Arabic heritage language learners and the Simple View of Reading model.	Jordan Kastrinsky & Ahmad al-Janadbah: The Influence of Geographic Location and Religion on Dialect: A Comparison of Jordanian Christian & Muslim Arabic Dialects in Amman & Karak
	10	10.30	Lior Laks & Elinor Saiegh-Haddad: Interference of Colloquial Arabic in the Standard Arabic writing of school children	Ekab Al-Shawashreh & Stephen Levey: Word Order Variability in Jordanian Arabic: A Sociolinguistic Perspective
	10.30	11	coffee	
	11	11.30	Fatima Said: "Aiwa intal asad ya khaltee" Choice of language based on its perceived emotionality	Khairiah Al-Qahtani: The definite article m- in Tihāmat Qaḥṭān: a variationist sociolinguistic analysis
	11.30	12	Darine Saidi: The Development of Narrative Competence & Linguistic Abilities in Tunisian Arabic	Henri Bensaria: First notes on the Lebanese dialects of Bšarre and Dayr ʿal-Aḥmar

	12	1	Reem Khamis-Dakwar, Adelphi University: <i>Ditching “otherness” in the study of Arabic diglossia: The need for inter-professional and theoretically-grounded investigations</i>	
	1	2	working lunch (business meeting about possible future events to be held during lunch)	
			Session7 (room A)	Session8 (room B)
	2	2.30	Abdelaziz Jaradat: Prosodic Structure and syntactic recursion in Jordanian Arabic Dialect (Spoken in the City of Irbid)	Rania Al-Aqarbeh: The Directionality of Agree: A Case from Number and Gender Agreement in Standard Arabic
	2.30	3	Majdi Sawalha, Claire Brierley, Eric Atwell & James Dickins: Language Resources, Algorithms, and Machine Learning for Prosodic Analysis of Classical and Modern Standard Arabic	Hanna Danbolt Ajer: The middle voice in Arabic: towards an understanding of forms V, VII and VIII
	3	3.30	Sam Hellmuth & Rana Almbark: Question prosody: evidence from spoken Arabic dialects	Andreas Hallberg: The role and distribution of case endings in formal Arabic speech styles
	3.30	4	coffee	
	4	4.30	Nabila Louriz: Frequency Effects in Loanword Phonology	
	4.30	5	Mohammed Nour Abu Guba: Phonetics and Phonology of Epenthetic Vowels in Ammani Arabic	
Thurs 30th July	5	6	Ghada Khattab, Newcastle University: <i>The short and long of it: acquiring gemination in a language contact situation.</i>	

Abstracts for plenary talks
(in chronological order)

Some Thoughts on Some Sorts of Free Relatives

Louisa Sadler
University of Essex

A free relative clause is a relative clause lacking an overt nominal head to modify. In English, free relative clauses are introduced by ‘plain’ *wh*-words, as in *I didn’t like what we ate last night* (compare *I didn’t like the food which/that we ate last night*) or ‘-ever’ *wh*-words, as in *The police arrested whoever was on the streets after curfew* (compare *The police arrested everyone/anyone who was on the streets after curfew*). Very little attention has been paid in the considerable theoretical (syntactic and semantic) literature on free relative clauses to such clauses in any variety of Arabic, and indeed this comes down essentially to passing references to the use of *wh*-elements such as *man* and *ma* (and cognate forms) in Moroccan Arabic and Modern Standard Arabic. In many approaches to both the syntax and the semantics of free relatives, the existence of a *wh*-item is a crucial component in the analysis (and indeed is sometimes even taken as definitional of free relatives). While this is uncontroversial for very many languages (since the requirement that a free relative contains a *wh*-item seems to be cross-linguistically very widespread) it runs counter to the use of *illi*, *alli* and related forms in what we might otherwise take to be free relative clauses in Arabic, examples such as the following:

- (1) *šift* *illī* *šār*
witnessed.1SG COMP happened.3SGM
I witnessed what happened HIJAZI ARABIC: Alqurashi
(2013, 66)
- (2) *hādu lli* *šrət-hum* *əl-yōm*
these REL buy.PV.3SGF-3PL DEF-day
These are what she bought today. TRIPOLI LIBYAN ARABIC: Pereira
(2008, 281)

This paper outlines the major properties of several different types of FRC, including realis free relatives (such as those above) and irrealis free relatives (also known as modal existential clauses). Using data from published studies of a number of dialects of Arabic and elicited data, we discuss a range of issues, showing *inter alia* that *illi* clauses are used to express both realis and irrealis free relatives, exhibiting the expected range of semantic properties, without the presence of any sort of *wh*-item. We briefly consider the consequences of this for analyses which assume the presence of a *wh*-item.

Alqurashi, Abdulrahman. 2013. *Arabic free and restrictive relative clauses: a Minimalist and HPSG Approach*. Ph.D. thesis, University of Essex.
Pereira, Christophe. 2008. *Le parler arabe de Tripoli(Libye): phonologie, morphsyntaxe et catégories grammaticales*. Ph.D. thesis, Institut National des Langues et Civilisations Orientales (INALCO), Paris.

Arabic, upside down (part II of the *Before Sunrise* series)

Ahmad Al-Jallad

University of Leiden

The title of this talk is inspired by a paper written by the late M.L. Bender entitled *Upside-down Afrasian*. Bender argued that the way scholars have thought about the homeland of Proto-Afro-Asiatic was influenced by a Semito-centric bias, and that there were strong arguments to place the homeland in Africa rather than southwest Asia. While this thesis continues to be debated by scholars, I believe that in principle a similar kind of bias holds true for Arabic. The historical study of Arabic has been influenced by a powerful myth: **there are no written sources from the Jahiliyyah, the pre-Islamic period**. As a result, the historiography of the language has privileged mythological histories composed in the 8th and 9th centuries. These sources place the origins of Arabic deep within the Arabian Peninsula, where nomads isolated from the outside world jealously guarded the language against impurities until the advent of Islam. This image continues to be the default starting point for the discussion of Arabic's early history.

The last twenty years have witnessed an explosion in the epigraphic surveying of the Arabian Peninsula and adjacent areas of the southern Levant. As a result, our image of the linguistic map of pre-Islamic Arabia is much clearer. What I would like to do in this talk is, in the fashion of Macdonald 2000, reflect on this map, and more precisely, on the distribution of Arabic. Quite contrary to what Islamic-period writers assert, Arabic in its earliest periods seems to have been spoken in the northwest corner of the Peninsula and the southern Levant. The Peninsula's interior and south, on the other hand, testify to a good deal of linguistic diversity, to which Arabic was a latecomer. Based only on the documentary evidence – epigraphy and papyri from the pre-Islamic period – I will outline the corpus of Old Arabic and plot its distribution on the map. I will also highlight points of contact between Arabic and other languages, and discuss what the epigraphic evidence can tell us about the nature of this contact. This new perspective will allow us to pose questions never before considered, such as: when did the Arabicization of the Arabian Peninsula begin and why? Why did the late Nabataean script become associated with Arabic exclusively, while the other alphabets used to write the language in different places and at different times fell into disuse? And, perhaps most importantly, what did pre-Islamic Arabic *actually* look like?

Language history as policy, language history as imagined history and linguistic history: Is there a real Arabic, and if there is, how can we discern it?

Jonathan Owens

There are few languages in human history imbued with so rich a socio-cultural profile as is Arabic. Similarly, there are few languages so transparent to linguistic analysis as is Arabic in that it offers a rich array of sources for its study. It is, however, precisely the juxtaposition of these two realities which, I will argue, inhibit a holistic conceptualization of Arabic, illustrating the argument from three perspectives, the Classical, the Philological-Semitic and the contemporary historical and socio-historical perspectives.

1. The late classical tradition

One of the great polymaths of the Arabic-Islamic tradition is certainly the Egyptian scholar Jalal ad-Din al-Suyuti (911/1505), writing about nearly all aspects of Classical Arabic. Whereas most of his work falls into a traditional, even if encyclopedic summary of various aspects of Arabic grammar, in his *Muzhir* (chapters 10, 11), Siyuti argues for a socio-historical treatment of variation in Old Arabic which contradicts the thrust and import of the original source which he treats, namely Sibawaih.

2. The philological-Semitic tradition

The (largely) European philological tradition in the study of Arabic has its fundamental roots in a nineteenth century divided, in the case of this tradition, between an interest in language as language (cf. historical linguistics, below) and language as a tool for discerning the history and culture of the great Middle Eastern civilizations. The classic work of Carl Brockelmann (1908/1913) exemplifies this bifurcated perspective, which continues to reverberate in the tradition today. The interpretation of old, written texts continues to be its basis; the interpretation of the linguistic variety which is reputed to lie behind these serving as a norm against which the history of the language is measured.

3. The historical and socio-historical traditions

Historical linguistics, which came of age in the nineteenth century, is a retrospective discipline based on reconstruction. It works backwards to 'explain' the present-day state of the language against conditioned, linguistically explicable innovations.

Whereas the historical linguistic tradition works under the assumption that language is a decontextualized, abstract system, socio-history attempts to add a further, crucial variable, namely the role of language communities in transmitting language. It will be argued that contemporary dialects can be seen as repositories of socio-historical changes, but also as agents of language stability.

Each of the three perspectives will be illustrated and critiqued against (mostly) well-known linguistic issues. It will emerge that only the third position enables a holistic, inclusive understanding of how contemporary Arabic is what it is.

Ditching “otherness” in the study of Arabic diglossia: The need for interprofessional and theoretically-grounded investigations

Reem Khamis Dakwar
Adelphi University

In this talk, I will argue that the quality of education and healthcare provided to Arabic-speaking individuals, within the Arab world as well as in the diaspora, would be significantly impacted by a collaborative approach to the study of Arabic diglossia. Collaborations between linguists, educators, and health professionals have already yielded insights into aphasia recovery, emergent literacy development, and disfluency markers within Arabic language norms. I will share examples of these impactful approaches and discuss the importance of such work for the future of educational and clinical service provision for Arabic-speaking communities.

A pre-requisite for research that has the potential to positively impact education and clinical work is that our investigations are grounded in the same theoretical frameworks and rigorously-applied standards that govern other scientific work. To illustrate this point, I will discuss event-related potential research that derives questions from a cognitive model of Arabic diglossia to examine lexico-semantic, phonological, and morpho-syntactic representation and processing in native speakers and learners of Arabic.

This line of study stands in contrast with a long tradition of behavioral studies of Arabic that have capitalized on the “otherness” of Arabic language and Arabs, examining unique features of Arabic without grounding these observations within theoretical frameworks of the language mechanisms that are shared by all humans. The contrasts between such behavioral approaches and the neuroimaging studies of Arabic representation and processing are used to highlight the effects of such implicit cultural imperialism in the study of Arabic diglossia. In closing, I will emphasize the importance of deriving questions from theoretically-grounded models and frameworks to support our emerging understanding of Arabic language development, learning, reading and writing.

The short and the long of it: acquiring gemination in a language contact situation

Ghada Khattab

Newcastle University

In this talk I explore the representation, phonetic implementation and acquisition of gemination (contrastive consonant length). Gemination plays a significant role in Arabic grammar: it can operate at the lexical (e.g. /bana/ *he built* vs /banna/ *coffee seller*) and morpho-syntactic level (e.g. /hamal/ *he carried* vs /hammal/ *he made someone carry*); it can also be derived, and within that, assimilated (ʔal + ʃams → [ʔaʃʃams] *the sun*) or concatenated (/ʔaxad/ + /dawa/ → /ʔaxaddawa/ *he took medicine*).

The phonological representation of gemination has been the focus of several studies looking at relationship between prosodic weight, phonological structure, and phonetic timing. Researchers have argued for a moraic view of syllable timing for Arabic (Broselow, 1995; Broselow et al, 1995; 1997; Davis, 1999; Hayes, 1995), but whether or not weight correlates with phonetic timing has until recently been debated. Our data from Lebanese Arabic (LA) provides the first set of phonetic evidence for a moraic theory of weight (e.g. Khattab & Al-Tamimi, 2014); a look at patterns of duration for medial singleton and geminate consonants and their surrounding vowels in LA shows that a bimoraic constraint, rather than whether syllables are open or closed, determines the degree of temporal compensation of vowels preceding singleton and geminate consonants.

In terms of non-durational indices for gemination, we present evidence for relatively minor but consistent fortition effects on target geminate consonants and their preceding vowel (Al-Tamimi & Khattab, 2011; 2015). These include intensity, fundamental frequency, and spectral properties of the consonants and their surrounding vowels, as well as voice quality effects. The results highlight [+tense] as a secondary feature for the singleton-geminate contrast in LA, with the degree of robustness of this feature varying across place and manner of articulation of the consonant and interacting with intrinsic duration. In the process of phonological acquisition, however, children initially follow various paths to the acquisition of gemination, with some of their productions exhibiting tenseness as a primary feature, and others treating length as a prosodic cue which is freely applied to any segment(s) in words with geminate consonants before more target-like behaviour is evident. Despite gemination being a rare and marked phonological feature in the world's languages (e.g. Blevins, 2006; Maddieson, 1997), children's default productions actually exhibit predominantly long phonetic segments; achieving target-like length involves both phonetic control and phonological learning. This task is made harder in cases where Arabic-speaking children are exposed to other languages with no phonological length contrast such as English and French. The influence of Arabic phonology on the French and English varieties spoken in Lebanon introduces further variability: many medial consonants in these languages are phonetically lengthened (e.g. [ʃappo] for /ʃapo/ *hat*), leading to the salience of phonetic length but at the expense of a phonological contrast.

Al-Tamimi, Jalal & Ghada Khattab. (2011). Multiple cues for the Singleton-Geminate contrast in Lebanese Arabic: Acoustic investigation of stops and fricatives. In Wai-Sum Lee & Eric Zee (eds), *Proceedings of the XVIIth International Congress of Phonetic Sciences*, 212-215. Hong Kong.

Al-Tamimi, Jalal & Ghada Khattab. (2015). Acoustic cue weighting in the singleton vs geminate contrast in Lebanese Arabic: The case of fricative consonants. *Journal of the Acoustical Society of America*, 138(1): 344-360.

Blevins, Juliette. 2006. *Evolutionary Phonology: the Emergence of Sound Patterns*. Cambridge: CUP.

Broselow, Ellen. 1995. Skeletal positions and moras. In John Goldsmith (ed.), *The Handbook of Phonological Theory*, 175-205. Cambridge, Mass. and Oxford: Blackwell.

Broselow, Ellen, Susan Chen & Marie Huffman. 1997. Syllable weight: convergence of phonology and phonetics. *Phonology* 14. 47-82.

- Broselow, Ellen, Marie Huffman, Susan Chen & Ruohmei Hsieh. 1995. The timing structure of CVVC syllables. In Mushira Eid. (ed.), *Perspectives on Arabic Linguistics VII: Papers from the 7th Annual Symposium on Arabic Linguistics*, 119-138. Amsterdam/Philadelphia: John Benjamins.
- Davis, Stuart. 1999. On the moraic representation of underlying geminates: Evidence from prosodic morphology. In René Kager, Harry van der Hulst & Wim Zonneveld (eds.), *The Prosody–Morphology interface*, 39–61. Cambridge: Cambridge University Press.
- Hayes, Bruce. 1989. Compensatory lengthening in moraic phonology. *Linguistic Inquiry* 20. 253–306.
- Khattab, Ghada and Al-Tamimi, Jalal (2014). Geminate Timing in Lebanese Arabic. *Laboratory Phonology* 5(2): 231-270
- Maddieson, Ian. 1997. Phonetic universals. In William J. Hardcastle & John Laver (eds.). *The Handbook of Phonetic Sciences* 619-639. Oxford: Blackwell.

Abstracts for submitted talks

(in alphabetical order of first author's surname)

Phonetics and Phonology of Epenthetic Vowels in Ammani Arabic

Mohammed Nour Abu Guba
Sharjah University-UAE

This paper examines the phonological and phonetic properties of epenthetic vowels in English loanwords in Ammani Arabic (henceforth AA). It shows that vowel epenthesis is invoked to satisfy structural requirements of AA phonotactics, in particular to syllabify unlicensed segments in complex margins and to repair CCC and CCCC consonant clusters word medially (cf. Hall 2011). Results show that a default epenthetic high front vowel, [i], is inserted context independently. This is in line with markedness and perceptual criteria in that it is the shortest, least sonorant and least salient vowel in AA (cf. Shinohara 1997; Steriade 2001; Kenstowicz 2005; Uffman 2006). Findings lend support to the contention that [i] is underspecified in AA as it does not block vowel harmony and it functions as the target and never the trigger of vowel harmony in AA. The round vowel, [u], and the guttural low vowel, [a], surface due to round and pharyngeal harmony, respectively. Epenthesis site shows that AA is not purely a -VC dialect where vowels are inserted to the left of unlicensed consonants (cf. Kiparsky 2003; Watson 2007). It shares properties with other -C and -CV dialects. Results show that AA tends to ban trimoraic syllables as the majority of potential trimoraic syllables in source words undergo vowel shortening, vowel epenthesis or consonant deletion. However, it allows a long vowel flanked by a coda consonant word-internally only if the coda is a liquid or a nasal. This can be stipulated as a condition on mora sharing in that mora sharing is possible only between a vowel and a sonorant, which is phonetically natural. Moreover, although AA is mainly a -VC dialect, epenthetic vowel site interacts with other prosodic properties, e.g., foot-binarity and the type of consonants in complex onsets and codas. These factors interact to yield the least marked structure. Adopting an OT analysis, the paper suggests a number of constraints to account for the quality and site of epenthetic vowels in AA. The paper concludes with a three-way comparison between epenthetic vowels in native words, epenthetic vowels in loanwords and lexical vowels. It was found that although they share many phonological and phonetic characteristics they do differ especially with regards to stress assignment. This study is of paramount importance to AA phonology as it provides external evidence for a number of understudied phonological phenomena in AA.

Arabic in the Moroccan Media Space: What Implications for Diglossia?

Mina Afkir

Hassan II University, Casablanca, Morocco

The media is today conceived as one of the contexts that contribute indirectly but pervasively and significantly to language change (Stuart-Smith 2006, Stuart-Smith et al. 2007, Coupland 2001, 2009), leading to phenomena such as the de-standardization and the demotisation of language varieties (Kristiansen 2003, 2008, Auer and Spiekerman 2011, Coupland and Kristiansen 2011) and thus enhancing transformations in value systems related to language use. The aim of this paper is to investigate empirically, through the analysis of a corpus of television programs, how the two varieties of Arabic, namely Standard Arabic and Moroccan Arabic are employed in the contemporary Moroccan media space, which has undoubtedly been affected by today's media, which is characterized by "the prevalence of a certain kind of media culture which creates and disseminates ways of speaking characterized by suprarregionality and informality" (Auer and Spiekerman, 2011:161). Examining media Arabic, which is incontestably characterized by more mixing of the different forms of Arabic, will unravel a broader societal language change that is affecting the way diglossia is managed in the Moroccan speech community as a whole. Research has shown that the broadcasting media, which has an indirect influence on viewers' adoption of new norms of language usage and on their construction of shared knowledge of varieties, is also reflective of language change in a particular speech community. The paper also seeks to examine the extent to which the use of Arabic in its different forms in the contemporary Moroccan media space is moving towards a pattern because this will be an indicator of shifting value systems around language use and hence of new ways of perceiving diglossia.

The middle voice in Arabic: towards and understanding of forms V, VII and VIII

Hanna Danbolt Ajer
University of Cambridge

It is widely agreed upon that the verb forms in Modern Standard Arabic modify the meaning of the root in different ways. However, it has proved hard to pin down the exact contributions of the forms. This paper seeks to elucidate our understanding of Arabic verbal morphology by taking a closer look at forms V, VII and VIII. I argue that the three forms mainly encode the middle voice, and that each has a different semantic area of the middle as its core.

“Middle voice” is a term often applied to classes of verbs for which the entity affected by the action coincides with the entity controlling it, as in English “to wash oneself”. Kemmer (1993) identifies low conceptual distinction between the participants in an event as a defining characteristic of the middle. Following this definition, the meanings commonly attributed to forms V, VII and VIII seem to fall under the middle (Wright 1962: vol. 1, pt. 2).

In order to test this hypothesis, I constructed a sample of more than 1200 Arabic verbs, relying on information from Wehr (1979). This dictionary has often been the choice of researchers performing similar surveys, such as Al-Qahtani (2005) and Danks (2011). As forms V, VII and VIII are often seen in relation to forms I, II and IV in the literature, my sample also includes verbs of these forms. The verbs were classified according to meaning and transitivity.

My findings show that forms V, VII and VIII are mainly used to express the middle voice: 97% of the form V verbs in my sample encode middle meanings, whereas the same is the case for 96% of the form VII verbs and 81% of the form VIII verbs.

The three forms express many of the same middle categories, but each has a different focus. Form V is the only one to include many verbs belonging to the prototypical reading of the middle, where controller and affected entity coincide. An example is the verb *tadattara* (“cover o.s.”). Most form VII verbs, on the other hand, lack any overt or implied controller, as is the case for *infajara* (“explode”). Furthermore, I argue that the core of form VIII is verbs whose controller is particularly invested in the action, as demonstrated by the verb *ihtāla* (“strive, employ artful means, deceive”). The middle is often said to have a detransitivising effect, a claim which is supported by my comparison of verbs of form V, VII and VIII with other verbs from the same root in the sample.

This paper thus sheds light on the function of forms V, VII and VIII, adding to our understanding of verbal morphology in Arabic. It is also a contribution to the research on the middle voice, as determining the scope of the middle in individual languages is crucial to arriving at a typologically valid definition.

Al-Qahtani, Duleim M. 2005. *Semantic Valence of Arabic Verbs*. Beirut: Librairie du Liban.

Danks, Warwick. 2011. *The Arabic Verb: Form and Meaning in the Vowel-Lengthening Patterns*. John Benjamins Publishing.

Kemmer, Suzanne. 1993. *The Middle Voice*. Typological Studies in Language 23. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Wehr, Hans. 1979. *A Dictionary of Modern Written Arabic: Arabic-English*. Edited by J. Milton Cowan. 4th ed. Wiesbaden: Harrassowitz. http://archive.org/details/Dict_Wehr.pdf.

Wright, William. 1962. *A Grammar of the Arabic Language*. Edited by William Robertson Smith and Michael Jan de Goeje. 3rd ed. Vol. 1. 2 vols. Cambridge: Cambridge University Press.

The Directionality of Agree: A Case of Number and Gender Agreement in Standard Arabic

Rania Al-Aqarbeh
Mu'tah University, Jordan

The directionality of the Agree relation is debatable. There are four proposals. First, the probe looks downwards for a matching goal in its c-command domain (Chomsky 2000). Second, the probe looks upwards for a goal (Zeijlstra 2012). Third, the Spec, head configuration is still assumed to account for some agreement facts, e.g. Standard Arabic Agreement Asymmetry (SAAA) (Ussery 2011). Finally, Baker (2011) proposed the Direction of Agreement Parameter (DAP). Accordingly, some languages require the probe to c-command the goal, whereas others require the opposite.

In SAAA, verbs agree in gender and number with preverbal subjects, but in gender only with post verbal subjects. Previous movement accounts (Mohammad 2000) assume that verbs move to T in VSO where it agrees with a covert expletive in spec, TP, whereas the verb agrees in number and gender with the subject that moves to the spec, TP in SVO. However, the non-movement accounts (Soltan 2007) assume that the preverbal DP is a left-dislocated DP with a covert resumptive *pro* identified by full agreement with verbs in SVO; the VSO lacks this *pro*, so no full agreement. I argue that the problem with the previous accounts lies in assuming the presence of a covert pronoun, while overlooking the same SAAA the non-verbal predicates exhibit in the same configurations. Therefore, I examined number and gender agreement between subject and non-verbal predicates in SA. I found that they agree in gender and number with the preceding DP (1a), but in gender only when the DP follows (1b).

I contend that the SA Φ -feature Probe is split, i.e. each feature probes on its own, since number and gender agreement operate independently. The fronted non-verbal constituent is focus that is related to a gap not to a resumptive inside the sentence due to island sensitivity; it cannot be related to a gap within a complex NP island (2a) or a wh-island (2b). Furthermore, it preserves the case marking of its corresponding gap and not the default nominative case (3-4). This entails that it is not a Left-Dislocated element with a resumptive pronoun inside the clause. Furthermore, the spec, head accounts are problematic because the DP and AP are maximal projections that are not in a spec, head configuration in their base-generated or derived positions, yet the same SAAA holds.

The study concluded that gender agreement holds whether the goal c-commands or is c-commanded by the probe, number agreement is only Spelled-Out as a last resort at the time when the phase is sent to PF provided that the goal c-commands the probe. It seems that gender agreement in SA is a priority and more significant to the interpretation than number agreement which is delayed till the Spell-Out if the locality condition is met. This recalls the strong-weak dichotomy of features. As a feature, gender is probably stronger than number in its contribution to the interpretation and accordingly it is valued immediately, whereas number is weaker and so delayed. SA does not fit neatly in Baker's (2011) DAP. Therefore, I would suggest that the intra linguistical and cross-linguistic variation can be better accounted for by allowing a bidirectional parameter. That is some languages may allow bi directionality, whereas others do not allow bi directionality. Likewise, features within the same language may allow bi directionality or not. Nonetheless, such modification requires further research across different languages to be better articulated.

- (1) a. al-banaat kunna waqif-aat/ *waqif-at/ şayir-aat/ *şayir-at
the-girls-plf were.plf AP-standing-plf/ AP-standing-sgf/ young-plf/ young-sgf
‘The girls were standing/ young.’
- b. waqif-at/ *waqif-aat/ şayir-at/ *şayir-aat kaan-at al-banaat
AP-standing-sgf/ AP-standing-plf/ young-sgf/ young-plf was-sgf the-girls-plf
‘STANDING/ YOUNG, the girls were.’
- (2) a. *samiŕ-it anna şayir-at hakeit maŕ al-imaraʔah alti banaat-uha
heard.1sg that young-sgf talked-1sg with the-woman who daughters-her
- ŕala az-zwaaji
on the-marriage
‘I heard that YOUNG, I talked with the woman whose daughters are to get married.’
- b. *samiŕ-it anna şayir-at taŕarif kam hunna ____ ŕala az-zwaaji
heard-1sg that young-sgf know-2sg how they.plf ____ on the-marriage
‘I heard that young, you know how they are ____ to get married.’
- (3) a. al-faty-aat-u şayir-aat-un b. şayir-at-un, al-faty-aat-u
the-girl-plf-nom young-plf-nom young-sgf-nom the-girl-plf-nom
‘The girls are young.’ ‘Young, the girls are.’
- (4) a. kaan-at al-faty-aat-u şayir-aat-in b. şayir-at-in, kaan-at al-faty-aat-u
was-sgf the-girl-plf-nom young-plf-acc young-sgf-acc was-sgf the-girl-plf-
nom
‘The girls were young.’ ‘Young, the girls were.’

Note: < stands for before

- Baker, M. 2011. ‘Agreement and Case’. In *The Oxford Handbook of Linguistic Minimalism*, ed. C. Boeckx, 607-654. New York and Oxford: Oxford University Press.
- Chomsky, N. 2000. ‘Minimalist inquiries: the framework’, in R. Martin, D. Michaels, and J. Uriagereka (eds.), *Step by Step: Essays on Minimalist Syntax in Honour of Howard Lasnik*. Cambridge, MA: MIT Press, 89-115.
- Mohammad, Mohammad. 2000. *Word Order, Agreement and Pronominalization in Standard and Palestinian Arabic*. Amsterdam: John Benjamins.
- Soltan, Usama. 2007. On Agree and Postcyclic Merge in Syntactic Derivations: First Conjunct Agreement in Standard Arabic Revisited. In *Perspectives on Arabic Linguistics XIX*, eds E. Benmamoun, 191-216. Amsterdam: John Benjamins.
- Ussery, Cherlon. 2011. Case and Phi Features as Probes. Poster presentation delivered in the 29th meeting of the West Coast Conference on Formal Linguistics. Tucson, AZ.
- Zeijlstra, H. 2012. There is only one way to Agree. *lingBuzz1435*.

Palatalisation of /k/ in Souf, Jordan
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Palatalisation of /k/ is a characteristic feature of many modern Arabic dialects. In Jordanian dialects, it has been described for the dialect of Salt (Herin 2010). In Herin & Al-Wer (2013) it is stipulated that palatalisation in Salt is being reversed, and that this process motivates grammatical change. Al-Wer (2007) maintains that in the formation of the Amman dialect, palatalisation is leveled out very early on (1st generation). It appears therefore that the feature is recessive in large cities. To date, palatalisation has not been investigated quantitatively as a sociolinguistic variable in Jordanian dialects. The current analysis fills this gap. In all Jordanian dialects that have the feature, Palatalisation is of the conditioned type, and affects /k/ in the stem of the word as in /ke:f/ > /tʃe:f/ ‘how’, as well as in the feminine suffix *-ik*, e.g. /ke:f ɦa:lik/ > /tʃe:f ɦa:liɦ/ ‘how are you (fem)?’. The analysis presented in this paper comes from research in the town of Souf, which aims to investigate variation and change in the town’s traditional dialect. Souf is located some 60 km to the northwest of Amman, in the heart of the Jordanian part of Horan. The town is inhabited by extended families whose tribes are indigenous to the town, and include Muslim (majority) and Christian families. A total of 24 native speakers were interviewed, distributed over three age groups, and include equal numbers of female and male speakers. The data were analysed using Rbrul. Palatalisation of /k/ is treated at two levels and thus involves two variables: 1. phonological variable (k); the pool of data for this variable includes tokens of /k/ in the stem of the word. The data were coded for linguistic environment (preceding sound, following sound), and the social variables (age and gender). 2. Morphophonemic variable *-ik*; the pool of data includes tokens of /k/ in the feminine suffix */ik/*. The data were coded for the social variables and following environment only (since in this case the preceding environment is invariable) Palatalisation in the stem was found to occur only in 12% of the total number of tokens. Rbrul analysis returned all variables significant. It is most favoured when it is preceded or followed by high front vowel. Women favour the palatal variant (FW 0.73) while men disfavour it strongly (FW 0.27). The oldest group palatalise most frequently (15%), young group (11%); and middle age group (0.09%).

For suffix *-ik*, the palatalised variant occurs most frequently in the data as a whole (70%). Rbrul returned gender and age as the only significant factor groups. Here too the female speakers use the palatalised variant (80%) significantly more than the male speakers (28%). Old speakers are the highest users (91%), middle age speakers (67%) and the youngest speakers (41%). The results overall show that palatalisation in the stem is very low, whereas it is maintained to a considerable level in the suffix. It is possible to explain its prevalence in the suffix with reference to its function in the grammar (marking gender). Interestingly, the female speakers are more conservative than the male speakers with respect to the traditional feature. This finding is likely to be related to the pattern of employment in the town.

- Al-Wer, E. 2007. The formation of the dialect of Amman: from Chaos to order. In C. Miller, E. AlWer, D. Caubet, J. Watson (eds.). *Arabic in the city. issues in dialect contact and language variation*. London: Routledge. 55-76.
- Herin, B & Al-Wer, E. (2013) From phonological variation to grammatical change: depalatalisation of /č/ in Salti. In C. Holes & R. de Jong (eds) *Ingham of Arabia*. Brill. 55-73.
- Herin, B. (2010). *Le parler arabe de Salt (Jordanie)*. Phonologie, morphologie et elements de syntaxe. Ph.D. Thesis, Université libre de Bruxelles.

The definite article *m-* in Tihāmat Qaḥṭān: a variationist sociolinguistic analysis

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Modern Arabic dialects, including the standard variety, have one invariant form of the definite article, namely *l-* as in *l-gamar* ‘the moon’, *l-zabal* ‘the mountain’. The phonetic realisation of this form undergoes assimilation according to the following sound (viz. ‘sun’ or ‘moon’ letters; contrast *l-gamar* vs. *f-fams* ‘the sun’). In a few dialects, however, and these tend to be relatively isolated dialects, an ancient Semitic form of the definite article continues to be used. One such dialect is Tihāmi Qaḥṭāni as spoken in the ‘Asīr province, southern Arabia. In this dialect, the definite article takes the form *m-*, as in *m-razil* ‘the man’.

The definite article *m-* is an old linguistic feature that dates back to the existence of the Himyarite kingdom that lived in Yemen around the 3rd century (Rabin, 1951). While some scholars, such as Taymūr (1973) and Anīs (1952:123), suggest that the use of the article *m-* is random, the present data suggests that where both forms are used the use of *l-* or *m-* forms is constrained by linguistic factors as will be demonstrated in the results below.

This paper investigates the use of *m-article* as part of a larger sociolinguistic study in two remote Tihāmi Qaḥṭāni villages namely al-Jawwa and al-Farša. The study as a whole aims to examine the effect of social and linguistic factors, in addition to geographical isolation, on linguistic change. The data was obtained through sociolinguistic interviews with 28 native speakers distributed according to age (2 groups), gender and locality. The data was analysed using the variable rule software Rbrul.

In this paper, I focus on the statistical results of *m-article*. Rbrul returned ‘following segment’ as highly significant factor group ($P < 2.86e-09$), followed by ‘gender’ ($P < 2.61e-07$) and ‘locality’ ($P < 8.29e-06$). The linguistic analysis suggests that the innovative from *l-* is likely to be favoured when it occurs before /m/ (51%), non-coronal sounds (44%) and labial sounds (43%). However, *l-* is likely to be disfavoured when it occurs before /l/, coronal sounds, /z/ and /b/. Subsequent runs excluding ‘locality’ as a factor group returned ‘gender’ as highly significant at level ($P < 1.53e-08$) followed by ‘age’ at level ($P < 0.000739$) in the lowlands. This is a strong indication of change in progress in this locality and the leaders of this change are younger women who use the innovative form at a rate of 52%.

The results are interpreted with reference to the fact that the *m-article* is a localised feature that occurs in a few dialects only, all of which are spoken in relatively isolated areas. Additionally, as a recessive feature that is also perceived as ‘rural’ its usage is heavily stigmatised; the incoming variant, *l-article*, on the other hand, is used much more widely in Arabia and elsewhere, in addition to it being the standard feature. With respect to the finding that the female speakers lead the change from *m-* to *l-* in the lowlands locality I present an analysis of gender and gender roles in the local community, in particular the marginalisation of women’s pursuits and their aspirations, as a motivation to diverge from the local traditional linguistic features (cf. Eckert 1989 & 2000; Gal 1978).

- Anīs, A (1952). *Fi allahajāt al-‘Arabyyah* [On Arabic Dialects]. Cairo: Maktabat al-Anjlo AlMaṣriyyah.
Eckert, P. (1989). *Jocks and Burnouts: Social categories and identity in the high school*. New York: Teachers College Press.
Eckert, P. (2000). *Linguistic variation as social practice*. Oxford: Blackwell.
Gal, S. (1978). Peasant men can’t get wives: Language change and sex roles in a bilingual community. *Language in Society*, 7 (1), pp. 1-16.
Prochazka, T (1988). *Saudi Arabian Dialects*. London: Kegan Paul International.
Rabin, C. (1951). *Ancient West Arabian*. London: Taylor's Foreign Press.
Taymūr, A (1973). *Lahjāt al-‘Arab* [The Arabs’ dialects]. Al-hay’ah Al-Maṣriyyah al-‘āmmah lilkitāb.

Word order variability in Jordanian Arabic: A sociolinguistic perspective

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Cursory inspection of the literature reveals that word order has been a longstanding controversy in Arabic linguistics (e.g., Abdo 1983; Bakir 1979; Brustad 2001; Dahlgren 1998, 2001; Holes 1995), with opinions divided on whether SV(O) or VS(O) should be considered the basic word order in contemporary varieties of the language (Edwards 2010; Holes 2010). Much previous research addressing this issue has been hampered by the use of eclectic methodologies drawing on elicited, decontextualized or intuited material. Conspicuously rare in contemporary studies of word order variation in Arabic are systematic analyses of spontaneous speech data (Edwards 2010:94; but see e.g., Owens, Dodsworth & Rockwood 2009).

The dearth of quantitative studies of word order variation in colloquial Arabic provides the primary motivation for the present investigation. Drawing on the framework of variationist sociolinguistics (Labov 1972), we conduct an accountable analysis of word order variation in a corpus of vernacular Jordanian Arabic (JA) recorded in the Irbid metropolitan area in 2014. Based on over 30 hours of digitized recordings obtained from 30 speakers stratified by age, sex, education, as well as urban/rural origin, we exploit these spontaneous speech data to: (i) assess the frequency of different word order variants in vernacular JA; (ii) ascertain which social and linguistic factors constrain the selection of major word order variants; and (iii) determine whether the apparent time component incorporated into the research design reveals any evidence of change in progress.

Distributional and multivariate analyses of 2049 tokens coded for the aforementioned social factors, in addition to an array of linguistic factors hypothesized to constrain variant choice (e.g., morpholexical class of subject, animacy, grammatical person, polarity, type of clause, and complexity and stativity of the verb), confirm that word order variation is subject to multiple constraints (Holes 1995). A first important finding concerns the quantitative preponderance of SV(O) word order in vernacular JA, which competes with less frequent VS(O). Statistical analysis of the linguistic factors conditioning the observed variability reveals that the presence of an object as well as definite subject pronouns are key predictors of SV(O) word order choice, as determined by the relative magnitude of these effects. Particularly compelling is the social embedding of the variation. Comparison of younger (18-40) speakers with older (40+) speakers reveals a statistically significant difference, offering provisional indications that alternation between SV(O) and VS(O) word orders is implicated in ongoing change. This inference is additionally bolstered by sex-differentiation in the data (Labov 1990), with women leading in the use of SV(O), as well as an urban-rural split, with urban-origin speakers using SV(O) word order more frequently than their rural-origin counterparts.

The results foreground the utility of empirically accountable analyses of spontaneous speech in elucidating key issues relating to word order variation in modern varieties of spoken Arabic. Patterns of variation in apparent time additionally offer an important evidence-based perspective on the possible evolution from VS(O) to SV(O) in the history of JA (El-Yasin 1985).

Abdo, D. (1983). 'abunya l-daxiliyya li-l-jumhla 'alf'liyya fi l-'arabiyya. *Al-AbHaath* 31: 37-54.

Bakir, M. J. (1979). *Aspects of Clause Structure in Arabic: A Study of Word Order Variation in Literary Arabic*. Bloomington, IN: Indiana University.

Brustad, K. (2000). *The Syntax of Spoken Arabic: A Comparative Study of Moroccan, Egyptian, Syrian and Kuwaiti Dialects*. Washington D. C.: Georgetown University Press.

- Dahlgren, S. (1998). Word order in Arabic. Goteborg: Acta Universitatis Gothoburgensis.
- Dahlgren, S. (2001). Word order and topicality in the Qur'an. *Zeitschrift für Arabische Linguistik* 39: 20-35.
- Edwards, M. (2010). Word order in Egyptian Arabic: Form and function. In Owens, J. & Elgibali, A. (eds). *Information Structure in Spoken Arabic*. London: Routledge pp. 93-106.
- El-Yasin, M. (1985). Basic word order in Classical Arabic and Jordanian Arabic. *Lingua* 65: 107-122.
- Holes, C. (1995). *Modern Arabic: Structures, Functions, and Varieties*. London: Longman.
- Holes, C. (2010). Word order and textual function in Gulf Arabic. In Owens, J. & Elgibali, A. (eds). *Information Structure in Spoken Arabic*. London: Routledge pp. 61-74.
- Labov, W. (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W. (1990). The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2: 205-254
- Owens, J., Dodsworth, R. & Rockwood, T. (2009). Subject-verb order in spoken Arabic: Morpholexical and event-based factors. *Language Variation and Change* 21: 39-67.

A sociolinguistic analysis of *Imāla* (final raising) in the dialect of Ha'il

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This paper is based on empirical research on the dialect of Ha'il, a dialect that belongs to the Najdi type of dialects in the Arabian Peninsula. Unconditioned *Imāla* of feminine ending is one of the most salient features of the traditional Ha'ili dialect. It is defined as: fronting and raising of short [a] to [ɛ] or even [e]. Raising in Haili dialect occurs in all linguistic environments, including a preceding guttural or emphatic sounds (see Abboud 1979, p. 489). This contrasts with the case of Arabic dialects that raise this vowel conditionally. For instance, in urban Levantine varieties in general, the vowel is not raised after back and emphatic consonants; in Horani dialect (including most Jordanian dialects), it is raised generally only after coronal sounds (see Al-Wer, 2007).

The aim of this paper is to investigate variation in the use of the traditional feature (unconditioned raising) in relation to linguistic and social factors. The data were obtained through sociolinguistic interviews with 47 adult native speakers, distributed over three age groups and with almost equal representation from both genders. Variation in the use of this feature is also measured in relation to the speakers' level of contact with outside communities (specifically with speakers of non-raising dialects); an index was devised to measure the level of contact (high vs low). Data were analysed using multivariate statistical software (Rbrul).

The results show that the traditional feature (unconditioned raising) is not adhered to consistently, but there is a tendency to lower this vowel in the speech of various groups. Specifically, Rbrul returned age, level of contact, preceding sound and gender as significant factors. With respect to age, the youngest speakers are the most innovative group (56%), while the oldest group disfavours the incoming variant at factor weight (FW) 0.059, which is a strong indication that change is taking place. Regarding the level of contact, high-contact speakers favour lowering at FW 0.82. Women lead the change at FW 0.54.

With respect to linguistic constraints, there seems to be a tendency to use the raised variant in the vicinity of coronal and labial sounds, while the environment of emphatic sounds favours raising least. On the other hand, lowering is favoured after dorsal sounds.

These results are interpreted with reference to the pressure exerted by the emergence of a supra-local variety in the central region of Saudi Arabia, in which no raising is found.

- Al-Wer, E. (2007). The formation of the dialect of Amman: from chaos to order, in Miller, C., Caubet, D., Watson, J. and Al-Wer, E. (eds) *Arabic in The City: Issues in Dialect Contact and Language Variation*. London: Routledge. pp.55-76.
- Al-Wer, E., Horesh, U., Herin, B. and Fanis, M. (2015). How Arabic regional features become sectarian features? Jordan as a case study. *Zeitschrift für Arabische Linguistik (ZAL)*.
- Abboud, P. (1979). The verb in northern Najdi Arabic. *Bulletin of the School of Oriental and African Studies*, 42, pp. 467-499 doi:10.1017/S0041977X0013575X
- Ingham, B. (2009). Saudi Arabia, In: *Encyclopedia of Arabic Language and Linguistics*; Vol.4. Leiden; Boston: Brill.
- Prochazka, T. J. (1988), "Saudi Arabian dialects", Kegan Paul International, London, Distributed by Routledge, Chapman and Hall, London, New York.

Investigating antonymy in an Arabic corpus

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Lexical relations have been thoroughly investigated cross-linguistically (Lyons, 1977; Cruse, 1986; Murphy, 2003). Antonymy is particularly interesting because antonymous pairs share both syntagmatic as well as paradigmatic relations. Studies (such as Raybeck and Herrmann, 1996) agree on the universality of this lexical relation in both its complementary and contrary types. Moreover, studies on first language acquisition also suggest that antonymy relation is learnt early in life and is understood similarly by children and adults (Murphy and Jones, 2008; Phillips, 2013). However, different perspectives towards opposition have been noted among cultures. For example, in Confucian philosophy contrast can be reversible (e.g. *yin* and *yang*), while in western cultures contrasts are often seen as fixed and irreversible; however, in Swedish culture contrasts are less clear-cut than in English (Murphy et al., 2009).

The present corpus-driven study investigates antonym use in Modern Standard Arabic using an on-line corpus and a newspaper corpus. Corpus studies investigating this lexical relation have either focused on antonymous adjectives or antonymous pairs of similar part of speech. However, crosscategorical antonymy was investigated by Fellbaum (1995) who found that semantically opposing words co-occur in text more than chance would allow regardless of their syntactic form. Therefore, it is important to look at crosscategorical antonymy. This, however, provides particular challenges but also particular opportunities when looking at Arabic because of the rich potential for cross-categorical antonymy due to its root-based morphological structure.

When investigating Arabic antonyms several issues need to be taken in consideration. For example, parallelism has been found to be a trigger of opposition (Davies, 2013; Murphy et al., 2015). However, because Arabic is highly inflected, what might score as highly parallel in English might not seem to be so in Arabic. Consider the following two examples. The first example shows an antonymous pair of verbs with the same inflection: أنحيا ونموت كما تموت الأنعام *?anaḥyā wanamūt kamā tamūt al?anṣām* ‘do we live and die the same as animals die’. On the other hand, the antonymous verbs in the sentence فمن قوي بالله لاتضعفه الشدائد *faman qawiya billāh lā tuḍʿifuhu aššadāʿid* ‘who is strengthened by Allah is not weakened by the hardships’ are used contrastively but do not share the same inflection. The first is in the perfective form while the second is in the imperfective form.

Deciding on how to measure parallelism is important in highly inflected languages like Arabic. This issue is made more complex if one accepts that antonymy in Arabic should be investigated at the level of the root, not on particular lexical units, in order to fully appreciate the extent of antonymous contrast in text. Investigating Arabic antonymous roots would elicit hits where antonymous pairs are of different morphological forms. For example, the word قديمة *qadīmah* ‘old’ co-occurred with both جديدة *ḍjadīdah* ‘new’ and متجددة *mutaḍḍadidah* ‘renewing’. Moreover, investigating antonymous roots would help in cross-categorical antonymy such as يخفف ثقل *yuxaffif tiql* ‘lighten the heaviness of ..’. Investigating antonym co-occurrences in corpora of different languages presents some challenges but can help in better understanding this lexical relation and how it functions in text.

Cruse, D. A. (1986). *Lexical semantics*. Cambridge University Press, Cambridge.

Davies, M. (2013). *Oppositions and Ideology in News Discourse*. Bloomsbury Publishing Plc, London.

Fellbaum, C. (1995). Co-occurrence and antonymy. *International Journal of Lexicography*, 8(4):281–303.

Lyons, J. (1977). *Semantics*, volume 1. Cambridge University Press, Cambridge.

Murphy, M. L. (2003). *Semantic relations and the lexicon*. Cambridge University Press, Cambridge.

- Murphy, M. L. and Jones, S. (2008). Antonyms in children's and child-directed speech. *First Language*, 28(4):403–430.
- Murphy, M. L., Jones, S., and Koskela, A. (2015). Signals of contrastiveness: but, oppositeness and formal similarity in parallel contexts. *Journal of English Linguistics*.
- Murphy, M. L., Paradis, C., Willners, C., and Jones, S. (2009). Discourse functions of antonymy: A cross-linguistic investigation of Swedish and English. *Journal of Pragmatics*, 41:2159–2184.
- Phillips, C. I. (2013). Children's understanding of antonymy. PhD thesis, University of Calgary, Alberta.
- Raybeck, D. and Herrmann, D. (1996). Antonymy and semantic relations: The case for a linguistic universal. *Cross-Cultural Research*, 30(2):154–183.

First notes on the Lebanese dialects of *Bšarre* and *Dayr al-Aḥmar*

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The main aim of this talk is to present the primary results of an ongoing research project that focuses on the Lebanese dialects of *Bšarre* and *Dayr al-Aḥmar*. These villages are located on the opposite sides of the Mount Lebanon range in the northern district, close to 'Ornat as-Sawda, the highest point in the country.

Despite the large number of linguistic studies on Lebanese Arabic, one notices that they disproportionately deal with certain survey points while other parts remain largely uninvestigated. The majority of them concern the Mount-Lebanon district: Abu Haidar (1979), El Zein (1981), Naim-Sanbar (1985), Tohme (1989), Dib-Yordanov (1994), and Germanos (2009), while other Lebanese regions are neglected. Excluding the work of Henri Fleisch (1974) and El-Rabih Massoud Makki (1983) there is no study of a Lebanese mountain dialect outside the Mount-Lebanon district.

The villages of *Bšarre* and *Dayr al-Aḥmar* are inhabited by Christian Maronites with various tribal links connecting the two villages. In addition to this, they share a similar way of life and common linguistic features. It appears however that there are a number of differences that can be attributed to the influence of the Bekaa Valley in the case of *Dayr al-Aḥmar*, whereas *Bšarre* is under the influence of the *Qādīšā* Valley. I propose therefore (1) to present the major linguistic characteristics of these two villages and highlight the features that distinguish them from the regional koine as spoken in Beirut, (2) the phonological, morphosyntactical differences between the two villages' varieties and (3) an attempt to link these differences to the varieties spoken in the *Biqā* ' and *Qādīšā* Valleys. Examples:

/a/ > /o/ and /ā/ > /ō/

- (1) d-ḏāyf əm'azzaz u-mkaḥḥöm 'ənd-nō.
DEF-guest cherished and-honoured at-1p
We cherish and honour the guest.

- (2) 'ənd-na mṭō'əm.
at-1p restaurants
We have restaurants.

Lengthening of stressed vowel

- (3) btəsəṭḥ-o bi š-šāməs.
Spread.out.IPFV.2ms-3ms in DEF-sun
You spread it out in the sun.

Abu-Haidar, Farida. 1979. A Study of the Spoken Arabic of Baskinta. Leiden, London: Brill.

Dib-Yordanov, Mireille. 1994. Eléments de description du parler arabe de Hadath. Paris: Inalco. (Master thesis)

El-Zein, Abdul-Fattah. 1981. Le parler arabe des Druzes de Chanay (Liban): phonologie, morphologie du verbe. Paris: Université Paris III, Sorbonne Nouvelle. (Ph.D. dissertation)

Germanos, Marie-Aimée. 2009. Identification et emploi de quelques stéréotypes, traits saillants et autres variables sociolinguistiques à Beyrouth (Liban). Paris: Université Paris III, Sorbonne Nouvelle. (Ph.D. dissertation)

Fleisch, Henri. 1974. Études d'arabe dialectal. Beyrouth: Dar el-Machreq Éditeurs.

Makki, El-Rabih Massoud. 1983. The Lebanese Dialect of Arabic: Southern Region. Washington D.C.: Georgetown University. (Ph.D. dissertation)

Tohme, Talal. 1989. Le parler arabe de Mazboud (Liban) phonologie, morphologie, éléments de syntaxe. Paris: Université Paris III, Sorbonne Nouvelle. (Ph.D. dissertation)

A heavy workload: (Q) as a marker of (supra) local identity in Gaza City

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The issue of linguistic prestige (Labov 1966; Trudgill 1972) is one that has been at the core of studies of sociolinguistics. Within Arabic sociolinguistics a long list of scholarly work exists that has attempted to treat the issue of prestige to varying degrees. More recent work has reoriented notions of prestige towards specific dialects of Arabic that are given some weight in the linguistic market in a given region or community (Bourdieu 1991). As Al-Wer and Herin (2011) point out, however, research on the social evaluation of linguistic variables in the Arabic speaking world often lacks an empirical discussion of the emergence of social values, their meaning, and their significance (p. 59).

In this paper I present quantitative sociolinguistic results from recent studies I've conducted on the current position of (Q) in the speech of Jaffan Palestinians who presently live as refugees in Gaza City. The results reflect that the sample is split along gender lines. Female speakers show a strong tendency to opt for the traditional Jaffan variant, glottal stop [ʔ], itself a supralocal variant of (Q) in the Levant (Al-Wer 1997), while male speakers overwhelmingly adopt the more localized variant, the voiced velar [g].

My interpretation of these results attempts to move the discussion surrounding variants of (Q) away from one that appeals to notions of prestige or localized "standards". Instead, I draw on these quantitative results to show how the range of possible social meanings of this variable, its *indexical field* (Eckert 2008; Silverstein 2003; Wortham 2006), is used by Jaffa refugees to do work related to identity formation and maintenance in Gaza City. In doing so I approach the speech of these speakers through the framework of *adequation* – "the long-term pursuit of socially recognized sameness" – proposed by Bucholtz and Hall (2004). I show how the differing linguistic practices of male and female speakers for (Q) aids in integrating speakers into a local "Gazan" identity frame, while simultaneously maintaining a distinct "Jaffan" or "Palestinian" identity through indexical meanings that operate at a more regional level.

This type of analysis has the potential to enrich the field of Arabic sociolinguistics by taking investigations of linguistic variables out of the realm of discrete social categories while highlighting the interface between variationist sociolinguistic work and anthropological theory. In doing so, this type of work makes it possible to more concretely situate an analysis of linguistic production within a given community or speaker. The result allows us, as sociolinguists, to show how linguistic meanings are not static objects of investigation, but instead are as fluid and diverse as the Arabic language itself.

Al-Wer, Enam. 1997. Arabic between reality and ideology. *International Journal of Applied Linguistics*, 7(2): 251-265

Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge, Massachusetts: Harvard University Press.

Bucholtz, Mary and Kira Hall. 2004. Language and identity. In: Alessandro Duranti (ed.). *A Companion to Linguistic Anthropology*. Cambridge: Cambridge University Press. 369-394.

Eckert, Penelope. 2008. Variation and the indexical field. *Journal of Sociolinguistics* 12(4): 453-476.

Labov, William. 1966. *The Social Stratification of English in New York City*. Washington: Center for Applied Linguistics.

Silverstein, Michael. 2003. Indexical order and the dialectics of sociolinguistic life. *Language and Communication* 23: 193-229.

Trudgill, Peter. 1972. Sex, covert prestige and linguistic change in the urban British English of Norwich. *Language in Society* 1(2): 179-195.

Wortham, Stanton. 2006. *Learning Identity: The Joint Emergence of Social Identity and Academic Learning*. Cambridge: Cambridge University Press.

Phasal verbs in Egyptian Colloquial Arabic

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The term ‘phasal verbs’ is used to refer to the class of verbs, defined as: “Phasal predicates refer to the phase of an act or state: its inception, continuation, or termination, and are represented in English by forms such as begin, start, continue, keep on, finish, stop, and cease.” (Noonan, 2007, p.139). Despite the fact that verbs of this class are all referred to in the literature by a common term, which is phasal verbs or aspectualizers, they show different syntactic properties such as belonging to the category of auxiliaries, the set of complements they can take, as well as treating them as complex predicates or raising verbs (Eisele, 1992). The behaviour of these verbs didn’t receive much attention in syntactic studies, and especially in descriptions of Egyptian Colloquial Arabic (ECA).

The current study aims to fill this gap by investigating the syntactic behaviour of phasal verbs in ECA: what are the possible complements these verbs can take, and how to represent these structures syntactically within the principles of Lexical Functional Grammar (LFG). The list of verbs include: begin /badaʔ/, become /baʔa/, remain /fidil/, stop-end /xallas/, catch /lihiʔ/, be-near /ʔarrab/, cease /battal/, continue /kammil/, return /rigiʕ/ and try /haawil/.

The main challenge facing this study was the lack of a corpus of ECA from which to get the data which would represent the actual use of these verbs by speakers of the dialect. Therefore data was elicited from a corpus of ECA that was built for these purposes. The corpus is comprised of around 1.5 million words and collected from web resources such as forums, blog posts and articles where ECA was used. Concordances for each of these verbs were collected to investigate the possible structures of sentences where the verbs are used, such as:

- (1) ʔalb saʕd badaʔ yitharrak
heart Saad start.pv.3sgm move.ipfv.3sgm
Saad’s heart started to move (beat)

Possible complements for these phasal verbs include verbs either in finite or non-finite forms, noun phrases, adverbs, prepositional phrases, participles, complementisers, as well as cases where the phasal verb occurs at the end of the clause/sentence. The most frequent complement structure was non-finite verbs which followed all of the phasal verbs except for /kammil/ ‘continue’ which was followed by nouns in all of the cases, as in:

- (2) baʕaawil ʔagiib kitaab
try.bi-ipfv.1sg get.ipfv.1sg book
I’m trying to get a book

- (3) kammilna el-tariiʔ w el-sawwaaʔ tafa nour el-ʔutubiis
Continue.pv.1pl the-road and the-driver turn.off.pv.3sgm light the-bus
We continued the road and the driver turned the bus lights off

In the presentation I will show the different patterns of behaviours of these verbs suggesting their classification into subgroups according to the complements they take and syntactic behaviour of each. This will be illustrated using LFG tools capturing the various syntactic structures in which these verbs can occur and analysing each in terms of f-structure and c-structure.

- Eisele, J. C. (1992). Egyptian arabic auxiliaries and the category of aux. In M. E. Ellen Broselow and J. McCarthy (Eds.), *Perspectives on Arabic linguistics IV*, pp. 143–165. John Benjamins.
Noonan, M. (2007). Complementation. In T. Shopen (Ed.), *Language Typology and Syntactic Description*, pp. 52–150. Cambridge University Press.

Symmetry as a Unifying Conceptual Category

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Verbs formed in the vowel lengthening pattern *faaʕala* and its reflexive counterpart *tafaʕala* are typically classified as either conative (describing the exertion of effort), or reciprocal, with a number of seemingly unrelated categories listed separately (see for example Holes, 2004). In this paper I argue for a unified analysis in which all these different verb types serve the same purpose: the expression of symmetrical events. Drawing on work in cognitive semantics, my approach to Arabic morphology is that a verb pattern is a linguistic representation of an abstract cognitive model or schema for a given event type, and the semantic content associated with a consonantal root is framed in one or more of these schemata as different events are conceptualized. The merger of root and pattern to create a verb therefore mirrors the merger of semantic content and event schema to conceptualize an event. I first present a model of a prototypical symmetric event consisting of two complementary abstract forces, each aimed towards the other, and claim that this symmetrical arrangement of forces is marked in Arabic by the long vowel /aa/. I then show that *faaʕala* verbs containing this marker of symmetry describe situations of RESISTANCE where the subject exerts energy that is counter to that exerted by another party; RISK, where the subject is countered by a force that threatens to take away a stake; COMPETITION where the subject vies with the object; and CO-ACTION where the subject partners with the object in an activity. In these situations, one of the roles in a symmetric event is foregrounded against the background of the other. I then move to symmetric events in which two semantic roles are equally prominent, where no such contrast between foreground and background exists. These are construed by verbs formed in *tafaʕala*, which describe RECIPROCAL situations of opposition, equality or interaction between two equal elements; what I term COUNTERFACTUAL situations where an event participant feigns a state (such as sickness) that is counter to its real state; CO-ACTION and CHAINING situations, where equal parties partner or follow each other respectively; and PROGRESSIVE CHANGE where one participant increases or decreases in a cyclical fashion relative to a prior version of itself. Having illustrated how my theory of Arabic morphology is able to unify this diverse range of morphologically marked verbs under one analysis, I conclude by briefly demonstrating that problematic non-reciprocal verbs marked with supposed reciprocal markers in other languages are better explained as instances of symmetry, thus confirming the crosslinguistic validity of my approach to verb meaning.

Holes, C. 2004. *Modern Arabic: Structures, functions and varieties*. Washington, DC: Georgetown University Press.

The role and distribution of case endings in formal Arabic speech styles

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Case endings are an important marker of *fushā* but are by most native speakers considered complicated and difficult. They typically appear only sporadically even in the most formal forms of extempore speech. There has been relatively little academic interest in the use of case ending forms of extempore speech. Research has been characterized by largely impressionistic accounts (Badawī1973; Meiseles1977) and more recently by qualitative investigations of a few individual speakers (Parkinson1994). There is to date no attempt of giving a comprehensive quantitative description of how the case system is employed in formal speech.

The project reported in this paper aims to help fill this gap. Data on the extent to which case endings are used by individuals, and how consistently, is presented and analyzed. It is argued that experienced speakers use the case system in varied and productive ways as an integral part of their formal speech style, without relying on fixed phrases. Furthermore, the data indicates that case endings, however few, are seen as a requirement for speech to be marked as *fushā*. Data is taken from a manually annotated corpus of seventeen televised interviews with prominent politicians from Egypt, Syria and Palestine that were recorded under very similar circumstances. Speakers are assumed to be using the most formal register available to them in extempore speech. The interviews are approximately 25 minutes long, giving a total of roughly 15000 nouns and adjectives annotated for case marking.

The use of case endings in the corpus vary considerably between individuals, from several case markers in every sentence to only a few in the whole interview. Contrary to previous observations (Meiseles 1977; Schulz 1981; Walters 2003) there is in this data no general pattern of decreasing case marking as the interviews progress. Multilevel regression modelling shows a statistically significant slight increase in case marking over time. This suggests that the speakers have found levels of case marking, different for each individual, that they can comfortably maintain. Case endings are evenly spread out in the interviews with clusters only appearing when the same word appears in a clause or phrase structure that is repeated for rhetorical effect. Furthermore, there is surprisingly little use of fixed phrases with case endings, fixed phrases being defined as stem suffix combinations in the same syntactical position occurring three or more times (e.g., *bi-šaklin [adj]* ‘in a [adj] way’). Only one speaker produces more than 15% of his case endings in fixed phrases.

These results shed light the role played by case in the upper part of the diglossic continuum and are of particular importance for the development of Arabic language instruction.

Question prosody: evidence from spoken Arabic dialects

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Despite claims of linguistic universals involving high pitch (Bolinger 1978), the prosodic realisation of interrogatives varies cross-linguistically (Rialland 2007). This paper contributes to the task of establishing the extent of cross-linguistic variation in the prosodic realisation of questions, by presenting the results of prosodic analysis of read speech interrogatives in a range of syntactically related spoken Arabic dialects. We then offer a case study of the presence vs. absence of focus marking of *wh*-words in different Arabic dialects, in the context of theoretical debate regarding the prosodic spell out of semantic and/or syntactic features in interrogative contexts (Truckenbrodt 2013).

The Intonational Variation in Arabic (IVAr) corpus [www.york.ac.uk/res/ivar] comprises recordings from 12 speakers (6M/6F) each in a range of geographically dispersed colloquial Arabic dialects: Morocco, Tunisia, Egypt, Jordan, Syria, Iraq, Kuwait, Oman, Yemen. Data were collected in fieldwork locations in the Middle East, and comprise a range of speech styles: read speech, read and retold narratives, a map task and spontaneous conversation. We present here the results of prosodic annotation of read speech interrogatives elicited by means of a scripted dialogue task (Hellmuth & Almbark, in prep). This task yields lab speech realisations of different utterance types including up to six lexically distinct tokens per speaker of: broad focus declaratives (dec), *wh*-questions (whq) and yes-no-questions (ynq).

The utterances are elicited within an extended dialogue, with questions produced in context and yielding (scripted) answers. The information structure context in which the question was produced is thus known, and we can, for example, observe variation in the prosodic realisation of questions of a single type (e.g. ynq) depending on whether the following scripted answer is positive or negative. The position of the accented syllable in the last lexical item of each utterance is systematically varied (final, penult, antepenult) to facilitate phonological analysis of the nuclear accent contour. The last lexical item in each utterance is segmentally parallel across all dialects, permitting cross-dialectal comparison of nuclear contours in different utterance types. Prosodic annotation was performed by two transcribers for each dialect, using annotation labels based on the Tones and Break Indices (ToBI) annotation system (Beckman et al 2005; Prieto & Frota 2015), using a train-test protocol.

Results indicate that the means of prosodic marking of questions in Arabic is diverse. In many dialects a ynq is typically indicated by choice of nuclear pitch accent category (e.g. Yemen: use of nuclear L+H* instead of H*), rather than by choice of final boundary tone (H% instead of L%). There is evidence of distinct patterns in the slope of the overall pitch register, in different question types, e.g. in Syrian Arabic (cf. Dalton & Chasaide 2003). Our case study explores interaction of syntactic and prosodic variation in placement of main prominence: an obligatorily fronted *wh*-word typically displays obligatory focus prosody (increased *f*₀ excursion), but there is variation in the prosodic realisation of *wh*-in-situ.

Beckman, M., Hirschberg, J., & Shattuck-Hufnagel, S. (2005). The original ToBI system and the evolution of the ToBI framework. In S.-A. Jun (Ed.), *Prosodic Typology* (pp. 9-54). Oxford: Oxford University Press.

Bolinger, D. (1978). Intonation across languages. In J. Greenberg (Ed.), (2 ed., pp. 371-425). Stanford U.P.

Dalton, M. & Chasaide, A. N. (2003). Modelling Intonation in Three Irish Dialects. *Proceedings of 15th ICPhS*.

Hellmuth, S & Almbark, R (in prep.). Intonation in spoken Arabic dialects. Ms., University of York.

Prieto, P. & Frota, S. (2015). *Intonation in Romance*. Oxford: OUP.

Rialland, A. (2007). Question prosody: an African perspective. In T. Riad & C. Gussenhoven (Eds.), *Tones and tunes: typological studies in word and sentence prosody* (pp. 3562). Berlin: Mouton de Gruyter.

Truckenbrodt, H. (2013). An analysis of prosodic F-effects in interrogatives: Prosody, syntax and semantics. *Lingua: International Review of General Linguistics*, 124, 131-175.

Native speakers as historical linguists: Disentangling Palestinian Arabic

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In Labov (1989) very young speakers are described as “linguistic historians”, in the sense that they are predictors of linguistic processes, long before acquiring overt, conscious awareness of the linguistic features involved. The Palestinian Arabic data presented in the current study are quite different from the American English data analysed by Labov, but I argue that the speakers nonetheless have accumulated a body of linguistic knowledge that at times qualifies them to serve as proverbial “historical linguists,” or at least aid trained linguists in solving linguistic puzzles through insights that are beyond shallow folk etymologies.

Palestinian Arabic has been in contact with Modern Hebrew for over a century (Henkin-Rotfarb 2011:61). Many older speakers have lived through times of both monolingualism and bilingualism. Many of them were victims of forced displacement, which has shaken the dialectological balance of the Palestinian speech community. This paper follows three elderly speakers whose sociolinguistic interviews included discussion of language.

One speaker addresses the terminology of ethnic and sectarian terminology:

‘previously we had “Arabs” and “Jews”. Then the Arabs became, because of media and encouragement from the authorities ... [Instead of] “Arab” we started saying, “Muslim and Christian.” Later they started saying, “Muslim and Christian and Druze”. And after a little bit, “Muslim and Christian and Druze and Bedouin”. God knows what they’ll want tomorrow, what other thing will come out, what other nonsense’.

A second speaker, of Christian heritage, reveals that only in recent years, since Palestinian Muslims began travelling to Mecca for Hajj, there has been a surge in various manifestations of Islam in her community, including the greeting [*as-*] *salamu ʕalekum* ‘peace upon you-2PL’ – which upsets her when addressed to an individual. She even reports that she responds in the singular: [*as-*] *salamu* [*f*] *alek* ‘peace upon you-2SG.’ In fact, she may be correct that the singular form had predated the plural form, even for Muslims, as data from other, more conservative dialects show (e.g., Shawarbah 2012).

Finally, a third speaker tells the story of the genitive exponent *ʕe:t*. This particle is of significance because its use has increased in Jaffa, since 1948, and one hypothesis is that it is due to its phonetic (but not etymological) resemblance to the Hebrew particle *ʕe:l*, which serves the same grammatical function. Speaker 3, who is an elderly Muslim, who has not lived in Jaffa since 1946, does not use this feature. When asked about it she said:

1. *ana baʔulif “ʕe:t-i”, kan ʕind-i lli biʔulu “ʕe:t-i”, bi-ʕzi:l l-ʕdid.*

‘I don’t say “ʕe:t-i”. We did have those who said “ʕe:t-i”, in the new generation’.

2. *ʕa:rif mi:n illi kanu jʕulu z-zama:n “ʕe:t-i, ʕe:t-i”? l-masihijje.*

‘You know who used to say “ʕe:t-i, ʕe:t-i” back in the day? The Christians’.

The common thread offered by all three speakers is summed up by speaker 1: “*farroq tasud*” ‘divide and rule’, alluding to the role the Zionist state has played, by reshuffling the Palestinian population, creating sectarian divisions that had not been in place before 1948, and imposing a new linguistic reality.

Henkin-Rotfarb, Roni. 2011. Hebrew and Arabic in asymmetric contact in Israel. Lodz

Papers in Pragmatics 7:61--100.

Labov, William. 1989. The child as linguistic historian. *Language Variation and Change* 1: 85-97.

Shawarbah, Musa. 2012. *A grammar of Negev Arabic: Comparative studies, texts and glossary in the Bedouin dialect of the ‘Azāzmih tribe*. Wiesbaden: Harrassowitz Verlag.

Variation in the use of *Jīm* in Medini Arabic from a sociolinguistic perspective

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A few sociolinguistic studies on modern Arabic dialects have revealed that *Jīm* is variable (e.g. in Jordan, Al-Wer 1991, 1999; Bahrain, Holes 1980 and Al-Qouz 2009 and in Saudi Arabia, Al-Shehri 1993).

In al-Medina, a heterogeneous assortment of diverse ethnicities and social backgrounds are in day-to-day contact with one another: the Bedouin and urban groups are typical examples. Consequently, al-Medina provides an ample breeding ground for dialect contact between different varieties, yet not a single study has been conducted to investigate its sociolinguistic situation.

This research aims at investigating the impact of dialect contact on the linguistic behaviour of Bedouin and urban speakers with respect to the variable *Jīm*. The data were obtained through sociolinguistic interviews conducted during 2013, with 60 Medini speakers. The speakers were categorized according to three social factors: age (4 groups), gender and social group (Bedouin vs. urban). In addition to the social factors, variation in the use of *Jīm* was analysed according to the following linguistic environments: variant position in the word (1st, 2nd syllable, etc.), preceding and following sound, variant position in the syllable (onset or coda), gemination, number of syllables, stress and syllable structure. Rbrul multivariate analysis was used to analyse the data.

The results show that *Jīm* is indeed variable in the speech of both social groups; it has two variants: an affricate [dʒ] and a fricative [ʒ]. Based on the dialect description available of the Bedouin Harbi group (al-Hazmy 1975), and my own native knowledge of the traditional urban dialect of the city, it is possible to conclude that the affricate variant [dʒ] is the old traditional form in the dialects of both groups, whereas the fricative [ʒ] is the innovative variant. In both dialects results showed an increase in the occurrence of the innovative form. Regarding the urban variety, age, preceding sound, gemination, following sound and stress are found to be statistically significant and thus influence the variation of *Jīm*. Age of speakers was returned as the most significant factor statistically, with the youngest age group being the most advanced users (58%) of the innovative variant compared to only 12% use of [ʒ] by the oldest age group (60+). As for the Bedouin dialect, Rbrul returned the following factors as significant: age, preceding sound, gemination, following sound, gender, number of syllables (length of the word), and variant position (onset or coda). The youngest speakers use the innovative form 44% compared to 13% use of [ʒ] by the oldest informants. It is worth mentioning that while the pattern of change is quite similar for the two groups, in the Bedouin dialect gender was shown to be significant while in the urban variety it was not.

The interpretation of these results firstly draws on a comparison between the two dialects (whose speakers constitute the core Medini speech community). Secondly, I will explain the effect of demographic and socioeconomic developments that al-Medina has undergone over the past few decades as well as koineisation and the emergence of a shared Medini variety.

- Al-Hazmy, A. 1975. A critical and comparative study of the spoken dialect of the Harb tribe in Saudi Arabia. PhD thesis. University of Leeds
- Al-Qouz, Muna. 2009. Dialect contact, acquisition and change among Manama youth, Bahrain. PhD thesis. University of Essex
- Al-Shehri, A. 1993. Urbanisation and linguistic variation and change: a sociolinguistic study of the impact of urbanisation on the linguistic behaviour of urbanised, rural immigrants in Hijaz, Saudi Arabia. PhD thesis. University of Essex
- Al-Wer, Enam. 1991. Phonological variation in the in the speech of women from three urban areas in Jordan. PhD thesis. University of Essex

- Al-Wer, Enam. 1999. 'Why do different variables behave differently? Data from Arabic'. In *Language and Society in the Middle East and North Africa: Studies in Variation and Identity*, ed. by Yasir Suleiman, 38-57. London: Routledge
- Holes, C.1980. 'Phonological variation in Bahraini Arabic: the [j] and [y] allophones of /j/. ' *Zeitschrift für arabische linguistic*. 4. 72-89

Prosodic Structure and syntactic recursion in Jordanian Arabic Dialect (Spoken in the City of Irbid)

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In the context of syntax-prosody mapping, this study argues that recursion within syntactic phrases is not reflected in prosodic representation of Jordanian Arabic. During the last few decades, theories of prosody make inferences to syntactic structure. In Strict Layer Hypothesis (Nespor & Vogel 1986; Selkirk 1986), prosodic hierarchy is independent from syntactic one, but inferences to syntactic constituents are possible. Some other studies assume that prosodic domain boundaries are sensitive to maximal syntactic projections (Selkirk and Shen 1990; Truckenbrodt 1995, 1999). The basic notion behind this approach is that prosodic boundaries are aligned to the right and/or left edge of lexical XPs. Also, it has been introduced that prosodic domains are sensitive to edges of syntactic domains that are products of functional phrases such as TP and VP.

Empirical examinations to tonal phenomena in various languages such as manipulation of downstepping at edges of German and Hindi relative clauses (Féry and Schubö 2010) and distribution of phrase-level accents in Connemara Irish (Elfner to appear) support the assumption that syntactic nesting is mirrored in prosodic representation which is proposed in Ito and Mester (2007, 2010), Selkirk (2009) and Wagner (2010). Thus, some recent analyses to tonal phenomena in different languages are used as cues to detect more syntactic information from prosodic representation.

In this study, we argue against the reflection of syntactic recursion in the prosodic structure on the basis of empirical results of an articulatory experiment. Ten native speakers of JA (5 males and 5 females) have read three everyday dialogues that contain 21 declarative SVO sentences with various syntactic complexities. A syntactic XP can contain at most two embedded XPs.

This paper provides evidence from JA to argue against the claim that prosodic structure is syntactically-transparent. Duration and f_0 measurements show that JA prosodic structure is not sensitive to edges of complex and extra complex XPs. This rules out the direct mapping between syntactic and prosodic constituents.

- Elfner, E. to appear. Recursion in prosodic phrasing: Evidence from Connemara Irish. *Natural Language and Linguistic Theory*.
- Féry, C. & Schubö 2010. Hierarchical prosodic structures in the intonation of centerembedded relative clauses. *The Linguistic Review*.
- Ito, J. and Mester. 2007. Categories and projections in prosodic structure. In OCP4 [Old World Conference in Phonology]. Rhodes, Greece. Ito, J. & Mester 2010. The onset of the prosodic word. In S. Parker (ed.) *Phonological Argumentation: Essays on Evidence and Motivation*. London: Equinox.
- Nespor, M. & Vogel 1986. *Prosodic Phonology*. Dordrecht: Foris.
- Selkirk, E. 1986. On derived domains in sentence phonology. *Phonology Yearbook* 3.
- Selkirk, E. 2009. On clause and intonational phrase in Japanese: The syntactic grounding of prosodic constituent structure. *Gengo Kenkyu* 136.
- Selkirk, E. and Shen 1990. Prosodic domains in Shanghai Chinese. In *The Phonology– Syntax Connection*, Sharon Inkelas and Draga Zec (eds.), 313–338. Chicago: University of Chicago Press.
- Truckenbrodt, H. 1995. *Phonological Phrases: Their Relation to Syntax, Focus, and Prominence*. Doctoral dissertation, Massachusetts Institute of Technology.
- Truckenbrodt, H. 1999. On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry* 30.
- Wagner, M. 2010. Prosody and recursion in coordinate structures and beyond. *Natural Language & Linguistic Theory* 28.

The Influence of Geographic Location and Religion on Dialect: A Comparison of Jordanian Christian and Muslim Arabic Dialects in Amman and Karak

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A dialect can have any number of factors that weigh on making it a regional, age, or general social marking. In the case of Amman, Jordan, the relatively recent capital of Jordan that has become a metropolitan city and regional hub for refugees, the dialect is being heavily impacted by native Jordanian influences, Palestinian refugees, and the general language mixing that can happen in any large city to form a new Ammani dialect, which has only recently been studied.

Karak, a smaller city in the south of Jordan, also has a distinct dialect that has remained apart from the emerging Ammani dialect, due to its ancient history. Additionally, Karak, like Amman, has a large Jordanian Christian population that lives there.

This research dives into what factors in Jordan are most significant in determining dialect. Throughout the Arab world, different groups: Christian, Jewish, Muslim, would speak different dialects as a social marker, indicating affiliation to one of these religious communities (Miller 2004). However, this typically happened in ancient settled areas. Does Jordan, as a recent country, have religious influence on the dialect?

Using Enam al-Wer's (2007) study on Amman's dialect formation as a foundation and Hekki Palva's (2008) study on Karak's dialect, this research explores if geography or religion is of greater importance when it comes to the most recent dialect formation in Jordan. Conversations of 23 Christian and Muslim men and women in Karak and Amman all of university age (those who are most likely to be participating in the emerging dialects) were recorded and analyzed for phonetic, morphological, and semantic features to see if they correlated with the previous studies conclusions as well as local speakers' understanding of the dialects. Muslims, being used as the standard, were compared to the Christians in the studies to see if Christians had a different dialect or not, or was the dialectical difference present in Jordan merely geographical in nature.

Reading comprehension among Arabic heritage learners and the Simple View of Reading Model.

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The Simple View of Reading model (SVR) was used as a theoretical lens to explore some of the reading comprehension issues and challenges faced by Arabic Heritage Language Learners (HLLs) in the United States. Arabic, an example of diglossia, has two language forms. Modern Standard Arabic (MSA) is the literary form that is used in reading or writing by all Arabic speakers, and the colloquial form of the language is the spoken dialect and it is strictly an oral form. MSA and the colloquial dialect are different in phonology, syntax, morpho-syntax, and lexicon (Feitelson, Goldstein, Iraqi, & Share, 1993; Saiegh-Haddad, 2003).

Exposure to MSA becomes a concern within the heritage language community due to the shift in linguistic functionality that is common in heritage language communities where HLLs begin to use Arabic less frequently. Although there is no current research on issues in reading comprehension among HLLs, research on learners of Arabic in Arabic speaking countries has already found an association between reading difficulties in young Arab children and this diglossic situation (Abu-Rabia, 2000; Feitelson et al., 1993; Levin, Saiegh-Haddad, Hende, & Ziv, 2008). Due to the gap between the oral form and the literary, beginning readers who do not receive enough exposure to MSA before they begin learning how to read, do not pick up the necessary vocabulary knowledge and morpho-syntactic structures and have no prior knowledge of phonemes that exist in MSA. This results in a negative impact on their linguistic comprehension (Iraqi, 1990; Abu-Rabia, 2000) as well as their decoding skills (Saiegh-Haddad, 2007).

The purpose of this study was to investigate which of the two SVR model components, decoding and linguistic comprehension, is a better predictor of Arabic reading comprehension among HLLs. The study also examined if the level of reading proficiency affected the way the two components predict Arabic reading comprehension. To answer these questions, 70 participants from four different levels from a southern California heritage language school were tested on one reading comprehension measure, one linguistic comprehension measure, and two decoding measures.

Results revealed that both components, linguistic comprehension and decoding, were equally significant predictors of reading comprehension in the overall sample accounting for 62% of the variance in reading comprehension. Moreover, the sample was then split into more skilled readers and less skilled readers. In the sample of less skilled readers, both linguistic comprehension and decoding were significant predictors of reading comprehension accounting for 42% of the variance in reading comprehension, with decoding being a slightly stronger predictor. In the sample of more skilled readers, only linguistic comprehension was a significant predictor of reading comprehension. However, when the decoding measure, was replaced with a fluency component, both linguistic comprehension and the fluency component were equally significant predictors of reading comprehension accounting for 53% of the variance in reading comprehension. Additional preliminary observations and speculations were presented in respect to HLL's linguistic ability, linguistic comprehension, and literacy development.

Interference of Colloquial Arabic in the Standard Arabic writing of school children

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Arabic is a typical case of 'diglossia' (Ferguson 1959) where two varieties of the same language co-exist and used for complementary functions: Colloquial Arabic for speaking and Standard Arabic for writing. While a rigid separation between their functions is a defining feature of diglossia, code-switching characterizes the speakers' linguistic behavior (Badawi 1970). We investigated the impact of diglossia on writing among school children. We examined elements of colloquial Palestinian Arabic (PA) surfacing in Modern Standard Arabic (MSA) texts produced by children in order to identify interference patterns.

Methodology is based on an international cross-linguistic project on developing literacy (Berman 2008; Berman & Verhoeven 2002). Participants were shown a video clip demonstrating various conflicts and were asked to write texts on this topic in MSA. We analyzed instances of use of PA elements in texts in grades 4, 7 and 9.

The results reveal strong tendencies in to use PA in three domains: phonology, morphology and the lexicon. In contrast to the phonological spelling errors that decreased with age, other errors persisted in all groups.

Phonology: Research shows that spelling errors in Arabic are mainly phonological (AbuRabia et al 2004, 2013). We provide specific criteria that explain and predict types of errors. The Arabic writing system maps the phonological structure of MSA words in a regular way (shallow orthography). However, the results show that children's writing reflects a representation of the phonological structure of PA words. This supports the argument that Arabic orthography is psycholinguistically deep (Saiegh-Haddad & Henkin-Roitfarb 2014). For instance, participants made errors on letters representing MSA phones that are not within the PA phonetic inventory (Saiegh-Haddad 2007). Participants also dropped mothers of reading representing long vowels when these are shortened in PA. Research shows that the complexity of the Arabic orthography might constitute a major stumbling block in literacy acquisition (Eviatar & Ibrahim 2014). Our results did not locate spelling errors reflecting letter shape confusion (Saiegh-Haddad 2013) even among 4th graders.

Morphology: The morphological distance between PA and MSA is mainly in inflection. Yet, we found that interference was mainly in te derivation. We assume that it reflects the high token-frequency of inflectional morphemes. Arabic relies highly on word formation in templates with vocalic patterns. Participants used the same consonantal roots with templates that are more common in PA. For example, the pattern *aCCaC* was often replaced by *CaCCaC* (e.g. *ʔarja ʕ-rajja ʕ'return'*).

Lexicon: Lexical interference was notably apparent in the use of the same verb with the PA prepositions/particles, for example, *nalʕabu ʕala l-ħabl* instead of *bi-l-ħabl* 'we play with a rope'. Such alternations also occurred in noun phrases where a preposition is used instead if a construct state.

The results provide a linguistic characterization of the impact of diglossia on writing development in MSA and predictions with respect to which features of PA are more likely to occur in MSA. Further, it suggests avenues for corpus-based research as well as applications for language pedagogy.

Frequency Effects in Loanword Phonology

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The present paper aims at examining the role of frequency in loanwords. It particularly investigates the way frequency of syllable structure can account for such adaptations. The focus will be on French loanwords into Moroccan Arabic (MA).

Unlike French, the onset in an obligatory constituent of MA syllable. When a loanword lacks an onset in the source language, it presents a challenge to the host language. Loanword data show that this is repaired in different ways resulting in a great deal of asymmetry. Consider the following examples:

	MA	French	Gloss		MA	French	Gloss
a-	grisa saja Skanta Kraza	agrees eseje eski~te ekraze	To agres To try To wreck To mash up	b-	Tobis lastik kuri stafet	otobys elastic ekyri estafet	Bus Rubber Stable (n) van
c-	labilans lasorans lardwaz lotil	abyla~s asyra~s ardwaz otel	Ambulance Insurance slate hotel	d-	zalamit zufri ztazen zmigri	alymet uvrije etazuni imigre	Matches Worker USA immigrant

The initial syllables of all French words in the data above lack an onset; however, when borrowed into MA they satisfy the ONSET requirement. This is done differently in different words. In sets (a) and (b) the initial vowel is deleted altogether. In (c) and (d) *-l* and *-z* function as onsets, respectively. What triggers such an asymmetry? I will argue that frequency effects in the donor language (the input) play a role in the adaptation of the ill-formed syllable. In other words, occurrence frequency of these words with preceding morphemes, hence, sounds, in the source language has an influence on phonological patterns in the adaptation data.

There is a growing body of research interested in the role that frequency effects play in grammar. It has been applied to different areas of linguistics, in general, and to phonology, in particular. They have been used to model intra-language and inter-language phonological variation (Antilla, 1995, 1997). Also, scholars have studied the way frequency of words' occurrence has an impact on undergoing or resisting phonological change (Bybee, 2001, 2006; Pierrehumbert, 2002). Moreover, psycholinguistic studies have demonstrated the relation between frequency and phonology in word recognition (Conrad & Markus, 2007; Mathey & Zagar, 2002; Conrad & Jakobs, 2004). In addition, other researchers (Sloos, 2013) have proved that frequency effects play a significant role in loanword adaptation.

Adopting the Optimality Framework (OT), this paper will base its analysis on the existing literature to shed light on how syllable frequency effects can demystify the irregularities manifested in the data in hand. I will provide a model that incorporates frequency effects in the grammar. More precisely, I will introduce some preference constraints and show how they interact with faithfulness to the input in order to generate the optimal output. The strength of my account lies in its ability to (i) generate the different outputs in the data, (ii) predict the output for new loanwords in MA, (iii) account for variation in loanword grammar, and (iv) show the flexibility of OT to incorporate certain non-linguistic yet significant generalizations about language.

Another look at the development of postverbal negation in dialectal Arabic

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In certain Arabic dialects of Egypt, the southwestern Levant, Oman (according to Reinhardt 1894), and perhaps sporadically elsewhere, it is possible in at least some contexts to express negation with the enclitic element *-š* alone (henceforth *X-š*), instead of with the more familiar and more widespread bipartite *mā X-š* construction. In a recent article and subsequent monograph, Wilmsen (2013, 2014) advances several novel proposals regarding the genesis of these two constructions. He argues against two commonly held positions: i) that the *-š* morpheme is grammaticalized from *šay* ‘thing’; and ii) that the various types of negative construction observed in dialectal Arabic are the result of a crosslinguistically common set of cyclical changes in the expression of negation, known as ‘Jespersen’s cycle’, whereby the expression of negation undergoes the development PREVERBAL > BIPARTITE > POSTVERBAL. Instead, Wilmsen proposes that *-š* came to function as a negator through reanalysis of the interrogative particle *ši* (which he believes does not derive from *šay*), and that “Arabic dialects negating without a pre-posed *mā* [...] have not lost the pre-positioned negator [...], for, such forms have been in place as long as an enclitic *-š* has been used in interrogation and negation” (2013: 26–7).

The present paper offers a critical examination of Wilmsen’s proposals, making the following main arguments.

- i) There are dialects recorded in the twentieth century in which there is a clear reflex of *šay*’ as a postverbal negator, e.g. various Moroccan dialects with *ma...šay* (Caubet 1993: 68, Heath 2002: 212) and (*ma...*)-*šey* in the Ša‘īdī dialect described by Khalafallah (1969: 100–2).
- ii) Relative to *mā X-š*, the number and spread of dialects in which *X-š* occurs as a negative construction is tiny, and its occurrence is possible only in a subset of grammatical contexts in Palestinian and Cairene (and different contexts in each of these dialects; Lucas 2010). These facts should be explained by positing a handful of independent parallel innovations of negative *X-š* via *mā*-dropping or other mechanisms. Wilmsen’s alternative, which entails positing massively parallel independent losses of negative *X-š* in dialects lacking the construction today, is less parsimonious.

Caubet, Dominique. 1993. *L’arabe marocain*. Paris: Peeters.

Heath, Jeffrey. 2002. *Jewish and Muslim dialects of Moroccan Arabic*. London and New York: Routledge.

Khalafallah, Abdelghany. 1969. *A descriptive grammar of Saei:di colloquial Arabic*. The Hague: Mouton.

Lucas, Christopher. 2010. Negative *-š* in Palestinian (and Cairene) Arabic: Present and possible past. *Brill’s Annual of Afroasiatic Languages and Linguistics* 2, 165–201.

Reinhardt, Carl. 1894. *Ein arabischer Dialekt gesprochen in ‘Oman und Zanzibar: Nach praktischen Gesichtspunkten für das Seminar für orientalische Sprachen in Berlin*. Berlin: Spemann.

Wilmsen, David. 2013. The interrogative origin of the Arabic negator *-š*: Evidence from copular interrogation in Andalusī Arabic, Maltese, and modern spoken Egyptian and Moroccan Arabic. *Zeitschrift für Arabische Linguistik* 58, 5–31.

Wilmsen, David. 2014. *Arabic indefinites, interrogatives and negators: A linguistic history of western dialects*. Oxford: Oxford University Press.

Aspectual «fi» in Tunisian Arabic (TA).

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This paper investigates why a sub-class of transitive verbs in TA requires their direct object (DO) to be introduced by the element “fi” in order to obtain a present progressive reading. If “fi” is not present the DO must be a bare plural and the sentence receives a generic interpretation. Compare (1) and (2):

- (1) Səmi yeghsil *(fi)-z-zrabi. (2) Səmi yeghsil (*ez)-zrabi.
Semi wash.imp fi-the-carpets. Semi wash.imp (*the)-carpets.
Semi is washing the carpets. Semi washes carpets.(Semi is a professional carpet-washer)

In contexts such as (1) “fi” seems to be an aspectual element but, at the same time, evidences coming from wh-movement suggest that “fi” shares constituency with the object DP.

- (3) **f-eši** yəkl Səmi ti?
fi-what eat.perf Semi?
What is Semi eating?

Moreover, the opposition between (4) and (5) shows that “fi” is incompatible with perfective forms. If “fi” is present in questions with a perfective verbal form, the wh-element is necessarily interpreted as a locative adjunct.

- (4) **eš** klə Səmi? (5) **f-eš** klə Səmi?
what eat.perf Semi? in-what eat.perf Semi.
What has Semi eaten? **In what** (container) has Semi eaten?

Since these transitive predicates select “fi” only with the imperfective forms we assume that the preposition is not assigned to the predicate in the lexicon. What triggers, then, the selection of “fi”? We propose that “fi” allows the DO to be existentially bound and that the class of TA predicates under discussion lacks specifically this ability but only in the imperfective form. Notice that “fi” is used across many dialects in both locative and existential constructions (similar to the Italian “ci”) making it a plausible candidate to be the binder of existential objects such as “the carpets” in (1). Furthermore we propose that TA bare plurals are property denoting (see McNally, 2004 for a similar suggestion about Spanish bare plurals) and that a defective imperfective predicate is only able to select a property denoting complement as in (2). Given that existentiality does not apply to properties, bare plurals are the only possible candidates for this object position.

Finally, we explain the alternating characterizing/progressive reading of these imperfective forms assuming they are assigned with floating types: property selecting predicates are themselves individual level properties and are unbounded by definition. Since TA imperfectives are unspecified for tense the sentence is interpreted as an unbounded event overlapping with the utterance time, which is the default option in the absence of temporal specification. Conversely, when “fi” is selected the DO is existential and the predicate is episodic. The DO, in this case, assigns temporal boundaries to the predicate (see *Aspect Interface Hypothesis* in Tenny, 1989): the predicate is understood as durative but its duration is limited to the time interval mapped by the object (washing event = time needed to wash a/some carpet/s). Once again, since the imperfective paradigm is unspecified for tense the durative event is anchored by default to the utterance time and, therefore, the sentence is interpreted in the “present progressive”.

Tenny, Carol. The aspectual interface hypothesis.No.31 Lexicon Project, Center for Cog Sci MIT, 1989.

McNally, Louise. "Bare plurals in Spanish are interpreted as properties." *Catalan Journal of Linguistics*. 2004; 3.

How many forms do you need to know to conjugate verbs in Transitional Libyan Arabic?

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Principal Parts (PPs) are the minimal number of forms from which it is possible to deduce all/most of the other forms across the verbal/nominal paradigm of a particular language system. In Latin, for instance, we can derive all ten forms of the nominal paradigm, for any of the five declension classes, by knowing the nominative and genitive singular. More recently, Finkel & Stump (2013) have formalized the notion PPs, using them as an important tool for developing the scale of complexity of different inflectional systems. We propose a novel stem-based classification of TLA verb system based on implicative relations and the optimal PPs needed to predict the remaining forms in a lexemes paradigm using the Principal-Parts Analyzer (PPA) which is a computer programme developed by (Finkel & Stump, 2013) for analysing inflectional systems.

TLA verbs are divided into four verb series: sound, double, hollow and defective, representing inflectional classes (table 1). Yet, unlike Latin, in TLA, the inflectional exponents which express the morphosyntactic features in all verb measures including the irregular ones, do not show affix allomorphy. Instead, similar to French (Bonami & Boy 2002), TLA shows stem alternations distinguishing distinctive cells of the perfect verb paradigms for the same cells across sound verbs (e.g. the morphomic stem (Aronoff, M. 1994) of the 3rd plural/3rd singular feminine ‘stem3’ is distinguished from 1st/2nd and the 3rd singular masculine forms ‘stem2’). In addition, in most verbs, the imperative stem is inferred from the default imperfective ‘stem1’ (Sound ‘the default class’: *yi-ʕrif* ‘he knows sth’, ↔ *ʔi-ʕrif* ‘know sth!’). By contrast, in the perfective sub-paradigm, each of the stems of the 3rd singular masculine and 3rd singular feminine have to be listed as PPs of 1st/2nd stems and 3rd plural stems respectively (e.g. *ʕaraf* ‘he knew sth.’ ↔ *ʕaraf-na* ‘we knew sth’ but *ʕuruf-it* ‘she knew sth.’ ↔ *ʕuruf-in* ‘they f. knew sth.’). For the non-default class represented by hollow verbs, on the other hand, the 3rd masculine cannot be specified as a PP for 1st/2nd stems (*y-tiir*, ↔ ‘he flies’, *tiir* ‘fly!’, *taar* ‘he flew’, but *tur-na* ‘we flew’). We will show that some verbs, including the default class, require up to three optimal PPs while others are *less* morphologically complex with only one PP. In addition, the stems alternation and their dependency relations in TLA pose serious empirical problems for any morpheme-based account.

Table (1) Stem alternation in the perfect and imperfect paradigm of TLA measure 1 verbs

Measure 1	a. Sound		b. Hollow		c. Double		d. Defective	
	sekan ‘live’		zaad ‘increase’		ʃadd ‘capture’		nisee ‘forget’	
	perf.	imperf.	perf.	imperf.	perf.	imperf.	perf.	imperf.
1.2 SG/PL	sekan	us(u)k(u)n	zid	ziid	ʃadd	ʃidd	nsee	ans /a/ /Ø/
3SGM	sekan	uskun	zaad	ziid	ʃadd	ʃidd	nsee	ansa
3SG.F/PL	sukun	us(u)k(u)n	zaad	ziid	ʃadd	ʃidd	ns /Ø/	ans /a/ /Ø/

Aronoff, M. (1994), *Morphology By Itself*. MA: MIT Press, Cambridge

Bonami, O. and Boye, G. 2002. ‘Suppletion and stem dependency in inflectional morphology’, in Franck Van Eynde, Lars Hellan and Dorothee Beermann (eds.), *The Proceedings of the HPSG ’01 Conference*, CSLI Publications, Stanford

Finkel, Raphael, and Gregory Stump. 2013. *Morphological Typology*. Morphology. From Word to Paradigm, MA: MIT Press, Cambridge

ʔana_k'birɪ 'hma wɪ_tʃal'limɪ 'hma
Vowel Convergence from Minia Arabic to Cairene Arabic

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Modern life in Egypt involves spatial mobility leading to more contact among people from different backgrounds and dialects. Since most mobility is towards Cairo, Cairene Arabic (CA) greatly influences other Egyptian dialects speakers who usually start as migrants to Cairo and finally settle there (Miller, 2005). This influence of CA is not only limited to migrants to Cairo but also extends spatially and socially throughout Egypt. This is due to its prestige, heavy usage in most economic sectors, media and educational institutions besides the desire of speakers of other Egyptian dialects to sound prestigious or get a job. The final outcome of this is convergence to CA.

Minia Arabic (MA), the dialect of Minia (250 km south of Cairo), is rich with variations. It is, therefore, the only Egyptian dialect classified into two linguistic regions, North MA which shares some similarities with CA, and South MA that is more similar to Upper Egyptian dialects (Behnstedt and Woidich, 1985). Minia has witnessed many changes over the last four decades in education, urbanization and rural migration, thereby destroying the closely-knit social networks and leading MA speakers to converge to CA. In this, MA speakers are similar to other Egyptian dialects speakers who also converge to CA.

The current study investigates MA speakers' convergence towards CA by adopting CA vowels although vowels in Egyptian Arabic are not as stigmatized as consonants, especially /q/ and /dʒ/. The convergence happens through four processes: vowel raising, lowering, fronting and backing, as illustrated below.

<u>Process</u>	<u>MA North</u>	<u>MA South</u>	<u>CA</u>	<u>Translation</u>
Fronting	['kɔtɔr]	['kɔtɔr]	['kɪtɪr]	<i>it became abundant</i>
Backing	['jɪgɔʃ]	['jɪgɔʃ]	['jɔʒɔʃ]	<i>he falls</i>
Raising	['ʕallɪm]	['ʕallam]	['ʕallɪm]	<i>he taught</i>
Lowering	[jɪs'tɪhbɪl]	[jɪs'tahbal]	[jɪs'tahbɪl]	<i>he plays the fool</i>

Of the tokens studied, 50% are related to raising and 34% to lowering. This refers to sweeping convergence involving raising, a feature of CA, especially in verbs having Form 2 [C1aC2.C2ɪC3] as in ['ʕallɪm] 'he taught' and Form 5 [ʔɪt.C1aC2.C2ɪC3] as in [ʔɪt'ʕallɪm] 'he learned'.

Data was collected from 63 participants in two styles (careful and casual) through 30-minute recorded interviews, focusing on four social categories: gender, residence, education and age. Results show that females converge more than males, urbanites and migrants more than villagers, the highly-educated more than those with secondary education or no education and youngsters more than the middle-aged and old. Result interactions also show that highly educated females in town, either born urbanites or rural migrants, lead the change in Minia by converging the most to CA vowels. This reflects their awareness of their dialect low prestige and the linguistic requirements of the market. Are these results enough to reveal that MA speakers converge to CA? To answer this question, the stigmatized consonants /q/ and /dʒ/, stress and lexical variations should also be explored.

Miller, C. (2005). Between accommodation and resistance: Upper Egyptian migrants in Cairo. *Linguistics*, 43(5), 903-956.

Behnstedt, P., Woidich M. (1985). *Die ägyptisch-arabischen Dialekte. Band 2.* Wiesbaden, Dr. Ludwig Reichert Verlag.

“*Aiwa intal asad ya khaltee, now come on wipe your tears*” Choice of language based on its perceived ability to communicate speaker feelings to the interlocutor: The case of a multilingual Arabic-English speaking family in London.

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This sociolinguistic exploratory case study seeks to examine the language use of a multilingual Arabic-English speaking family and to understand how each member selects and uses their languages in the everyday repetitive mundane activity of multiparty family mealtimes. The chosen family consists of four members, the mother and father, and their two boys (aged 6 and 9) who in addition to speaking Arabic and English are learning French and Spanish at school. The study specifically examines the language use of this family by focusing on the two most recurrent phenomena in the data: code-switching (the alternating between two languages) and the choice and use of address terms. In addition to examining how multilingual children and their parents code-switch and choose address terms the study also seeks to identify the possible roles these two aspects may take on during conversation. The data was collected through video recording and lasted eight months with one recorded mealtime per month. The multiparty mealtime conversational data was transcribed in accordance to LIDES (Macwhinney, 1995) and analysed from an applied Conversation Analysis perspective (Hutchby & Wooffitt, 1998; Li Wei, 2007; Schegloff, 2007; Sidnell, 2011). The linguistically (and non-linguistically) rich data revealed that family members in general use and mix their language to discuss a particular topic (e.g., prayer rituals or the reciting of Qur'an), to express emotion or to display a specific stance or identity to the other speakers. In particular, the data suggests that parents use their languages to socialise the children, to reinforce their authority as parents, and to also create a connection and solidarity with them. Whereas, the children seem to use language to learn, resist and even transform the socialisation lessons their parents endeavour to teach them, to resist their parents' authority, and to also create a connection with them. Language is at the centre of the social lives of this family and mealtimes as an event offers a unique opportunity for creative and especially agentive use of languages and a chance for speakers (consciously or not) to uniquely mix linguistic components from both Arabic and English during conversation. Finally, the data affirms that the family is an important sociolinguistic environment for the use of multiple languages and a vital support system for the maintenance of a minority language (Lanza, 2007; Okita, 2001; Luykx, 2003).

- Hutchby, I., & wooffitt, R. (2008). *Conversation Analysis* Cambridge, UK: Polity Press
- Lanza, E. (2007). Multilingualism and the Family. In Li Wei & P. Auer (Eds.), *The Handbook of Multilingualism and Multilingual Communication* Berlin Mouton de Gruyter
- Li Wei. (2007). The "why" and "how" questions in the Analysis of Conversational Code-switching In P. Auer (Ed.), *Code-switching in Conversation: Language, Interaction and Identity* London: Routledge.
- Luykx, A. (2003). Weaving Languages together: Family Language Policy and Gender Socialization in Bilingual Aymara Households. In R. Bayley & S. R. Schecter (Eds.), *Language Socialization in Bilingual and Multilingual Societies*. Clevedon: Multilingual Matters.
- Macwhinney, B. (1995). *The CHILDES Project: Tools for analyzing talk* New Jersey: Erlbaum.
- Okita, T. (2001). *Invisible Work: Bilingualism, language choice and childrearing in international families*. Amsterdam: John Benjamins.
- Schegloff, E. A. (2007). *Sequence Organization in interaction: A Primer in Conversation Analysis (Vol. 1)*. Cambridge Cambridge University Press
- Sidnell, J. (2011). *Conversation Analysis: An Introduction* West Sussex John Wiley & Sons

The Development of Narrative Competence and Linguistic Abilities in Tunisian Arabic

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Tunisian Arabic is a language which coexists with Standard Arabic in a complex linguistic situation. Therefore, the young child has to « juggle » with two different linguistic systems in order to move from « native speaker » to « proficient speaker ». (Berman, 2004:9, 2008:2). Our interest focuses on the development of narrative competence in a native language. We will be particularly concerned with the role played in narrative development of word order variation, syntactic transitivity and speaker-perspective.

To this end, the study include a detailed analysis of these relevant linguistic domain in the Tunisian vernacular that constitutes the first or native language of the 75 participants in the study (15 each in four age groups – 4-year-old preschoolers and 7-9 and 11-year-old schoolchildren compared with 15 adults). The narrative task used to elicit the data is a wordless picture-book entitled ‘*Frog where are you?*’ (Mayer, 1969).

The finding is that with age, children rely more on clauses with lexical verbs and less on verbless constructions in narrative context. The functional role of word order variation in terms of the flow of new vs old information has also been investigated. A major finding is that across age groups, verb-initial clauses predominate, followed by pronoun-initial clauses with adults making least use of preposed pronominals and the youngest 4-year-old preschoolers differing from the rest of the participants in this as in other respects. The description of the sentence syntax and word order variation in Tunisian Arabic compared to Standard Arabic has shown that contrary to what is stipulated for the Arabic varieties (SVO languages), the dominant word order in a narrative production is VS/O. SV/O and SP (subject-predicate) are certainly less used but nevertheless essential in the construction of a narrative discourse. Despite the flexibility that the language has in word order, the speakers are more or less rigid about its variation; OV/S and VOS are rarely used.

In the domain of “Transitivity and Perspective”, our results showed a developmental break between preschoolers and schoolchildren at different ages. Analyses also considered the use of affectee dative constructions compared with other types of oblique objects, using detailed comparisons of the encoding of four specific scenes as a means of evaluating the role of transitivity in describing narrative event representation. A major finding is the decline in favoring of intransitive predicates as a function of age and a concomitant shift from an agent perspective to a patient orientation. With respect to transitivity and perspective, Tunisian Arabic recourse to less topicalization structures in narrative discourse compared to other languages: Amharic, English, French and Hungarian (Jisa & al, 2010).

Language Resources, Algorithms, and Machine Learning for Prosodic Analysis of Classical and Modern Standard Arabic: an Overview

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Natural Language Processing (NLP) is a sub-field of Artificial Intelligence concerned with the interaction between computers and human languages. Text processing and text data mining are major tasks in NLP. Text processing tools and algorithms provide automatic analysis of input text at different levels: morphology, phonology, syntax, and semantics. Our RCUK funded project focuses on the Arabic *Qur'an* as a core text [1]. The project is informed by traditional Arabic grammar, *tajwīd* or correct Quranic recitation, and traditional Arabic dictionaries. This is an interdisciplinary project that brings together scholars from Computer Science, Arabic Linguistics and Phonetics, and Islamic Studies.

This abstract concerns the linguistic and computational aspects of the project, namely: the insights informing the project, the tools and algorithms developed for analyses, the resources produced, and some conclusions. First, *tajwīd* mark-up in the *Qur'an* is viewed as additional text-based data for computational analysis. This mark-up, which is incorporated into Quranic Arabic script, identifies phrase boundaries of different strengths. We report on version 1.0 of our *Boundary-Annotated Qur'an* (BAQ) dataset [2]. Each word in BAQ is tagged with prosodic and syntactic information at two coarse-grained levels. The BAQ dataset was then used in phrase break prediction experiments [3]. Promising results for accuracy and performance were achieved for comparative experiments with off-the-shelf N-gram and HMM taggers and coarse-grained feature sets for syntax and prosody. The task was to predict boundary locations in an unseen test set stripped of boundary annotations by classifying words as breaks or non-breaks.

Second, a comprehensive grapheme-phoneme mapping scheme was developed, informed by Quranic recitation, traditional Arabic linguistics, and modern phonetics [4]. The scheme maps the phonemes of Modern Standard Arabic (MSA) to symbols from the International Phonetic Alphabet (IPA). The scheme is customized specifically for automated transcription of Arabic text. State-of-the-art Arabic>IPA phonemic transcription software was developed [5]. We achieved 100% accuracy as measured against two gold standards: one for Quranic or Classical Arabic, and one for Modern Standard Arabic. Version 2.0 of the *Boundary Annotated Qur'an* dataset has emerged as a result, featuring Arabic words tagged with pausal phonemic transcriptions in IPA [6].

Third, our state-of-the-art transcription software was further developed to generate a stressed and syllabified phonemic transcription for each word in the entire text of the *Qur'an*. Rules for syllabification and primary stress were defined based on traditional Arabic grammar. As a result of applying new functions in Arabic>IPA transcription technology, version 3.0 of the BAQ dataset emerged. Four new tiers were added: syllabified pausal IPA; syllabified CV patterns; stressed (*i.e.* with primary stress) and syllabified pausal IPA; and stressed (*i.e.* with primary stress) and syllabified CV patterns.

Current and future work using the developed resource of the BAQ dataset and *tajwīd* involves the statistical technique of keyword extraction to explore semiotic relationships between sound and meaning in the *Qur'an*. Statistically significant keywords in the *Qur'an* were extracted using a comparable historical Arabic corpus. These keywords will then be compared with prosodically significant words marked with prolongation. We will also investigate correlation of stressed/prolonged syllables with rhythmic juncture or pause marks.

- [1] Atwell, Eric; Dickins, James and Brierley, Claire (2013). Natural Language Processing Working Together with Arabic and Islamic Studies. RCUK funded project
- [2] Brierley, Claire; Sawalha, Majdi; Atwell, Eric (2012). 'Open-Source Boundary-Annotated Corpus for Arabic Speech and Language Processing'. In Proceedings of the Language Resources and Evaluation Conference (LREC) 2012. Istanbul, Turkey.
- [3] Sawalha, Majdi; Brierley, Claire; Atwell, Eric (2012). 'Predicting Phrase Breaks in Classical and Modern Standard Arabic Text.' In Proceedings of the Language Resources and Evaluation Conference (LREC) 2012. Istanbul, Turkey.
- [4] Brierley, Claire; Sawalha, Majdi; Heselwood, Barry; Atwell, Eric. (To appear) A Verified Arabic-IPA Mapping for Arabic Transcription Technology, Informed by Quranic Recitation, Traditional Arabic Linguistics, and Modern Phonetics. *Journal of Semitic Studies*.
- [5] Sawalha, Majdi; Brierley, Claire; Atwell, Eric; Dickins (Forthcoming). IPA transcription technology for Classical and Modern Standard Arabic.
- [6] Sawalha, Majdi; Brierley, Claire and Atwell, Eric (2014). Automatically generated, phonemic Arabic-IPA pronunciation tiers for the Boundary Annotated Qur'ān Dataset for Machine Learning (version 2.0). In Proceedings of the Workshop on Language Resources and Evaluation for Religious Texts (LRE-Rel2) at LREC 2014. Reykjavik, Iceland.

Acquisition and (non)use of Arabic discourse markers in an immersion environment.

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Language immersion programs seek to provide a naturalistic environment, particularly to improve students' speaking skills, an aspect of which is the acquisition of language-specific pragmatic skills. Included in these pragmatic skills is the use of language-specific discourse markers. However, research on discourse markers in Arabic, either for native or non-native speakers is sparse. The current study, drawn from a larger ethnomethodological investigation of students' language use during an 8-week Arabic language immersion program, examines the contexts that appear to encourage students' use of Arabic discourse markers. Viewed through a lens of complexity theory, I argue that for native speakers of English, the attractor state is the use of English language discourse markers. Attractor states require less effort to persist; factors that lead English language discourse markers to maintain their attractor state, despite the good-faith efforts of students to adhere to the language pledge, include the very nature of discourse markers—speakers are often unaware of the discourse markers they do use and why those specific markers have been chosen. Additionally, even with explicit instruction in the use of discourse markers, the weak semantic link between discourse markers and their function in discourse makes it difficult for language learners to note their use of their native language discourse markers, as well as successfully replacing them with equivalent markers in the target language. In the study, students at all levels were able to acquire some discourse markers. However, the data indicate that explicit instruction alone was less helpful, but that students acquired forms frequently used by their native-speaker instructors. This is consistent with a similar study involving learners of Spanish (Hernández, 2008). It appears that these types of pragmatic resources can be taught, but the most salient method may be rich exposure to a variety of pragmatic and discourse markers. The data also provide evidence that students who did not take up Arabic markers often displayed other disfluencies, which engenders a context in which students who would be likely to need the pragmatic resources provided by the use of discourse markers are also more likely to resort to the discourse markers that require the least effort (i.e., English language discourse markers). Ultimately, proficiency alone is not an accurate predictor of acquisition and use of target language markers; exposure to a wide range of pragmatic and discourse markers appears to be an essential step in acquisition and deployment. Finally, it appears that, cross-linguistically, some markers are more difficult to acquire and deploy. In addition to adding to the literature on cross-linguistic studies of discourse markers, particularly for studies of discourse markers in Arabic, the preliminary findings of this study have implications for second and foreign language research.

(Non)autonomous entities and the choice between existential and possessive constructions in Modern Standard Arabic

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Although languages use very divergent constructional strategies, all existential constructions appear to invariably involve an implicit or explicit locative constituent. This locative constituent either surface as a true locative phrase (e.g. *There is a man in the garden*) or are realized as a possessor noun phrase (e.g. *The table has a round shape*). The close connection between location and possession in the linguistic expression of existence has been explored, inter alia, in the work of Clark (1978), Lyons (1967), Freeze (1992), Koch (2012) and Wang & Xu (2013). However, while much research focuses on the supposed underlying syntactic relation of locative and possessive existential constructions, not much is known about possible semantic factors that could govern the choice between these constructions. Here, we would like to provide a meaning-based account of existential locative and possessive constructions in Modern Standard Arabic (MAS), using the grammaticalized deictic adverb *tammata* (there), or the (explicit or implicit) copula *kāna* combined with the preposition *ladā*, respectively.

To this end, we will examine three possible scenarios: (i) one in which only the existential locative is possible (e.g. 1 vs. 2); (ii) another one in which only the possessive existential is possible (e.g. 3 vs. 4); and (iii) a third one in which the two constructions alternate (e.g. 5 vs. 6).

Our hypothesis is that the choice between locative and possessive existentials is closely linked with the conceptual autonomy of the existential theme (i.e. what is posited to exist) relative to its location or the entity of which it is part. Our data, covering a range of ontologically different existential entities (physical objects, events, body parts, essential qualities, feelings, etc.) lend support to this autonomy hypothesis. The construction with *tammata* is the only possible one to express the existence of a fully autonomous (i.e. non-dependent) entity (concrete objects (e.g. 1), events– the ones that Grimshaw called ‘simple’–). The possessive construction with (*kāna*) *ladā* is the only one used to express the existence of fully non-autonomous (i.e. fully dependent on a whole) entities (body parts, dimensions (e.g. 3), essential qualities). The two constructions alternate when the existential theme is conceptually dependent but separable of the whole, either because it has an autonomous (independent) existence of the given whole (object parts (e.g. 5a, 6a)), or because it receives a relative autonomy in the speech through a modifier (accidental qualities, feelings (e.g. 5b, 6b), psychological states, among some other kinds of themes). Finally, we will show that kinship terms (e.g. son), which at first sight may seem to constitute counterexamples to our hypothesis, are nonetheless supported by it.

The ontological (non-)autonomy of located or possessed entities is also reflected by morphosyntactic properties, among them the use and the choice of determiners, pluralisation and the behavior of entities in the context of associative anaphora.

Selected data

- (1) *ṭammata* *rağulun* *fi* *l-ḥadīqati*
adv.Loc. man.Nom.Indef. in the-garden.Gen.
'There is a man in the garden'
- (2) *(*kāna*) *ladā* *l-ḥadīqati* *rağulun*.
(was) to the-garden.Gen. man.Nom.Indef.
'*The garden has/had a man' (autonomous existential theme)
- (3) *ladā* *ṭ-ṭawilati* *şaklun* *dā'iriyyun*.
to the-table.Gen. shape.Nom.Indef. round.Nom.Indef.
'The table has a round shape'
- (4) **ṭammata* *şaklun* *dā'iriyyun* *ladā/fi* *ṭ-ṭawilati*
adv.Loc. shape.Nom.Indef. round.Nom.Indef. to/in the-table.Gen.
'*There is a round shape in the table'
- (5a) *ladā* *s-sayyāрати* *muḥarrikun* *kahrabā' iyyun*
to the-car.Gen. motor.Nom.Indef. electric.Nom.Indef.
'The car has an electric engine'
- (5b) *ladā* *muḥammadin* *ḥubbun* *lā* *yūşafu* *li-zawğati-hi*
to Mohamed love.Nom.indef. neg. described to-wife.Gen.-Poss.Pron..
'Mohamad has an indescribable love for his wife'
- (6a) *ṭammata* *muḥarrikun* *kahrabā' iyyun* *fi* *s-sayyāрати*
adv.Loc. motor.Nom.Indef. electric.Nom.Indef. in the-car.Gen.
'There is an electric engine in the car'
- (6b) *ṭammata* *ḥubbun* *lā* *yūşafu* *ladā* *muḥammadin* *li-zawğati-hi*
adv.Loc. love.Nom.indef. neg. described to Mohamed to-wife.Gen.-Poss.Pron..
'There is an indescribable love in Mohamed for his wife'

Clark, Eve V. 1978. Existential, locative, and possessive constructions. Joseph H. Greenberg (ed.), *Universals of Human Language*, volume 4, pp. 4.85-126. Stanford: Stanford University Press.

Freeze, Ray. 1992. Existentials and other locatives. *Language* 68 (3), 553-595.

Koch, Peter. 2012. Location, existence, and possession: A constructional-typological exploration. *Linguistics* 50 (3), 533-603.

Lyons, John. 1967. A note on possessive, existential, and locative sentences. *Foundations of Language* 3: 390–396. Wang, Yong and Xu, Jie. 2013. *A systemic typology of existential and possessive constructions*. *Functions of Language* 20 (1), 1-30.

Systematic Polysemy in Arabic¹: A Generative Lexicon-based Analysis

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The phenomenon of systematic polysemy (henceforth SP) remains one of the vexing issues in the literature of lexical semantics and in other meaning-oriented disciplines such as lexicography. SP refers to “word senses that are distinct, but which follow a general pattern or rule in the language” [1]. For example, the noun *bottle* in ‘*Lily opened the bottle*’ refers to the ‘container’ sense, whereas it refers to the ‘content’ sense in ‘*Lily drank the whole bottle*’; thus, the relationship that holds between the ‘container’ and ‘content’ senses is deemed systematic.

In Arabic, SP receives no attention in the current literature, nor had it been the case even in the old literature, too. Examples (1-2) below demonstrate the very nature of SP in Arabic noun class.

(1) qaraʔa² Zayd-un kitaab-a al-mudarris-i
read.PERF.3.M.SG Zayd -NOM book.SG-ACC DEF-teacher.3.M.SG-GEN
‘Zayd read the teacher’s book’

(2) ishtaraa Zayd-un kitaab-a al-mudarris-i
buy.PERF.3.M.SG Zayd-NOM book.SG-ACC DEF-teacher.3.M.SG-GEN
‘Zayd bought the teacher’s book’

Noun alternations, similar to that of ‘*kitaab*’, express two different, but distinct senses: the information and the physical object, respectively. This nature of SP (or ‘facets’ in Cruse’s term [2]) is very crucial in underlying the compositional meaning the words bear in a given construction. Nouns of this alternation type (i.e. physical object-information type) seem to convey a regular polysemous pattern that is pervasive in the Arabic language.

Verb alternations in Arabic, on the other hand, interestingly seem to follow a different trend from that of English’s, especially in the causative/ inchoative pattern. Verbs in English such as *break* and *sink* (see example 3) encode two eventive readings in the causative/inchoative type [3], and both are morphologically unmarked; giving rise to SP. In Arabic, however, the causative/inchoative type is morphologically marked (see example 4a-b), and both correspond to different *V-Forms* (typically Form II for the causative and Form VII for the inchoative), with some registered differences between MSA and JA, though.

(3) The boy *broke* the window. (causative)
The window *broke*. (inchoative)

(4) a. *Kasar* al-walad-u al-naafiḏa-ta
CAUS.break.PERF.3.M.SG DEF-boy.3.M.SG-NOM DEF-window.F.SG-ACC
‘the boy broke the window’

b. *In-kasar-at* al-naafiḏa-tu
INCHO-break.PERF.3.SG-F DEF-window.F.SG-NOM
‘the window broke’

¹ The use of ‘Arabic’ in this paper specifically refers to both Modern Standard Arabic (MSA) and Jordanian Arabic (JA) only. Any reference to either of both, when required, will be identified as MSA or JA.

² See the table of Arabic transcription system on page 2.

The current research aims at offering a working definition of the phenomenon within Pustejovsky's Generative Lexicon (GL) enterprise. A qualitative method is adopted in order to seek an in-depth understanding of SP and to give explanations to the phenomenon. Data obtained in MSA and English are of primary source; that is literature-based, and data obtained in JA are intuitively-driven. The current research goal is to provide insights which are useful to addressing the issue of SP, especially in the fields of lexical analysis and Arabic lexicography, since lexicography is interested in defining and disambiguating words and their (multiple) senses.

Table of Arabic Transcription System

q	Voiced uvular stop
ʔ	Voiceless glottal stop
ð	Voiced dental fricative
aa	Long vowel
i	Short vowel

- [1] Murphy, M Lynne. (2010). Lexical meaning. Cambridge Textbooks in Linguistics. Cambridge University Press, pp.89.
- [2] Cruse, D.A. (2000). Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford Textbooks in Linguistics. Oxford University Press.
- [3] Pustejovsky, James. (1995). The Generative Lexicon. Cambridge, Mass.: MIT Press, pp. 183-193.

Egyptian Railways Vocabulary

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This paper discusses the *English-Arabic vocabulary compiled in connection with the Egyptian State Railway Signalling School Lectures (Qāmūs mūğaz inğilīzī - ‘arabī ‘an mufradāt muḥādarāt madrasat al-bulūk bi-maṣlaḥat sikak ḥadīd al-ḥukūma al-miṣrīya)*. This booklet, published by the Egyptian State Railways, consists of 32 pages of railways related vocabulary, containing in total 1143 lemmata. The work has no author and is undated, although a bookseller’s stamp narrows down its publication date to the first half of the twentieth century.

The text is divided into three columns, giving the vocabulary in English, in transcribed (Egyptian) Arabic and in Arabic script. The lemmata concern anything related to the railways, trains, or stations. They include technical vocabulary related to mechanical parts of the trains (e.g. “head break *issibinsa il’amāmiyya*”), the manoeuvring of the trains (e.g. “shunting *minawra*”), and the railroads (e.g. “four foot *bēn išširiṭēn*”). The vocabulary also contains the terms for the workers of the railways (e.g. “fireman *‘atašgi*”, “waggon examiner *barrād il‘arabiyyāt*”), the administration and services (e.g. “urgent message *buṣla musta‘gila*”, “ticket tube *nahr ittazākir*”), and any other vocabulary anybody would need in and around a train station or the railways.

The paper discusses the etymology of the lexical items given in the vocabulary, which often have influences from French and English, and sometimes also Turkish and Italian. Some of the words have become obsolete, while others are still in use, but are not mentioned in the *Dictionary of Egyptian Arabic* by Badawi and Hinds (1986). Also the discrepancies between the translations in transcription and Arabic script which occur in some lemmata will be discussed.

Al-qi:l wa-l-qa:l. Alliteration, Assonance and Recurrence in Arabic Medieval Texts

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Multiword units are an important and marked means of expression not only in Arabic. Common definitions see them as collocations (or groups of words) that co-occur statistically more frequently than chance and cover various types of common phrases and/or multiword terms. As such, they have been studied extensively both in Corpus Linguistics and Natural Language Processing circles, but studies in the field of Arabic linguistics appear as well (for Corpus linguistics in general cf. e.g. Wang 2005; for Arabic and NLP e.g. Hawwari et al. 2012; for repetition in Arabic in general esp. Johnstone 1991; for repetition based on identical roots in medieval Arabic esp. Diem 2005). Arabic is known for favouring various types of repetition.

This contribution deals with special form of such repetition, where the repeated items are similar (but not identical; the difference usually being expressed by variation of one grapheme – such as *al-qi:l wa-l-qa:l*, *al-ḍikr wa-l-fikr*, *nafaṣ ʔaw/wa- dafaṣ*, etc.; part of *jina:s* in Arabic rhetorical tradition, cf. Abdul-Raof 2006: 261ff.). Such units have strong euphonic impact and reflect word play and language games. The study builds on data from the CLAUDia historical corpus of Arabic (currently, 400 mil. words; information on genres, chronology and authors is available). Excerpts have been obtained by the use of a computerized algorithm allowing elimination of prepositions, but also allowing variations in accordance with Arabic orthographic usage (e.g., constructions like *wa-li-l-*). The result takes into consideration only content words. From the list, candidate entries have been selected manually, only units with frequency higher than 30 have been considered (the resulting list contains more than 400 items). As such, these units cover a wide range of linguistic concepts, from pure units with one (and often stable) meaning to units built on a combination of two synonyms (or antonyms) that are capable of further adaptation. Most of them are binomials.

Out of many possibilities how to investigate such phenomenon, that include analysis on phonological, morphological, lexical, syntactic and pragmatic levels (but also the chronological dimension – usage in a given period, etc.), in this contribution we concentrate on the study of lexical, syntactic, as well as on the stylistic characteristics. The lexical analysis focuses on the types of derivation and lexical cohesion, the syntactic one deals especially with types of structures, possible distance between items, alterations of the constructions and possible open slots (i.e., further adaptation of the constructions). The stylistic analysis is limited mainly to the occurrence in individual genres of the medieval Arabic literature).

Self-references omitted.

Abdul-Raof, Hussein. 2006. *Arabic Rhetoric. A pragmatic analysis*. London (Routledge) 2006.

Diem, Werner. 2005. *Wurzelrepetition und Wunschsatz. Untersuchungen zur Stilgeschichte des arabischen Dokuments des 7. bis 20. Jahrhunderts*. Wiesbaden (Harrassowitz).

Hawwari, Abdelati – Kfir Bar – Mona Diab. 2012. *Building an Arabic Multiword Expression Repository*. Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics, Jeju, Republic of Korea, 12 July 2012, p. 24–29.

Johnstone, Barbara. 1991. *Repetition in Arabic Discourse*. Amsterdam (Benjamins).

Wang, Shih-ping. 2005. *Corpus-based approaches and discourse analysis in relation to reduplication and repetition*. *Journal of Pragmatics* 37 (2005), p. 505–540.