

The Situational Noun in Ancient Hebrew

A New Understanding of אִישׁ

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Language is the unintended byproduct of [human] attempts to communicate effectively.

—Randy LaPolla (2003:123)

Introduction

The noun אִישׁ is a familiar word; nearly everybody who knows even a little Hebrew is sure what it means. Yet the following three distinctive and well-accepted facts call for a comprehensive explanation:

- אִישׁ is used far more frequently than the other general human nouns אָדָם or נֶפֶשׁ or גִּבּוֹר or אֲנוּשׁ;¹
- the meaning of אִישׁ is much more *semantically mutable*—that is, influenced by context—than most Hebrew nouns are;² and
- אִישׁ is employed hundreds of times where it *gives no new information* about its referent’s features.³

This paper explains those distinctive behaviors by taking a communication-oriented approach, asking:

¹ Masculine forms of אִישׁ together appear almost three times more often than נֶפֶשׁ (whose denotation is usually not even related to human beings; according to Brown et al. [1906:660], it indicates a person only 144 times out of 754 instances, not including its pronoun-like usages), four times more often than אָדָם, 33 times more often than גִּבּוֹר, and 52 times more often than אֲנוּשׁ. (Here I am counting only the masculine forms of אִישׁ because only they can represent human beings without regard to gender.)

² Prototypical nouns have a coherent semantic or cognitive profile: they evoke a fairly stable image of their referents’ qualities (Hopper and Thompson 1984; Hanks 2013:134–36). Hence performing a standard word study on אָדָם, גִּבּוֹר, and אֲנוּשׁ yields a coherent profile for each one. In contrast, that approach fails miserably for אִישׁ (or for נֶפֶשׁ): the result is diffuse and amorphous, with too many internal contradictions to be useful—which is a sign of that term’s mutability on the informational level.

³ Categories include: (1) cases where אִישׁ is used in place of someone’s name or as a label that could just as well refer to another discourse-active participant; e.g., Gen 26:13; 30:43; Exod 2:9, 21; Judg 17:11; 2 Sam 12:5; (2) cases where אִישׁ is used as the head of a referring expression whose modifying term could alone suffice to enable the audience to fix the intended referent (see below).

When ancient Hebrew speakers employed the noun $\psi\aleph$, how did it evoke meaning in their audience? (and)

Under what conditions did speakers use this noun?

In other words, in order to get at what $\psi\aleph$ means, I will discuss *how* does it mean, and *when* does it mean.⁴

For my underlying theory, I rely mainly upon the two key commitments of cognitive linguistics: namely, the same general principles govern both semantics and pragmatics; and these principles accord with what is known about the workings of the human mind (Evans 2019: 35–38).

The noun $\psi\aleph$ displays certain consistent patterns of usage even as it is broadly dispersed across the biblical corpus. I approach these patterns as if they were features of the ancient Hebrew language—and as such, they not only apply uniformly, but also reflect an effort to communicate as language speakers do. I further assume that the masculine form $\psi\aleph$, the feminine form $\aleph\psi$,⁵ and their respective plurals are internally consistent in their functions whenever a speaker employs one form or the other.⁶ Taken together, these forms appear nearly

⁴ This paper thus summarizes and updates my dissertation (Stein 2020a) as it applies to $\psi\aleph$ in ancient Hebrew, which in turn updates my earlier articles on the subject (2008a; 2018).

Regarding a word’s meaning contribution, the cognitive linguist Benjamin Bergen likewise observes, “Maybe *what does X mean?* is the wrong question, or at best maybe it’s only part of the question. Perhaps the real question is *what are the understanding processes that X invokes?*” (2012:150).

As Paul Noble has explained in *Biblical Studies*, the most worthwhile meanings in a text are found through interpreting it “in relation to the milieu of its production” (Noble 1995:197). I.e., why use this word rather than something else? In what follows I am making the same idealizing assumptions about the text’s audience that the composers of the text presumably made—e.g., the audience consists of fluent speakers of Hebrew who can hear the presenter perfectly and are paying constant attention.

⁵ The feminine noun form $\aleph\psi$ appears in 782 instances (Even-Shoshan 1982); it is counterposed with $\psi\aleph$ hundreds of times.

⁶ For frequently used words like $\psi\aleph$, irregular feminine and plural forms are the result of natural forces that shape language so as to make its signals more efficient. The most commonly occurring words are actually the most likely to have irregular inflections (Corbett 2009; Bybee and Beckner 2015:966). For such words, the heightened phonological contrasts are the most useful for ensuring rapid and accurate communication (Ramscar and Port 2016:71). The process of creating irregular inflections from distinct stems is known as *suppletion* (Mel’čuk 1994; Corbett 2009). The language typologist Greville Corbett remarks that “when looking at a new language it is no surprise to find that the translation equivalents of ‘man’ and ‘go’ are suppletive” with respect to their plurals (2009:32).

Because of suppletion, the evident fact that for $\psi\aleph$ these forms derived from different stems is irrelevant to their meaning; what matters is how speakers use them. True, corpus linguists have

three thousand times in the Hebrew Bible.⁷ When I mention “שֵׁן,” I am referring to all four forms—unless otherwise noted.⁸

I have proceeded as recommended by Reinier de Blois, who has written that when lexicographers investigate the usage of a particular word, “the safest approach is to start with the assumption that there is one single concept behind [it]” (de Blois 2010a:5).⁹

(All of the foregoing assumptions can be considered valid if they turn out to engender cogent results with wide-ranging explanatory power—as you will soon see is the case here.)

So, after stating my hypothesis and give its conceptual background, I will cite three broad and diverse usage patterns that only my hypothesis can explain. These patterns are like pieces of a jigsaw puzzle that snap together to make a coherent picture of this noun’s meaning contributions. And after discussing and summarizing my conclusions, I will touch upon the implications for biblical dictionaries.

Hypothesis

My hypothesis is as follows: in ancient Hebrew, as reflected in the Bible, a speaker prototypically employs the noun שֵׁן to signal that its referent is *an essential participant*—that is, essential to grasping the speaker’s depicted situation; and this noun is the most efficient way

empirically demonstrated that singular and plural forms of the typical human noun have distinct distributional and collocation patterns, as do the masculine versus feminine forms in certain languages with two or three semantically based grammatical genders (Mahlberg 2005; Schnedecker 2018a; Cappeau and Schnedecker 2018). Nonetheless, those corresponding forms do share many of the same functions with each other, and distinctively so—that is, those functions are not shared by other general human nouns (ibid.). Thus there is good reason to expect the same for שֵׁן.

⁷ The exact number of instances is disputed. An Accordance search for the common nouns שֵׁן and שָׁן yields 2968 instances (Hebrew Masoretic Text with Strong’s number tagging, v. 4.20), while *TLOT* totals 2964 (Kühlewein 1997a:98–99; 1997b:187–88); and *DCHR* totals 2959 (Clines 2018a:309; 2018b:594).

⁸ Stated more formally, I treat שֵׁן, שָׁן, שְׁנָן, and שָׁן as inflectional forms of the same word that together comprise a single paradigm, in accordance with linguists’ standard practice for suppletion (cf. Corbett 2009).

⁹ This not only is a parsimonious way to conduct an investigation, but also it appears to emulate the cognitive processing of word meaning in actual language use. The psycholinguist Stephen Frisson has argued, based upon his robust experiments on the apprehension of the written word, that encountering a polysemous word initially activates an *underspecified* meaning that encompasses all of that word’s established senses (e.g., Frisson 2009, 2015). In other words, processing starts from a single meaning. This is one rendition of the “thin semantics version of the underspecification approach” to polysemy in linguistics; see Blutner 1998; Falkum and Vicente 2015:4–5; Falkum 2015.

to communicate the *situatedness* of that participant. Therefore I call $\psi\aleph$ the *situational noun* for discussing human participants.¹⁰ It seldom functions in the manner of prototypical nouns, used to describe their referent in terms of the intrinsic features possessed by such an entity.

A situational noun appears to exist in at least several languages.¹¹ Such nouns operate mostly within the realm of communication *between the speaker and an audience*. This is the domain of pragmatics, whose operations are largely invisible even to native speakers (Löbner 2013:15, 58; Fauconnier 2004:674). As the late cognitive linguist Gilles Fauconnier wrote, “This invisibility is a general feature of meaning construction” (*ibid.*). In other words, my hypothesis is far from obvious. So I will devote the next section to unpacking it, starting with some basic tenets of human cognition and of communication.

Theory: Situations and Participants



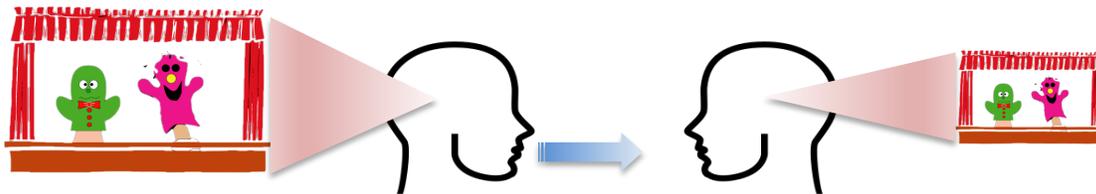
It appears that in human beings, cognition is largely devoted to *keeping track of elements within situations*. Like the cognitive psychologist Lawrence Barsalou, I hold that the human brain’s most basic function is to represent and process situations—that is, to notice the way in which an entity is related to its surroundings and circumstances (Barsalou et al.

¹⁰ The term *situational noun* has seldom been employed in the linguistics literature to date. It has been used, for example, to classify nouns whose featural profile seems to evoke a “situation” rather than a freestanding “thing”—e.g., in English, *parent, author, chef, boss, habit, war, effort* (Booij and Lieber 2004; similarly Hellan 2016). This class seems equivalent to what are more generally known as *relational nouns*. Therefore I think it justified to repurpose the moniker *situational noun*. (Upon further reflection, perhaps the term *situating noun* would be even more suitable.)

¹¹ Such was the conclusion of my dissertation (Stein 2020a), which found that *man* in English, *homme* in French, and $\psi\aleph$ in ancient Hebrew share a set of discourse functions that meanwhile set those words apart from the other general human nouns in their respective languages. It seems safe to speculate that further examination would show that cognate terms in languages that are closely related to the foregoing—such as *Mens* in Dutch (a Germanic language like English), *home* in Asturian (a Romance language based in northwest Spain), and *awilum* in Akkadian—are likewise situational nouns, or at least have functioned in that manner at a certain stage in their evolution.

2018:1–2, 9).¹² In this paper, the situated elements that I am specifically interested in are the human participants.

In successful communication, whenever speakers depict a situation, their audience forms a mental representation of it. Scholars call that representation a “discourse model” or “situation model” or “stage model” (Webber 1978: 27–29; Lambrecht 1994; Kintsch 1998; Van Hoek 2003:173–75; van Berkum et al. 2007; Aitchison 2012:89). It is populated by participants whom the audience must keep track of. The speaker’s mental representation of that depicted situation and its participants (*shown on the left*) is ideally reproduced in the audience’s own situation model (*shown on the right*).¹³



Communication thus requires synchronization between speaker and audience. So how might speakers go about helping their audience to promptly grasp what is being described?

Introducing the Concept of a Situational Noun

Let’s try a thought experiment: What if you were a speaker, and there were a specialized noun whose sole purpose was to signal to your audience, “Hey, this participant I’m mentioning is essential for constituting the depicted situation in your mind”? What if this noun were semantically empty—so that it could operate only on the discourse level? It would be like a photon in physics: an elementary particle that has no mass and thus reaches its destination instantly and produces an excitation there. The excitation would light up the audience’s situation model and prompt it to be updated with the new participant. This linguistic photon

¹² See also Barsalou 2003; 2016; Yeh and Barsalou 2006; Rehder and Ross 2001. A *situation* consists of elements that are configured in relationship to each other, or more practically speaking, “a setting where agents encounter other agents, objects and events” (Barsalou et al. 2018:2). Similarly, in the philosophical tradition, see Jackson 1998:25.

¹³ According to the theory of discourse processing developed by the cognitive psychologists Anthony Sanford and Simon Garrod (e.g., 1998), knowledge is organized in the mind in terms of specific situations, which they call “scenarios.” In their view, the most basic operation in understanding an utterance is to *recognize the presupposed situation*, in order to apply what one knows about such situations. Similarly, in the branch of cognitive linguistics known as Cognitive Grammar, “referring expressions designate things that exist in ... a *situation* as conceived by a language user” (Taylor 2002:72; emphasis added).

would function to relate its referent to the depicted situation: it would thus help to *define* the situation of interest at the same time as it *situated* that participant in it.

Unlike photons, every noun has at least a little semantic weight; but some nouns are known for being semantically “thin”—so thin that they do not usefully classify their referent as some sort of entity, and so thin as to be highly mutable.¹⁴ Real “situational nouns” are of this type.

The whole idea might sound abstract and obscure—until we realize how *communicatively efficient* such a noun can be.¹⁵ In general, speakers strive for efficiency in communication (Levshina 2018:126). They look for ways to say more but with less effort.¹⁶ They reach for words that are not only easy to pronounce and easy to understand, but also semantically thin

¹⁴ In the linguistics literature, early treatment of such nouns include Ivanič 1991, Cumming and Ono 1996:84–85, Haspelmath 1997:28, and Schmid 2000; see Benitez-Castro 2015 for a more recent review. With respect to human nouns, see Mahlberg 2005; Mihatsch and Schnedecker 2015; Mihatsch 2015a, 2015b, 2017:71–78; Schnedecker 2015, 2018b; Adler and Moline 2018:5–6; Fasciolo 2018; see also Adler 2017, 2018; Benninger 2018. According to numerous psycholinguistic studies, semantically thin terms are handled in the mind *in a different manner* than semantically rich terms (Johns and Long 2019). Thin semantics are known by various names (evoking a variety of metaphors), including *underspecification*, *generality*, *low density*, *low-dimensional*, *empty*, and *low weight*. The nouns studied (mostly in English, French, and German) have been termed *shell nouns*, *pro-heads*, *generic nouns*, *general nouns*, *summit nouns*, and *ground nouns*.

I do not accept the working assumption of some cognitive linguists that no practical distinction can be drawn between word meaning and stored world knowledge. Rather, words as communicated signals evoke a limited, parametric meaning, which in turn accesses larger knowledge structures (Evans 2015, 2019:458–92). The distinction is not only “necessary, important and feasible” (Löbner 2013:293–98; here 294) but also psychologically real (Evans 2015:266–70 and Hanks 2013).

¹⁵ Efficiency can be viewed as an optimal reduction in the audience’s uncertainty about the speaker’s intended message (Ramscar and Port 2015:92). Alternatively, efficiency is achieved when the speaker spends only the energy that is necessary to invoke the desired intellectual and emotional changes in the hearer (Levshina 2018:5).

¹⁶ Generally speaking, nouns exact a significant processing cost. Regarding only the speaker’s effort, psycholinguists have shown a cross-linguistic tendency in speech for a differential treatment of nouns versus verbs (after controlling for word length and morphological complexity): before a noun, speakers retard their articulation and pause more. This slowdown has been attributed to the relatively larger amount of planning that nouns require, given that their usage carries a higher “information load”—it evokes new or unexpected referential information that must be accounted for (Seifart et al. 2018; Lester et al. 2019; see also Strunk et al. 2020).

and therefore widely applicable.¹⁷ Remember, situational nouns stimulate the most basic of cognitive processes. Human beings naturally think in terms of a situational gestalt.¹⁸ Thus it often suffices to describe a situation of interest in a schematic way, and even in an abbreviated fashion: mentioning just one or two key features of a familiar situation is enough to evoke vastly more information about it in the audience’s mind.¹⁹ Hence a situational noun is a short-hand notation—which should make it the default choice for communicating about a situation and its participants.²⁰

The Situational Noun for Human Beings in the Hebrew Bible

As you know, שִׁי (the masculine singular form) is a one-syllable word that is unusually easy to pronounce, and it is famously both semantically thin and highly mutable (Stein 2020a). In all four respects, שִׁי is distinctive among the human nouns in ancient Hebrew (ibid.). So outwardly, at least, it is a good candidate for the realization of the concept of situational noun.

¹⁷ This is a prediction of information theory. It has been confirmed via various regression analyses on a lexical database (large tagged corpus) in three Germanic languages: English, German, and Dutch (Piantadosi et al. 2012; see also Gibson et al. 2019).

More generally, linguists and psycholinguists have found that a speaker will tend to produce utterances that are underspecified because an audience is not only capable of “connecting the dots” via inference but also does so automatically. As the pragmaticist Stephen Levinson has pointed out, when it comes to human communication, “the essential asymmetry is: inference is cheap, articulation expensive, and thus the design requirements are for a system that maximizes inference” (2000:29). As the cognitive scientists Piantadosi et al. have argued, “any effort the speaker makes to express a distinction that could have been inferred is, in effect, wasted effort” (2012:284). The human drive for efficiency likewise favors minimal work by the audience, which tends to interpret an utterance in terms of schemas that have proven (by their frequency) to be the most probable. Conventional meanings are considered before any unconventional ones.

¹⁸ This phenomenon can also be described in terms of another fundamental cognitive operation, namely metonymy—that is, associative thinking (Littlemore 2015; Gibbs 1999).

¹⁹ For psycholinguistic research on the valuable role played by an audience’s generalized situation knowledge during language comprehension, see the studies cited in Ferretti et al. 2001:519.

²⁰ Psycholinguists have found that sparse featural information about participants is optimal for grasping a situation: “Less specified, less concrete, and sparsely detailed schemas direct attention to structure better than richly detailed concrete situations [do]” (Son, Smith, Goldstone 2007:31; see also Son and Goldstone 2009; Son et al. 2012). My surmise also accords with a finding in discourse analysis: “The speaker who chooses to describe an episode in only the sketchiest terms typically uses more general lexemes” (Downing 1980:91).

As a situational noun, $\psi\aleph$ would tend to be employed only when the situatedness of its referent is at issue.²¹ Prototypically speaking, it would be used when the speaker is *framing a situation of interest—offering a schematic depiction*. Conversely, $\psi\aleph$ would not be used when that situation is already established, the participant in question is construed as a given, and the speaker’s interest is then on depicting some kind of action. In other words, when speakers depict a situation, it is their particular construal of that situation that determines whether to use $\psi\aleph$ as a label.²²

I will now present three kinds of evidence that correlate the usage of $\psi\aleph$ with the speaker’s concern for the situatedness of its referent. In the footnotes along the way, I will discuss the associated statistics that validate the linguistic nature of these findings by showing that each usage pattern is broadly dispersed in the biblical corpus, and how it is employed by a variety of speakers—including both narrators and speaking characters.²³

Puzzle Piece #1: Presence versus Absence

One type of supporting evidence is the subject of a paper due out next month in the *Journal*

²¹ This surmise is consistent with cross-linguistic observations that (1) references to participants who are new to the discourse are more elaborate than to discourse-active participants (“the more disruptive, surprising, discontinuous or hard to process a topic is, the more coding material must be assigned to it”; Givón 1983:18; see also 2018:40–48); and (2) participant reference systems can convey meaning via the presence-versus-absence of a given word (“lexical source”; Frajzyngier 2011:10; see also Frajzyngier and Shay 2003, 247–82; Frajzyngier and Jirsa 2006).

Except for how they have handled $\psi\aleph$, the established findings of discourse analyses and of participant-reference tracking studies—two well-studied analytical modes in Biblical Studies—are in accord with my approach. This includes Bergen (1994); Revell (1996), Heimerdinger (1999), Levinsohn (2000), Longacre (2003), Grebe (2007); Bandstra (2008), Polak (2013; 2015; 2017), De Regt (1999; 2013; 2019a; 2019b), and Runge (2006; 2007; 2010; and with Westbury: 2012a, 2012b).

²² On construal as a basic cognitive operation, see Langacker 2015:120; 1991:315.

²³ I.e., in order to demonstrate that the observed patterns are features of the language as a whole (rather than someone’s personal style, or a local lectal variant, or a scribal gloss), it is necessary to show that the usage patterns are widely distributed across the corpus and employed by diverse speakers. For the biblical corpus, those distinct voices crucially include the reported speech of narrative characters. (The text’s audience would predictably interpret their speech according to its own conventional parlance—while expecting the speaker’s audience within the story to do the same; see further Stein 2020a:105.) These results suggest that in ancient Hebrew, the alternative expressions were employed by the same speakers, who would choose between them as a matter of convention, according to the needs of the occasion. Consequently, it is valid to ascribe a differential linguistic meaning to the two paired expressions of each type.

for *Semitics* (Stein in press). I identified 39 instances where *איש* is the head of a complex referring expression, and compared them to 90 other cases where the referring expressions are basically the same as in the first group—except without *איש*.

Here is one such matched pair from the book of Jeremiah (3:3; 5:7), involving the noun *זונה*:

וּמִצַּח אִשָּׁה זֹנָה הָיָה לָךְ

You had the [brazen] forehead of a streetwalker

וּבֵית זֹנָה יִתְגַדְּדוּ:

They went trooping off to the prostitute's house

In the first verse, *אשה* seems superfluous, because *זונה* alone would tell us that the referent is a woman. So why does the speaker bother to use it? According to my hypothesis, *אשה* signals to the speaker's audience that this participant's involvement defines the depicted situation. Here, the focus of attention is on the typical streetwalker's brazenness, which cannot be evoked in the audience's mind without first picturing *her*. That cognitive need, and the communicative need for the synchronization of situation models, accounts for the speaker's use of *אשה*.

In contrast, in the second instance, the speaker takes as a given the existence of the referent (and her place of operation), while focusing attention on the activity that involves her. According to my hypothesis, the use of *אשה* would indeed not be expected.

Likewise, as predicted, all 39 cases that used *איש* in my study were found to be sketching a new or modified situation, in which this noun's referent was profiled as a key participant, whereas all 90 cases *without* *איש* treated its referent as a given element.²⁴ This finding is amazing because it provides the first-ever comprehensive explanation for the presence of *איש* in at least 129 referring expressions headed by *איש* where it is semantically superfluous.

²⁴ Three types of biblical evidence were presented: (1) *איש*-headed appositions involving *זונה*, versus the latter noun as a freestanding substantive (2) within a verbal complement, relative clauses that modify *איש* versus those that serve in lieu of a substantive, and (3) clauses that introduce an unquantified subset of a known group. In the first group, the 9 instances with *אשה* as the head noun and the 21 instances without it are both employed in narration, in reported speech, in legislation, and in prophetic pronouncements; and both kinds appear in each of four disparate biblical books: Kings, Jeremiah, Ezekiel, and Proverbs. In the second group, there are 16 instances with *איש* as the head noun and 29 instances without it; both kinds appear in Genesis, Leviticus, Numbers, Samuel, Kings, and Malachi. And in the third group, there are 13 instances of a partitive construction preceded immediately by *אנשים* versus 40 instances without that noun; both kinds appear in Numbers, Kings, Jeremiah, Nehemiah, and Chronicles.

Puzzle Piece #2: Elaboration

A discourse function that I call *elaboration* is exemplified in the Bible by a statement that Hannah makes about herself, in the temple at Shiloh, in response to the priest Eli’s reproach (1 Sam 1:15):

לֹא אִדְנִי אִשָּׁה קִשְׁת־רוּחַ אֲנִי

“No, my lord! I’m a very unhappy woman!”

Elaboration obtains when a speaker opens a predication with *אִישׁ*—a predication that supplies key information about an already given participant. The situational noun signals that a piece of data will follow, to predicate something essential about that participant. In effect, the speaker holds the depicted situation fixed so that the new information can be taken into account.²⁵ In most cases, the elaboration function is set up by employing our noun as Hannah did—namely, as the head term of the clausal predicate.²⁶ So, too, in the introduction of Deborah by the narrator of the book of Judges (4:4):

וְדִבּוֹרָה אִשָּׁה נְבִיאָה

Deborah was a prophet.

In a sample corpus consisting of Genesis through Kings, elaborations account for just under 4% of the instances of *אִישׁ*. That might not seem like much, but 76 cases is not a small number.²⁷ Notably, in elaborations, *אִישׁ* does not itself contribute any new information; the attributes of personhood, adulthood, and gender would be apparent without it! Furthermore, the clause is grammatical even when our noun is omitted: *וְדִבּוֹרָה נְבִיאָה* = subject and predicate: ‘Deborah was a prophet’. So what does *אִשָּׁה* contribute to the utterance’s meaning?

Viewed in terms of communicative need and audience cognition, leading with this noun presupposes the participant’s presence in the situation at hand—and efficiently accesses that presence in the audience’s situation model, where it prompts an update. In other words, *אִישׁ* is

²⁵ In her 2005 monograph *English General Nouns*, the corpus linguist Michaela Mahlberg examined the usage patterns of twenty high-frequency nouns in mainstream British English from 1990–2000. Among them was the set *man, woman, men, and women*. She called attention to the elaboration discourse function, which is a subset of what she labeled the distinctive “characterising function” of those four words. Typical English examples include: “he’s a man with a mission” and “she’s a woman of many talents.”

²⁶ The other means of elaboration places an *אִישׁ*-headed noun phrase in nonrestrictive apposition with some prior description of its referent, such as a name.

²⁷ Instances of using *אִישׁ* to signal elaboration in the Pentateuch include: Gen 6:4; 6:9; 9:20; 25:27 (3x); 27:11 (2x); 39:1, 2; 41:38; 46:32, 4; 47:6; Exod 4:10; 15:3; 18:21; 22:30; 32:1, 23; Lev 13:44; 21:18, 19; Num 13:32; 16:2; 27:18; 32:14; Deut 1:15; 24:12. Instances using *אִשָּׁה* in Genesis through Kings include: Gen 12:11; Judg 4:4 (2x); 1 Sam 1:15; 2 Sam 14:5, 27; 1 Kgs 11:26.

used to signal that the immediately following information about this participant is essential for grasping the depicted situation. Thus in the cited examples, Hannah is employing אִשָּׁה to insist that Eli must take into account her deep distress. In Judges, the narrator is telling us that Deborah is reliably a prophet (not merely an occasional one), and that this aspect of her character is definitive for the story.

Elaboration is a normal discourse function of אִשָּׁה, which suggests that it is indeed a situational noun.

Puzzle Piece #3: Referring to a Party with אִשָּׁה Rather Than a Specific Label

In the Bible, when speakers set out to depict a situation for some audience, they often refer to a third party via the noun phrase הָאִשָּׁה הַזֹּאת—that is, using the label אִשָּׁה along with the appropriate proximal demonstrative pronoun. This way of making reference in ancient Hebrew is not only conventional but also preferred, as can be seen from the 33 such cases where the speaker clearly or presumably knows that third party’s name or has readily available a more specific designation, as used nearby in the text.²⁸

The typical setting is a lawsuit in which one of the disputants is testifying about what happened—that is, framing a situation—such as when a prostitute famously addresses King Solomon and uses this expression three times (2 Kgs 3:17–19):

אֲנִי וְהָאִשָּׁה הַזֹּאת יֹשְׁבֹת בְּבַיִת אֶחָד ...
 וַתֵּלֶד גַּם-הָאִשָּׁה הַזֹּאת ...
 וַיָּמָת בֶּן-הָאִשָּׁה הַזֹּאת לַיְלָה ...

“*This woman* and I live in one house.... *This woman*
 also gave birth.... *This woman’s* son died overnight....”

In this example, presumably the speaker knows her housemate’s name—why is she so pointedly not using it? Or consider how a disdainful Jeremiah refers to the king, whom he does name (Jer 22:28),

הַיְעֵצָב נִבְזָה נָפוּץ
 הָאִשָּׁה הַזֹּאת כְּנִיָּהּ
 אֶם-כִּלְיָ אֵין חֶפֶץ בּוֹ

“An abandoned, broken jar: is [that] *this man* Coniah—
 a vessel nobody cares about?”

²⁸ The instances are: Gen 24:58; 26:11; 34:21; Num 16:26, 30; 22:9; Deut 1:35; 22:14, 16; Judg 19:23, 24; 1 Sam 2:20; 25:25; 2 Sam 3:39; 1 Kgs 3:17, 18, 19; 2 Kgs 6:28; Jer 22:28, 30; 26:11, 16; 38:4 (2x); 38:9, 16; Ezek 14:3, 14, 16, 18; Jon 1:14; Neh 1:11; 1 Chr 11:19.

Why doesn't the prophet simply make reference to his target by the name Coniah alone? Moreover, the speaker's audience already knows or can plainly see that third party's gender and adult status. The label *שׂוֹמֵר* is not informative, so why do Hebrew speakers choose it?

The answer is: When what is of paramount interest to speakers is the depicted situation itself, they prefer to portray it schematically, and to label its key participant(s) *in terms of that situation*. To do so, they employ *שׂוֹמֵר*—the situational noun.

Additional Evidence

Altogether, the three puzzle pieces account for about 10% of all instances of *שׂוֹמֵר*. What about the other 90%?

If time permitted, I would tell you about further supporting evidence, including:

- Changed labels that presuppose participation in a situation
- Preferred over role terms (*king, father, mother, son*)
- Presence and absence when describing gender relations
- Negation that presupposes participation in a situation
- Unique deixis that presupposes participation in a situation
- Applications to groups that presuppose participation in a situation
- Situational construct expressions that presuppose participation²⁹

while also showing how my hypothesis handily solves more than a dozen longstanding interpretive cruxes.³⁰ Even so, while most instances of *שׂוֹמֵר* are not so boldly situational, they are *consistent* with the view of *שׂוֹמֵר* as a situational noun.³¹ Take the cases where *שׂוֹמֵר* functions like an indefinite pronoun (and thus is rendered into English by *anyone, someone, no one*, or

²⁹ I hope to detail these pieces of evidence in my subsequent writing.

³⁰ E.g., Gen 4:1; 18:2; 30:43; 32:25; Exod 2:14; 10:7; Num 5:31; 1 Sam 1:11; 2:33; 9:9; 26:15; 2 Sam 3:15; 10:6; 14:2, 16; 20:16; 21:20; 1 Kgs 2:2; Isa 66:13; Ezek 23:45; 43:6; Jer 38:7; Zech 3:8; Neh 1:11. In these cases, viewing *שׂוֹמֵר* as a situational noun leads to explanatory parsimony: it makes the fewest (and least-cost) assumptions and involves the fewest propositions, while being consistent with what is known about how human beings use language—namely, that our minds begin with the most conventional construal and look no further if it readily yields a coherent and informative result (Stein 2018:550–52).

³¹ The methodological assumption of a single basic concept has proven to be surprisingly potent. The posited prototypical concept ('essential or situation-defining participant') accounts for 567 of the 570 instances of masculine *שׂוֹמֵר* (singular and plural) in the Pentateuch, or 99% in that sample corpus (Stein 2020b), and 739 of the 781 instances of *שׂוֹמְרֵי* (singular and plural) in the Bible, or 95% (Stein 2020c).

everyone).³² Such behavior is exactly what is expected from a noun that labels the situation’s key-participant slot—when that slot is construed as being occupied by nobody in particular. Indeed, in all of the various pronoun-like usages of **שׂי**, it can be said to function straightforwardly as a situational noun.

Deriving the Other Meanings of **שׂי**

By virtue of the normal cognitive processes of association, the participants in a depicted situation are conceptually linked to all other aspects of that situation. The implications of this fact for the evolution of **שׂי** as a polysemous word can be seen by considering Lawrence Barsalou’s well-regarded model of cognitive frames, as adapted by Reinier de Blois for use in biblical lexicography.³³ When expressed as a Barsalou frame, the basic conceptual structure of the situational noun for persons—setting aside gender issues for a moment—consists of these four attributes.

Attribute	Value
<i>Description:</i>	An essential participant in a situation
<i>Source:</i>	Ontological domain of <human being> ³⁴
<i>Function:</i>	To communicate efficiently about participants in situations
<i>Connotation:</i>	Associated with being situationally essential/definitive

³² Out of the 570 instances of masculine **שׂי** (singular and plural) in the Pentateuch, 45, or 8%, function like an indefinite pronoun (Stein 2020b), and likewise 6 of the 781 instances of **שׂי** (singular and plural) in the Bible, or 1% (Stein 2020c).

Some biblical scholars (Van der Merwe et al. 2017:309; Moshavi 2018:43n5) have pointed out that indefinite pronouns might be more accurately termed *quantifiers* (in analogy with that term’s denotation in logical semantics), for they signal that the referent is less accessible within the audience’s situation model than true pronouns do. Nonetheless, I speak in terms of indefinite pronouns because that is standard in biblical scholarship (based on grammatical tradition), and in analogy to how such usages of **שׂי** are usually rendered into English. On how certain nouns can function as indefinite pronouns, see Haspelmath 1997:182; cf. 10, 27–29, 53. On the continuum between nouns and pronouns, see Fasciolo 2012; Sugamoto 1989.

³³ See, e.g., Barsalou (1992) 2009; de Blois 2010a:4–5; 2010b; Löbner 2013:301–24. Barsalou summarizes the model as follows: “At their core, frames contain attribute-value sets. *Attributes* are concepts that represent aspects of a category’s members, and *values* are subordinate concepts of attributes” ([1992] 2009:43; emphasis added).

³⁴ Developmental psychologists and psycholinguists have observed that the human mind naturally classifies experience into certain basic ontological categories (e.g., Soja, Kerry, and Spelke 1991; Imai and Gentner 1997). Some linguists have taken note of how this phenomenon affects word formation

According to cognitive linguistic theory, the meaning extensions of *אִישׁ* can be understood as motivated by a conceptual shift in focus from this overall initial frame toward one of its attributes.³⁵ Thus:

1. Whenever the referent of *אִישׁ* is contrasted with a deity or with an animal, such that *אִישׁ* classifies the referent as a ‘human being’, this reflects the speaker’s focus on the Source attribute—its ontological domain.
2. Whenever *אִישׁ* is applied to a group of persons (which is thus regarded as a single participant) or applied even to a non-human referent, this reflects the speaker’s focus on the Function attribute. The speaker is deploying *אִישׁ* to attend to the referent’s situatedness succinctly.
3. Whenever the speaker uses *אִישׁ* to profile a situation’s participants in terms of social categories, such as “women versus men” and “wife versus husband,” this reflects a focus on the Connotation attribute, because such social categories are essential for construing the participant properly in that particular setting.³⁶

What about Gender?

Unlike the other general human nouns, *אִישׁ* must necessarily have both a masculine and a feminine form. That’s because *אִישׁ* is prototypically used to situate individual participants in the audience’s mind; and according to the morpho-syntactic referential gender rules for Hebrew, whenever a speaker uses a noun to refer to an individual person as a specific reference, that noun’s form must match the social gender of its referent.³⁷

and usage. For example, in English, several series of indefinite pronouns correspond to the major ontological categories of <person>, <thing>, <place>, <time>, and <manner>, such as *somebody*, *something*, *somewhere*, *sometime*, and *somehow* (Haspelmath 1997:28; see also, e.g., Fasciolo 2018).

³⁵ De Blois 2010a:6; 2004:110–11. This posited semantic structure for *אִישׁ* accords with the cognitive linguist David Tuggy’s assertion that a word can have a schematic meaning that exists alongside specific conventionalized “elaborations” that count as distinct senses ([1993] 2006)—a view recently endorsed by Evans (2019:433–34, 455). It is the opposite of what linguists call grammaticalization.

³⁶ The number of biblical instances of *אִישׁ* that cannot be derived via this Barsalou frame is negligible. Essentially all of its attested usages can be accounted for by either the posited basic meaning or one of its predictable extensions.

³⁷ Stein 2008b; 2013. From an information-theoretic perspective, a grammatical gender cue is more informative and thus more useful for discriminating referents. Meanwhile, linguists have proposed that speakers aim to keep relatively constant their audience’s uncertainty about the intended message (Dye et al. 2017). Under that assumption, speakers should mean less (on the informational level) by their use of a gender-marked label than they do by their use of a non-marked label from the same noun class. To

Meanwhile, Israelite society's social gender roles do constrain the interpretation of **אִישׁ** to some extent. For example, a man's **אִשָּׁה** is understood to be his wife, whereas a man's **אִישׁ** is either his subordinate, lineage successor, or opponent. Both of those differentially gendered participants are slotted into a distinct conventional situation that involves the man in question; the audience applies considerations of salience to infer which situation applies.

(As for the limited degree to which **אִישׁ** displays lexical gender in the biblical corpus, I refer you to my 2019 paper in the SBL Linguistics seminar.)³⁸

Summary

To summarize thus far, before talking about dictionaries:

A situational noun is both cognitively basic and communicatively advantageous.

When applied to **אִישׁ** in the Hebrew of the biblical corpus, this concept successfully explains why this noun is used so much more frequently than other general human nouns; why its meaning is much more semantically mutable than most nouns are; and why it is often employed even where it gives no new featural information about its referent.³⁹

This single concept accounts for almost every instance of the word.⁴⁰ Indeed, it consistently accounts for not only the presence of **אִישׁ** in the text but also its absence.

Furthermore, the aggregation of the instances of masculine **אִישׁ** with those of **אִשָּׁה** and their respective plurals confirms that they regularly share certain discourse functions that are meanwhile not shared by other general human nouns.

keep the uncertainty constant, the situational noun's added information about its referent's gender offsets the paucity of other information that a situational noun evokes.

³⁸ On the diachronic deterioration (post-biblically) of the situating functions of **אִישׁ** in favor of increased lexical gender, see §9.3.3 in Stein 2020a.

³⁹ This view also explains why **אִישׁ** is the standard label for participants in conventional, everyday roles—such as sexual partners, spouses, householders, agents, and adversaries. Our recognizing the situation-orienting function of **אִישׁ** casts many of its distinctive behaviors as perfectly natural: its dominant usage for introducing new participants; its conspicuous presence even where informationally superfluous; its pronoun-like usages; its role as a counting unit; and its application to various non-human entities.

⁴⁰ See above, n. 31. Meanwhile, it is to be expected that lectal, diachronic, and even meaningless variation exists in the biblical corpus (e.g., Naudé 2003; Holmstedt 2006:14–18; Geeraerts 2016). My claim is that the degree of such variation is negligible for the purposes of this study, which has focused on establishing the distinctive prototypical discourse functions of **אִישׁ**. The issue of variation in usage can be properly explored only *after* recognizing the prototypical functions **אִישׁ**—and then investigating whether and when they are taken up by this noun's synonyms or by circumlocutions.

Finally, the hypothesis that **שֵׁן** is prototypically a situational noun not only is more comprehensive and parsimonious than any previous account, but also it repeatedly yields a biblical text that is more coherent and informative.

Lexicographic Implications

Now I will touch upon three implications of my hypothesis for lexicography. First of all, let's recall that this is a word that prototypically is *not* part of a semantic field. Generally speaking, the notion that the referent of **שֵׁן** is both a type of Object and a type of Being is presupposed by this noun's usage rather than profiled by it. So for dictionaries to slot this noun into such a field (as two of them have recently done) arguably misrepresents its meaning contribution.

Second, a semantic definition (let alone a gloss) does not inform the reader *how* **שֵׁן** means or *when* it means (i.e., its communicative functions and the circumstances for its use)—yet those aspects are largely the point of employing a situational noun.

And third, listing the many senses of **שֵׁן** does not do justice to their common thread and how they relate to each other. One can infer from such a list that this word is highly mutable—but not why.

In conclusion, because **שֵׁן** is a situational noun, it seems to be an extreme case of what Harold Scanlin was alluding to when he wrote, “The last place to look for the meaning of a word is in the dictionary” (Scanlin 1992:134). But does it necessarily have to be that way? I really don't know!

References

- Adler, Silvia. 2017. “Les noms généraux – « shell nouns » – participent-ils à une lecture taxinomique de type Hiérarchie-être ?” *Syntaxe et sémantique* 18 (1): 45–66. doi:10.3917/ss.018.0045.
- . 2018. “Sémantique Des Noms Généraux Sous-Spécifiés et Construction Du Sens.” *Langages* No. 210 (2): 71–86. doi:10.3917/lang.210.0071.
- Adler, Silvia, and Estelle Moline. 2018. “Les Noms Généraux : Présentation.” *Langue Française* 198 (2): 5–18.
- Aitchison, Jean. 2012. *Words in the Mind: An Introduction to the Mental Lexicon*. 4th edn. Malden, MA: Wiley-Blackwell.
- Bandstra, Barry. 2008. *Genesis 1–11: A Handbook on the Hebrew Text*. Baylor Handbook on the Hebrew Bible. Waco, TX: Baylor University Press.
- Barsalou, Lawrence W. 2003. “Situating Simulation in the Human Conceptual System.” *Language and Cognitive Processes* 18 (5–6): 513–62. doi:10.1080/01690960344000026.
- . (1992) 2009. “Frames, Concepts, and Conceptual Fields.” In *Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization*, edited by Adrienne Lehrer and Eva Fetter Kittay, 21–74. New York: Routledge.

- . 2016. “Situated Conceptualization: Theory and Applications.” In *Perceptual and Emotional Embodiment*, edited by Yann Coello and Martin H. Fischer, 19–45. Foundations of Embodied Cognition 1. New York: Routledge.
- Barsalou, Lawrence W., Léo Dutriaux, and Christoph Scheepers. 2018. “Moving beyond the Distinction between Concrete and Abstract Concepts.” *Philosophical Transactions of the Royal Society B: Biological Sciences* 373: 1–11. doi:10.1098/rstb.2017.0144.
- Benitez-Castro, Miguel-Angel. 2015. “Coming to Grips with Shell-Nounhood: A Critical Review of Insights into the Meaning, Function and Form of Shell-Noun Phrases.” *Australian Journal of Linguistics* 35 (2): 168–94. doi:10.1080/07268602.2015.1005001.
- Benninger, Céline. 2018. “Les noms quantité et nombre et la notion de « noms généraux » : rencontre aux sommets ?” *Langue française* 198 (2): 115–29. doi:10.3917/lf.198.0115.
- Bergen, Benjamin K. 2012. *Louder than Words: The New Science of How the Mind Makes Meaning*. New York: Basic Books.
- Bergen, Robert D., ed. 1994. *Biblical Hebrew and Discourse Linguistics*. Dallas: SIL.
- Blutner, Reinhard. 1998. “Lexical Pragmatics.” *Journal of Semantics* 15 (2): 115–162.
- Booij, Geert, and Rochelle Lieber. 2004. “On the Paradigmatic Nature of Affixal Semantics in English and Dutch.” *Linguistics* 42 (2): 327–57. doi:10.1515/ling.2004.011.
- Brown, Francis, S.R. Driver, and Charles A. Briggs. 1906. “שָׁמַיִם.” *A Hebrew and English Lexicon (BDB)*, 659–61. Boston: Houghton Mifflin.
- Bybee, Joan L., and Clay Beckner. 2015. “Usage-Based Theory.” In *The Oxford Handbook of Linguistic Analysis*, edited by Bernd Heine and Heiko Narrog, 2nd edn. Oxford University Press. doi:10.1093/oxfordhb/9780199677078.013.0032.
- Cappeau, Paul, and Catherine Schnedecker. 2018. “Du Degré de Généralité Des Noms d’humains (Pluriels) *Gens, Hommes, Humains, Individus, Particuliers, Personnes*: Différences Distributionnelles, Sémantique et Génériques.” *Langue Française* 198: 65–81.
- Clines, David J. A. 2018a. “שָׁמַיִם.” *The Dictionary of Classical Hebrew Revised (DCHR)*. 1:309–27. Sheffield: Sheffield Academic.
- . 2018b. “הָאָרֶץ.” *The Dictionary of Classical Hebrew Revised (DCHR)*. 1:594–603. Sheffield: Sheffield Academic.
- Corbett, Greville G. 2009. “Suppletion: Typology, Markedness, Complexity.” In *On Inflection*, edited by Patrick O. Steinkrüger and Manfred Krifka, 25–40. Trends in Linguistics: Studies and Monographs 184. Berlin: Mouton de Gruyter.
- Cumming, Susanna, and Tsuyoshi Ono. 1996. “Ad hoc Hierarchy: Lexical Structures for Reference in Consumer Reports Articles.” In *Studies in Anaphora*, edited by Barbara A. Fox, 69–94. Philadelphia: John Benjamins.
- de Blois, Reinier. 2004. “Lexicography and Cognitive Linguistics: Hebrew Metaphors from a Cognitive Perspective.” *DavarLogos* 3 (2):97–116.
- . 2010a. “The Soul of the Old Testament: Reconstructing Concepts in an Ancient Language.” Paper presented at the fourth annual Nida School for Translation Studies, Murcia, Spain.
- . 2010b. “Wine to Gladden the Heart of Man: The Art of Writing Definitions.” Paper presented at the 20th congress of the International Organization for the Study of the Old Testament, Helsinki.
- de Regt, Lénart J. 1999. *Participants in Old Testament Texts and the Translator: Reference Devices and Their Rhetorical Impact*. Studia Semitica Neerlandica 39. Assen: Van Gorcum.
- . 2013. “Participant Reference in Discourse: Biblical Hebrew.” *Encyclopedia of Hebrew Language and Linguistics*, edited by Geoffrey Khan. Leiden: E. J. Brill.

- . 2019a. “Anaphoric Accessibility in Biblical Hebrew Narrative: Global and Local Participant Tracking across Clause Boundaries.” In *Ancient Texts and Modern Readers: Studies in Ancient Hebrew Linguistics and Bible Translation*, edited by Gideon R. Kotzé, Christian S. Locatell, and John A. Messarra, 63–78. *Studia Semitica Neerlandica* 71. Leiden: Brill.
- . 2019b. *Linguistic Coherence in Biblical Hebrew Texts: Arrangement of Information, Participant Reference Devices, Verb Forms, and Their Contribution to Textual Segmentation and Coherence*. Piscataway, NJ: Gorgias Press.
- Downing, Pamela A. 1980. “Factors Influencing Lexical Choice in Narrative.” In *The Pear Stories: Cognitive, Cultural, and Linguistic Aspects of Narrative Production*, edited by Wallace Chafe, 89–126. Norwood, NJ: ABLEX.
- Dye, Melody, Petar Milin, Richard Futrell, and Michael Ramscar. 2017. “A Functional Theory of Gender Paradigms.” In *Perspectives on Morphological Organization: Data and Analyses*, edited by Ferenc Kiefer, James Blevins, and Huba Bartos, 212–39. *Empirical Approaches to Linguistic Theory* 10. Leiden: Brill. doi:10.1163/9789004342934.
- Evans, Vyvyan. 2015. “What’s in a Concept? Analog versus Parametric Concepts in LCCM Theory.” In *The Conceptual Mind*, edited by Eric Margolis and Stephen Laurence, 251–90. Cambridge, MA: MIT Press.
- . 2019. *Cognitive Linguistics: A Complete Guide*. 2nd edn. Edinburgh: Edinburgh University Press.
- Even-Shoshan, Abraham. 1982. “ הַשֵּׁשׁ .” *Qōnqōrdansyâ Hādāshâ (New Concordance)*. 4th edn., 122–25. Jerusalem: Kiryat-Sefer.
- Falkum, Ingrid Lossius. 2015. “The How and Why of Polysemy: A Pragmatic Account.” *Lingua* 157: 83–99. doi:10.1016/j.lingua.2014.11.004.
- Falkum, Ingrid Lossius, and Agustin Vicente. 2015. “Polysemy: Current Perspectives and Approaches.” *Lingua* 157: 1–16. doi:10.1016/j.lingua.2015.02.002.
- Fasciolo, Marco. 2012. “Y-a-t-il un *continuum* entre noms et pronoms?” *Scolia: Revue de Linguistique* 26: 61–79.
- . 2018. “Les Noms Du Fond, Ou La Fonction Des Noms Dits «sommitaux».” In *Congrès Mondial de Linguistique Française (CMLF 2018), SHS Web of Conferences*, 46.12008: 1–15. EDP Sciences. doi:10.1051/shsconf/20184612008.
- Fauconnier, Gilles. 2004. “Pragmatics and Cognitive Linguistics.” In *Handbook of Pragmatics*, edited by Laurence Horn and Gregory Ward, 657–674. Malden, MA: Blackwell.
- Ferretti, Todd R., Ken McRae, and Andrea Hatherell. 2001. “Integrating Verbs, Situation Schemas, and Thematic Role Concepts.” *Journal of Memory and Language* 44 (4): 516–47. doi:10.1006/jmla.2000.2728.
- Frajzyngier, Zygmunt. 2011. “Grammaticalization of Reference Systems.” In *The Oxford Handbook of Grammaticalization*, edited by Heiko Narrog and Bernd Heine, 625–35. Oxford: Oxford University Press.
- Frajzyngier, Zygmunt, and Bill Jirsa. 2006. “The Principle of Indirect Means in Language Use and Language Structure.” *Journal of Pragmatics* 38: 513–42.
- Frajzyngier, Zygmunt, and Erin Shay. 2003. *Explaining Language Structure through Systems Interaction*. *Typological Studies in Language* 55. John Benjamins.
- Frisson, Steven. 2009. “Semantic Underspecification in Language Processing.” *Language and Linguistics Compass* 3 (1): 111–28.
- . 2015. “About Bound and Scary Books: The Processing of Book Polysemies.” *Lingua* 157: 17–35. doi:10.1016/j.lingua.2014.07.017.

- Geeraerts, Dirk. 2016. "The Sociosemiotic Commitment." *Cognitive Linguistics* 27 (4): 527–42. doi:10.1515/cog-2016-0058.
- Gibbs, Raymond W., Jr. 1999. "Speaking and Thinking with Metonymy." In *Metonymy in Language and Thought*, edited by Günter Radden and Klaus-Uwe Panther, 61–76. Philadelphia: John Benjamins.
- Gibson, Edward, Richard Futrell, Steven T. Piandadosi, Isabelle Dautriche, Kyle Mahowald, Leon Bergen, and Roger Levy. 2019. "How Efficiency Shapes Human Language." *Trends in Cognitive Sciences* 23 (5): 389–407. <https://doi.org/10.1016/j.tics.2019.02.003>.
- Givón, T. 1983. "Topic Continuity in Discourse: An Introduction." In *Topic Continuity in Discourse: A Quantitative Cross-Language Study*, edited by Talmy Givón. Typological Studies in Language 3. Amsterdam: John Benjamins.
- . 2018. *On Understanding Grammar: Revised Edition*. Philadelphia: John Benjamins.
- Grebe, Charles. 2007. "Participant Reference in the Saul Narratives: 1 Samuel 9–31." Master's thesis, Briarcrest Seminary.
- Hanks, Patrick. 2013. *Lexical Analysis: Norms and Exploitations*. Cambridge, MA: MIT Press.
- Haspelmath, Martin. 1997. *Indefinite Pronouns*. Oxford Studies in Typology and Linguistic Theory. New York: Oxford University Press.
- Heimerdinger, Jean-Marc. 1999. *Topic, Focus and Foreground in Ancient Hebrew Narratives*. JSOT Supplement Series 295. Sheffield: Sheffield Academic.
- Hellan, Lars. "Light Verb Constructions as Valency Modeling. A Study of Norwegian." Paper for Societas Linguistica Europaea (SLE), Naples, 31 August 2016.
- Holmstedt, Robert D. 2009. "Issues in the Linguistic Analysis of a Dead Language, with Particular Reference to Ancient Hebrew." *Journal of Hebrew Scriptures* 6, Article 11.
- Hopper, Paul J., and Sandra A. Thompson. 1984. "The Discourse Basis for Lexical Categories in Universal Grammar." *Language* 60 (4): 703–52. doi:10.1371/journal.pone.0005772.
- Imai, Mutsumi, and Dedre Gentner. 1997. "A Cross-Linguistic Study of Early Word Meaning: Universal Ontology and Linguistic Influence." *Cognition* 62 (2): 169–200. doi.org:10.1016/S0010-0277(96)00784-6.
- Ivanič, Roz. 1991. "Nouns in Search of a Context: A Study of Nouns with Both Open- and Closed-System Characteristics." *International Review of Applied Linguistics in Language Teaching* 29 (2): 93–115.
- Jackson, Philip W. 1998. *John Dewey and the Lessons of Art*. New Haven, CT: Yale University Press.
- Johns, Clinton L., and Debra L. Long. 2019. "Do You Know Who That Is? Representational Detail Affects Discourse Focus and Anaphor Resolution." OSF Preprints. February 28. doi:10.31219/osf.io/39ndr.
- Kintsch, Walter. 1998. *Comprehension: A Paradigm for Cognition*. Cambridge: Cambridge University Press.
- Kühlewein, J. 1997a. "שִׁיחַ." In *Theological Lexicon of the Old Testament (TLOT)*, edited by Ernst Jenni and Claus Westermann, and translated by Mark E. Biddle, 1:98–104. Peabody, MA: Hendrickson.
- . 1997b. "הִשָּׁחַ." In *Theological Lexicon of the Old Testament (TLOT)*, edited by Ernst Jenni and Claus Westermann, and translated by Mark E. Biddle, 1:187–91. Peabody, MA: Hendrickson.
- Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge Studies in Linguistics 71. Cambridge University Press.
- Langacker, Ronald W. 1991. *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.

- . 2015. “Construal.” In *Handbook of Cognitive Linguistics*, edited by Ewa Dąbrowska and Dagmar Divjak, 120–43. Handbooks of Linguistics and Communication Science 39. Berlin: De Gruyter Mouton.
- LaPolla, Randy. 2003. “Why Languages Differ: Variation in the Conventionalization of Constraints on Inference.” In *Language Variation: Papers on Variation and Change in the Sinosphere and in the Indosphere in Honour of James A. Matisoff*, edited by David Bradley, Randy LaPolla, Boyd Michialovsky, and Graham Thurgood, 113–44. Pacific Linguistics 555. Canberra: Pacific Linguistics. doi:10.15144/PL-555.cover.
- Lester, Nicholas, Balthasar Bickel, Steven Moran, and Sabine Stoll. 2019. “Speech Rates Differentiate Nouns and Verbs in Child-Surrounding and Child-Produced Speech: Evidence from Chintang.” *Proceedings of the 44th Annual Boston University Conference on Language Development*, Boston, 7 November 2019 – 10 November 2019, 280–293.
- Levinsohn, Stephen H. 2000. “NP References to Active Participants and Story Development in Ancient Hebrew.” *Work Papers of the Summer Institute of Linguistics, University of North Dakota*, 44.
- Levinson, Stephen, C. 2000. *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge, MA: MIT Press.
- Levshina, Natalia. 2018. “Towards a Theory of Communicative Efficiency in Human Languages.” PhD diss. Universität Leipzig.
- Littlemore, Jeannette. 2015. *Metonymy: Hidden Shortcuts in Language, Thought and Communication*. Cambridge: Cambridge University Press.
- Löbner, Sebastian. 2013. *Understanding Semantics*. 2nd edition. New York: Routledge.
- Longacre, Robert. 2003. *Joseph: A Story of Divine Providence: A Test Theoretical and Textlinguistic Analysis of Genesis 37 and 39–48*. 2nd edn. Winona Lake, IN: Eisenbrauns.
- Mahlberg, Michaela. 2005. *English General Nouns: A Corpus Theoretical Approach*. Studies in Corpus Linguistics 20. Philadelphia: John Benjamins.
- Mel’čuk, Igor A., 1994. “Suppletion: Toward a Logical Analysis of the Concept.” *Studies in Language* 18(2): 339–410.
- Mihatsch, Wiltrud. 2015a. “La Sémantique des Noms Généraux ‘Être Humain’ Français et Allemands.” In *Les Noms d’Humains: un Catégorie à Part*, edited by Wiltraud Mihatsch and Catherine Schnedecker, 55–84. Zeitschrift für französische Sprache und Literatur Beihefte 40. Stuttgart: Franz Steiner Verlag.
- . 2015b. “La Position taxinomique et les Réseaux Méronymiques des Noms Généraux ‘Être Humain’ Français et Allemands.” In *Les Noms d’Humains: un Catégorie à Part*, edited by Wiltraud Mihatsch and Catherine Schnedecker, 85–114. Zeitschrift für französische Sprache und Literatur Beihefte 40. Stuttgart: Franz Steiner Verlag.
- . 2017. “Les Noms d’Humains généraux aux Limites de la Grammaticalisation.” *Syntaxe & Sémantique* 18: 67–99.
- Mihatsch, Wiltrud, and Catherine Schnedecker. 2015. “Préface.” In *Les Noms d’Humains: un Catégorie à Part*, edited by Wiltraud Mihatsch and Catherine Schnedecker, 7–14. Zeitschrift für französische Sprache und Literatur Beihefte 40. Stuttgart: Franz Steiner Verlag.
- Moshavi, Adina. 2018. “On the Possible Grammaticalization of כִּי as an Indefinite Pronoun in Biblical Hebrew.” *Journal of Northwest Semitic Languages* 44:41–60.
- Naudé, Jacobus A. 2003. “The Transitions of Biblical Hebrew in the Perspective of Language Change and Diffusion.” In *Biblical Hebrew: Studies in Chronology and Typology*, edited by Ian Young, 189–214. New York: T&T Clark.

- Noble, Paul R. 1995. *The Canonical Approach: A Critical Reconstruction of the Hermeneutics of Brevard S. Childs*. Leiden: E. J. Brill.
- Piantadosi, Steven T., Harry Tily, and Edward Gibson. 2012. "The Communicative Function of Ambiguity in Language." *Cognition* 122 (3): 280–91.
- Polak, Frank H. 2013. "Speaker, Addressee and Positioning: Dialogue Structure and Pragmatics in Biblical Narrative." In *Interested Readers: Essays on the Bible in Honor of David J. A. Clines*, edited by J. Aitken, J. Clines, and C. M. Maier, 359–72. Atlanta: SBL.
- . 2015. "Whodunit? Implicit Subject, Discourse Structure, and Pragmatics in the Hebrew and Greek Bibles." In *From Author to Copyist: Essays on the Composition, Redaction, and Transmission of the Hebrew Bible in Honor of Zippi Talshir*, edited by Cana Werman, 223–47. Winona Lake, IN: Eisenbrauns.
- . 2017. "Participant Tracking, Positioning, and the Pragmatics of Biblical Narrative." In *Advances in Biblical Hebrew Linguistics: Data, Methods, and Analyses*, edited by Adina M. Moshavi and Tania Notarius, 153–72. Linguistic Studies in Ancient West Semitic 12. Winona Lake, IN: Eisenbrauns.
- Ramscar, Michael, and Robert Port. 2015. "Categorization (Without Categories)." In *Handbook of Cognitive Linguistics*, edited by Ewa Dąbrowska and Dagmar Divjak, 75–99. Handbooks of Linguistics and Communication Science 39. Berlin: De Gruyter Mouton.
- . 2016. "How Spoken Languages Work in the Absence of an Inventory of Discrete Units." *Language Sciences* 53: 58–74. doi:10.1016/j.langsci.2015.08.002.
- Rehder, Bob, and Brian H. Ross. 2001. "Abstract Coherent Categories." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 27 (5): 1261–75. doi:10.1037/0278-7393.27.5.1261.
- Revell, E. J. 1996. *The Designation of the Individual: Expressive Usage in Biblical Hebrew*. Kampen: Kok Pharos.
- Runge, Steven E. 2006. "Pragmatic Effects of Semantically Redundant Anchoring Expressions in Biblical Hebrew Narrative." *Journal of Northwest Semitic Languages* 32 (2): 87–104.
- . 2007. "A Discourse-Functional Description of Participant Reference in Biblical Hebrew Narrative." PhD diss. University of Stellenbosch.
- . 2010. "Information Structure." Chapter 9 in *Discourse Grammar of the Greek New Testament: A Practical Introduction for Teaching and Exegesis*. Logos Bible Software module. Bellingham, WA: Lexham Press.
- Runge, Steven, and Joshua R. Westbury, eds. 2012a. *The Lexham Discourse Hebrew Bible*. Logos Database. Bellingham, WA: Lexham.
- . 2012b. "Glossary." In *Lexham Discourse Hebrew Bible*. Bellingham, WA: Lexham.
- Sanford, Anthony J., and Simon C. Garrod. 1998. "The Role of Scenario Mapping in Text Comprehension." *Discourse Processes* 26 (2–3): 159–90.
- Scanlin, Harold P. 1992. "The Study of Semantics in General Linguistics." In *Linguistics and Biblical Hebrew*, edited by Walter P. Bodine, 125–36. Winona Lake, IN: Eisenbrauns.
- Schmid, Hans-Jörg. 2000. *English Abstract Nouns As Conceptual Shells: From Corpus to Cognition*. Topics in English Linguistics 34. Berlin: Mouton de Gruyter.
- Schnedecker, Catherine. 2015. "Les (Noms d') Humains Sont-ils à Part? Des Intérêts et Perspectives Linguistiques d'une Sous-catégorie Nominale Encore Marginale." In *Les Noms d'Humains: un Catégorie à Part*, edited by Wiltraud Mihatsch and Catherine Schnedecker, 15–54. Zeitschrift für französische Sprache und Literatur Beihefte 40. Stuttgart: Franz Steiner Verlag.
- . 2018a. "Le Nom d'homme: Est-Il Un Nom Général?" *Linx* 76: 23–56. doi:10.4000/linx.2506.

- . 2018b. “Les Noms d’Humains: Intérêts Théoriques, Méthodologiques et Perspective dans le Cadre d’une Linguistique Située.” In *Les Noms d’Humains—Théorie, Méthodologie, Classification: Nouvelles Approches en Sémantique Lexicale*, edited by Catherine Schnedecker and Wiltrud Mihatsch, 3–43. Berlin: De Gruyter. doi:10.1515/9783110586169-001.
- Seifart, Frank, Jan Strunk, Swintha Danielsen, Iren Hartmann, Brigitte Pakendorf, Søren Wichmann, Alena Witzlack-Makarevich, Nivja H. de Jong, and Balthasar Bickel. 2018. “Nouns Slow Down Speech Across Structurally and Culturally Diverse Languages.” *Proceedings of the National Academy of Sciences* 115 (22): 5720–25.
- Soja, Nancy N., Susan Carey, and Elizabeth S. Spelke. 1991. “Ontological Categories Guide Young Children’s Inductions of Word Meaning: Object Terms and Substance Terms.” *Cognition* 38: 179–211.
- Son, Ji Y., Linda B. Smith, and Robert L. Goldstone. 2007. “Words that Evoke Schemas: The Need for Optimal Vagueness.” In *Analogies: Integrating Multiple Cognitive Abilities*, edited by Angela Schwering, Ulf Krumnack, Kai-Uwe Kühnberger, and Helmar Gust. 31–34. Publications of the Institute of Cognitive Science 5. Universität Osnabrück.
- Son, Ji Yun, Linda B. Smith, Robert L. Goldstone, and Michelle Leslie. 2012. “The Importance of Being Interpreted: Grounded Words and Children’s Relational Reasoning.” *Frontiers in Psychology* 3, Art. 45:1–12. doi:10.3389/fpsyg.2012.00045.
- Son, Ji Y., and Robert L. Goldstone. 2009. “Fostering General Transfer with Specific Simulations.” *Pragmatics & Cognition* 17 (1): 1–42. doi:10.1075/p&c.17.1.01son.
- Stein, David E. S. 2008a. “The Noun ׳יֵשׁ (’iš) in Biblical Hebrew: A Term of Affiliation.” *Journal of Hebrew Scriptures* 8 (Article 1): 2–24. doi:10.5508/jhs.2008.v8.a1.
- . 2008b. “The Grammar of Social Gender in Biblical Hebrew.” *Hebrew Studies* 49: 7–26. doi:10.1353/hbr.2008.0014. purl.org/scholar/HS-2008.
- . 2013. “Gender Representation in Biblical Hebrew.” *Encyclopedia of Hebrew Language and Linguistics*, edited by Geoffrey Khan. 2:20–22. Leiden: Brill. purl.org/stein/ehll-gender.
- . 2018. “Cognitive Factors as a Key to Plain-Sense Biblical Interpretation: Resolving Cruxes in Gen 18:1–15 and 32:23–33.” *Open Theology* 4: 545–89. doi:10.1515/opth-2018-0043.
- . 2019. “When Did the Biblical Hebrew Noun ׳יֵשׁ Become Lexically Gendered?” Paper presented to the “Linguistics and Biblical Hebrew” Section, Society of Biblical Literature; San Diego, 24 November. purl.org/stein/lex-gender.
- . 2020a. “Relational Meanings of the Noun ׳יֵשׁ (’iš) in Biblical Hebrew.” PhD dissertation, Dept. of Ancient Studies, Stellenbosch University.
- . 2020b. “Tabulations of the Meanings of the Masculine Noun ׳יֵשׁ in the Pentateuch (Torah).” Unpublished documentation available at purl.org/scholar/tally-penta
- . 2020c. “Tabulations of the Meanings of the Noun ׳יֵשׁ in the Bible.” Unpublished report, prepared for the Semantic Dictionary of Biblical Hebrew.
- . In press. “The Noun ׳יֵשׁ in Ancient Hebrew: A Marker of Essential Participation.” *Journal for Semitics* 30 (2). doi:10.25159/0256-8853/9321.
- Sugamoto, Nobuko. 1989. “Pronominality: A Noun-Pronoun Continuum.” In *Linguistic Categorization: Proceedings of an International Symposium in Milwaukee, Wisconsin, April 10–11, 1987*, edited by Roberta L. Corrigan, Fred Eckman, and Michael Noonan, 267–91. Philadelphia: John Benjamins.
- Strunk, Jan, Frank Seifart, Swintha Danielsen, Iren Hartmann, Brigitte Pakendorf, Søren Wichmann, Alena Witzlack-Makarevich, and Balthasar Bickel. 2020. “Determinants of Phonetic Word Dura-

- tion in Ten Language Documentation Corpora: Word Frequency, Complexity, Position, and Part of Speech.” *Language Documentation & Conservation* 14: 423–61.
- Taylor, John R. 2002. *Cognitive Grammar*. Oxford Textbooks in Linguistics. Oxford: Oxford University Press.
- Tuggy, David. (1993) 2006. “Ambiguity, Polysemy, and Vagueness.” In *Cognitive Linguistics: Basic Readings*, edited by Dirk Geeraerts, 167–84. Cognitive Linguistics Research 34. Berlin: Mouton de Gruyter.
- van Berkum, Jos J.A., Arnout W. Koornneef, Marte Otten, and Mante S. Nieuwland. 2007. “Establishing Reference in Language Comprehension: An Electrophysiological Perspective.” *Brain Research* 1146 (1): 158–71. doi:10.1016/j.brainres.2006.06.091.
- van der Merwe, Christo H. J., Jackie A. Naudé, and Jan H. Kroeze. 2017. *A Biblical Hebrew Reference Grammar*. 2nd ed London: Bloomsbury T&T Clark.
- van Hoek, Karen. 2003. “Pronouns and Point of View: Cognitive Principles of Coreference.” In *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*, edited by Michael Tomasello, 2:169–94. Mahwah, NJ: Lawrence Erlbaum Associates.
- Webber, Bonnie Lynn. 1978. “A Formal Approach to Discourse Anaphora.” PhD diss., Harvard University. BBN-3761, Advanced Research Projects Agency, U.S. Office of Naval Research. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a055671.pdf>.
- Yeh, Wenchi, and Lawrence W. Barsalou. 2006. “The Situated Nature of Concepts.” *American Journal of Psychology* 119 (3): 349–84.