

The Exponents of Eleven Simple, Universal Concepts in Three Semitic Languages

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مُلَخَّصٌ

نظريّة اللّغة-المعرفة الدّلاليّة الطّبيعيّة (NSM) تُنادي بوجود 65 مفهوماً بسيطاً وعالمياً؛ هذه المفاهيم تُعرف بـ "المعاني الأولى". يُمكن إثبات بساطة هذه المفاهيم عن طريق استحالة تعريفهم بكلمات أبسط، بينما يُبرهن عن عالميتهم عن طريق إيجاد نظرائهم في أكبر عدد ممكن من اللّغات المختلفة جغرافياً ووراثياً. في هذه المقالة، أكتشف النقاب عن مقابلات أحد عشر معنى أولياً في ثلاث لغات: اللّغة العربيّة الفصحى، اللّغة العربيّة الجسّية، واللّغة العبريّة.

Abstract

The Natural Semantic Metalanguage (NSM) theory makes the claim that there are 65 concepts that are simple and universal; these are called semantic primes in NSM. Their simplicity is proven by the fact that they cannot be defined via simpler terms, while their universality is proven by finding their exact equivalents in as many geographically and genetically different languages as possible. In this paper, I identify the exponents of eleven semantic primes in three Semitic languages: Standard Arabic, Jish Arabic, and Hebrew.

Keywords: Natural Semantic Metalanguage; relational substantives; determiners; quantifiers; Jish Arabic; Standard Arabic; Hebrew.

1. Introduction

1.1 The Natural Semantic Metalanguage

The concept of a “semantic prime” is the most fundamental concept in the Natural Semantic Metalanguage (NSM), a semantic theory developed by Anna Wierzbicka, Cliff Goddard, and colleagues since the 1970s. Semantic primes are 65 in number, and they have two main characteristics.

The first characteristic is simplicity; each of the 65 semantic primes is so simple that it cannot be defined using simpler terms. Consider, for example, the English pronoun *I*, which is regarded as a semantic prime. It is normally defined as “first-person singular pronoun,” but while *I* is understood by even very young English-speaking children, the words *singular* and *pronoun* are not.

The second characteristic is universality; these 65 semantic primes are said to have exact equivalents in all languages. Proving the universality of a word is harder than proving its simplicity. Simplicity is proven by the trial-and-error method (i.e. we try to define a candidate word using simpler words; if we fail, this word is said to be a semantic prime if and only if it is also universal). Universality, on the other hand, requires checking the counterparts of this candidate word in all languages. Doing this borders the impossible, given the relatively large number of languages (about 7,000) and the relatively small number of linguists who are interested in this field and who are qualified to do this kind of semantic investigation. But, then, how can one prove that a certain word (or, more accurately, concept) is universal? The answer lies in investigating as many languages that are distinct from each other as possible.

Semantic primes have been identified in geographically and genetically different languages (Goddard and Wierzbicka 1994, 2002; Goddard 2008; Peeters 2006), which lends support to the premise that they are universal human concepts. As has been mentioned, the number of these primes currently stands at 65, as can be seen from the table below:

Table 1: English exponents of semantic primes (Goddard and Wierzbicka 2014)

Notes: • Primes exist as the meanings of lexical units (not at the level of lexemes)

- Exponents of primes may be words, bound morphemes, or phrasemes
- They can be formally complex
- They can have language specific combinatorial variants (allolexes) indicated by ‘~’
- Each prime has well-specified syntactic (combinatorial) properties.

English exponents	Semantic group
I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	Substantives
KIND, PART	Relational substantives
THIS, THE SAME, OTHER~ELSE	Determiners
ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL	Quantifiers
GOOD, BAD	Evaluators
BIG, SMALL	Descriptors
THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR	Mental predicates
SAY, WORDS, TRUE	Speech
DO, HAPPEN, MOVE, TOUCH	Actions, events, movement, contact
BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING), BE (SOMEONE)'S	Location, existence, possession, specification
LIVE, DIE	Life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	Time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE	Space
NOT, MAYBE, CAN, BECAUSE, IF	Logical concepts
VERY, MORE	Intensifier, augmentor
LIKE	Similarity

Different realizations of the same semantic prime are called *allolexes*. There are two main kinds of allolexes, positional and combinatorial. A positional allolex is an allolex that is needed because of the changing of the position of the semantic prime in the sentence, e.g. nominative I vs. oblique ME. A combinatorial allolex is an allolex that is called for because of the combination of the semantic prime with other words; for instance, the English exponent THIS is used with singular nouns while the allolex THESE with plural nouns (Goddard and Peeters 2006).

As has been mentioned, semantic primes have been investigated and identified in a number of languages. Yet, not all of them have been identified in Arabic and Hebrew, two Semitic languages. Investigating all the Arabic and Hebrew semantic primes in one paper is

impossible owing to space constraints. Habib (2019) identified the exponents of the substantives (I, YOU, SOMEONE, SOMETHING, PEOPLE, BODY). In this paper, I will explore the exponents of the relational substantives (KIND, PART), determiners (THIS, THE SAME, OTHER), and quantifiers (ONE, TWO, SOME, MANY, FEW, ALL) in Standard Arabic, Jish Arabic, and Hebrew. Identifying these (as well as the other) exponents helps us translate explications (definitions using semantic primes and semantic molecules only) into Arabic and Hebrew; it also underpins the hypothesis that semantic primes are universal.

1.2 Standard Arabic, Jish Arabic, and Hebrew

Arabic is one of the top most spoken languages in the world (Noack and Gamio 2015). Twenty two countries have it as their official language, about 1.8 billion people regard it as their sacred language, and around half a billion people speak one of its forms natively (Holes 2004).¹

Arabic is diglossic, having two genetically-related varieties: standard and non-standard (cf. Schiffman 1997). The standard variety comprises only one form, which is used in written literature, news, education, and most formal settings (e.g. parliamentary sessions). Additionally, this form is not the mother tongue of anyone. On the other hand, the non-standard variety consists of many forms, and each form is the mother tongue of a certain community. Those non-standard forms which are geographically close to each other are mutually intelligible.

In general, ordinary Arabs regard the standard form as a language and the non-standard forms as dialects of the same language. While some linguists may agree with this on the basis of the criterion of mutual intelligibility (Alsahafi 2016), others may not agree on the basis that only those non-standard varieties which are geographically adjacent to each other are mutually intelligible while those which are at the ends of this chain are not, unless Arabic-speakers are exposed to them, say via the media (Ech-Charfi 2019). Delving into this issue is outside the scope of this paper, especially if we bear in mind that drawing a satisfactory distinction between language and dialect is “one of the most difficult theoretical issues in linguistics” (Crystal 1997, 25).

In this paper, I will investigate, besides Standard Arabic and Hebrew, a non-standard form of Arabic which I, among other people from Jish, speak natively. Jish is a town of 3,000 people,

¹ See also: “List of Countries Where Arabic is an Official Language”. Retrieved from http://en.wikipedia.org/wiki/List_of_countries_where_Arabic_is_an_official_language (accessed October 11, 2018).

and it lies in the north of Israel, close to the Israeli-Lebanese borders. Jish Arabic, like any non-standard Arabic form, is not officially recognized, and its use in writing is restricted to text messaging, some local posters, and the like (cf. Habib and Kurzon 2008).

Hebrew is the official language of the State of Israel. In Israel, it is spoken natively by about 6.5 million Jews and is spoken as a second language by around 1.8 million Arabic speakers. The Hebrew that I am investigating is not Biblical Hebrew but rather Modern Hebrew, otherwise called ‘Israeli Hebrew,’ or ‘Israeli’ (Rozen 1962; Junger 1987; Zuckermann 2009). This language was revived in the late 19th century by Eliezer Ben Yehuda (1858-1922). While its roots are found in Biblical Hebrew, some, if not many, of its semantic and syntactic features are based on Yiddish. Thus both Biblical Hebrew and Yiddish are considered primary contributors to Modern Hebrew (Zuckermann 2004, 2009, 2005).

2. Methodology

The method that I follow in identifying the exponents of the eleven semantic primes mentioned above is the one used in Habib (2019). Habib relies on the following guidelines:

1. In a given language, if (a) there appears to be only one candidate for a certain semantic prime, and (b) this candidate satisfies all the combinatorial frames² of the semantic prime, then this candidate is to be regarded as the exponent of this semantic prime.
2. If (a) there appear to be two or more candidates for a certain semantic prime, but (b) only one of them satisfies all the combinatorial frames of the semantic prime, then only this candidate is to be regarded as the exponent of this semantic prime.
3. If (a) there appear to be two or more candidates for a certain semantic prime, and (b) all of them satisfy all the combinatorial frames of the semantic prime, but (c) only one of them seems to be semantically simpler than all the others, then only this candidate is to be regarded as the exponent of the semantic prime.
4. If (a) there appear to be two or more candidates for a certain semantic prime, and (b) all of them satisfy all the combinatorial frames of the semantic prime, and (c) there does not appear to be any semantic difference between them, but (d) one of them is much more frequent than

² A combinatorial frame (also called ‘canonical construction’) is a sentence that is simple and universal. It cannot be simplified further, and it has exact equivalents in all languages.

all the others, then only this candidate is to be regarded as the exponent of the semantic prime.³

5. If (a) there appear to be two or more candidates for a certain semantic prime, and (b) all of them satisfy all the combinatorial frames of the semantic prime, and (c) there does not appear to be any semantic difference between them, and (d) they are not (much) different in their frequency, then all of them are to be regarded as allollexes of the exponent of the semantic prime.

A note on frequency is in order; Habib (2019) provides two reasons for relying on frequency to rule out candidates. The first reason relies on the idea that infrequent words might not be known to young children, which may indicate that they are not conceptually simple. The second reason is practical; it can be that, of all the possible candidates, none is more complex than the others, but, since one is at least twice more frequent than each of the others, it is selected as the exponent of the semantic prime for matters of convenience. To illustrate, assume that, in a certain language, 10 candidates for a certain semantic prime were identified, but the sole difference between them is that one of them is at least twice more frequent than every other candidate. Introducing all of them as allollexes of the same exponent of that semantic prime may be correct but not practical. At the end of the day, we just need to use only one of them in defining other words.

Following in the footsteps of Habib (2019), I will use corpus analysis in order to check frequency. A corpus is a collection of a myriad of texts coming from variant sources. To check frequency in Standard Arabic, I will use the ArabiCorpus (150+ million words), and, for Hebrew, I will use HebrewCorpus (170+ million words).⁴

In the next sections, I attempt to provide a relatively detailed account of the Arabic and Hebrew exponents of NSM relational substantives (Section 3), determiners (Section 4), and quantifiers (Section 5). Owing to space constraints, however, I do not always deal with all the complexities that arise. For the same reason, I also do not provide all the possible combinatorial frames and allollexes for each exponent.

³ Habib (2019) notes that the phrase ‘much more frequent’ is vague. He writes, “what number of occurrences would determine the difference between ‘not much more frequent,’ ‘more frequent,’ and ‘much more frequent’? The answer is in no way simple. In this paper, I abide by the following: Of two candidates, if the first is at least twice more frequent than the other, I regard the first as the exponent. I should note that I will not always be able to check the frequencies of the candidates. This is because Arabic and Hebrew have consonantal writing systems, and therefore, a given word can highly likely be homonymous. Checking the frequency then would require a meticulous checking of every context, a task that can be tremendously time-consuming.”

⁴ It is worth noting that these corpora are constantly updating.

3 Relational substantives

3.1 KIND and PART

KIND and PART constitute an integral part of many explications. For instance, KIND may be needed if we want to describe a certain being as an entity of one kind (see, e.g., Habib 2011a, 2011b). PART may be called for if we want to talk about different parts of the (imagined) body of that being.

The exponents of these two semantic primes are lexicalized as NAW‘ and JUZ‘ in Standard Arabic, NŌ‘ and JUZE‘ in Jish Arabic, and SUG and KHELEK in Hebrew. Similar to KIND and PART, these exponents can occur with both determiners and quantifiers.

3.1.1 Standard Arabic: NAW‘ and JUZ‘

There are three candidates for KIND in Standard Arabic: *naw‘*, *ṣinf*, and *jins*. The three do not seem to be semantically different. However, ArabiCorpus shows that the first of the three candidates is much more frequently used than the other two. For instance, the phrase *naw‘ min* ‘kind of’ occurs 17,516 times in this corpus; on the other hand, the phrases *ṣinf min* and *jins min* occur only 549 and 182 times, respectively, in the same corpus. This being so, *naw‘* is the most appropriate exponent of KIND.

With regard to PART, there are two candidates, i.e. *juz‘* and *qism*. The latter is polysemous and can mean either PART or SOME. Whilst there does not seem to be any paraphrasable semantic difference between *juz‘* and *qism* when *qism* means PART, I propose the former as the exponent of the semantic prime on the grounds that it is much more frequent. To give an indication of the two words’ different frequencies, the phrase *juz‘ min* ‘part of’ appears 18,369 times in ArabiCorpus, whereas *qism min* with both meanings of ‘some of’ and ‘part of’ appears only 1,566 times in the same corpus. Example (1) below illustrates the use of these two exponents:

- (1) *naḥs-u n-naw‘-i / l-juz‘-i*
same-NOM DEF-kind-GEN/ DEF-part-GEN
‘the same kind/part’

3.1.2 Jish Arabic: NŌ‘ and JUZE‘

In Jish Arabic, the exponents of KIND and PART are straightforward (in the sense that each prime has only one exponent) and do not raise any problem. They are realized as NŌ‘ and JUZE‘, respectively. The following is an example of their use in a canonical construction:

- (2) *nafs in-nō' / l-juze'*
 Same DEF-kind / DEF-part
 'the same kind/part'

It is worth noting that one may claim that these two exponents are “recent” borrowings from Standard Arabic, and therefore, should not be part of the NSM inventory. Whether they are recent or not is not really relevant, as these two words exist in Jish Arabic and are frequently used. This being so, there is no problem in identifying them as the exponents of KIND and PART.

3.1.3 Hebrew: *SUG* and *KHELEK*

In Hebrew, there is only one candidate for PART, viz. *KHELEK*, but four candidates for KIND, and they are *sug*, *min*, *zan*, and *tipus*. Of the four, only *sug* is to be regarded as the exponent of the semantic prime because (1) it is much more frequent than the others when it comes to structures of the type *X is a kind of Y*, and (2) it is the only candidate that can be used in some combinatorial frames, such as ‘women[m] are a kind of people. Example (3) illustrates the use of these two exponents:

- (3) *oto sug / khelek*
 same kind / part
 'the same kind/part'

4. Determiners

Determiners in general, and the determiner *THIS* in particular, are among the most ubiquitous semantic primes in NSM explications. Their ubiquity can be ascribed to the need for their use to make reference points. To exemplify this, if an entity is defined as ‘someone of one kind,’ a reference to this concept, such as ‘this someone’ or ‘someone of this kind,’ would be required in the rest of the explication components.

4.1 *THIS*

4.1.1 Standard Arabic: *HĀDHĀ*

THIS is realized in Standard Arabic as *HĀDHĀ*. *HĀDHĀ* agrees in number and gender (in singular and dual) with the word it modifies, and therefore, it has the following combinatorial allollexes, *HĀDHIHI* [this(SG.F)], *HĀDHĀN* [this-DU.M], *HĀTĀN* [this(DU.F)], and *HĀ'ULĀ'I* [this(PL)]. The plural form is normally used to modify nouns that refer to human beings. Nouns referring to

non-human entities are normally modified by the singular feminine form HĀDHIH. Akin to English THIS, Standard Arabic HĀDHĀ can function not only as a determiner, but also as a quasi-substantive, as in example (4). It can also function as a complement of the predicates KNOW, WANT, HAPPEN, SEE, HEAR, DO, and SAY, as in (5):

- (4) *hādhā jayyid-u-n.*
 this(SG.M) good(SG.M)-NOM-INDF
 ‘This is good.’
- (5) *hā’ulā’i n-nās-u ya-‘rif-ū-na hādhā.*
 this(PL) DEF-people-NOM 3-know-PL.M-IND this(SG.M)
 ‘These people know this.’

The combination LIKE THIS is realized as the portmanteau HĀKADHĀ, as can be seen from example (6):

- (6) *an-nās-u yu-fakkir-ū-na hākadhā.*
 DEF-people-NOM 3-think-PL.M-IND like.this
 ‘People think like this.’

4.1.2 Jish Arabic: HĀDĀ

The primary exponent of THIS in Jish Arabic is HĀDĀ, whose combinatorial allomorphs are HAY [this(SG.F)] and HADŌL [this(PL)]. Besides being a determiner, HĀDĀ can be used for the quasi-substantive THIS, as in (7). The portmanteau HĒK is used to express the Jish Arabic near equivalent of the English combination LIKE THIS, as can be seen from example (8). This same portmanteau is also used as a complement to the predicates WANT, HAPPEN, DO, and SAY (see example (9)) but not to the predicates KNOW, SEE, and HEAR, which require *hādā l’ishī* ‘this thing’ to be their complements instead. The use of the near equivalent of LIKE THIS as a complement for some predicates is reminiscent of Malay, where *kata* ‘SAY’ and *fikir* ‘THINK’ do not take as their complements the determiner *ini* ‘THIS’ but rather *macamini* ‘LIKE THIS’ (Goddard 2002).

- (7) *hādā mnīḥ.*
 this(SG.M) good(SG.M)
 ‘This is good.’

- (8) *hadōl in-nās āl-ū hēk.*
 this(PL) DEF-people say-3PL like.this
 ‘These people said this.’
- (9) *in-nās bi-fakkr-ū hēk.*
 DEF-people 3-think-PL like.this
 ‘People think like this.’

4.1.3 Hebrew: ZE

ZE is the exponent of THIS in Hebrew. This form is used as both a determiner and a quasi-substantive, and its combinatorial allolexes include ZOT [this(SG.F)] and ELE [this(PL)]. No additional allolex is used for the quasi-substantive THIS or as a complement to the predicates KNOW, WANT, HAPPEN, SEE, HEAR, DO, or SAY. Contrary to its Arabic counterparts, Hebrew ZE agrees with its modified noun in definiteness, as shown in example (10).

- (10) *ha-anashim ha-ele y<o>d`-im et ze.*
 DEF-people DEF-this(PL) know<PRS>-PL.MP REP this(SG.M)
 ‘These people know this.’
- (11) *ze tov.*
 this(SG.M) good(SG.M)
 ‘This is good.’

The combination LIKE THIS is realized as KAKHA; here is an example:

- (12) *anashim kh<o>shv-im kakha.*
 people think<PRS>-PL.M like.this
 ‘People think like this.’

4.2 THE SAME and OTHER

The semantic prime THE SAME is needed in order to talk about similarities and differences between entities, actions, or situations belonging to the *same* kind. The semantic prime OTHER is needed, inter alia, to express the idea that two or more things, persons, or groups of people are different in a certain aspect.

THE SAME and OTHER are realized as NAFS and ĀKHAR in Standard Arabic, NAFS and TĀNĪ in Jish Arabic, and OTO and AKHER in Hebrew.

The exponents of THE SAME precede the nouns they modify in all three languages investigated here. In Standard Arabic and Jish Arabic, there is not any kind of agreement between

the exponents of THE SAME and the nouns they modify. On the other hand, the Hebrew exponent OTO agrees in gender and number with its modified noun, resulting in the combinatorial allolexes OTA [the.same(SG.F)], OTAM [the.same(PL.M)], and OTAN [the.same(PL.F)].

Unlike English and some other languages (Goddard 2002; Gladkova 2007), the Arabic and Hebrew exponents of THE SAME cannot function as quasi-substantives. That is, the exponents of this semantic prime cannot designate a noun or noun near equivalent; they can function as adjectives only. A sentence such as ‘I want the same,’ which can be regarded as elliptical, does not have elliptical near equivalents in Arabic and Hebrew. Therefore, it can be rendered in these languages only as the near equivalent of the un-elliptical English sentence ‘I want the same thing.’ This suggests that the use of THE SAME as a quasi-substantive should not be regarded as a canonical part of NSM any longer.

The exponents of OTHER follow the nouns they modify in all three languages investigated, and they combine freely with the semantic prime PLACE and with all the substantives, save I and YOU. In Standard Arabic, ĀKHAR agrees with the noun it modifies in case, gender, number, and definiteness; the combinatorial allolexes of ĀKHAR are thus UKHRĀ [other(SG.F)], ĀKHARĀN [other-NOM.DU.M], UKHRAYĀN [other(NOM.DU.F)], ĀKHARŪN [other-NOM.PL.M], and UKHRAYĀTU [other(NOM.PL.F)]. The Jish Arabic TĀNĪ inflects for gender, number, and definiteness; its combinatorial allolexes include TANYĪN [other-PL.M] and TANYĀT [other-PL.F]—no special allolex is used as the singular feminine form. Like its Jish Arabic counterpart, the Hebrew AKHER agrees with the noun it modifies in gender, number, and definiteness; its combinatorial allolexes include AKHERET [other-SG.F], AKHERIM [other-PL.M], and AKHEROT [other-PL.F]. Contrary to English, Arabic and Hebrew do not have positional allolexes for the exponents of OTHER.

Examples (13)-(15) illustrate the use of Standard Arabic NAFS, Jish Arabic NAFS, and Hebrew OTO, respectively:

- (13) *anā sami‘-tu nafs-a sh-shay’-i.*
 I hear-1SG the.same-ACC DEF-thing-GEN
 ‘I heard the same thing.’
- (14) *anā smi‘-et nafs il-ishī.*
 I hear-1SG the.same DEF-thing
 ‘I heard the same thing.’

- (15) *ani shama`-ti oto ha-davar.*
 I hear-PST.1SG the.same(SG.M) DEF-thing
 ‘I heard the same thing.’

Examples (16)-(18) illustrate the use of Standard Arabic ĀKHAR, Jish Arabic TĀNĪ, and Hebrew AKHER, respectively:

- (16) *anā sami`-tu shay`-a-n ākhar-a.*
 I hear-1SG thing-ACC-INDF other-ACC
 ‘I heard something else.’
- (17) *anā smi`-et ishī tānī.*
 I hear-1SG thing other
 ‘I heard something else.’
- (18) *anī shama`-ti mashehu akher.*
 I hear-PST.1SG something other
 ‘I heard something else.’

5. Quantifiers

5.1 ONE and TWO

The semantic primes ONE and TWO are called for in components that express categorization and/or numbers. That is, components of the kind “someone/something/beings of one kind” (see, e.g., Habib 2011a, 2011b, 2012).

5.1.1. Standard Arabic: WĀḤID and IṬHNĀN

ONE is realized in Standard Arabic as WĀḤID, which is used to modify singular masculine nouns. With singular feminine nouns, the combinatorial allolex WĀḤIDA is used. Like any adjective in Standard Arabic, these two forms follow the nouns they modify, and they agree with them in case and definiteness. There are two more combinatorial allolexes, namely AḤAD [someone(SG.M)] and IḤDĀ [someone(SG.F)], which are used in subset structures, as exemplified in (20):

- (19) *shay`-u-n wāḥid-u-n*
 thing-NOM-INDF one(M)-NOM-INDF
 ‘one thing’

- (20) *aḥad-u ḥādhi-hi l-ashyā’-i*
 one(M)-NOM this-SG.FD EF-thing(PL)-GEN
 ‘one of these things’

ITHNĀN is the exponent of TWO. Because Arabic has a dual system, this form is not frequently used. Its use is almost restricted to emphasizing the duality of a certain entity, as in example (21), or to elliptical constructions, as in example (22).

- (21) *hunālika naw’-āni ithn<ā>ni.*
 there.are kind-NOM.DU two<NOM.M>
 ‘There are two kinds.’

- (22) *ra’ay-tu ithna<y>ni.*
 see-1SG two<ACC.M>
 ‘I saw two (persons/animals/...).’

The dual form is expressed via the suffixes-ĀNI [NOM.DU] and -AYNI [ACC/GEN.DU], which are added to the noun being modified. These suffixes can join the Standard Arabic exponents of THING, KIND, and PART, and SOMEONE but not the exponent of PEOPLE. As Habib (2019) remarks, the phrase ‘two people’ is not a canonical part of NSM because PEOPLE refers to people as a collective group rather than individuals.

- (23) *ḥadatha shay’-āni.*
 happen(1SG.M) thing-NOM.DU
 ‘Two things happened.’

5.1.2 Jish Arabic: WĀḤAD and TNĒN

The primary exponent of ONE in Jish Arabic is WĀḤAD. This exponent has only one combinatorial allolex, viz. WAḤDI, which is used to modify singular feminine nouns. Like their Standard Arabic counterparts, these two forms follow the nouns they modify, and they agree with them in definiteness.

- (24) *ishī wāḥad*
 thing one(M)
 ‘one thing’

The basic exponent of TWO is TNĒN. This form is the masculine form, and its feminine counterpart is TINTĒN. Similar to their corresponding Standard Arabic forms, these two forms are not frequently used due to the existence of the dual form -ĒN. Nonetheless, when they are

employed, they are used for emphasis (and can thus be omitted), as in (25), with certain nouns that do not have dual forms, as in (26), or in elliptical constructions, as is shown in (27).

- (25) *fī nu‘-ēn tnēn.*
 there.are kind-DU two(M)
 ‘There are two kinds.’
- (26) *fī niswān tintēn.*
 there.are woman(PL) two(F)
 ‘There are two women [m].’
- (27) *shuf-et tnēn.*
 see-1SG two(M)
 ‘I saw two (persons/animals/...).’

Like its Standard Arabic counterpart, TNĒN is combinable with the Jish Arabic exponents of OTHER, PLACE, KIND, and PART, but not with the exponent of PEOPLE.

5.1.3 Hebrew: *EKHAD* and *SHNAYIM*

Akin to its Jish Arabic counterpart, Hebrew *ekhad* ONE has one combinatorial allolex, that is AKHAT, which is used to modify singular feminine nouns. The two forms follow the nouns they quantify and agree with them in definiteness. The following canonical construction is illustrative:

- (28) *mashehu ekhad*
 thing one(M)
 ‘one thing’

TWO is realized in Hebrew as SHNAYIM, which is the masculine form; the feminine form is SHTAYIM. When these two forms modify nouns, they change into SHNEY and SHTEY, respectively. Here is one example:

- (29) *shney dvar-im*
 two thing-PL.M
 ‘two things’

SHNAYIM can occur with four semantic prime exponents; they are *akher* OTHER, *makom* PLACE, *sug* KIND, and *khelek* PART. Consider the following examples: *shney mekomot* ‘two places,’ *shney sugim* ‘two kinds,’ and *shney khalakim* ‘two parts’. As these examples demonstrate, SHNAYIM changes into SHNEY.

5.2 MUCH~MANY

The semantic prime MUCH~MANY is needed in the explications of a number of nouns. If linguistic data suggest that people have the idea that there are a large number or amount of a certain entity, MUCH~MANY will have to be used to anchor this notion (see, e.g., Habib 2011a, 2011b, 2012).

5.2.1 Standard Arabic: KATHĪR

MUCH~MANY is realized in Standard Arabic as KATHĪR. This exponent can precede both count and mass nouns and is followed by the preposition *mina* ‘of/from,’ as exemplified by (30). The combination of this exponent with the preposition *mina* is also used in subset structures, such as in (31). When KATHĪR follows masculine mass nouns, the same form of the exponent is used; if the mass noun is feminine, the combinatorial allolex KATHĪRA is deployed.

- (30) *hunālika kathīr-u-n mina n-nās-i.*
there.are many-NOM-INDF PREP DEF-people-GEN
‘There are many people.’

- (31) *ra’ay-tu kathīr-a-n min hā’ulā’i n-nās-i.*
see-1SG many-ACC-INDF PREP these DEF-people-GEN
‘I saw many of these people.’

The Standard Arabic exponent of MUCH~MANY can also follow the noun it modifies. If the noun is uncountable, the same form KATHĪR is used. If the noun is countable, one of the following positional allolexes is used: KATHĪRŪN, KATHĪRĀT, and KATHĪRA, as in (32). KATHĪRŪN and KATHĪRĀT quantify, respectively, masculine and feminine nouns that refer to human beings. KATHĪRA is used to modify masculine and feminine count nouns that refer to non-humans. These three allolexes agree in case with the nouns they modify.

- (32) *hunālika u-nās-u-n kathīr-ūn.*
there.are INDF-people-NOM-INDF many-NOM.PL.M
‘There are many people.’

There is another form, namely *kuthur*, that can follow both masculine and feminine count nouns that refer to human beings. However, it will not be regarded as one of the positional allolexes because it is much less frequent than KATHĪRŪN and KATHĪRĀT.

5.2.2 Jish Arabic: *KTĪR*

The primary exponent of MUCH~MANY in Jish Arabic is *KTĪR*. This exponent occurs before the noun it modifies, whether it is a mass or count noun. It can also occur after a mass noun. When the noun to be modified is a count noun, the compositional allolex *KTĀR* can follow it; this allolex is used for both masculine and feminine nouns referring to both humans and non-humans.

- (33) *fī ktīr nās.*
there.are many people
'There are many people.'

Like its Standard Arabic counterpart, *KTĪR* can occur with the preposition *min* 'of/from' to specify a subset, as shown in the example below.

- (34) *shuf-et ktīr min hadōl in-nās.*
see-1SG many PREP these DEF-people
'I saw many of these people.'

5.2.3 Hebrew: *HARBE*

There are two candidates in Hebrew for the semantic prime MUCH~MANY, viz. *harbe* and *hamon*. The latter is much less frequent than the former; by way of illustration, in HebrewCorpus, *hamon* occurs only 21,090 times whilst *harbe* is found 95,668 times. In addition, *hamon* suggests a 'huge' amount. Consider the following two examples: (1) *bemahalakh ha 'imun atsmo khova lishtot hamon; Loharbe, hamon* 'During the drill itself, it is an obligation to drink *hamon*; not *harbe*, but *hamon*' and (2) *va 'ani shava hamon. Loh arbe, hamon!!* 'I am worth *hamon*; not *harbe*, but *hamon!!*' The first sentence is taken from a passage that instructs bicycle riders to drink a lot of water while cycling. The second sentence is taken from a passage in which a person talks about how any girl/woman would admire her not much but very much. Hence, *harbe* is to be regarded as the basic exponent of MUCH~MANY.

Like its Arabic counterparts, *HARBE* can precede or follow the noun it quantifies. If it precedes it, the form *HARBE* is used; if it follows the noun, and the noun is a count noun, the positional allolexes *RAV*[SG.F], *RABA*[SG.F], *RABIM*[PL.M] and *RABOT*[PL.F] are used; if the noun is a mass noun, only *RAV*[SG.F] and *RABA*[SG.F] can be deployed.

- (35) *yesh harbe anashim.*
there.are many people
'There are many people.'

In subset constructions, HARBE is followed by the preposition *me* ‘of/from.’

- (36) *ra`i-ti harbe me-ha-anashim ha-ele.*
 see-PST.1SG many PREP-DEF-people DEF-these
 ‘I saw many of these people.’

5.3 LITTE~FEW

This semantic prime is relatively new (Goddard and Wierzbicka 2014) and has not been studied cross-linguistically. In addition, whether *little~few* or *a little~a few* should be regarded as the English exponent of the semantic prime remains an open question. Such a problem does not seem to arise in Standard Arabic and Jish Arabic, but it does seem to arise in Hebrew, as will be discussed below.

5.3.1 Standard Arabic: QALĪL

In Standard Arabic, there are two candidates, *qalīl* and *biḍʿ*. The former is to be regarded as the exponent of the semantic prime because the latter cannot modify mass nouns. If QALĪL precedes the noun it modifies, as in (37), or occurs in subset structures, as in (38), it is followed by the preposition *mina* ‘of/from.’ If it follows the noun it modifies, it agrees with it in number, gender, and case.

- (37) *hunālika qalīl-u-n mina n-nās-i.*
 there.are few-NOM-INDF PREP DEF-people-GEN
 ‘There are a few people.’
- (38) *raʾay-tu qalīl-a-n min hāʾulāʾi n-nās-i.*
 see-1SG few-ACC-INDF PREP these DEF-people-GEN
 ‘I saw a few of these people.’

5.3.2 Jish Arabic: SHWAYYET

In Jish Arabic, the exponent is SHWAYYET. This exponent precedes (but never comes after) the noun it modifies, as exemplified in (39).

- (39) *fī shwayyet nās.*
 there.are few people
 ‘There are a few people.’

Like its Standard Arabic counterpart, SHWAYYET can occur with the preposition *min* ‘of/from’ to specify a subset, as shown in the example below. In this case, however, SHWAYYET is

truncated into SHWAYY (see example (40)). I should observe that I do not regard <et> as a suffix, because, apart from this case, it does not seem to attach to any other word.

- (40) *shuf-et shwayy min hadōl in-nās.*
 see-1SG few PREP these DEF-people
 ‘I saw a few of these people.’

5.3.3 Hebrew: MI`AT~KTSAT

In Hebrew, there are two candidates, *mi`at* and *ktsat*. HebrewCorpus shows that both are relatively frequent (*mi`at* occurs 37,804 times, and *ktsat* occurs 31,451 times). It also shows that both can be used with count and non-count nouns. For example, both words can modify the count noun *nashim* ‘women’ and the non-count noun *melakh* ‘salt.’ HebrewCorpus also shows that the two words can be used with abstract and concrete nouns (*mi`at/ktsat izra* ‘[a] little help’ vs. *mi`at/ktsat melakh* ‘[a] little salt’), and both can modify adjectives (*mi`at/ktsat muzar* ‘[a] little strange’). So, at first glance, there seems to be no semantic difference between the two words. However, a closer look reveals that *mi`at* behaves like *little/few*, whereas *ktsat* behaves like *a little/a few*. In support of this argument, consider the fact that the phrase *mi`at me`od* ‘very little/few’ occurs 1,779 times in HebrewCorpus, whereas *ktsat me`od* ‘very little/few’ occurs only 3 times in the same corpus. This suggests that *mi`at* can be used to indicate a smaller number/amount of something than *ktsat* does. Yet, since it is not clear at the moment whether or not *little/few* is simpler than *a little/a few*, I would present both words as exponents of the semantic prime. These two exponents precede the noun they modify, as is shown in example (41):

- (41) *yesh mi`at/ktsat anashim.*
 there.are (a)few people
 ‘There are (a) few people.’

In subset constructions, MI`AT~KTSAT are followed by the preposition *me* ‘of/from’; here is an example:

- (42) *ra`i-ti me`at/ktsat me-ha-anashim ha-ele.*
 see-PST.1SG (a)few PREP-DEF-people DEF-these
 ‘I saw (a) few of these people.’

5.4 SOME

SOME would be needed in the explications of some entity concepts. Like in the case of the semantic prime OTHER, the need for SOME in such explications can be attributed to the fact that different members of a certain kind of entity perform different tasks; therefore, the semantic prime would be required to state that some members do a certain task whereas others do different tasks (see, e.g., Habib 2011a, 2011b, 2012).

5.4.1 Standard Arabic: BA ‘D

The exponent of SOME in Standard Arabic is straightforward; it is realized as BA ‘D. Example (43) illustrates its use in a canonical construction:

- (43) *ba‘ḍ-u n-nās-i yu-fakkir-ū-n hākadhā.*
some-NOM DEF-people-GEN 3-think-PL.M-IND like.this
‘Some people think like this.’

5.4.2 Jish Arabic: ‘IDDET

English *some* can be translated into Jish Arabic as *shwayyet*, *akam*, *fī*, or ‘*iddet*, depending on the context. However, none of these candidates seems to qualify as the exponent of SOME. *Shwayyet* has been suggested as the exponent of FEW~LITTLE (see Subsection 5.3.2 above), and *fī* is the exponent of THERE IS. There is no reason to believe that these words are polysemous. Like *shwayyet*, *akam* is used to denote small numbers; thus its range is narrower than that of SOME, which can be used to refer to any number between ONE and ALL (Wierzbicka 1996). Besides, *akam* cannot be used with collective nouns and mass nouns. ‘*iddet* denotes a vague number, and it seems to be the only possible exponent; however, akin to *akam*, it cannot modify mass nouns. This casts doubt on the primeness (i.e. its being a semantic prime) of SOME. Example (44) shows the use of the exponent in a canonical construction:

- (44) ‘*iddet nās bi-fakr-ū hēk.*
some people 3-think-PL like.this
‘Some people think like this.’

It is worth noting that, in subset structures, such as ‘some of these people,’ ‘*iddet* cannot be followed immediately by the near equivalent of English *of*. Instead, it has to be followed by

the same noun that appears in the prepositional phrase. Thus ‘some of these people’ has to be translated as if it were ‘some people of these people.’

5.4.3 Hebrew: *KAMA*

SOME is realized in Hebrew by means of the adjective *kama*. Like Jish Arabic ‘*iddet*, this exponent cannot modify mass nouns, which, again, casts doubt on the primeness of SOME. Example (45) below illustrates the use of this exponent in a canonical construction:

- (45) *kama anashim kh<o>shv-im kakha.*
 some people think<PRS>-3PL.M like.this
 ‘Some people think like this.’

5.5 ALL

ALL is lexicalized as KULL in both Standard Arabic and Jish Arabic and as KOL in Hebrew. Arabic and Hebrew do not make a distinction comparable to that between English *all* and *every*, a situation that finds echoes in other Semitic languages, such as Amharic (Amberber 2008).

Standard Arabic makes use of another word, that is *jamī‘*, to convey the meaning of English *all*. This word, however, is not to be regarded as the exponent of a prime or an allolex of the exponent because it does not satisfy all combinatorial frames. *Jamī‘* cannot modify mass nouns. It also cannot quantify the singular forms of count nouns; consequently, in the Standard Arabic near equivalent of the phrase ‘all the cake,’ the exponent KULL has to be used whereas the use of *jamī‘* is ungrammatical.

The exponents of ALL in Arabic and Hebrew normally occur before the noun they quantify. If they occur after the noun, a pronoun referring to the head noun is suffixed to them. The portmanteau EVERYONE is expressed in Standard Arabic and Jish Arabic by prefixing the definite article to the exponents of ALL; in Hebrew, the portmanteau KULAM (lit. ‘all of them’) is used. The portmanteau EVERYTHING is expressed as the combination KULL SHAY’ (lit. ‘all thing’) in Standard Arabic and KULLISHĪ (lit. ‘all thing’) in Jish Arabic. In Hebrew, EVERYTHING is expressed by prefixing the definite article to the exponent of ALL. Examples (46)-(48) illustrate the use of Standard Arabic KULL, Jish Arabic KULL, and Hebrew KOL, respectively:

- (46) *kull-u n-nās-i raʿ-aw kull-a shayʿ-i-n.*
 all-NOM DEF-people-GEN see-3PL all-ACC thing-GEN-INDF
 ‘All people saw everything.’
- (47) *kull-in-nās shāf-ū kull ishī.*
 all-EDEF-people see-3PL all thing
 ‘All people saw everything.’
- (48) *kol ha-anashim raʿ-ū ha-kol.*
 All DEF-people see-3PL DEF-all
 ‘All people saw everything.’

6. Conclusion

This paper has identified the exponents of eleven semantic primes in three Semitic languages: Standard Arabic, Jish Arabic, and Hebrew. The identification of these exponents underpins the premise that the relational substantives KIND and PART, the determiners THIS, THE SAME, and OTHER, as well as the quantifiers ONE, TWO, ALL, MANY, and FEW are universal. The Jish Arabic and Hebrew exponents of SOME seem to pose a problem, and this may cast doubt on its universality. In addition to this, this paper can be considered as a contribution to the field of contrastive semantics.

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