Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale

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Online First Publication, March 18, 2021. http://dx.doi.org/10.1037/cep0000243

CANADIAN PSYCHOLOGICAL ASSOCIATION
SOCIÉTÉ CANADIENNE DE PSYCHOLOGIE

Canadian Journal of Experimental Psychology / Revue canadienne de psychologie expérimentale

ISSN: 1196-1961

https://doi.org/10.1037/cep0000243

SPECIAL ISSUE: KATZ—LANGUAGE AND COMMUNICATION

Marking Multiple Meanings: Salience and Context Effects

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Katz and Ferretti's, (*Discourse Processes*, 2003, *36*, 19) pioneering paper was the first to address and systematically examine the role of marking (*literally speaking*, *in a manner of speaking, proverbially speaking*) during online processing of proverbs (see also Schwint et al., 28th Annual Conference of the Cognitive Science Society Proceedings, 2006, 768). For Katz and colleagues, such markers function as introductory formulae, signaling to the addressee the intended interpretation of an incoming proverb. Inspired by their work, this paper explores the effects of marking, showing that some markers (*literally, in the full sense of the word, double entendre, really*) rather than disambiguating an ambiguous utterance, can allow for ambiguation (e.g., *S/he is radiant, in the full sense of the word* uttered in reference to a smiling person wearing sparkling clothes). Two offline questionnaire studies and one online reading task experiment, all conducted in Hebrew, test the *Low-Salience Marking Hypothesis* (Givoni, *Low-salience marking*, 2011; Givoni, *Marking multiple meanings*, 2020; Givoni, *Journal of Pragmatics*, 2013, *48*, 29). Accordingly, such marking boosts low-salience meanings ("glittery", here the literal meaning) which are less-frequent, less-familiar, less-prototypical, and less-conventionalized (The Graded Salience Hypothesis, see Giora, *Cognitive Linguistics*, 1997, 8, 183; Giora, *On our mind: Salience, context and figurative language*, Oxford University Press, 2003; Givoni & Giora, *Handbuch Pragmatik*, J.B. Metzler, 2018). Marked utterances were embedded in contexts, strongly supportive of the salient meaning of the ambiguities ("happy", here the figurative meaning). Results support the *Low-Salience Marking Hypothesis*. They show preference for low-salience meanings as well as faster reading times of such meanings following low-salience marking relative to control conditions.

Public Significance Statement
Three experiments show that multiple meanings of ambiguities spring to mind when these are linguistically marked with cues such as "double entendre"; "literally". Speakers can communicate less-familiar meanings using such marking.

Keywords: marking, salience, low-salience, The Low-Salience Marking Hypothesis, ambiguity processing

Supplemental materials: https://doi.org/10.1037/cep0000243.supp

Language is ambiguous, but, contra conventional wisdom in the psycholinguistic literature, an ambiguity need not always be resolved in order to arrive at a single (intended) meaning. Indeed, Nerlich and Clarke (2001) argue that interlocutors enjoy juggling more than one meaning, such that communicative efficiency is not the over-arching motivator for language use, but rather the pragmatic and discourse effects which can be achieved (e.g., injecting language with subjectivity; (re)appropriating language as a shared inter-subjective system; (re)motivating language for new communicative purposes). In this way, speakers may say *less* than what they mean, trusting their interlocutor to pick up on the word play. Rather than spelling out their full intention, speakers may explicitly mark ambiguities.

Consider Examples (1) and (2) below, cases in point (ambiguous utterances in capital letters, markers in bold throughout):

(1) Now **in every sense of the word**, this [White House] administration is **truly** HOPELESS. (The Late Show with Stephen Colbert, 2018)

In Example (1), the speaker linguistically marks the homonymous HOPELESS twice (using **in every sense of the word** and **truly**) as he signals to the hearer to add to the "without any hope" meaning, a second proper name based meaning, "without Hope Hicks, the former White House Communications Director".

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This research was supported by the Israel Science Foundation (ISF) grants (540/19 & 436/12) to Rachel Giora. Shir Givoni was awarded sequential (annual) scholarship for outstanding graduate students co-funded by the Rector of Tel-Aviv University and the ISF grants awarded to (one of) her supervisor(s): Rachel Giora. We have no conflicts of interest to disclose.

We would like to thank three anonymous reviewers for their helpful suggestions. In addition, we wish to thank Albert Katz and Herbert Colston for insightful comments and feedback and Debra Titone, Penny Pexman, and Lori Buchanan for their support. Finally, we are grateful for the assistance of Israela Becker, Adi Cholev, Inbal Jaffe, Efrat Levant, Tal Norman, and Orna Peleg.

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> (2) London at the end of November. White and light snow flutters and it's very cold. I stop at a book store, TO WARM UP, **double entendre**, and a book of short stories 'for the soul' catches my glance as a possible warmer for the winter. (Dinur, 2008)

In Example (2), translated from Hebrew, marking the polysemous (TO) WARM (UP) with **double entendre** invites the reader to consider not only the literal meaning, having to do with "warming one's body", but also the metaphoric meaning, having to do with "warming one's soul". These examples demonstrate the phenomenon of *ambiguation*, wherein interlocutors transition from one meaning to another, while *maintaining* both (see also Brône & Coulson, 2010). Furthermore, they demonstrate the phenomenon which will be the focus of this paper, namely, **marked** ambiguation.

Marking Ambiguities—Disambiguating Versus Ambiguating

To date, marking has generally been taken to be a *dis*ambiguating device, that is, it has been shown to favor one of the possible meanings of the marked utterance. Indeed, in a pioneering study, Katz and Ferretti (2003) tested the role of explicit markers such as **literally speaking**, **proverbially speaking**, and **in a manner of speaking** on the processing of proverbs. The authors placed the markers immediately before familiar and unfamiliar proverbs, embedded in literally and nonliterally biasing contexts, presenting them in a dichotomous fashion. Thus, **proverbially speaking** only appeared in nonliteral contexts, biasing a proverbial reading; **literally speaking** only appeared in literal contexts, biasing a literal reading, effectively treating marking as an additional *contextual* constraint. Findings from reading times reveal that the markers tested can reduce the ambiguity associated with meanings of proverbs, but that this influence is stronger with respect to unfamiliar proverbs relative to familiar, conventionalized ones [note, however, that Schwint et al. (2006) measured slow cortical potentials and found marker effects even for familiar proverbs]. Crucial to the work on marking is the authors' hypothesis that these markers should act as strong constraints on how people interpret the proverbs (i.e., either literally or figuratively). Under this view, such markers do not function as ambiguation markers but rather signal to the addressee the (single) intended interpretation of an incoming proverb.

Indeed, according to the Constraint-Based Model of nonliteral language processing (Katz & Ferretti, 2001), the most activated meaning (literal vs. figurative) is determined by the relative strength of different sources of information (i.e., constraints). These sources of information provide immediate probabilistic support for competing interpretations in parallel and over time and can be linguistic in nature (whether lexical or contextual), as well as extralinguistic (e.g., Pexman et al., 2000). According to the Constraint-Based Model, competition duration (i.e., reading time) is expected to be faster if the constraints point to the same interpretation, but slower if support for different alternatives becomes equal. Additionally, the Direct Access account (Gibbs, 1994), predicting that rich and constraining contextual information interacts with lexical access initially and selects contextually appropriate meanings exclusively, would also anticipate marking to benefit meanings more strongly biased by context.

However, note that "Literally speaking, lightning never strikes twice", allows for both the proverbial meaning and compositional interpretation to co-exist, even when in a literally biasing context. Moreover, the semantics of marking is not always transparent with respect to which meaning is getting marked. In Example (3), Issa Rae uses **literally** to enrich a conventionalized literal meaning with a compositional literal interpretation:

> (3) I'm AFRICAN-AMERICAN you know quite **literally** and my mom is from Louisiana and my dad is African (Larry King, 2018).
>
> While the collocation AFRICAN-AMERICAN refers to "an American of African and especially of black African descent" (Merriam-Webster, n.d.), taken compositionally, it can refer to someone who is both American *and* African (e.g., one parent born in the States and one born in Senegal, as in Issa Rae's case). Note that both these meanings are literal.

Here our aim is to investigate the computation of ambiguity marking in cases of ambiguation. Specifically, we ask: Which meaning is getting marked? We argue that marking an ambiguity activates low-salience meanings. On encountering these markers, additional meanings of stimuli—meanings low on salience—are activated, drawing interlocutors' attention to them (Givoni, 2011; Givoni, 2020; Givoni et al., 2013).

The Low-Salience Marking Hypothesis

Couched within the Graded Salience Hypothesis framework, the *Low-Salience Marking Hypothesis* assumes a graded meaning activation process: Salient meanings are meanings foremost on our minds; they are activated by default, i.e., automatically, when the ambiguous stimulus is encountered, regardless of literalness (on defaultness, see Giora et al., 2015; Givoni & Giora, 2018). Meanings low on salience are less prominent, because, as opposed to salient meanings, they are less familiar, less frequent, less prototypical, or less conventional. As such, their activation lags behind. They may, therefore, be lost in comprehension (The Graded Salience Hypothesis, see Giora, 1997, 2003). Therefore, the *Low-Salience Marking Hypothesis* predicts that marking will benefit low-salience meanings, acting as a boosting device for such meanings. In fact, it predicts that meanings low on salience will benefit from marking, resulting in higher awareness (i.e., preference) and faster activation of these meanings when marked.

The experiments reported here tease apart the predictions of the *Low-Salience Marking Hypothesis* from those of the Direct Access View and the Constraint-Based Model by measuring offline meaning preference (Experiments 1 and 2) and online reading times (Experiment 3) of low-salience meanings (e.g., *menatsnetset* → "glittery"), when following marked polysemous ambiguities (e.g., *hi korenet, bimlo muvan hamila* → "She's radiant, in the full sense of the word") relative to control counterparts (note that the salient meaning in Hebrew is the metaphoric *me'usheret* → "happy"). The markers tested were: *bimlo muvan hamila* (**in the full sense of the word**); *be'emet* (**really/truly**); *literali* (**literally**); and *tartey mašma* (**double entendre**).[1]

[1] For the purpose of this study, these minimal linguistic markers make up a functional class and are referred to as such. Having said that, it is important to stress that we do not assume that the function of marking ambiguation is the exclusive role or even the central role of these markers. Indeed, only a thorough corpora search (or norming study) would justify making such a claim. We do, however, predict that these markers can be used in such a way. It is the function of marking ambiguation that is central here, in other words, the markers are but a means to test this function.

In Experiments 2 and 3, such markers, termed here low-salience markers, were paired with control fill-in markers: *xaval al hazman* (**(it's) out of this world**); *legamrey* (**completely/totally/entirely/utterly/quite**); *kayadu'a* (**as is known**); and *xad vexalak* (**clear-cut**). This was applied, so as to ensure that, in either marker condition (low-salience/fill-in), participants will process additional information following the ambiguity, while avoiding a possible confound, wherein marked ambiguities allow for additional processing (i.e., giving rise to additional meanings) simply due to being longer, as also predicted by the Graded Salience framework.

Still, Experiment 1 compared markers to a no-marker condition, replicating the design in Givoni (2011) and Givoni et al. (2013). Comparing the results of Experiments 1 and 2 made it clear that the fill-in marker controls are appropriate controls (i.e., no interaction effect between the two experiments was found). Indeed, coming up with a control condition was a major challenge of this marking research program, as the markers tested tend to appear following the ambiguity in real-life discourse.

Note that ambiguation occurs in contexts that do not exclude either meaning of an ambiguity, even if they show a stronger bias toward one of the meanings. In order to tease apart the predictions of the *Low-Salience Marking Hypothesis* from those of the Direct Access and Constraint-Based accounts, context appearing *before* the ambiguation has to be provided. Recall that the two latter views would predict that marking would act as an additional contextual cue, directing attention to the meaning (most) biased by context. Highlighting the less-salient meaning in the preceding context will not allow for a distinction between the different models because, in this scenario, the prediction would be the same for all three views, the *Low-Salience Marking Hypothesis*, the Direct Access View, and the Constraint-Based Model. For the former, the less-salient meaning is expected to be facilitated by the marker, being a *lexical* cue; for the latter two, the less-salient meaning is expected to be facilitated by the marker, being a *contextual* cue. It is therefore necessary to use contexts that highlight the salient meaning. Here the predictions are different. The *Low-Salience Marking Hypothesis* would expect the less-salient meaning to benefit from marking and therefore to show a difference between the (low-salience) *marked* and *unmarked* conditions. On the other hand, the Direct Access View and the Constraint-Based Model would expect marking, taken to be a *contextual* cue, to benefit salient meanings in such contexts (i.e., to align with the meaning made more prevalent in the preceding context), and, as a result, would not predict facilitation for less-salient meanings, when marked, compared to when they are unmarked.

Experiment 1

Offline Questionnaire Comparing Marking to a Null Marking Condition

Method

Participants. Twenty students of Tel-Aviv University (15 women), mean age 23.5 ($SD = 2.04$), volunteered to take part in the experiment. All were native Hebrew speakers.

Materials. Materials included 28 polysemous sentences embedded in context, 28 probe-words instantiating less-salient meanings, and four low-salience markers (to view these, see the Supplemental materials). All materials were displayed in Hebrew.

Sentences. Sentences containing a subject pronoun followed by an ambiguous predicate were selected on condition that they allow both the salient and less-salient meanings to be simultaneously applicable to the same referent.[2] In order to allow for enough items of this categorization, different part-of-speech words were used as predicates (nouns, verbs, and adjectives).[3] All sentences were two words long,[4] including mostly conventional polysemous metaphors,[5] which have been shown to have two meanings (in Hebrew), differentiated in terms of degree of salience.

Probe-Words. Each sentence was paired with a probe-word related to the less salient meaning of the polysemous sentence. To ascertain meaning salience, three pretests were run (for detail with respect to these, see Givoni, 2020). Note that less-salient probe-words can only be established relative to salient probe-words and unrelated probe-words, in this way, a meaning hierarchy can be claimed to exist (for salient and unrelated probe-words, see the Supplemental materials). Pretest 1 ascertained that salient probe-words (e.g., "happy") and less-salient probe-words (e.g., "glittery") were judged as being *related* to their respective polysemous sentences (e.g., "She's radiant" displayed *unmarked*) in comparison to unrelated counterparts (e.g., "scholarly"). Pretest 2 established subjective meaning prevalence (i.e., preference) between the two related meanings. Importantly, when presented with the two possible related probe-words for a given sentence, salient probe-words were selected by at least two-thirds of the participants, revealing that less-salient probe-words, while instantiating related meanings, are nevertheless considered to instantiate less prevalent meanings of the polysemous sentences. Finally, in Pretest 3, a lexical decision task was run in which the three probe-word types (salient/less-salient/unrelated) were displayed following the polysemous sentences. This pretest found that the mean response time (RT) to salient probe-words was significantly faster than the mean RT to unrelated probe-words. The mean RT of the less-salient probe-words did not exhibit this difference relative to the unrelated probe-words. In other words, the mean RT to salient probe-words was fastest.

[2] Note that the various meanings of the polysemous *sharp* cannot be simultaneously intended, since one meaning refers to objects (e.g., a blade) while the other to intelligence. In the sentence *She's sharp* the literal meaning cannot be intended; in the sentence *He's hot* ("warm"; "sexy") both meanings can be intended.

[3] Gender or animacy of the subject pronoun was not a controlled factor in the design. Furthermore, part-of-speech ambiguity processing effects took less precedence. This meant that two items exhibited a verb-adjective ambiguity in the predicate. This ambiguity is productive in Hebrew when verbs are used in the present beynoni tense.

[4] Note that in Hebrew, like in other Semitic languages, sentences containing syntactic subjects followed by an adjective or noun are characterized as nominal sentences which do not have verbal predicates.

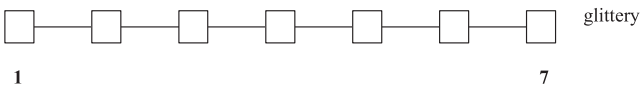
[5] Indeed, of the 28 items, 26 were conventional metaphors, of which the salient meaning was found to be the metaphoric one, and two were non-metaphoric polysemes where both meanings were literal. Recall that precedence for the criteria of applicability of both meanings was established as the over-arching common factor (i.e., not their syntactic part-of-speech, see footnote #3 and not the metaphoricity of the sentence), so as to enable an equal number of sentences (7) per marker (4). Given that (less)salience is the factor of interest in the analysis, and that only less-salient probe words were tested, the factor of metaphoricity of the polysemes was not included in the statistical analysis. (For more on the selection of sentences, see Givoni, 2020).

Markers. Four low-salience markers, established as such and previously discussed in Givoni et al. (2013), were used.

Contexts. Twenty-eight contexts, biased toward the salient meaning of the sentences, were used. Crucially, contexts always indicated a favored meaning (here, the salient one; see Contextual strength pretest below), without explicitly excluding the other possible meaning.

Each context + sentence (presented either with or without a marker), appearing in bold, was followed by a 7-point scale, instantiating the less-salient probe-word at its rightmost end,[6] as in Example (4), translated from Hebrew, which exemplifies a (low-salience) marker condition:

(4) Minutes after winning the Oscar, the actress is all smiles. This is a tremendous achievement for her and will surely propel her career forward. She holds the shiny figurine that matches her silver dress and diamond necklace. "Wow, "Gali says, "**She's radiant, in the full sense of the word**."



Two booklets were prepared such that marker presence (yes/no) was counterbalanced across items and booklets. Items' order of presentation was pseudorandom, such that the same marker was never repeated consecutively on the same page.

Contextual strength pretest. In order to ensure that the biasing contexts will (more strongly) support the salient meaning of the marked sentence, a pretest of contextual strength was administered to 20 students of Tel-Aviv University (14 women), mean age 25.15 (SD = 2.48), all native Hebrew speakers. Participants were asked to rate the relatedness of the probe-word (either salient or less-salient), instantiated at the right-most end of a 7-point scale, to the meaning of the sentence (in bold and unmarked) at the end of the text, **given the preceding context**. Salience of probe-word was counterbalanced across items and booklets.

Sixteen (2.86%) data points were removed (four responses from four participants), as the contexts of these items were revised during pretesting. Results show that contexts strongly biased the sentences toward the salient meaning. The mean score of the probe-words was higher in responses to the salient probe-words (M = 5.62, SE = .10) compared to responses to the less-salient probe-words (M = 3.03, SE = .15; $t_1(19)$ = 17.55, $p < .001$; $t_2(27)$ = 6.31, $p < .001$).

Procedure[7]

Participants were asked to rate the relatedness of the word, instantiated at the scale's end, to the meaning of the sentence (in bold) at the end of the text, **given the preceding context**. The scale ranged between 1 = *There's no relation* and 7 = *There's a strong relation*.

Results and Discussion

One (0.18%) response was N/A. Results show that the mean score in the marked condition was higher (M = 3.96, SE = .20) than the mean score in the unmarked condition (M = 3.41, SE = .17; $t_1(19)$ = 2.45, p = .02; $t_2(27)$ = 3.11, p = .004).

Results support the *Low-Salience Marking Hypothesis*. They show that, despite contexts biasing salient meanings more strongly, marking facilitates less-salient meanings. In other words, marking offsets the effects of context, challenging the Direct Access and Constraint-Based accounts. The two latter accounts would predict that the marker would align with the meaning more strongly supported by the context and therefore, that the less-salient probe-word would receive *lower* scores following marking.

Experiment 2

Offline questionnaire comparing marking to a fill-in marking condition

Method

Participants. Twenty students of Tel-Aviv University (14 women), mean age 26.75 (SD = 4.82), volunteered to take part in the experiment. All were native Hebrew speakers.

Materials. As in Experiment 1, with one exception: Sentences were either followed by a low-salience marker or a fill-in marker.

Fill-in Markers. The four low-salience markers were paired with four fill-in markers, matched for word length and conventionality.[8] The four fill-in markers selected can be characterized as intensifiers or emphatics in that they do not add semantically biasing, limiting, or blocking information, and do not affect coherence as established by a pretest (see Givoni, 2020). Intensifiers are a good choice for comparison, because they can, in theory, intensify whichever meaning is already available, whether it is the salient, the less-salient one, or both. Order of item presentation was the same as in Experiment 1.

Procedure

As in Experiment 1.

Results and Discussion

Results show that the mean score in the low-salience marker condition was higher (M = 3.98, SE = .25) than the mean score in the fill-in marker condition (M = 3.28, SE = .17; $t_1(19)$ = 3.31, p = .004; $t_2(27)$ = 2.95, p = .006).

Results support the *Low-Salience Marking Hypothesis*, while challenging the Direct Access and Constraint-Based accounts. Marking facilitates less-salient meanings even relative to fill-in markers, which allow for longer processing of the ambiguity.

Comparing Experiment 1 and Experiment 2

The data were analyzed using repeated-measures ANOVAs, with marker condition (low-salience/other; where other could either be no marker or fill-in marker) and Experiments (1 and 2) as independent variables. For the participant analysis, the variable of

[6] Recall that Hebrew is read from right to left.

[7] Note that all the studies reported below were approved by the ethics committee of Tel-Aviv University.

[8] Three of the markers were matched for syllable length as well, but one pair was not, with the fill-in marker having less syllables. In terms of conventionality, all markers that are more than a word long are familiar multi-word expressions.

marker was treated as a within-participant variable and the variable of experiment was treated as a between-participant variable. For the item analysis, both variables were treated as within-item variables. Results of the ANOVAs show a main effect of marker ($F_1(1, 38) = 16.43$, $p < .001$, $\eta_p^2 = .30$; $F_2(1, 27) = 15.64$, $p < .001$, $\eta_p^2 = .37$), but no main effect for experiment ($F_1(1, 38) = .058$, $p = .81$, $\eta_p^2 = .002$; $F_2(1, 27) = .26$, $p = .62$, $\eta_p^2 = .009$). The main effect of the marker is explained by the finding that the low-salience marker condition received higher scores in both experiments ($M = 3.98$, $SE = .16$), whether compared to a null control condition or a fill-in marker control condition ($M = 3.35$, $SE = .12$). Most importantly, there was no interaction effect of marker condition*experiment in both participant and item analyses ($F_1(1, 38) = .237$, $p = .63$, $\eta_p^2 = .002$; $F_2(1, 27) = .28$, $p = .60$, $\eta_p^2 = .01$) owing to the fact that the difference between the conditions in each experiment (0.55 in favor of the low-salience marker in Experiment 1 and 0.7 in favor of the low-salience marker in Experiment 2) did not differ from each other. This allows us to confirm that the fill-in markers do not add any biasing or blocking information regarding less-salient meanings relative to no marking. Having established this, an online study was conducted with fill-in controls that better simulate the prime-probe interval of the low-salience markers than a null control would.

Experiment 3

Online Study Comparing Marking to a Fill-In Marking Condition

Method

Participants. Twenty-six students of Tel-Aviv University (19 women), mean age 23.46 ($SD = 2.63$), took part in the experiment, in return for 30 shekels. All were native Hebrew speakers, 17 right-handed and nine left-handed, with normal or corrected-to-normal vision, and with no (reported) language impairments.

Materials. Similar to Experiments 1 and 2; however, probe-words were no longer displayed on their own, but were embedded in a sentence, making up the probe-sentence, without adding any biasing information. In this way, sentences followed by markers acted as the prime-sentence, followed by the probe-sentence that was followed by a spillover-sentence and then by a final sentence (e.g., translated from Hebrew: "She's radiant, in the full sense of the word."// And her friend adds: "She's glittery. // I have to admit, // she is the most beautiful woman I've ever seen."). The context preceding the prime-sentence was divided into segments such that all contexts segments were displayed in lines 1–4, totaling eight lines of text in the critical items. All probe-sentences were four-word long[9], such that the final word was always the less-salient probe-word. Spillover-sentences were always two-word long[10] and each text was paired with a comprehension question.

Two online booklets were created such that marking was counterbalanced across items and booklets. Order of presentation was pseudorandom with fillers interspersed with critical items, such that the same marker was never repeated consecutively. The maximum of the same consecutive response (i.e., "yes") for the comprehension questions was three.

Procedure

A reading comprehension task was administered and prime-sentence, probe-sentence, and spillover-sentence reading times were recorded. The experiment was programmed and run with E-Prime Professional 2.0. Participants self-paced their reading of the texts. Presentation mode was moving windows (i.e., segment by segment), such that upon pressing the "proceed" key on the keyboard, a segment was displayed on the center of the screen, replacing the previous one. Participants were instructed to read for comprehension at their normal pace, to advance the text by using their dominant hand index finger, and to answer the comprehension questions with their non-dominant hand. Once the participant pressed the "proceed" key on the final sentence, the comprehension question was displayed until the participant responded. Then dashed lines appeared on the center of the screen and when the participant pressed the "proceed" key, the next trial began.

Results and Discussion

Thirty-five (4.81%) data points were discarded from the analysis because of an error in responding to the comprehension question. Outliers were defined as reading times above 2.5 *SD* from the mean of each participant across conditions per each region (prime-sentence, probe-sentence, or spillover-sentence). Finally, one participant (3.85%) was excluded from the analysis as this participant's mean reading time was above 2.5 *SD* of the mean reading time of all the participants in each of the regions.

Results for Prime-Sentences. Twenty-two (3.02%) outliers were discarded from the analysis. Results show that the mean reading time (in millisec throughout) of the prime in the low-salience marker condition ($M = 1027$, $SE = 52$) did not differ significantly from the mean reading time of the prime in the fill-in marker condition ($M = 1058$, $SE = 56$; $t_1(24) = 1.28$, $p = .21$; $t_2(27) = 1.76$, $p = .09$). This finding allows for the results of the next region to be interpretable in a non-confounding manner.

Results for Probe-Sentences. Nineteen (2.61%) outliers were discarded from the analysis. Results show that the mean reading time of the probe-sentence following the low-salience marker condition ($M = 1118$, $SE = 50$) was shorter than the mean reading time of the probe-sentence following the fill-in marker condition ($M = 1178$, $SE = 57$; $t_1(24) = 2.21$, $p = .037$; $t_2(27) = 2.30$, $p = .03$).

Results for Spillover-Sentences. Fourteen (1.92%) outliers were discarded from the analysis. Results show that the mean reading time of the spillover in the low-salience marker condition ($M = 778$, $SE = 35$) did not differ from the mean reading time of the spillover in the fill-in marker condition ($M = 762$, $SE = 34$; $t_1(24) = .82$, $p = .42$; $t_2(27) = .91$, $p = .37$), the effects of marking having possibly worn off by this time.

Results support the *Low-Salience Marking Hypothesis*. They show that probe-sentences incorporating less-salient probe-words are read faster following low-salience marking relative to fill-in

[9] In Hebrew.
[10] In Hebrew.

marking. These results indicate that low-salience markers facilitate low-salience meanings such that they become more easily integrated when processing the probe-sentence.

General Discussion

This study is the first to make use of ambiguity marking in context in order to further our knowledge of meaning activation mechanisms when ambiguation is involved; it sheds light on the ongoing debate on context versus salience (i.e., lexicon-based) effects and highlights the importance of testing instances of ambiguation, not only *dis*ambiguation. Findings from three (two offline and one online) experiments support a new hypothesis in the field—the *Low-Salience Marking Hypothesis*—while simultaneously providing further support for the psychological reality of a graded architecture of the lexicon.

Results reported here are unprecedented and cannot be explained by the Direct Access nor by the Constraint-Based accounts. Note that, in theory, the Constraint-Based account may treat markers as *lexical* cues, rather than contextual cues; perhaps on a marker-by-marker basis, such that some markers are analyzed as contextual cues (e.g., the ones tested in Katz & Ferretti, 2003) and others as lexical cues (e.g., the markers tested here), or else, depending on the syntactic position of the marker and its discoursal role (given that some markers can behave both as Low-Salience Markers and Discourse Markers, and specifically Procedural Markers, see e.g., Ziv, 1998, 2008). If markers are treated as lexical cues, the Constraint-Based account could then make the same predictions as the *Low-Salience Marking Hypothesis*. It remains possible that markers should not be inherently characterized one way or another, their function being dependent on discourse and speakers' goals.

Résumé

L'article avant-gardiste de Katz et Ferretti (« Discourse Processes », 2003, 36, 19) était le premier à aborder et à étudier de manière systématique le rôle du recours aux marqueurs (littéralement, pour ainsi dire, proverbialement, etc.) lors du traitement en ligne de proverbes (voir aussi Schwint et al., *28th Annual Conference of the Cognitive Science Society Proceedings*, 2006, 768). Pour Katz et ses collègues, ces marqueurs ont la fonction de formules d'introduction; ils signalent au destinataire l'interprétation voulue d'un proverbe à venir. Inspiré par ces travaux, le présent article se penche sur les effets de tels marqueurs, en illustrant que certains d'entre eux (littéralement, dans la pleine acception du terme, double sens, réellement), plutôt que de d'éliminer l'ambiguïté dans des propos ambigus), peuvent en fait causer une ambiguïté (p. ex., elle est radieuse, dans le plein sens du terme énoncé pour faire renvoi à une personne souriante qui porte des vêtements étincelants). Deux questionnaires en ligne et une expérience axée sur une tâche de lecture, aussi en ligne, et tous deux en Hébreu, ont mis à l'essai l'« hypothèse du recours aux marqueurs à faible relief » (ou *Low-Salience Marking Hypothesis;* Givoni, « Low-salience marking », 2011; Givoni, « Marking multiple meanings », 2020; Givoni, Journal of Pragmatics, 2013, 48, 29). Par conséquent, le recours à ces marqueurs renforce les significations à faible relief (le sens littéral étant ici « étincelant ») qui sont moins fréquentes, moins familières, moins stéréotypées et moins formalisées) (« The Graded Salience Hypothesis », voir Giora, *Cognitive Linguistics*, 1997, 8, 183; Giora, « On our mind: Salience, context and figurative language », Oxford University Press, 2003; Givoni & Giora, Handbuch Pragmatik, J.B. Metzler, 2018). Les énoncés accompagnés de marqueurs étaient intégrés aux contextes, ce qui soutenait fermement la signification saillante des ambigüités (le sens figuré étant ici « heureuse »). Ces résultats soutiennent l'« hypothèse du recours aux marqueurs à faible relief ». Ils démontrent une préférence pour les significations à faible relief, ainsi que des temps de lecture plus rapides de ces significations suivant des marqueurs à faible relief relativement aux conditions de contrôle.

Mots-clés : marqueurs, relief, faible relief, *The Low-Salience Marking Hypothesis*, traitement de l'ambigüité

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Received March 2, 2020
Revision received June 26, 2020
Accepted October 5, 2020 ■