THE HEBREW *BE-SAX HA-KOL*: AN EXCLUSIVE ACCOUNT OF AN APROXIMATIVE READING

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1 Introduction

This paper proposes a unified analysis of apparently two unrelated readings of the Hebrew *be-sax ha-kol* (≈all in all), which I label the 'exclusive' and the 'approximative' readings, as in (1) and (2), respectively:

(1) Rina *be-sax ha-kol* pkida
Rina *be-sax ha-kol* clerk
Rina is *be-sax ha-kol* a clerk

(2) Ha-xeder *be-sax ha-kol* naki
The.room *be-sax ha-kol* clean
The room is *be-sax ha-kol* clean

My main claim is that *be-sax ha-kol* is an exclusive operator, under a modified scalar definition of exclusives that I propose, and its various readings follow from the types of scales it operates on. Crucially, unlike *only*, *be-sax ha-kol* can operate both on the classical Roothian scale of alternatives to its prejacent p, and on a scale of alternatives that refer to the degree to which the adjective holds.

On the 'exclusive' reading *be-sax ha-kol* functions like *only*, where the scale contains alternative propositions to p, whereas on the 'approximative' reading it operates on the scale of degrees associated with the adjective it modifies (cf. Kennedy & McNally 2005, K&M, henceforth). I further show that the compatibility of the approximative *be-sax ha-kol* with various adjectives correlates with their scale structure (following K&M's proposal).

In section 1 I present novel observations concerning the distribution and interpretation of *be-sax ha-kol*. In section 2 I suggest a modified definition of exclusives as scalar operators. This definition is inspired by suggestions in Zeevat 2003, Beaver & Clark 2008, and Kadmon & Sevi 2011, with some modifications which overcome some shortcomings in the previous analyses. Section 3 develops the analysis of *be-sax ha-kol*, and shows that applying the definition of exclusives to *be-sax ha-kol* captures correctly its interpretation and distribution. Section 4 summarizes the paper and suggests some directions for further research concerning (a) the focus sensitivity of *be-sax ha-kol* (b) the compatibility of *be-sax ha-kol* with other types of predicates (c) another reading of *be-sax ha-kol*, and (d) implications of the proposed analysis for the semantics of exclusives cross linguistically.

2 The Interpretation and Distribution of *be-sax ha-kol*: Some Novel Observations

be-sax ha-kol functions both as an exclusive and as an approximator. On its exclusive reading, it basically patterns like *only*, as in (3) and (4)

(3) Rina *be-sax ha-kol* ovedet nikayon
Rina *be-sax ha-kol* worker cleaning
Rina is *be-sax ha-kol* a cleaning worker

(4) Danny *be-sax ha-kol* ben 5
Danny *be-sax ha-kol* son 5
Danny is *be-sax ha-kol* 5 years old

On its approximative reading, typically found with adjectives (but not only), *be-sax ha-kol* is interpreted similar to *more or less*:

(5) Haxeder *be-sax ha-kol* yaveS
The.room *be-sax ha-kol* dry
The room is *be-sax ha-kol* dry

(6) Danny *be-sax ha-kol* bari
Danny *be-sax ha-kol* healthy
Danny is *be-sax ha-kol* healthy

Under the approximative reading *be-sax ha-kol* is constrained, as there are predicates with whom *be-sax ha-kol* cannot yield the approximative reading. This is illustrated in (7) and (8) below

(7) #ha-xeder *be-sax ha-kol* meluxlax/ ratov
The.room *be-sax ha-kol* dirty/ wet
The room is *be-sax ha-kol* dirty/ wet

(8) ? Danny *be-sax ha-kol* xole
Danny *be-sax ha-kol* sick
Danny is *be-sax ha-kol* sick

Note, though, that these sentences are fine under the exclusive reading:

(9) haxeder *be-sax ha-kol* meluxlax, hu lo harus
The.room *be-sax ha-kol* dirty, he no destroyed
The room is *be-sax ha-kol* dirty, it's not destroyed

(10) Danny *be-sax ha-kol* xole, hu lo goses
Danny *be-sax ha-kol* sick, he no dying
Danny is *be-sax ha-kol* sick, he is not dying

To account in a unified way for the two readings of *be-sax ha-kol* and for its constrained distribution under the approximative reading, I will propose that *be-sax ha-kol* is essentially an exclusive operator under a modified scalar definition of exclusives that I develop. I show that the various readings of *be-sax ha-kol*, and its distribution, follow from the types of scale it operates on. In the next section I suggest a modified definition of exclusives.

3 A Modified Definition of Exclusives

The definition I propose here is in the tradition of scalar accounts of *only*. In particular, it is inspired by proposals in Zeevat 2003, Beaver & Clark 2008 (B&C, henceforth), and Kadmon & Sevi 2011(K&S, henceforth) with some modifications. The informal definition is given in (11):

(11) Ex = Exclusive operator

EX p **presupposes that p is lower than a salient potential proposition in the scale of alternatives to p, and asserts that it is the actual maximal element in the scale.**

A formal definition is given in (12). Note that for simplicity, I follow B&C in assuming that EX is a sentential operator.

(12)

Presupposition: $p_C \in ALT \wedge p_C \neq p \wedge p_C > p \wedge \exists w_1$ **s.t** $w_1 R_c w_0 \wedge w_1 \neq w_0 \wedge p_C(w_1)$
Assertion: $\forall p'\ [p' \in ALT \wedge p' \neq p] \rightarrow [p'(w_0) \rightarrow p' < p]$
(where p_c is a salient proposition in the context)

In words: Presupposition: p_c is a member of the set of alternatives, which is different from p and stronger than p. And there is a w_1 s.t w_1 is accessible from w_0 and different from w_0, and p_c is true in w_1.
Assertion: For every p', if p' is a member of the alternatives and different from p, then if p' is true in w_0, then it is weaker than p.

I will now motivate the modified/ new components of the definition in (12). In particular, I will relate to the following four components: (a) the requirement that EX p presupposes that a **salient** stronger alternative to p is true, (b) the use of possible worlds semantics, (c) the fact that 'expectation rejection' is not encoded into the definition, and (d) the status of the prejacent.

2.1 *EX p* Presupposes that a Stronger SALIENT Alternative to p Is True

Previous analyses of exclusives, including B&C 2008 and Zeevat 2003, require that alternatives against which EX operates be stronger than p. The requirement for stronger alternatives in the context, against which EX operates, can explain the infelicity of (13)

(13) # I have 20 students, but only 20 students came

As 20 students is the maximal potential number of students that can come, there is no stronger alternative in the context, so we get infelicity. But this requirement alone cannot explain the infelicity of (14):

(14) # I have at least 20 students, but only 20 students came

Intuitively, (14) indicates that the potential number of students that can come is either 20 or higher than 20. In other words, a **stronger** alternative than p **is** present in the context. Thus, given previous scalar analyses of exclusives, (14) is wrongly predicted to be felicitous. But the definition in (12) requires the alternative against which EX operates to be **salient**, and not only **stronger** than p. In (14) the salient alternative is the proposition that the minimal number of students that can come is 20 (cf. Cohen & Krifka (to appear): the speaker grants that 20 is the minimal number of students, and leaves it open whether more than 20 can come). So the **salient** alternative '20 students can come' is **as strong as** p, and not **stronger**. This results in presupposition failure, which leads to infelicity.

Note, though, that the salient alternative might be explicit in the common ground as in e.g.

(15) I expected that 20 students would arrive, but only 15 arrived

Or accommodated, as in (16),

(16) Danny (my brother) has four children so he will stay in this apartment, but Esti (my sister) has only three children, so she can stay in the smaller apartment

The alternative *Esti has four children* is not explicit, but it is 'triggered' (accommodated) by the implicit comparison to my brother who has four children.

2.2 The Use of Possible Worlds Semantics

Intuitively, the scalar account of Exclusives in (12) contains the following two components: a. a presupposition that stronger alternatives than p are true. b. an assertion that p is the strongest true alternative, so stronger alternatives than p are not true.
Prima facie, the presupposition and the assertion seem incompatible.[1] To avoid this apparent incompatibility, I propose that a sentence with an exclusive presupposes that alternatives stronger than p are true in a world which is accessible from the actual world, but crucially, it is different than the actual world (e.g. a world in which the expectations of at least one of the interlocutors are borne out). And it asserts that stronger alternatives than p are not true in the actual world.

2.3 The Status of p

Intuitively, *EX p* strongly implies p. (17), for example, strongly implicates that Rina is a clerk.

(17) Rina is only a clerk

There is an intense debate in the literature regarding the status of p[2]. There is evidence to suggest that p is not an explicit part of the semantics of Exclusives. To illustrate, Ippolito 2005 and van Rooij & Shulz 2005 show that p can be suspended**,** as in (18). They take it to suggest that p is neither presupposed nor asserted: On the one hand, something that has been just asserted cannot be immediately falsified, so we must say that p in (18) is not asserted. On the other hand, traditionally, a presupposition should survive under negation (e.g. Stalnakar 1974), so we cannot take p to be a presupposition.

(18) Only Lucy can pass the test, and it's possible even she can't.

B&C also show that contrary to the traditional claim that p is presupposed as it survives in the family of sentences (Horn 1969), p does not always survive under negation. Consider (19)

(19) She's one of the first and really represents the country and isn't only some blond bimbo with no brains (B&C, pp 250)

(19) does not contain any implication that *she is a blond bimbo with no brains*. Based on examples like (19) (among other things), B&C conclude that p is neither presupposed, nor asserted.
Considering these data, I do not require that p is asserted by Ex p. To capture the fact that it is nonetheless strongly inferred, I will take it to be derived as a conversational implicature in the spirit of McCowly 1981 and van Rooij and Shultz 2005.

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[1] See a discussion of a similar problem in B&C's theory in Orenstein& Greenberg 2011.

[2] Cf. Roberts 2006 for a comprehensive review of the literature regarding the status of the prejacent.

I would like to note here that the behavior of p under negation is quite systematic. Examining the cases in which p survives/does not survive in negated sentences with *only* reveals that the survival of p depends on the relation between the alternatives in the relevant scale. In particular, p systematically survives in negated sentences which involve an entailment scale (a scale in which each alternative entails the one ranked below it). But it systematically does NOT survive in negated sentences which involve a non entailment scale (an evaluative scale in which members are ordered by strength, but a stronger alternative does not entail a lower alternative).[3] The dependency of the survival of p in negated sentences on the type of relation that holds between the alternatives further supports the conclusion that p is neither asserted, nor presupposed by EX p, and thus cannot be part of the semantics of exclusives.

2.4 Expectation Rejection Is Not Encoded into the Definition

Previous scalar analyses of *only* proposed that part of the function of *only* is to reject expectations in the common ground that stronger alternatives that p hold. Specifically, Zeevat 2003 suggests that *only* is a mirative particle which weakly presupposes that stronger alternatives are expected to be true. Similarly, B&C 2008 explicitly claim that the main function of *only* is a discourse function, to reject expectations in the common ground that stronger alternatives than p hold (though they do not encode it into their formal definition), as seen from the infelicity of (20)

(20) # I expected 40 students, but only 50 arrived

Note that *expectation rejection* is not encoded into the definition of exclusives that I propose in (12), because although in many cases *only* seems to reject expectations, it is not always the case. In other words, *only* can be used felicitously without rejecting expectations, as illustrated in (21)

(21) *my mother and I are organizing a weekend for the whole family. We discuss where each sub family will stay:*
"Danny (my brother) has four children so he will stay in this apartment, but Esti (my sister) has *only* three children, so she can stay in the smaller apartment".

As we both know the number of children my sister has, there is **no expectation** that she has more children. (Clearly, there is a stronger alternative in the background but it is not an expectation).

Note that although I do not encode *expectation rejection* into the semantics of exclusives (because as seen above, it does not always exist) the definition in (12) subsumes cases in which *expectation rejection* is present in a sentence with an exclusive. Remember that the presupposition is that a salient alternative is stronger than p in some world which is accessible from the actual world. In cases in which this world is the world of expectations of at least one of the interlocutors, we get *expectation rejection*. But crucially, the presupposed stronger alternative can be true in other types of possible worlds. Consider again (21)

(21) Danny (my brother) has four children so he will stay in this apartment, but Esti (my sister) has *only* three children, so she can stay in the smaller apartment

[3] Note that Beaver and Coppock 2011 independently make a similar observation. They account for it using B&C's definition of exclusives. More research is needed here.

(21) readily implies that *If Esti had four children, she would also get a big apartment.*
Following Lewis' 1973 theory of counterfactuals, the stronger alternative *Esti has four children* is true in all worlds which are maximally similar to the actual world, besides the fact that Esti has four children in them. So in (21) *only* rejects a stronger alternative which is present in w_1 R_c w_0, but here it is not a world of expectations.

4 Applying the Definition to *be-sax ha-kol*

In this section I show that the core definition of exclusives proposed in (12) above can account for the interpretation and felicity constraints of *be-sax ha-kol*. First, the definition of exclusives in (12) accounts nicely for the interpretation of *be-sax ha-kol* under the exclusive reading, just as it does for *only*. Note that in all the *only* sentences above which can be accounted for using the definition in (12), *only* can be substituted by *be-sax ha-kol*[4].
However, the more interesting story concerns the interpretation and felicity constraints of the approximative *be-sax ha-kol*. In the remainder of this section I will focus on the approximative *be-sax ha-kol* and show that applying the definition to *be-sax ha-kol* accounts for the data.

4.1 The Approximative Reading: Accounting for the Data

On the approximative reading *be-sax ha-kol* functions like an exclusive under the definition in (12), but it operates on a scaled set of propositions of the type *'x is A to degree d'*. Both the interpretation and the felicity differences found with the approximative *be-sax ha-kol* follow from the interaction between its exclusive function (the definition in (12)), and the internal structure of the scale of degrees associated with the adjective it modifies (following Kennedy & McNally 2005). Specifically, *be-sax ha-kol* prefers to operate on Upper closed scale adjectives like e.g. *clean*, whose evaluation standard is the maximal end point on the scale, and fails to operate on Lower closed scale adjectives like e.g. *dirty*, whose evaluation standard is the minimal non zero point on the scale.
Similarly, concerning multi dimensional adjectives, *be-sax ha-kol* prefers to operate on conjunctive adjectives like e.g. *healthy*, rather than on disjunctive adjectives like e.g. *sick* (following Sassoon 2010).

4.1.1 Applying the Definition to *be-sax ha-kol* with *Upper* Closed Adjectives

Let us first consider a felicitous case, (2), repeated here,

(22) ha-xeder *be-sax ha-kol* naki
The.room *be-sax ha-kol* clean
The room is *be-sax ha-kol* clean

[4] Though it is by no means identical to *only*. See section 4.4 below for further discussion of similarities and differences between various exclusives.

Intuitively, (2) contains three inferences: The first inference is that the room is not maximally clean. This intuition is strengthened by comparing (22) and (23) below

(22) ha-xeder *be-sax ha-kol* naki aval yeS avak al haxalon
The.room *be-sax ha-kol* clean but there.is dust on the table
The room is *be-sax ha-kol* clean, but there is dust on the table

(23) #ha-xeder legamrei naki aval yeS avak al haxalon
the.room completely clean but there.is dust on the.table
The room is completely clean, but there is dust on the table

In (23) where it is said explicitly that the room is maximally clean, the 'but' clause is rejected, but in (22) the 'but' clause is accepted because being *be-sax ha-kol clean* implies that the room is not completely clean.

The second inference is that the room is still considered clean. *be-sax ha-kol* differs from other approximators in this respect. A good example is *almost*. Various theories of *almost* (e.g. Sevi 1998, Amaral & del Prete 2010) suggest that, unlike *be-sax hakol, almost p entails ¬p.* Amaral& del Prete support this with examples along the lines of (24)

(24) A: Ha-xeder *kimat* naki
A: the.room almost clean
A: The room is almost clean

B: lo naxon, ha-xeder naki
B: no right, the.room clean
B: That's not right. The room is clean.

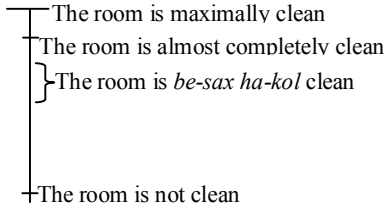
But if we substitute *almost* with *be-sax ha-kol*, as in (25), B's response is infelicitous. This seems to suggest that *be-sax ha-kol p* implies that p holds.

(25) A:ha-xeder *be-sax ha-kol* naki
A: the.room *be-sax ha-kol* clean
A: The room is *be-sax ha-kol* clean

B:?lo naxon, ha-xeder naki
B: no right, the.room clean
B: That's not right. The room is clean.

The third inference that follows from (2) is that the degree of cleanness is not just below the maximum, but a bit lower (there is a 'gap' between the maximal degree and the degree in p). According to the judgments that I got, *the room is almost completely clean* is stronger than *the room is be-sax ha-kol clean*. This is illustrated in the diagram in Fig.1

Fig. 1



The next step would be to apply the definition of EX to *be-sax ha-kol* in (2), and check to what extent it accounts for these inferences.
Being an exclusive, the definition of *be-sax ha-kol* is (12), repeated here,

(12)

Presupposition: $p_c \in ALT \wedge p_c \neq p \wedge p_c > p \wedge \exists w_1$ **s.t** $w_1 R_c w_0 \wedge w_1 \neq w_0 \wedge p_c (w_1)$
Assertion: $\forall p' [p' \in ALT \wedge p' \neq p] \rightarrow [p' (w_0) \rightarrow p' < p]$

Applying this definition to (2) will yield the following:
Presupposition: In some world accessible from the actual world (and which is different from the actual world) the proposition *'the room is clean to a degree d'* where d is **salient**, is true. As *clean* involves an **Upper closed** scale (K&M), the salient degree is the **maximal end point**. That is, the alternative proposition *the room is clean to a maximal degree* is true in some accessible world. Remember again that this world might be a world of expectations (in a scenario where it is expected in the common ground that the room is maximally clean), or another (cf. Sassoon & Toledo 2011 according to which the comparison class for absolute adjectives is composed of the same entity in other worlds (and times)). Now this salient alternative (*the room is maximally clean*) is required to be different from p and stronger than it.
In order to satisfy this requirement, we first need to determine what p is, or more precisely**,** what is the value of d in p. To determine the degree to which the room is clean in p, I follow K&M in assuming that unmodified APs contain the *pos* operator whose function is to relate the degree argument of an adjective to an appropriate standard of comparison. As *clean* involves an Upper closed scale, and it has a **maximal endpoint**, d satisfies the standard relation imposed by *pos* in case it equals the maximum degree of cleanness, as in (26) (adapted from K&M, pp 358)

(26) [pos] ([clean max])=$\lambda x.\exists d$[**standard**(d)([clean max])(C)$\wedge$[clean max](d) (x)]

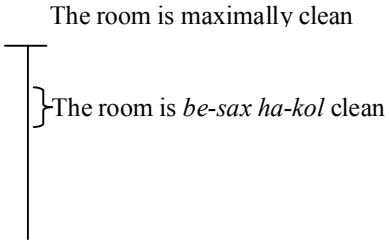
That is, according to (26), p= *the room is clean to a maximal degree*. As we have seen above, the presupposition requires that $p_c > p$. But if p itself is *the room is maximally clean* (given (26)), then we get an apparent contradiction, which should lead to a presupposition failure. This contradiction can be resolved by assuming that *clean* in p is used imprecisely. K &M admit that although the default standard relation on d in upper closed adjectives is that it equals the maximal end point, in everyday use end point adjectives are very often used **imprecisely.** They bring the example in (27), which is taken to be true in a scenario where very few people are present.

(27) The theater is empty tonight

Several mechanisms for accounting for imprecise uses of absolute adjectives like *clean* are suggested in the literature. For example, Lasersohns' 1999 Pragmatic Halos theory determines how much deviation from what is actually true still counts 'close enough to the truth'. Alternatively, following Saureland & Stateva 2007, when an absolute adjective like *clean* is used imprecisely, the standard of precision is more relaxed through a coarse granularity, and as a result the degree of cleanness on the scale is lower.

Note, though, that we cannot calculate the precise value of d in p. But we can say that it is within an interval of degrees which are restricted to be **lower than the maximum** and **high enough to be considered clean**.[5] This is illustrated in the diagram in Fig. 2.

Fig. 2



Now let us look at the assertion of (2). (2) asserts that in the actual world p is the strongest alternative. Every alternative proposition of the form *'the room is clean to a degree d'*, which is true in w_0 is lower than p. Thus, no true alternative in w_0 is such that it is both stronger than p and lower than the maximum. Consequently, the assertion indirectly ensures that d in p is not very close to the maximum. The requirement that no true alternative can be located between p and the maximal end point would be trivial (i.e. will be always true) in a scenario where the degree to which the room is clean in p is very close to the top. But in fact, this requirement is not trivial, because there is some gap between the maximal degree on the scale and the degree referred to in p.

So far we have seen that applying the definition of exclusives to (2), which is a felicitous sentence in which *be-sax ha-kol* operates on the Upper closed adjective *clean*, yields the intended inferences, namely, that the room is not maximally clean, that the room is considered clean, and that the degree to which the room is clean is not very high.

4.1.2 Applying the Definition to *be-sax ha-kol* with Lower Closed Adjectives

Applying the definition to (28) can account for its infelicity.

(28) #Ha-xeder *be-sax ha-kol* meluxlax
The.room *be-sax.ha-kol* dirty
The room is *be-sax ha-kol* dirty

[5] This captures the intuition that when saying *The room is besax hakol clean* the speaker really does not refer to a specific degree of cleanness.

The presupposition of (28) requires that in some world accessible from the actual world (and which is different from the actual world) the proposition *'the room is dirty to degree d'* where d is salient, is true. Now, as *dirty* involves a Lower closed scale (K&M), the salient degree is the minimal non zero degree of dirt**.**
The presupposition also requires this salient degree to be stronger than the degree referred to in p. But this requirement cannot be satisfied because the salient minimal degree on the scale is by definition the lowest possible, so it cannot be stronger than the degree referred to in p. Thus, we get presupposition failure which leads to infelicity. Crucially, in the case of (28), lowering the precision standard for evaluating *dirty* cannot save the sentence, because under the most relaxed standard, objects with a minimal degree of dirt are considered dirty, so it is impossible to lower the standard.

4.1.3 *be-sax ha-kol* with Multi-dimensional Adjectives

I will now show that the interaction between the definition of *be-sax ha-kol* in (12) and the internal structure of the multi dimensional adjectives *healthy* and *sick*, can account for the felicity difference between (6) and (8), repeated here,[6]

(6) Danny *be-sax ha-kol* bari
Danny *be-sax ha-kol* healthy
Danny is *be-sax ha-kol* healthy

(8) ??Danny *be-sax ha-kol* xole
Danny *be-sax ha-kol* sick
Danny is *be-sa ha-kol* sick

According to Sassoon 2010, both *healthy* and *sick* are **multidimensional** adjectives, as they are associated with multiple dimensions simultaneously. *healthy* is a conjunctive multi dimensional adjective :an entity is judged *healthy* if it reaches the standard in **all** dimensions of health in a given context. Conversely, *sick* is a **disjunctive** adjective: an entity is considered *sick* if it reaches the standard in **one** dimension . In other words, the default standard of membership for *healthy* is **maximal** , because to be considered *healthy* ,x needs to be healthy with respect to **all** dimensions, and the default standard of membership for *sick* is **minimal** , because to be considered *sick*, x needs to be sick with respect to **one** dimension. Given the semantics of *be-sax ha-kol* in (12), this analysis of conjunctive *healthy* and disjunctive *sick*, should predict that *be-sax ha-kol* would be compatible with conjunctive multi dimensional adjectives, and incompatible with disjunctive multidimensional adjectives.

This prediction is borne out. First, (6) is felicitous and it intuitively means that Danny is not maximally healthy, but he is still considered healthy. Applying the definition to (6) accounts for this intuition, as I briefly explain below. (6) presupposes that the salient alternative *Danny is healthy with respect to all dimensions* is stronger than p. Though the default interpretation of p should itself be *Danny is healthy with respect to all dimensions*, we may assume that *healthy* is used imprecisely: the degree to which Danny is healthy is lower than the maximum, but he is

[6] The felicity judgment of (6) and (8) is supported by a Google search.

still considered healthy. This can be satisfied if Danny is healthy with respect to most dimensions.
In contrast, (8), with *sick* is infelicitous. In the case of *sick*, the salient alternative is *'Danny is sick with respect to one dimension'*, and this salient alternative is presupposed to be stronger than p. But this cannot be satisfied, because being sick with respect to one dimension is the minimal, lowest possible requirement for being considered sick, so it cannot be stronger than p. As a result, we get presupposition failure, and hence- infelicity.

5 Summary and Directions for Further Research

In this paper I examined the interpretation and distribution of the Hebrew *be-sax ha-kol*. I made some novel observations regarding two apparently unrelated readings of *be-sax ha-kol*: the 'exclusive reading' and the 'approximative reading'. I showed that the latter is constrained, as *be-sax ha-kol* generally prefers to operate on upper closed scale adjectives. I proposed a unified analysis of *be-sax ha-kol*, which accounts for both readings. The main claim is that *be-sax ha-kol* is essentially an exclusive, under a modified definition of exclusives that I proposed, and the various readings follow from the different types of scales it operates on. When it operates on a classical Roothian scale of alternatives, we get the exclusive reading, and when it operates on a scale of degrees associated with the adjective it modifies, we get the approximative reading. I further showed that this analysis can also account for the preference of *be-sax ha-kol* for upper closed scale adjectives (on the approximative reading).
The modified definition of exclusives that I suggested contains new elements which help overcome some shortcomings in previous scalar analyses of *only*.

The directions for further research concern the following issues: (a) the focus sensitivity of *be-sax ha-kol*. (b) the interaction of the approximative *be-sax ha-kol* with open scale adjectives and with non adjectival categories (c) extending the analysis to other readings of *be-sax ha-kol* and (d) implications for the study of exclusives. In what follows, I discuss each of these issues briefly.

5.1 The Focus Sensitivity of *be-sax ha-kol*

Unlike both semantic ('Weak') theories of focus (e.g. Rooth 1985, von Stechow 1989, Bonomi & Casalegno 1993) and pragmatic ('Strong') theories of focus (e.g. Rooth 1992, Schwarzschild 1997, Roberts 1996, Geurts and van der Sandt 1999), Beaver &Clark 2008 proposed a non-monolithic model of association with focus, which divides the class of focus sensitive expressions (FSE, henceforth) into those with Conventionalized association with focus (e.g. exclusives, scalars), which have focus sensitivity as part of their semantics, and nonconventionalized ones, whose focus sensitivity is a pragmatic by-product. The maim empirical support for B &C's claims is the different behavior of the Conventionalized *only*, and the Free *always* (and their correlates in several European languages) in a wide range of tests. B&C further suggest that an expression's degree of association with focus is related to its semantic and pragmatic function. For example, exclusives (e.g. *only*) are conventionalized FSEs, because their primary function is to make a comment on the current question (using Roberts

1996 terminology). Crucially, because the current question is presupposed by focus, exclusives must, by definition, associate with focus.

Being an exclusive, *be-sax ha-kol* is expected to have a conventionalized association with focus. However, preliminary data regarding the behavior of *be-sax ha-kol* in B&C's tests are inconsistent.

To illustrate, we will look at the behavior of *be-sax ha-kol* in two of B&C's tests, namely 'association with prosodically reduced material', and 'association with extracted elements'. B&C show that in (29) below *always*, but not *only*, can associate with the prosodically reduced pronoun *it*, and can have the reading that 'whenever people who grow rice eat, they eat rice'.

(29) People who grow rice *only/ always* [eat]^{F} it.

Testing the behavior of *be-sax ha-kol* in the Hebrew version of (29), namely (30) below, reveals that like *only* and its Hebrew equivalent *rak, be-sax ha-kol* cannot associate with prosodically reduced material, as it can only have the reading in **a**. This suggests that *be-sax ha-kol* behaves conventionally in this test.

(30) anaSim Semegadlim orez *be-sax ha-kol*/rak [oxlim]F oto
People who.grow rice *be-sax ha-kol*/only [eat]$_{F}$ him
People who grow rice *be-sax ha-kol* [eat]$_{F}$ it

a. People who grow rice *be-sax ha-kol* eat it, they do not do anything more interesting/ significant than it.
b. *People who grow rice besax hakol eat rice, and nothing else.

But in the 'association with extracted elements' test, *be-sax ha-kol* behaves freely, as seen from the fact that unlike *rak (only),* in (31) *be-sax ha-kol* **can** associate with the extracted element 'two shirts', as it can have both readings **a** and **b**, whereas *rak* can only have reading **b**.

(31) Stei xultsot, ze ma Se-danny *besax hakol/ rak* kana [la-banot Selo]$_{F}$
Two shirts, this what danny *be-sax ha-kol/only* bought [to.daughters his]$_{F}$
Two shirts, this is what Danny *be-sax ha-kol* bought [for his daughters]$_{F}$

a. Danny bought two shirts and not something more significant or worthy than that.
b. Danny bought shirts for his daughters but not for his sons. He wasn't too generous.

These findings still need to be confirmed with more constructions and with more informants. However, to the extent that these results are valid, they may indirectly support the analysis of *be-sax ha-kol* proposed in this paper. In particular, the inconsistent behavior of *be-sax ha-kol* in the focus sensitivity tests may be related to the fact that it is more flexible with respect to the type of the scaled set of alternatives it operates on. This direction has got a more general implication: A careful examination of the degree of association with focus of *be-sax ha-kol* will shed light on B&C's model, and particularly on their claim regarding the correlation between an expression's semantic pragmatic function and its degree of association with focus.

5.2 The Compatibility of *be-sax ha-kol* with more Predicates

In this paper I discussed the interaction of the approximative *be-sax ha-kol* with fully or partially closed scale adjectives and with multidimensional adjectives. Further research should investigate the interaction of *be-sax ha-kol* with other types of predicates. First, can *be-sax ha-kol* operate on one dimensional open scale adjectives such as e.g. *tall* or *short*?
The felicity status of (32) below seems questionable

(32) ?Danny *be-sax ha-kol* gavoha
Danny *be-sax ha-kol* tall
Danny is *be-sax ha-kol* tall

Intuitively, it seems that the analysis proposed above can account for (32). The evaluation standard for *tall* is context dependent (cf. K&M), less salient, so it is difficult to calculate the value of d in p (p is presupposed be lower than a salient alternative, but it is not clear what the salient alternative is).
Interestingly, the following Google example (regarding an employees' level of functioning) **is** felicitous:

(33) ramat hatifkud Selo *be-sax ha-kol* gvoha
Level functioning his *be-sax ha-kol* high
His level of functioning is *be-sax ha-kol* high

(33) seems to be analogous to conjunctive multidimensional adjectives. The level of functioning is composed of many aspects (e.g industriousness, productivity, team work , etc.). One is considered to have a high functioning level, if he functions well with respect to **all** aspects.
Second, so far I focused on the effect of *be-sax ha-kol* on adjectives, but notice that similar approximative readings are obtained also with other categories, as illustrated in (34)

Context: in an exhibition of modern furniture
(34) ze *be-sax ha-kol* kise
This *be-sax ha-kol* chair
This is *be-sax ha-kol* a chair

In (34) the context provides a scale of typicality, with an upper endpoint which denotes the most typical chair. *be-sax ha-kol* adds here that though this chair is not the most typical chair, it can still be considered chair. In addition, its level of typicality is not very high. But further research is needed here.

5.3 Other Readings of *be-sax ha-kol*

There are more readings of *be-sax has-kol*, which I did not address here.
Consider, for example, the precise reading as in (35)

(35) higiu 20 banim ve-10 banot, *be-sax ha-kol* higiu 30 yeladim
Came- 3 pl. 20 boys and 10 girls, *be-sax ha-kol* came-3 pl. 30 kids
20 boys and ten girls came. *be-sax ha-kol* 30 children came (≈20 boys and ten girls came. All in all 30 children came).

Further research should examine to what extent the unified analysis proposed in this paper can account for this (and other) readings of *be-sax ha-kol*.

5.4 Implications for the Study of Exclusives

A central goal of studying various exclusives cross linguistically is to identify the **core** properties of exclusives, and the parameters along which they **differ (**see Orenstein (in progress) and Beaver & Coppock 2011**)**.
I take the definition of exclusives proposed here to be the core meaning of exclusive operators. I have shown that the definition accounts for various uses of *only/rak* and *be-sax ha-kol*. But further research should examine the validity of this definition for other exclusives cross linguistically.

Note that although I claimed that in principle *be-sax ha-kol* and *rak* (*only*) seem to have a similar exclusive reading as in e.g.

(36) *rina be-sax ha-kol/rak pkida*
Rina be-sax ha-kol/only clerk
Rina is be-sax ha-kol/only a clerk

and thus can have the same core definition, there are several differences between *rak* (only) and *be-sax ha-kol*. I will discuss three of them. First, unlike *rak*, *be-sax ha-kol* seems to be a PPI, as seen in (37)

(37) Rina lo rak /#*be-sax ha-kol* pkida
Rina no only/#*be-sax ha-kol* clerk
Rina is not only/#*be-sax ha-kol* a clerk

A second difference between the two exclusives concerns the type of scale they can operate on. Whereas *rak/only* is restricted to operate on a standard Roothian scale of alternatives to p, *be-sax ha-kol* can also operate on a scale of propositions that refer to degrees to which the predicate holds (see the discussion above concerning the association with focus of these two exclusives). Finally, *be-sax ha-kol* is incompatible with pronouns. Consider (38)

(38) A: *mi higia?*
A: *who came?*
B: dani ve-yosi higiu ve-rak / #be-sax ha-kol hem
B: Danny and.Yossi came and.only/#be-sax ha-kol they
B: Danny and Yossi came ,and only/#be-sax ha-kol they

From the point of view of the cross linguistic research of exclusives, these differences between *rak* and *be-sax ha-kol* can be seen as parameters along which exclusives differ. Preliminary findings of a research on Hebrew exclusives by Orenstein (in Progress) point to several parameters that seem to distinguish between various exclusive particles.
First, exclusives vary with respect to the degree to which they associate with focus, as I showed in section 4.1 above. Second, Exclusives vary with respect to the type of scale they can operate on. Two distinctions are found here: First, with respect to the relation between the scaled alternatives we distinguish between entailment and non entailment scales. Some exclusives e.g. *only* and *be-sax ha-kol* can operate on both types of scales, but *stam* (Orenstein 2010, Orenstein & Greenberg 2011) and *merely* (Beaver & Coppock 2011) are restricted to operate on non entailment scales. Another distinction concerns the source of the alternatives. Traditionally, it was assumed that exclusives (typically *only*) operate on a scale of alternative propositions to p, which is triggered by focus or by the Current Question. But the analysis of *be-sax ha-kol* suggests that in principle it can also operate on a different salient scale, namely, a scale of propositions which constitute different interpretations of p, which differ with respect to the degree to which the predicate holds of an individual. Similarly, Orenstein & Greenberg 2011 note that when *stam* is stressed it induces a scale of propositions which constitute different interpretations of the predicate, rather than the standard Roothian set of alternatives. It seems that *rak* and *only* are restricted to operate on a set of alternatives to p, but other exclusives such as *be-sax ha-kol* and the stressed *stam* are more flexible in this respect. The third varying parameter has to do with the position of p on the scale. Whereas all exclusives require p to be lower than a salient alternative, *stam* requires p to be located low on the scale (cf. Orenstein & Greenberg 2011).

Note that Coppock ad Beaver 2011 argue for two other parameters. The first is scope: they show that *mere* and *sole* have scope over the modified NP, whereas *only* has scope over the whole sentence. The second parameter constraints the type of alternatives which constitute the salient scale. They show that *mere* requires alternatives to differ with respect to the property denoted by the modified noun, and *sole* requires alternatives to differ with respect to the individual to whom the property is attributed.

Further research of the semantic and pragmatic properties of various exclusive expressions cross linguistically will clarify the distinction between those core properties that are shared by all exclusives and the properties along which exclusives differ.

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