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On silent elements: a case study of *grand* and its silent entourage

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Abstract Recent work in syntax has seen a proliferation of silent elements (SEs), e.g., van Riemsdijk (2002, 2005) and Kayne (e.g., Kayne 2005, 2006, 2012). This paper offers a feature-based taxonomy of lexical items, in which SEs are non-canonical items without phonological features. An SE and its pronounced counterpart, if any, are thus semantically equivalent, but SEs are not the result of ellipsis, which suppresses the pronunciation of pronounceable elements. Under this contextualization, the SEs in Kayne's (2012) and Law's (2012) accounts of the monetary expression *grand* are reexamined. For *ten grand*, Kayne (2012) proposes for its underlying source: ten THOUSAND BUCKS IN grand TOTAL, where capitalized items are SEs, while Law (2012) argues for a simpler source form: ten THOUSAND grand BUCKS, where *grand* remains an adjective. Yet, their starting assumptions that *grand* does not pluralize and is not used as a noun elsewhere are incorrect. The SE accounts also make a number of incorrect predictions syntactically and semantically and have difficulty explaining acquisition. A nominal account of *grand* with the same lexical status as *G* and *nickel* is far simpler and applies to all dialects. Though the feature-based taxonomy of lexical items predicts the existence of SEs, a proposed SE must still be justified syntactically and semantically. Thus, some of the SEs proposed may not be warranted upon closer scrutiny.

Keywords Silent element · Ellipsis · *Grand* · *Total* · *Thousand*

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1 Introduction

A recent trend in syntax is the proliferation of silent elements (SEs), e.g., van Riemsdijk (2002, 2005), Leu (2008a, 2008b), Kayne (e.g., 2005, 2006, 2012), *inter alia*, and it is claimed that there are more such elements in syntax, especially those without an overt antecedent, than previously thought (e.g., Leu 2008b:6; Liao 2013). The concept of SEs is certainly not new, as null elements like zero morphemes and ellipsis have been around for a long time. The slight but significant twist of the Kaynian SEs is that they often have a semantic function, much like regular lexical items, often evidenced by the phonological realization of their counterparts in the same language or a related language. An example is HOURS (capitalization indicates silence) in English; the motivation for this SE comes in large part from French, where a pronounced counterpart is obligatory, as shown in (1c) (Kayne 2003, 2005).

(1) What time is it?
  a. It is six.
  b. It is six HOURS.
  c. Il est six *(heures).

Intuitively, as the supposed evidence for the underlying source form (1b) comes from (1c), the two must be semantically equivalent, and the same must also be true for (1b) and its surface form (1a). Thus, empirically, if (1a), (1b), and (1c) are shown not to be semantically equivalent, then the proposed existence of the SE HOURS is falsified. This is an important point, which we will come back to repeatedly.

Kayne (2012) again employs SEs to account for the syntax and semantics of the slang monetary term *grand*, meaning 'thousand bucks/dollars'. A surface form *ten grand* has a source form in (2b), where *grand* is an adjective. In the same issue where Kayne (2012) appeared, Law (2012), though supportive of Kayne's SE approach, proposes a different source form (2c), where *grand* is likewise an adjective.

(2)
a.	Surface Form:	ten grand
b.	Kayne's Source Form:	ten THOUSAND BUCKS IN grand TOTAL
c.	Law's Source Form:	ten THOUSAND grand BUCKS

The immediate problem is that neither source form is semantically equivalent to the surface form. Note that the surface forms (3a) and (4a) are well-formed semantically, but their respective source forms, (3b) and (4b), are self-contradictory, and thus have different semantic contents.

(3) a. He paid ten grand in subtotal so far. ≠
  b. #He paid ten THOUSAND BUCKS IN grand TOTAL in subtotal so far.

(4) a. He still owes ten lousy grand. ≠
  b. #He still owes ten lousy THOUSAND grand BUCKS.

Secondly, the accounts are based on two starting assumptions: (1) *grand* is never used as a noun elsewhere, and (2) the monetary *grand* never pluralizes as *grands*. In fact, the nominal use of *grand*/*grands* abounds and can refer to 'grand pianos', 'grandparents', 'grand children', 'grand champions', etc. Corpus data likewise show

that the monetary plural *grands* and the acronymized *Gs* are not uncommon at all in certain genres and dialects, a pattern reminiscent of nouns such as *deers*, *salmons*, *cannons*, and *nickels*, whose acceptability likewise varies dialectally and stylistically. The undisputed nominal status of the acronym *G* also indicates that its source, the monetary *grand*, must be a noun, not an adjective. It is also the only viable analysis in terms of acquisition. An SE proposed must be shown to be learnable, but an SE whose meaning is not fully available in the surface form is not learnable. Everything else being equal, a non-SE account is always to be preferred over one that relies on SEs.

Before we argue against the two SE accounts (in Sect. 3), present a more realistic picture of the use of *grand* in general and the nominal status of the monetary *grand* in particular (in Sect. 4), and demonstrate that the two SE adjectival accounts fall short in terms of acquisition (in Sect. 5), we should first thresh out the precise semantic and syntactic status of SEs (in Sect. 2), especially in relation to their pronounced counterparts. One such discussion on the nature of SEs is found in Simpson (2012), a response to Kayne (2012) in the same volume. Though supportive of Kayne's adjectival account where "a silent, morphologically singular TOTAL is present" (Simpson 2012:92–94), he raises two interesting and challenging questions regarding *grand*'s SEs. The more fundamental one is whether a source form with SEs must in principle be semantically equivalent to a pronounced counterpart. "Yes" is again the obvious answer, for two reasons. First, Kayne (2012) proposes the SE account precisely because, to him, the chosen source form faithfully accounts for the meaning of *ten grand*.[1] Second, we shall argue that, among the surface form, the source form with SEs, and the surface form with SEs pronounced, any deviation in meaning, or truth-value, opens a Pandora's Box of all sorts of wild possibilities. Simpson's second question is whether such SEs are different from phonetic deletion by ellipsis. We shall demonstrate that while SEs are base-generated as such, ellipsis silences pronounceable elements active in syntax.

With that background, this paper's goal is two-fold. First, we will offer a clear conception of *grand*'s SEs as lexical elements and thus answer Simpson's two questions in a meaningful way. Next, under such a contextualization of silence in grammar, we shall demonstrate, as a case study, that neither of the two SE accounts for *grand* can be justified and that a simple lexical account of *grand* as a noun is to be preferred. Ultimately, we wish to demonstrate that, while SEs are in fact indispensable in language, for each SE proposed, syntactic and semantic justification is necessary and many of the previous SE accounts need to be re-examined.

2 A conception of SEs in the generative framework

Elements active in syntactic derivation are not all pronounced, and there are two scenarios: either the element is inherently unpronounceable or its pronunciation is

[1] Another concrete example is Kayne (2013), where he proposes SINGLE as an SE following the numeral *one* and states explicitly that the SE is 'to be understood as a silent counterpart of *single*'.

suppressed in derivation. Various empty functional heads, along with PRO and *pro*, are examples of the former, and cases of ellipsis are of the latter, e.g., *He has two houses but I have three ~~houses~~*. When proposing a syntactic account that involves an unpronounced element, one thus must make clear whether its silence is inherent or due to deletion. Van Riemsdijk (2002) is exemplary in this regard. Consider the example in (5) from Swiss German, where a directional PP, e.g., *häi*, in general cannot follow the modal cluster at the end of the clause. This problem has an obvious solution if a silent verb of motion is assumed to immediately follow the PP. Van Riemsdijk (2002) considers the two options of this solution, (6) and (7).

(5) … wil mer hetted söle häi
because we would've had-to home
'… because we should've gone home'

(6) a. PF-deletion of *gaa* 'go'
b. … wil mer hetted söle häi ~~gaa~~
because we would've had-to home go

(7) a. Empty motion verb GAA (≈GO) in lexicon
b. … wil mer hetted söle häi GAA
because we would've had-to home GO

This illustrates that the distinction between base-generated SEs and silence due to deletion is not trivial, as van Riemsdijk (2002) argues for the SE account in (7), which avoids the problems associated with deletion in (6). Thus, an analysis where silence plays a vital role must make explicit the source of the silence. The lack of a clear exposition of SEs has prompted Simpson (2012) to ask two crucial questions:

(8) a. Must the source form with SEs be semantically equivalent to the surface form with pronounced counterparts?
b. Are SEs different from lexical elements whose phonetic matrix is deleted by ellipsis?

A prerequisite question is in fact this: in what ways do SEs differ from their pronounced counterparts? We shall contend that the two differ only in the fact that SEs have no phonological content. Any lexical item (LI) active in syntax, SE or not, must be selected in the Lexical Array. The standard view is that LI is a bundle of features.

> In the simplest case, the entry LI is a once-and-for-all collection (perhaps structured) of (A) phonological, (B) semantic, and (C) formal features. The features of (A) are accessed in the phonological component, ultimately yielding a PF-interface representation; those of (B) are interpreted at LF; and those of (C) are accessible in the course of the narrow-syntactic derivation. Language design is such that (B) and (C) intersect, and are disjoint from (A), though there is some evidence, to which we return, that presence or absence of features of (A) might have an effect on narrow syntactic computation. (Chomsky 1999:7)

Table 1 A feature-based taxonomy of lexical items

Type of Lexical Items	PFF	LFF	FF
1. Canonical lexical items	✓	✓	✓
2. Expletives, e.g., *it, there*	✓	✗	✓
3. Kayne's **SEs** for *grand*, PRO, *pro*, null light verbs, etc.	✗	✓	✓
4. Empty expletives, true empty category, (some) null functional heads	✗	✗	✓

We shall call the (A)/(B)/(C) features in the quote PFF, LFF, and FF, respectively. Clearly, an LI without FF cannot undergo syntactic computation.[2] This means that an LI active in syntax must have FF but may be without PFF or LFF or both. A feature-based taxonomy of LIs obtains, shown in Table 1.

Expletives *it* and *there*, as shown in (9) and (10), are without LFF and thus do not refer to an entity and cannot be questioned. They act as slot-fillers for the otherwise unfilled subject position, solely to fulfill the formal requirement of EPP.

(9) a. It surprised John that Bill was sick.
b. *What surprised John that Bill was sick?

(10) a. There comes a bus.
b. *Where comes a bus?

Like canonical LIs, expletives must be selected in the Lexical Array and undergo computation. In (9), for example, *it* carries the FF [third-person, singular-number] and can serve as a probe because it is the highest head and is also active by virtue of its FF, the uninterpretable φ-features (e.g., Chomsky 1999, 2004). A theory that allows such a conception of expletives should also allow LIs that are just the opposite, i.e., with LFF, but not PFF. This is precisely the point van Riemsdijk (2002:163) makes.

> Why not assume that the lexicon may contain a number of grammatical formatives that happen to lack phonetic content. This is essentially the same move as the shift from 'Deletion in COMP' (cf. Chomsky and Lasnik 1977) to 'Empty Operators' (cf. Chomsky 1982). ... My point here is that there is nothing to prevent us from attributing a variety of syntactic and semantic properties to such an empty light verb. After all, while phonetically non-null light verbs are semantically bleached, they nevertheless have to be specified for the constructions that they can and cannot occur in. (van Riemsdijk 2002:163)

This provides a good rationale for the possibility of the existence of Kayne's SEs like *grand*. The expletive *it* and the canonical pronoun *it* are identical in every way except that the former is devoid of the LFF that the latter has.[3] Likewise, Kayne's

[2] The operation Merge(α, β), as Chomsky (1995:246) proposes, "is asymmetric, projecting either α or β, the head of the object that projects becoming the label of the complex formed. If α projects, we can refer to it as the target of the operation..." Thus, Merge must be sensitive to selectional FF features.

[3] LFF and FF may intersect, but are disjoint from PFF. Expletive *it*'s φ-features are uninterpretable FF but those of the canonical pronoun *it* are both uninterpretable FF as well as interpretable LFF.

THOUSAND, BUCKS, and TOTAL and their counterparts *thousand*, *bucks*, and *total* are identical except that the former is devoid of the PFF that the latter has.

Finally, the theory predicts that an LI may have the minimally required FF only, with no PFF or LFF. Such elements include the so-called empty or null expletives (e.g., Huang et al. 1998 for Chinese; Safir 1985 for German; Vikner 1995 for Germanic languages; Kaiser 2004 for French), the true empty category in Mandarin (Li 2005, 2007a, 2007b), and null heads of the various agreement projections hosting Adjectives, Numerals, and Demonstratives (e.g., Cinque 1996, 2005).[4]

A word of caution is needed at this point. While the taxonomy in Table 1 predicts non-canonical LIs, such items are by nature the exception and highly constrained, as they impose an extra burden on acquisition and communication. An expletive, like *it* and *there*, can in principle be the LFF-less counterpart of any canonical LI. However, the reality is there are only a handful of expletives proposed. An SE can in principle be the PFF-less counterpart of any canonical LI, but in reality their number should likewise be small. Even though there is no general theory restricting the availability of such non-canonical LIs, the well-accepted non-canonical LIs may suggest a general direction. Expletives *it* and *there* are motivated by EPP as a 'last resort'. PRO and *pro* are motivated by the θ-Criterion. PRO is also constrained by the PRO Theorem, and *pro*, by subject-verb agreement morphology. One thus should be cautious proposing or evaluating such non-canonical elements, which must be grammatically or lexically motivated and highly constrained.

2.1 Semantic equivalence between SEs and pronounced counterparts

Must a source form with SEs be semantically equivalent to the surface form with pronounced counterparts? We submit that if semantic deviance is allowed, then SEs would indeed be "empirically intractable" (Zeschel and Stefanowitsch 2008a, 2008b). In a very practical sense, Kayne (2012) proposes the surface form 'ten THOUSAND BUCKS in grand TOTAL' precisely because in his view the syntax and semantics of *ten grand* can only be revealed by *ten thousand bucks in grand total*, but not by *ten thousand bucks*. His argumentation for *grand*'s SEs is thus based on the assumption of semantic equivalence between the two forms. If the assumption is invalid, then so is the account. The same can be said of Law (2012) and other SE accounts. More importantly, as demonstrated in the taxonomy of LIs, between THOUSAND and *thousand*, and BUCKS and *bucks*, the only difference is that the former lacks the PFF that the latter has. They should undergo the same syntactic computation and receive the same LF interpretation. This means that if (11a) below is the correct source form for (11c), then the semantic relation among (11a–c) must be direct and the semantic content of all three must be the same. Any deviation from this is a violation of the Principle of Compositionality: "the meaning of an expression is a function of the meanings of its parts and of the way they are syntactically combined" (Partee

[4] A true empty category is an empty position truly devoid of any features except the categorial features, whose sole purpose is to fulfill subcategorization requirements as a last resort.

2007:147).[5] Crucially, then, if it can be demonstrated that the three phrases in (11) are not semantically equivalent, then (11a) cannot be the correct source form for (11c). This will be central to our argumentation against the SE accounts.

(11) a. ten THOUSAND BUCKS IN grand TOTAL
b. ten thousand bucks in grand total
c. ten grand

However, though PFF are not accessible to narrow syntax, whether an LI does or does not have PFF might have an effect on its derivation (Chomsky 1999:7). One such case is operators and traces, which are inaccessible to Move, more specifically to Pied-Piping, as demonstrated in Chomsky (1999); see (12).

(12) a. the man [OP I spoke to]
b. *the man [[to OP] I spoke][6]

Empty operators may have overt counterparts, e.g., relative pronouns *who* and *which*, but the use of one or the other is semantically inconsequential. Also, traces can be seen as copies of the moved element. Though canonically only the highest c-commanding copy is pronounced, it is possible that a lower copy is pronounced also. Such variation likewise has no effect on the semantics, as whether one or more copies are pronounced has no effect on the LF. The other case is null light verbs projecting vP. The motivation of V-to-v raising is often seen as morphological, i.e., the affixal null light verb attracts the lower V (e.g., Hale and Keyser 1993; Chomsky 1995). An alternative is to attribute V-to-v to precisely the fact that the light verb lacks PFF but requires overt articulation to manifest its semantics. In this scenario, a light verb, e.g., CAUSE, and its overt counterpart, *cause*, thus involve different derivations and may indeed show some difference in terms of the scope of adverbial modification. However, it can still be argued that CAUSE is not an SE version of *cause*, as they differ in FF; i.e., the former is a bound morpheme, and the latter, a free morpheme.

What is more important to our purpose is the fact that none of *grand*'s SEs and other Kaynian SEs is a trace, empty operator, or a light verb, and it should thus be clear that a source form with SEs should have the same semantic content as a surface form, with or without SEs' pronounced counterparts.[7]

[5]The idea of compositionality is not new. Wikipedia says that it originated from Plato's work. Its modern formulation has been credited to the German philosopher Gottlob Frege. The principle is thus also known as Frege's Principle.

[6]An anonymous reviewer suggests a possible phonological reason for the unacceptability of (12b): an overt complement of P, when pied-piped, is stressed, but an empty operator cannot be stressed. However, Marcel den Dikken (*p.c.*) is unconvinced, because in 'the man to whom I spoke', the *wh*-element *whom* bears just as little stress as *to*. He suggests instead that the cause of the ungrammaticality of (12b) lies in the nature of the null operator: in the typology of null nominal elements, the only candidate for the identity of OP is PRO, which, with its distribution constrained by the PRO Theorem, cannot occur in governed positions; in (12b) (but not in (12a)), OP is governed.

[7]None of the SEs proposed in Kayne (2005), for example, PLACE, THING, NUMBER, AMOUNT, MANY, MUCH, VERY, COLOR, SIZE, AGE, YEARS, HOUR, etc., is a light verb, trace, or operator.

However, Simpson (2012:99–100) himself supports the opposite view; i.e., the source form and the surface form need not be semantically equivalent. Simpson's conclusion is based on two observations. Here is the first.

(13) ??He only gave me two thousand bucks in grand total. (Simpson 2012:99 (50))

(14) He was supposed to give me ten grand, but he only gave me two grand. (Simpson 2012:99 (51))

> First, the use of the phrase *grand total* regularly implies that speaker and hearer should be positively impressed by the sizeable amount of a sum of money (or other items) that is being referred to, due to the meaning of *grand* as "magnificent" that seems to be retained. Because of this, it is odd to use *grand total* when a negative attitude to the sum of money is being expressed by the speaker. (Simpson 2012:99)

An anonymous reviewer disagrees with Simpson's judgment of (13) and insists that if we added 'After all that hard work, . . .' the example comes out perfect. So, at least to some speakers, the use of both *only* and *in grand total* is pragmatically awkward, but (14) is entirely natural, as *two grand* is devoid of any hint of a positive impression.

Simpson's second observation concerns quantificational scope; e.g., (15) is not ambiguous and the total bet is $2,000, but (16) allows two readings, as the total bet is $2,000 or $4,000 (i.e., $2,000 on each horse).

(15) I'm going to bet $2,000 in grand total on two horses. (Simpson 2012 (52))

(16) I'm going to bet two grand on two horses. (Simpson 2012 (53))

> This difference in meaning again suggests that the underlying sequence of elements assumed to be present in *two grand*, namely "two THOUSAND BUCKS IN grand TOTAL" is not a simple unpronounced equivalent to overt *two thousand bucks in grand total*, but one which apparently has lost some of the meaning present in the fully overt sequence. This kind of meaning adjustment and loss is not uncommon in processes of grammaticalization, hence not totally unexpected (Hopper and Traugott 1993; Harris and Campbell 1995). (Simpson 2012:99–100)

Instead of rejecting the SE account with such evidence, Simpson (2012:100) concludes that some "meaning adjustment and loss" may exist between the source and the surface. Yet, allowing "meaning adjustment and loss" means the semantic correspondence between the source and the surface is unconstrained. If TOTAL is allowed to be semantically different from *total* in a source form, then an infinite number of silent items can likewise appear. Also, Simpson's reasoning is not sound. He first accepts Kayne's source form as the correct analysis, and under such an assumption, he can only reach the conclusion that the source form and the surface form need not be semantically equivalent. Under the feature-based conception of SEs, a justifiable source form must be semantically equivalent to the surface form. Simpson's two observations are in fact strong evidence that Kayne's source form for *grand* is problematic, which we will discuss in detail in Sect. 3.

2.2 Silent elements and deletion by ellipsis

Are SEs different from lexical elements whose phonetic matrix is deleted by ellipsis? We submit that they are different in nontrivial ways. However, we should first point out that the two must abide by the same requirement of recoverability.

> A transformation can delete an element only if this element is the designated representative of a category, or if the structural condition that defines this transformation states that the deleted element is structurally identical to another element of the transformed string. *A deleted element is, therefore, always recoverable*. (Chomsky 1964:41, emphasis added)

Allowing any unrecoverable deletion again opens a Pandora's Box and leaves deletion unconstrained (e.g., Neale 2004:138), a point made clear famously and humorously by Fiengo and Lasnik's (1972) *Linguistic Inquiry* squib, "On Nonrecoverable Deletion in Syntax", which appeared with both authors' names and institutional affiliation, and then a blank space. Now consider SEs. As we argued previously, if the LFF of an SE is not necessarily accessible at LF and thus unrecoverable in the surface form, then anything goes and an infinite number of SEs can be said to exist in syntax. Again, Kayne proposes the SEs for *grand* precisely because he considers their meanings present, and thus recoverable, in the surface form. Given that an SE in the Lexical Array is identical to its pronounced counterpart in every way except that it is without the PFF, which the latter has, the SE's meaning must likewise be accessible, or recoverable, in the surface form.

On the other hand, SEs differ from ellipsis in that they start out in the Lexical Array without PFF, while elided elements are canonical lexical elements whose PFF are deleted in derivation (e.g., Baltin 2012) or at Spell-Out (e.g., Chomsky and Lasnik 1993; Merchant 2001).[8] In addition, SEs and ellipsis are also licensed by different conditions. SEs are licensed by other lexical items, e.g., COLOR in (17) licensed by 'green', which crucially has the feature [+color], and THOUSAND in (18) licensed by 'grand TOTAL' in the context of 'BUCKS' (Kayne 2012:79).

(17) John bought a green COLOR car yesterday.

(18) It'll cost you ten THOUSAND BUCKS IN grand TOTAL.

In comparison, major cases of ellipsis, e.g., NP-ellipsis, VP-ellipsis, and sluicing, all involve functional heads (D, T, C), and the deletion of the complement is allowed only when the Spec is filled (e.g., Kayne 2006; Lobeck 1990; Saito et al. 2008). Ellipsis thus seems to apply across categories in a similar fashion, but the occurrence of SEs is far less productive. Also, the PF-deleted parts must be recoverable from overt antecedents or information available in the discourse, which may result in ambiguity when multiple antecedents are available, as illustrated in the joke below.

> Mom says to kid: Please go to the supermarket and get two **cartons of milk** for me.

[8] As Marcel den Dikken (*p.c.*) points out, under a 'late insertion' hypothesis in the theory of Distributed Morphology, ellipsis involves the non-association of a bundle of FF and LFF with PFF. The difference between Kaynian SEs and elided elements therefore becomes much less clear.

If they have **eggs**, then bring back a dozen.
(Later)
Mom: What the… Why did you buy 12 cartons of milk?
Kid: Because the supermarket had eggs.

SEs do not require overt antecedents and thus do not produce ambiguity of this kind. COLOR in (17) may have an antecedent in a weaker sense, i.e., the feature [+color] residing in *green*, but the same cannot be said of Kayne's (2012) THOUSAND and BUCKS, which precede the adjective *grand* in *grand total* and semantically have nothing to do with it. They should be seen as SEs, not ellipsis. SEs and ellipsis are thus *unified* as elements active in syntax but ultimately unpronounced. Yet, the two are *distinguished* as to whether their silence is base-generated.[9] This distinction is meaningful as the two kinds of silence may behave differently in terms of, e.g., licensing conditions and requirements of antecedents. Some of the differences may be seen in the different types of non-pronounced elements documented by Leu's (2008b). Though "partly agnostic" with regard to the source of silence, Leu (2008b:6–8) submits that there are four types of unpronounced elements.

First, lexical silence: this refers to LIs without PFF, precisely what we call SEs, which may have an exact overt counterpart in the same language or in a related language, e.g., the silent GO in Swiss German proposed by van Riemsdijk (2002) is a generic motion verb with its own unique semantic content and thus, crucially, *not* a silent counterpart of *gaa* 'go' or *choo* 'come'. However, Kayne's (2012) and Law's (2012) SEs for *grand*, i.e., THOUSAND, BUCKS/DOLLARS, IN, and TOTAL, can only be seen as lexical counterparts of pronounced lexical items.

Second, positional silence: Kayne (2006) proposes that spell-out systematically "fails to see" phrases at the edge of a phase. An example is 'topic drop' in German, where a silent topic may be pragmatically inferred as well as syntactically present at the phase-edge. Though Kayne (2006) supposes that all unpronounced elements should be accounted for in this manner, this view is not supported by Leu (2008b); it is also not entertained by Law (2012) or Simpson (2012), both supportive of Kayne's SE approach to the monetary *grand*, understandably, because the necessary movements in deriving [ten grand] from [ten THOUSAND BUCKS in grand TOTAL] or [ten THOUSAND grand BUCKS] would be massive and *ad hoc*. As Leu points out, it remains to be seen whether and how this notion of phase is compatible with the notion of phase in other respects, e.g., semantic interpretation, locality, spell-out, etc. Clearly, positional silence is not base-generated.

Third, geometric silence: Leu (2008b) contends that (19a) has the source form (19b), where an overt definite marker silences a subsequent one. Leu supports the view that such configurations are a post-syntactic effect. Under such a view, the silence is due to the deletion of PFF, not due to SEs. Example (19b) thus should be written as (19c), according to current conventions marking ellipsis. Such geometric silence is reminiscent of the so-called 'haplology' in Chao's (1968:247) account, which reduces a *-le le* sequence in Mandarin, the former a perfective aspect verbal suffix, and the latter a sentence-final change-of-state particle, to a single *le* with both functions.

[9] Again, this distinction does not exist under a 'late insertion' hypothesis, where all elements active in syntax are base-generated without phonological features.

(19) a. the blue car
b. the blue THE car
c. the blue ~~the~~ car

Fourth, relational silence: this relates to traces left by a moved constituent, especially under the *copy-move-delete* theory of movement. Again, the silence here involves the deletion of the PFF of a lower copy c-commanded by a higher copy. Leu further demonstrates that the silencing of the second *the* in (19b) may be reinterpreted as a case of such relational silence, where the first copy of *the* c-commands a lower copy and is thus licensed to delete it.[10]

2.3 Interim summary

Based on the taxonomy of LIs, which fully recognizes SEs as LIs without PFF, a proposed source form with SEs must be semantically equivalent to the surface form with pronounced counterpart. SEs thus differ from ellipsis, the simple criterion being based-generated silence versus non-base-generated silence. However, the same constraint of recoverability; i.e., the source form and the surface form must be semantically equivalent, is applicable to all types of silence in syntax.

3 A critical review of the SE accounts of *grand*

Based on the discussions above, we now demonstrate that the source forms in Kayne (2012) and Law (2012) make incorrect predictions syntactically and also do not have the same meaning as the surface form intended.

3.1 Kayne's (2012) source form: ten THOUSAND BUCKS IN grand TOTAL

The first thing we shall establish is that the monetary *grand* is not restricted to the American currency and can refer to at least the Canadian, Australian, or New Zealand dollar and the British pound.[11] In English-speaking expat communities, it can in fact refer to the local currency.[12] Example (20a) is thus well-formed, where the additional adjective *Australian* makes clear what currency the preceding *grand* refers to; yet, the putative source form is ruled out by the grammar. Note that the SEs pronounced are italicized in the examples hereafter.

(20) a. The ring cost him ten grand Australian. ≠
b. *The ring cost him ten *thousand bucks in* grand *total* Australian.

Kayne's source form has *grand* as an adjective modifying TOTAL, meaning *including or covering all units or aspects*, according to American Heritage Dictio-

[10] This view finds proof in Greek, where the overt appearance of multiple definite markers is possible when locality is not respected or c-command does not hold (Androutsopoulou 1996).

[11] For example, according to the OED online, *grand* can be a thousand dollars or pounds.

[12] For example, two online sources, Word-Detective and Wikipedia, define *grand* as 1000 units of any currency. Their respective URLs are: http://www.word-detective.com/2008/04/grand-one-thousand/ and http://en.wikipedia.org/wiki/1000_(number). Several sources on the net also remark that *grand* was at one time used to mean a thousand of almost anything, e.g., http://everything2.com/title/grand.

nary Online. However, *grand* here cannot be replaced by a synonym, as in (21b). *Grand*'s silent entourage thus must be stipulated to be specific to *grand* only. Also, *grand* must appear alone and cannot be conjoined with another adjective, regardless of the ordering between the conjuncts, as in (22b) and (23b). To rule out (21a), (22a), and (23a) as source forms, it must be stipulated that 'IN grand TOTAL' be a continuous string.

(21) a. He's lost ten THOUSAND BUCKS IN final/comprehensive TOTAL. ≠
b. *He's lost ten final/comprehensive.

(22) a. He's lost ten THOUSAND BUCKS IN final grand TOTAL. ≠
b. *He's lost ten final grand.

(23) a. He's lost ten THOUSAND BUCKS IN grand final TOTAL. ≠
b. *He's lost ten grand final.

Note also that THOUSAND may be part of a complex numeral, as in (24) and (25). BUCKS may also be the final conjunct and conjoin with another monetary unit, as in (26). In all three, the separation of THOUSAND and BUCKS in the source produces a surface form with a drastically different meaning that is marginally acceptable at best.

(24) a. ten THOUSAND three hundred BUCKS IN grand TOTAL ($10,300) ≠
b. ??ten three hundred grand ($10 \times \$3{,}000{,}000 = \$30{,}000$)

(25) a. ten THOUSAND and three BUCKS IN grand TOTAL ($10,003) ≠
b. ??ten and three grand ($\$10{,}000 + \$3{,}000 = \$13{,}000$)

(26) a. ten THOUSAND dimes, quarters, and BUCKS IN grand TOTAL ≠
b. ??ten dimes, quarters, and grand

Likewise, if 'ten THOUSAND BUCKS' is the first conjunct in a conjunction, the surface form collapses, as in (27). BUCKS and IN cannot be separated, as in (28).

(27) a. ten THOUSAND BUCKS and some change IN grand TOTAL ≠
b. *ten and some change grand

(28) a. ten THOUSAND BUCKS exactly IN grand TOTAL ≠
b. *ten exactly grand

As an anonymous reviewer points out, Kayne makes no particular claim about the structure of [*ten* THOUSAND BUCKS IN *grand* TOTAL], but he should no doubt assume the same structural relation between *ten thousand dollars* and *in grand total*; i.e., they do *not* necessarily form one constituent. Consider extraction, as in (29)–(31). Again, such extraction produces ill-formed surface forms.

(29) a. *In* grand *total*, they have put ten *thousand bucks* in the project. ≠
b. *Grand, they have put ten in the project.

(30) a. They have put ten *thousand bucks* in the project *in* grand *total*. ≠
b. *They have put ten in the project grand.

(31) a. They have, *in* grand *total*, put ten *thousand bucks* in the project. ≠
b. *They have, grand, put ten in the project.

One may spin the so-called 'locality constraint' that *grand* must impose on its SE entourage, but it ultimately comes down to a stipulation that 'THOUSAND BUCKS IN grand TOTAL' must be a continuous string. Such a stipulation is reminiscent of idioms, e.g., *money in the bag*, *pennies from heaven*, or *cash on the barrelhead*. However, unlike idioms, this string [THOUSAND BUCKS IN grand TOTAL] does not form a constituent, as shown in (32b). The constituent NumP must contain the entire numeral [ten THOUSAND], as in (32a); thus, (32b) is ill-formed.

(32) a. [**NumP** ten THOUSAND BUCKS IN grand TOTAL]
b. *ten [**??** THOUSAND BUCKS IN grand TOTAL]

Besides the difficulty in syntax, there are challenges in semantics. The observable semantic discrepancy between Kayne's source form and the surface form intended is part of the reason why Law (2012) rejects Kayne's source form. Consider (33a) and (33b).

(33) a. one million two hundred THOUSAND BUCKS IN grand TOTAL ($1,200,000) ≠
b. one million two hundred grand[13]
b-1. $1,000,200,000
b-2. $1,200,000

The source form (33a) allows only one reading, which is available in its pronounced surface form (33b), i.e., (33b-2), where a pause is needed after *million*; the parse for this reading is thus this: [[one million DOLLARS] AND [two hundred grand]]. The problem is that the surface form (33b) has another reading (33b-1), not available in its source form (33a).[14,15]

Semantically, the fundamental problem with Kayne's source form is that *grand* must always trigger a reading of *grand total*. By definition, 'GRAND/grand total' is not 'subtotal'. As mentioned in the introduction, the well-form expression

[13] An anonymous reviewer asks whether this phrase is well-formed. The answer is 'yes', as (33b) is the perfect answer to this question: *If one million two hundred people each give you a grand, how many grand will you have?* Or, imagine you are counting money, grand by grand, i.e., *1 grand*, *2 grand*, *3 grand*, . . .*one million one hundred and ninety-nine grand, one million two hundred grand*.

[14] An anonymous reviewer suggests that if the SEs in (33a) are all pronounced with a pause # between *hundred* and *thousand*, i.e., *one million two hundred # thousand bucks in grand total*, it would yield the reading 1,000,200,000, the same reading as (33b-1). But s/he concedes that, in (33a), it is impossible to detect the pause between the silent THOUSAND and *hundred*; hence, the reading in (33b-1) is not available. We accept the conclusion but not the source form with SEs.

[15] An anonymous reviewer suggests that the two readings of (33b) present difficulty for the nominal analysis as well. It does not. For (33b-1), the numeral that quantifies the N *grand* is straightforwardly *one million two hundred*. To get the reading in (33b-2), a pause after *million* is needed, indicating conjunction between *one million* and *two hundred grand*. Note that the same is true if *grand* in (33b) is replaced with *G* or *K*.

(i) one million two hundred G/K
a. $1,000,200,000 = [[one million two hundred] G/K]
b. $1,200,000 = [[one million DOLLARS] AND [two hundred G/K]]

The only analysis of *G*/*K* in (i) is N; *grand* in (33b) is exactly the same.

ten grand in subtotal, under Kayne's account, is predicted to be anomalous and self-contradictory like its source form, ten THOUSAND BUCKS IN grand TOTAL in subtotal. The same problem is demonstrated in (34), where the total payment in the source form (34b) is totally confused, but is clear in the surface form (34a). Note that (34b) must also involve both SEs and ellipsis. In (35)–(37) are more Google examples to illustrate the same point.

(34) a. In today's market, a dinky one-bedroom on Fifth Street costs a grand and a half, minimum.[16] ≠

b. In today's market, a dinky one-bedroom on Fifth Street costs a THOUSAND BUCKS IN grand TOTAL and a half ~~THOUSAND BUCKS IN grand TOTAL~~, minimum.

(35) Over the weekend we dropped the asking price on the house in Florida about 10 grand. Ten grand and six dollars to be exact.[17]

(36) Yeah, I'm glad I'm out in the county. 5 acres, small house, big garden, 600 sq. ft. greenhouse for a grand and nine dollars on our mortgage.[18]

(37) Sometimes I needed a grand and a buck—and only had the buck.[19]

Finally, recall that Simpson (2012) demonstrates two kinds of semantic discrepancy between Kayne's source form and the surface form. The first relates to a conflict between an emotionally negative modifier and the admiration implied by *grand total*. The other kind of semantic discrepancy concerns quantificational scope.

To summarize, there are two kinds of evidence against Kayne's SE account. First, the source form [THOUSAND DOLLARS IN grand TOTAL], like idioms, must be stipulated to be an uninterrupted string and yet, unlike idioms, it does not form a constituent. Second, the proposed source form makes all kinds of incorrect predictions about the surface form, due to the fact that the source and surface forms are not semantically equivalent. Crucially, this conclusion is reached entirely independently of dialectal variation, thus without considering whether the monetary *grands* as a plural form is well-formed or not.

3.2 Law's (2012) source form: ten THOUSAND grand BUCKS

Law (2012) proposes a different source form in (38a), and makes it clear that the surface form in (38b) is quite simply the pronounced version of (38a). He further stipulates that the two SEs cannot be pronounced, thus the ungrammatical (38c).[20]

[16] http://books.google.com.tw/books?isbn=0007373155, p. 127 of the 2005 novel *Specimen Days* by Michael Cunningham.

[17] http://www.abulsme.com/index.php?id=D20060605.

[18] http://www.plantedtank.net/forums/showpost.php?p=145832&postcount=14.

[19] Quoted from p. 204 of the biography *George Raft*, by Lewis Yablonsky, 1974, Lincoln, Nebraska: iUniverse, Inc.; accessible online via Google books.

[20] Law (2012) insists that *thousand grand bucks* is ill-formed. We will demonstrate shortly that this stipulation is unnecessary and unjustifiable.

(38) a. ten THOUSAND grand BUCKS
b. ten grand
c. *ten *thousand* grand *bucks* (ill-formed according to Law 2012)

Being an SE account like Kayne's, Law's account inherits similar syntactic and semantic difficulty. First, the source form 'THOUSAND grand BUCKS' must be stipulated to be an uninterrupted string, again reminiscent of idioms such as *money in the bag* or *pennies from heaven*, where none of the words can be substituted with another, regardless of how semantically and syntactically similar the substitute is, as shown in (39). Also, *grand*, though an adjective, allows no modification or conjunction, as in (40) and (41), respectively.

(39) a. ten THOUSAND magnificent/great/fabulous BUCKS ≠
b. *ten magnificent/great/fabulous

(40) a. ten THOUSAND extremely grand BUCKS ≠
b. *ten extremely grand

(41) a. ten THOUSAND grand and magnificent BUCKS ≠
b. *ten grand and magnificent

Likewise, 'BUCKS' allows no conjunction. In (42a), BUCKS in the source form is conjoined with *pennies*, but (42a) is not semantically equivalent to the surface form (42b). (42b-1) equals (42a-1), and (42b-2) equals (42a-4). Yet, (42b) does not have the readings in (42a-2) and (42a-3). In sum, (42a) has more interpretations than (42b).

(42) a. ten THOUSAND grand BUCKS and pennies
a-1. [[ten THOUSAND grand BUCKS] and [pennies]]
a-2. ten THOUSAND [grand [BUCKS and pennies]]
a-3. ten THOUSAND [[grand BUCKS] and [pennies]]
a-4. %ten [[THOUSAND grand BUCKS] and pennies][21]
b. ten grand and pennies
b-1. [ten grand] and [pennies] = a-1
b-2. ten [grand and pennies] = a-4

The stipulation that 'THOUSAND grand BUCKS' must be a continuous string is therefore necessary for Law's account. Yet, again, unlike idioms, this string does not form a constituent, as shown in (43). The constituent NumP contains the entire numeral, [ten THOUSAND], and the entire NP. Thus, (43a) is a constituent, but the source form [THOUSAND grand BUCKS] is clearly not.

(43) a. [**NumP** ten THOUSAND grand BUCKS]
b. *ten [**??** THOUSAND grand BUCKS]

A notable arbitrary claim Law (2012:110) makes is that THOUSAND and BUCKS can never be pronounced with *grand* in between. This means that (44) is ill-formed but (45)–(46) are good, i.e., *grand buck* can be quantified by any numeral except *thousand*, and 'thousand Adj bucks' is well-formed with any adjective except

[21] We thank the anonymous reviewer for providing this reading, which is not available to us.

grand. Given that *grand* in (44) is the same adjective in *ten thousand grand palaces* (Law 2012:108), the prohibition of (44) is *ad hoc* and counterintuitive. And indeed there are more than 30,000 Google hits of *grand dollars/bucks* as well as 560 exact matches of *thousand grand dollars/bucks*.[22] This stipulation is thus unnecessary and untrue.

(44) *ten *thousand* grand *bucks* (Law 2012:110 (30b))
(45) many/a few/several/2/3/4/5/../999/1001/1002/... grand bucks
(46) ten thousand good/fabulous/magnificent/sensational/wonderful/... bucks

As an anonymous reviewer notes, these Google hits show that there are speakers who treat *grand* as an adjective. In fact, we are certain that the *grand* in *grand bucks/dollars* is an adjective for all native speakers in all English dialects. However, s/he then concludes that this supports the adjectival analysis of the monetary *grand*. It does not. It only supports the *possibility* of an adjectival account, but does not in any way go against the nominal analysis. Semantically, Law's source form, where *grand* is an adjective, has the same fundamental problem as Kayne's, i.e., its meaning is different from that of the surface form. In (47a), the source form has only one reading, available in the surface form (47b), i.e., (47b-2), available with a pause after *million*. But the reading of (47b-1) is not present in the source form (47a). In short, the surface has more readings than the source.

(47) a. one million two hundred THOUSAND grand BUCKS ($1,200,000) ≠
b. one million two hundred grand
b-1. $1,000,200,000
b-2. $1,200,000

Furthermore, note that the adjective *grand* in Law's source form, THOUSAND grand BUCKS, is the same *grand* in *grand palaces* and, more importantly, *grand bucks*, as Law explicitly claims. However, it is precisely the semantics of *grand* as an adjective meaning 'magnificent' that causes trouble, as *grand* in *ten grand* means *ten thousand dollars* and does not imply grandness or magnificence in either the abstract amount or the physical objects. Thus, (48a) is natural, but (48b) is self-contradictory and thus pragmatically awkward. In (49a), the addition of 700 and 300 lousy bucks yields a lousy grand. Lousy bucks do not magically become grand bucks when they add up to a thousand, but that is what happens in (49b).

(48) a. one shitty/lousy/measly/damned grand ≠
b. ??one shitty/lousy/measly/damned *thousand* grand *bucks*
(49) a. 700 lousy bucks plus 300 lousy bucks is a grand. ≠
b. ??700 lousy bucks plus 300 lousy bucks is a lousy *thousand* grand *bucks*.

[22] Accessed on March 31, 2013. However, we must acknowledge the likely 'noise' in Google search results, as such results often contain lots of repetitions. Thus, the number of hits returned needs to be viewed with caution and for each search result a closer look at the summary pages of the hits and also the actual contents is often necessary, especially when the number of hits is relatively low.

An anonymous reviewer notes that too little is known about how lexical items undergo semantic change in general to draw any conclusion on the derivation of the meaning of *grand* in (48a) from the meaning of *grand* in (48b). We agree, but the key here is 'semantic change', which reveals precisely the fundamental problem with the SE accounts; i.e., the monetary *grand* has a different meaning in its surface form from that in the source forms. This fact alone indicates that the proposed source forms cannot be justified. The reviewer further comments that an adjective may have different meanings depending on the following noun, e.g., *black person*, *black magic*, *black Sunday*, etc. We agree. S/he then draws this conclusion: if *black* is always an adjective despite its different meanings, it is no surprise that the monetary *grand* has nothing to do with the adjective *grand* meaning 'magnificent'. We also agree. However, the fact the monetary *grand*'s meaning has nothing to do with that of the adjective *grand* in no way suggests that the monetary *grand* is thus also an adjective. Instead, it indicates, unequivocally, that the monetary *grand* cannot be derived from 'THOUSAND grand BUCKS' where *grand* is adjective meaning 'magnificent'. In other words, for Law's source form to be viable semantically, its *grand* must mean something else, something compatible with the monetary meaning of *grand*. That something turns out to be exactly nothing, as the surface form *grand* means 'thousand bucks' straightforwardly, expressed fully by the two SEs 'THOUSAND BUCKS' alone in the source form. That means the only overt item *grand* must, ironically, be meaningless, as in (50a). The same analysis applied to Kayne's account is shown in (50b). And if one were to apply the same SE approach to *nickel* and claim 'FIVE nickel CENTS' as its source form, then (51) would be its compositional semantics.

(50) a. THOUSAND grand BUCKS
↓ ↓ ↓
thousand ϕ bucks

b. THOUSAND BUCKS IN grand TOTAL
↓ ↓ ↓ ↓ ↓
thousand bucks ϕ ϕ ϕ

(51) FIVE nickel CENTS
↓ ↓ ↓
five ϕ cents

This means that *grand* and *nickel* are expletives, i.e., LFF-less items like *it* and *there*. The irony is that the only audible item is meaningless, while the inaudible ones are meaningful. Technically, such an account would work, but the concessions are surely too costly to be entertained. The opposite of this analysis is precisely a simple lexical account, i.e., the meaning 'thousand bucks' and 'five cents' comes solely from the audible form *grand* and *nickel*, respectively, with no need for SEs at all.

To summarize, there are two kinds of evidence against Law's SE account. First, the source form [THOUSAND grand BUCKS] must be stipulated to be a continuous string, like idioms, but, unlike idioms, the source form is not a constituent. Second, the fact that the source and surface forms are not semantically equivalent leads to all kinds of incorrect predictions. Again, it is important to stress that the conclusion that the two adjectival SE accounts are unwarranted is reached independently of the dialectal variation in terms of the plural form of the monetary *grands*.

4 A more realistic account of the monetary *grand*

Kayne's and Law's adjectival accounts are motivated by their judgment that *grand* is always an adjective, and thus its monetary use is only an apparent exception, as the plural form *grands* does not exist. We first demonstrate in Sect. 4.1 that *grand* has a number of non-monetary uses with *grands* as the plural form. Then, in Sect. 4.2, we demonstrate that the monetary *grand* has two plural forms prior to the 1950s, *grand* and *grands*, but nowadays the former is far more common than the latter. Based on this more realistic picture of *grand*, we propose in Sect. 4.3 that the proper analysis of *grand* should be in line with that of the many other colloquial terms referring to $1,000 and other denominations. Specifically, the morphological and syntactic behavior of the monetary *grand* is similar to that of *G* ($1,000) and *nickel* (5¢), which likewise have two plural forms, *G*/*G's* and *nickel*/*nickels*, respectively. Before we proceed, it is important to point out that, while data of *grand*'s nominal use are good evidence for seeing the monetary *grand* as a noun, such data may be subject to dialectal variation. Thus, crucially, we have not used such data in our argumentation in Sect. 3 against the adjectival accounts.

4.1 The non-monetary uses of *grand* as a noun

As pointed out earlier, most established dictionaries list *grand* as a noun meaning *grand piano*, its plural form being *grands*, alongside the monetary use, also listed as a noun. Numerous examples are found via Google, e.g., (52), which is part of an ad put out by a piano store going out of business. Another nominal use of *grand* refers to *grand championship*, which again has numerous Google matches; an example is given in (53) in the discourse context of talking about beauty pageant contestants.

(52) Over $1,000,000 in pianos must be sold immediately.
Baby Grands, Grands, Concert Grands, Player Grand Pianos, Upright Pianos, Console Pianos, Digital Pianos & More[23]

(53) It will be Alona. She's won several Grands in a row since spring.[24]

Grand also refers to *grandparent* and *grandchild*.[25] Again, numerous examples are found via Google. Note that in (54) the context makes it clear that *grands* refers to grandparents, while the context in (55) indicates that *grands* here means *grandchildren*.

[23] Quoted from www.southernpianos.com/.

[24] Quoted from www.voy.com/215799/23993.html.

[25] An anonymous reviewer commented that relating *grand* as a noun to *grandparent* or *grandchild* comes close to Law's analysis of monetary *grand*. We contend that the two are very different. Law derives *grand* from a non-constituent and non-lexical string 'THOUSAND grand BUCKS'. There is no similar process of such phonological reduction in English. In contrast, *grandparent* and *grandchild* are lexical items, not phrases; thus here *grand* does not mean 'magnificent' at all. Clipping is a well-attested word-formation process, which shortens a word without changing its meaning. Specifically, it is back clipping, i.e., the removal of the end of a word. Here are some examples.

a. advertisement → ad~~vertisement~~
b. crocodile → croc~~odile~~
c. examination → exam~~ination~~
d. facsimile → facs~~imile~~
e. mathematics → math~~ematics~~
f. photograph → photo~~graph~~

(54) My grands are old, approaching their 90s.[26]

(55) Interests: travel, music, cooking, relaxing watching my grands grow up.[27]

There are several other variants of this *grand*: *gran*,[28] *granny*, *nan*, *nanny*, and *grammy*, but they refer to 'grandmother' only. In short, the evidence presented in this subsection demonstrates that, besides its monetary use, *grand* has several other nominal uses. However, it is possible that there are speakers or dialects that accept none of these nominal uses of *grand*. In such cases, it is important to keep in mind that we have already demonstrated that the adjectival account of the monetary *grand* is unfounded. Thus, the absence of *grand* used as a non-monetary noun is by no means evidence that the monetary *grand* is therefore an adjective. We shall demonstrate that the nominal analysis of the monetary *grand* can be justified with or without the presence of the nominal plural form *grands*.

4.2 The monetary use of *grand* and its plural form

The primary reason why Kayne (2012), Law (2012), and Simpson (2012) reject the monetary *grand* as a noun is, to them, *grand* does not pluralize as *grands*. Indeed all the dictionaries we have checked concur. However, originally monetary *grand* could be pluralized. The earliest example of the monetary *grand* recorded in the OED is from 1922, while *The Random House Historical Dictionary of American Slang* cites the earliest usage from 1915 and notes that this use originated from the underworld, a fact whose importance will become clear later. As Simpson (2012:90) notes, an important historical fact is that a certain optionality existed between *grand* and *grands* as the plural form and both are attested up till the 1950s. Two examples of *grands* are given in (56) and (57), from the Corpus of Historical American English (400 million words, 1812–1912), and (58) and (59) are from the OED and also cited in Simpson (2012). Note that the context in these examples (e.g., *sez*, *cuckoo*, *suckers*, *black-market boys*) is indicative of an earthy, colloquial, underworld flavor typical of *grand*'s earlier use as a slang term.

(56) So I deposited a dollar here and a dollar there, and first thing you know a tough operator came up with **two grands** and he sez, "Here's your winning; what are you gonna do with it?"
[1937; Thomas W. Chinn, Chinese Cultural Society of America]

(57) **Two grands** a week and it's done, Dearie! It won't be orange juice if you don't run to it!
[1940; Phyllis Bottome, Snippet view]

(58) **"A hundred and fifty grands!"** I breathed. "You are cuckoo."
[1921; Collier's 26 Mar. 24/2]

[26] Quoted from http://forums.online-sweepstakes.com/archive/index.php/t-1055865.html.

[27] Quoted from http://mingle2.com/user/view/2830596.

[28] Note that *gran* is also a variant of the monetary *grand* and can thus also mean $1,000.

(59) "I stepped out with the spree-bent suckers into this world where the black market boys gamble in **grands**."
[1921; Collier's 26 Mar. 24/2]

Thus, the two SE accounts, where *grand* is a genuine adjective, clearly cannot accommodate this historical form *grands*. However, *grands* as the plural form for the monetary use seems to have dwindled after the 1950s. Still, Simpson's (2012:90, emphasis added) claim that "plural *-s most certainly* does not occur with *grand* any more in contemporary English" fails to take into account dialectal differences. In contemporary English, there are in fact plenty of cases of *grands* in its monetary use. The example in (60) is found in the Corpus of Contemporary American English (COCA, 450 million words of texts from 1990–2012). Note that Kayne (2012:73; fn. 3) rejects *grands* in all contexts, including (61), and yet acknowledges that there may be dialectal variation: "There are examples on Google that are perhaps acceptable only to those who accept phrases like *three millions* (which I don't)."

(60) Our finances were a mess, and two grand was two grand, and a whole week of two grands was… well, I'll leave that to you.[29]

(61) *They've spent (tens of) grands on their new house just this year alone.
(Kayne 2012:73 (12))

Yet, Google searches have turned up several million matches that conform to the following pattern, 2/3/4…10/20/30…*/hundred/several/a few/many millions*, thus indicating a fairly sizeable population. It is therefore not surprising that there are also thousands of Google matches of *grands* in its monetary use. A summary of the search results of the monetary *grands* in several syntactic contexts is given in (62). Four examples are given in (63)–(66), which we have some confidence are produced by speakers of American English. Note also the mundane nature of the discourse contexts.

(62) Number of Google matches of the monetary *grands*
- a. *cost(s) / spend(s) / spent / pay(s) / paid two / three / … / ten / several / a few grands*
  over 700 matches
- b. *two / three / … / ten / twenty / … / hundred / several / a few grands a week / month / year*
  over 280 matches
- c. *worth grands*
  over 800 matches
- d. *cost* (*me / us / you / him / her / them*) *grands*
  over 1,350 matches
- e. *spend / spent / spending grands*
  over 380,000 matches
- f. *tens / hundreds of grands*
  over 180,000

[29]Quoted from p. 8 of the novel *Thereby hangs a tail* by Spencer Quinn, New York: Atria Books, 2010.

[30]This is an ad on eBay, and the location of the sailboat is Largo, FL. The URL is: http://tampabay.ebayclassifieds.com/boats/largo/deal-half-million-sailboat-for-a-hundred-grands-atoll-43-by-dufour/?ad=17596455.

(63) DEAL!! Half million sailboat for a hundred grands.[30]

(64) Spend grands on the cruise to put a tan on my bruises.[31]

(65) Saving money with store brands... Brands can cost you grands![32]

(66) Personal computers, computer software, accessories and peripheral devices may very well cost several grands.[33]

However, we must acknowledge that the majority of speakers are like Kayne, Law, and Simpson, and reject the monetary *grands*, as it is not found in WebCorp's English corpus (460 million words from web-extracted texts from 2000–2010) and only one instance is found in the Corpus of Contemporary American English. Yet, how come Google searches turn up so many hits while it is virtually unattested in the combined 900 million words of the above two corpora of contemporary English? This might be attributed to the fact that these two corpora do not include the genres covered by social media of BBS, blogs, Twitter, YouTube, Facebook, etc.[34] As fascinating as this discrepancy may be, its sociolinguistics is not well understood and beyond the scope of this paper. Suffice to say that the monetary *grands* is not part of standard English and may be limited to certain genres and dialects.[35]

Obviously, for speakers and dialects that accept the plural monetary *grands*, its nominal status is settled. However, it is important to reiterate that, for dialects without the monetary *grands*, its absence is by no means evidence for the monetary *grand* as an adjective. After all, the adjectival accounts of the monetary *grand* have been shown to be on the wrong track, independently of the presence or absence of the monetary *grands*. We shall now demonstrate that the nominal analysis of the monetary *grand* can be justified with or without the presence of *grands* as it plural form.

4.3 The grammatical status of the monetary *grand*

An adjective may retain its adjectival status in the [Num Adj ~~N~~] construction and thus does not take the plural suffix *-s*, e.g., *I'll take two red and three green*, or it may have undergone reanalysis and become a noun and thus does take the *-s* plural form, e.g., *I'll take two larges and three mediums* (Simpson 2012). Thus, for speakers who accept the monetary *grands*, *grand* can only be a noun, not an adjective. Given our argumentation against the SE approach to the monetary *grand*, for speakers that

[31] Quoted from the lyrics of the song "U Can Believe It" (2007), in the album *Supply & Demand* by Playaz Circle, an American hip-hop duo from College Park, Georgia. See http://rapgenius.com/Playaz-circle-u-can-believe-it-lyrics#note-860675.

[32] Quoted from an online article at http://prmorgan.hubpages.com/hub/Saving-Money-with-Store-Brands, written by P.R. Morgan (http://prmorgan.hubpages.com), born in Limestone, Maine.

[33] Quoted from an online article "What is the best business to start?", by Dalelorenzo Johnson, CEO of EtrafficLane, a US-based firm. See http://etrafficlane.com/newline/what-is-the-best-business-to-start/.

[34] Of course another potential factor, as a reviewer points out, is that lots of people who contribute documents to the World Wide Web written in 'English' are not native speakers of English.

[35] Perhaps partially due to the underworld origin of *grand* and the more common earlier use of *grand-grands*, this use seems to occur more often in African American rappers' lyrics than other genres. However, this observation is impressionistic, not backed up by any systematic study.

reject the monetary *grands* the only alternative is still *grand* as a noun whose plural form follows the same pattern as *deer*, *fish*, *cannon*, etc. Note again that the monetary *grand* does not have the semantic content of the adjective *grand*, as demonstrated earlier in Sect. 3, indicating that the monetary *grand* has lexicalized into a noun and also severed semantic ties with the adjective *grand*.

A significant advantage of a nominal account is that it properly situates *grand* among the many other monetary terms, all of which are unmistakably nominal. A partial list of the more common terms in American English is given in (67).

(67) A partial list of monetary terms in American English
1¢: penny
5¢: nickel
10¢: dime
25¢: quarter
$1: buck, greenback
$100: Benjamin
$1,000: ***grand***, gran, G, K, thou, large, stack
$1,000,000: mil, rock[36]

Consider *G* first, no doubt a shortened form of *grand*.[37] The example in (68) is from the 2003 movie *Matchstick Man* and (69), which contains both *grands* and *G's*, is from a rap song. While the bare plural form *G* is far more common, *G's* is by no means rare, a pattern exactly like that of *grand*.

(68) Sam Rockwell: You don't want the forty G's?
Nicolas Cage: Keep it. Consider it a parting gift.

(69) And I like my fans spending grands 'cause we got the fire
I merchandise like 5 G's every half an hour[38]

Indeed no one suggests an SE account of *G*, i.e., *grand* is partly silent, thus gRAND, where only the first consonant is pronounced. Yet, the first consonant is [g], entirely different from the surface form [dʒi:], which is how the alphabetic *G* is pronounced.[39] *G* is thus an acronym of *grand* and as such it is dependent upon how *grand* is **spelled**, not how it is **pronounced**. Given the fact that an acronym and its base must have the same lexical category, the undisputed nominal status of *G* indicates that its base *grand* must likewise be noun, not an adjective. Assuming that the acronym *G* is similarly distributed among the population as *grand*, the fact that the two must have the same lexical category means that *grand* as a noun is as widespread as *G* as a noun.

[36] According to Wikipedia, this slang term is popularized by some movies and TV shows, most recently *The Sopranos*; see http://en.wikipedia.org/wiki/Slang_terms_for_money.

[37] This use of *G* also appears as *g* and *gee*.

[38] Quoted from the lyrics of *Crybaby* (2008), in the album *Killer* by Tech N9NE, American rapper from Kansas City, Missouri. See http://rapgenius.com/Tech-n9ne-crybaby-lyrics#note-658691.

[39] One online source (http://stupidquestionarchives.blogspot.tw/2008/03/grand.html) indicates that it was common to shorten *grand* to *gran* before it was sometimes further abbreviated to *G*.

The same argumentation applies to *K*, which has largely replaced *G*, especially among professional classes, *thou*, and *mil*, all referring to a specific amount of money, not a numerical value. Likewise, the monetary *large*, meaning $1,000 straightforwardly, has entirely lost the adjective meaning referring to size. The nominal status is easily confirmed for the less common *stack*, which pluralizes as *stacks*.

The nominal account still needs to account for the fact that most speakers reject *grands* as the plural form. Again, we should look at the bigger picture of monetary terms in general. As shown in (70), most of these terms require the *-s* plural form, some allow it, and others disallow it. For Kayne, Law, Simpson, and other speakers who do not accept *grands* as a plural form, *grand* is in the same category as *gran*, *thou* and *large*. For those that allow both *grand* and *grands* as plural forms, *grand* is in the same category as *G*, *K*, *nickel* and *mil*. Finally, for speakers that require *grands* as the only plural form, *grand* is like *penny*, *quarter*, *dime*, etc.

(70) Monetary Nouns' *-s* plural forms
Obligatory: *penny, bit, quarter, dime, buck, greenback, Benjamin, stack, rock*
Prohibited: *thou, large, gran* ← ***grand***
Optional: *nickel, G, K, mil* ←

This distribution pattern of the *-s* plural form is not unique to money terms. The judgment on the *-s* plural forms in (71) is taken from American Heritage Dictionary Online. Note that the distribution is rather arbitrary, especially for the following pairs: *pig-swine*, *cannon-mortar*, *deer-elk*, and *sardine-trout*. Many readers will likely disagree with some of the judgments. For example, American Heritage rules out *deers*, Merriam Webster allows both *deer*/*deers*; the former requires *sardines*, the latter allows *sardine*/*sardines*. In short, the variation of the monetary *grand*'s plural form(s) among different sectors of the population and in different genres is nothing extraordinary.

(71) Non-monetary Nouns' *-s* plural forms (American Heritage Dictionary Online)
Obligatory: *pig, mortar, sardine*
Prohibited: *deer, swine, bison*
Optional: *elk, cannon, trout*

Another piece of support for the nominal account comes from the morphological process that produces a nominal modifier from combining a numeral and a noun root, as in (72). Examples in (73) show that the N root cannot be replaced by an adjective root. As shown in (74), *grand* is just like other similar monetary nouns in (75) and other common nouns in (72) and does not behave like the adjectives in (73). In addition, under the two SE accounts, (76) and (77) contain the respective source forms of the surface forms in (74). Yet, the source forms in (76) and (77) are all ill-formed.[40] The SE accounts thus predict, incorrectly, that the surface forms in (74)

[40]Note that there is this entirely different process that temporarily converts a phrase into a modifier, e.g., *Don't give me that I-have-done-everything-for-you-so-you-owe-me talk again*. Thus, examples in (76) and (77) can be much improved if *buck* is changed to *bucks*.

should likewise be ill-formed. The fact that *grand* is well-formed in (74) indicates it must be a noun.

(72) a three-gift box — a five-shirt suitcase
a ten-millionaire team — a fifty-soldier group

(73) *a three-expensive box — *a five-red suitcase
*a ten-rich team — *a fifty-well-trained group

(74) a two-grand salary — a ten-grand debt
a four-grand diamond ring — a three-hundred-grand check

(75) a two-dollar candy bar — a ten-G debt
a four-cent stamp — a three-hundred-mil project

(76) *a two-thousand-buck-in-grand-total salary
*a ten-thousand-buck-in-grand-total debt
*a five-thousand-buck-in-grand-total diamond ring
*a three-hundred-thousand-buck-in-grand-total check

(77) *a two-thousand-grand-buck salary
*a ten-thousand-grand-buck debt
*a five-thousand-grand-buck diamond ring
*a three-hundred-thousand-grand-buck check

In addition, the possessive form [NP's worth] likewise shows that *grand* behaves like other monetary nouns, as in (78), and does not behave like the adjectives in (79b), which are not allowed in this formation, even though they can be used in the construction [Num Adj ~~N~~]. Yet, notice that the two source forms in (80a) and (80b) are also well-formed in this construction. The SE accounts thus predict, correctly, that the surface form, *one grand's worth*, in (78b) is likewise well-formed. However, the accounts also predict that *grand* in the well-formed *one grand's worth* is an adjective, not a noun. This is contradictory to the fact that adjectives are not allowed in this construction, as in (79b). In short, that *one grand's worth* is well-formed can only be explained by the nominal account.

(78) a. one penny/nickel/dime/dollar's worth
b. one dime/Benjamin/thou/G/grand's worth

(79) a. one green/red/large/small/red/green shirt's worth
b. *one green/red/large/small/red/green ~~shirt~~'s worth

(80) a. one THOUSAND BUCKS IN grand TOTAL's worth
b. one THOUSAND grand BUCKS's worth

Besides *grand*'s plural form, another challenge to *grand*'s nominal status raised by Kayne (2012:73) is the contrast between *thousand* and *grand* in the *-ish* formation, as in (81). However, a more meaningful comparison should be between *grand* and other money terms that are positively nouns. What (82) shows is that *grand* is no different from some of the money terms. This means that the **grand-ish* in (81b) cannot be used as evidence for or against *grand* as a noun. Also, note that the two SE sources are

also ill-formed in this regard, as in (83), but the adjectival *large-ish* and *small-ish* are good.[41] Thus, * *grand-ish* is not evidence for or against the adjectival analyses either.

(81) a. ?Just give me a thousand-ish and we'll call it even.
b. *?Just give me a grand-ish and we'll call it even.

(82) a. *?Just give me a Benjamin-ish and we'll call it even.
b. *?Just give me a G-ish and we'll call it even.
c. *?Just give me a buck-ish and we'll call it even.
d. *?Just give me a mil-ish and we'll call it even.

(83) a. *Just give me a THOUSAND BUCKS IN grand-ish TOTAL and we'll call it even.
b. *Just give me a THOUSAND grand-ish BUCKS and we'll call it even.

The body of evidence discussed in this subsection establishes that the monetary *grand* is a noun, not only in dialects where the monetary *grands* is acceptable as a plural form, but in all dialects, where the behavior of the monetary *grand* is in line with other monetary nouns but inconsistent with adjectives.

4.4 Why *grand*?

Now, we will try to answer Kayne's (2012:74) question: if the monetary *grand* is not the adjective *grand* in *grand total*, then why is it *grand* that has the meaning of $1,000 and "not *train*, say, or *round*, or any other randomly chosen English lexical item"? We now submit two answers, which, incidentally, are not necessarily mutually exclusive. First, most commentators agree that the origin of this use has something to do with the fact that in the early 20th century $1,000 was a big, thus grand, amount of money to most people. Thus, the monetary *grand* indeed originated as an adjective, perhaps in a nominal expression like 'grand bill', which carried an idiomatic reading of $1,000, and then reanalyzed into a noun. A very different scenario has the monetary *grand* as a noun from the start and had to do with President Grover Cleveland:

> I thought that perhaps a "grand" might be used to describe a $1,000 bill due to the president on the $1,000 bill, Grover Cleveland—the first part of "Grover" and the last part of "Cleveland" "Gr" "and"—hence *grand*. (Don Dierdorff, September 6, 2009, http://www.word-detective.com/2008/04/grand-one-thousand/)

In other words, *grand* could be the result of blending, in fact exactly like the other examples in (84), all of which have a similar internal structure of [modifier-head].

(84) a. Gr~~over~~ ~~Clevel~~and → grand
b. mo~~tor~~ + ~~ho~~tel → motel
c. simul~~taneous~~ + ~~broad~~cast → simulcast
d. tele~~vision~~ + ~~mara~~thon → telethon

[41] We thank the anonymous reviewer for making this point.

A piece of circumstantial evidence is the use of *Benjamin* for $100 due to the portrait of Benjamin Franklin on the $100 bill. Thus, while *Benjamin* ($100) is due to the shortening of *Benjamin ~~Franklin~~*, *grand* ($1,000) is due to the blending of *Grover ~~Cleve~~land*. In early 20th century, the Mandarin slang term *yuan-da-tou* 'Yuan big head' refers to a particular Chinese silver dollar, due to the portrait of the president Yuan Shikai; the slang term thus also involves the shortening of a full name. A cockney rhyming slang in use from around the mid-1990s in Greater London, *bag of sand*, referring to 'thousand pounds' and rhyming with *grand*, may also provide indirect support for the phonetic motivation in the genesis of *grand* the money slang.[42] If *grand* indeed originated from the blending of *Grover* and *Cleveland*, then it is for sure a simple noun from the very beginning and has nothing to do with SEs and the adjective *grand*. Of course, the two scenarios above may both be right and work in conjunction to derive the monetary slang term *grand*.

Our two answers to Kayne's question of 'why *grand*?', i.e., the lexicalization or reanalysis of adjective *grand* as a noun and the blending of *Grover Cleveland* to *grand*, are of course specific to the monetary *grand*. We have not attempted to offer a general theory as to when or why adjectives can undergo lexicalization and categorical reanalysis to become nouns or a general theory as to when a lexical item can shorten by undergoing blending. We are not certain such a theory is even possible, and to the extent that is possible, it is far beyond the scope of the paper.

Note that the answer to 'why *grand*?' offered by Kayne (2012) and Law (2012) is also specific to *grand*, i.e., only *grand* in the specific string with the specific SEs can produce the surface form of the monetary *grand*. There is no general theory either about exactly which adjectives can be accompanied by exactly what SEs and why. As we have demonstrated in Sect. 2, lexical SEs are not only permissible but in fact indispensable in language; however, there is no general theory yet as to which lexical items have SE counterparts and which SEs exist without pronounced counterparts. Again, to the extent that such a general theory is possible, it is far beyond the scope of the paper. However, the absence of such a theory does not change the fact that *grand* meaning $1000 is a noun and not an adjective with a silent entourage.

5 The question of acquisition

The fact that Kayne's (2012) and Law's (2012) source forms, ten THOUSAND BUCKS IN grand TOTAL and ten HOUSAND grand BUCKS, are not semantically equivalent to the surface form, *ten grand*, has a logical consequence for acquisition: such a source form is not learnable from the surface form, as one simply cannot derive *something* from *nothing*. It should thus be interesting to examine Kayne's and Law's argumentation that their respective analysis is not only learnable, but inevitable.

Kayne (2012) begins with the hypothesis that there can only be two options available to the learner: (1) lexical: the 'variant of *thousand*' analysis, versus (2) phrasal:

[42] Cited from the online article "Slang money words, meanings and origins", for British English. Its URL is: http://www.learnenglish.de/slang/moneyslang.htm.

the 'modifier of TOTAL' analysis, and claims that the learner must opt for the apparently more complex phrasal analysis. Why? Because the simpler choice is not UG-compatible, as a numeral, which must have a fixed non-flexible interpretation, cannot have any (near-)synonym. The 'variant of *thousand*' analysis for *grand* is thus only available *logically*, but not *linguistically*. So, "the learner of English immediately chooses the 'modifier of TOTAL' analysis (or something close to it)" (Kayne 2012:82), because it is the only analysis allowed by UG.

Setting aside the question whether numerals can have synonyms,[43] Kayne's starting hypothesis is problematic: *grand* does not mean *thousand*; rather, it means *thousand bucks*; similarly, *Benjamin* means *hundred dollars*, not *hundred*, and *nickel* means *five cents*, not *five*. The scenario is therefore quite the opposite from what Kayne argues: his SE analysis is not available to the learner, because the meaning of 'grand TOTAL' is not available from the surface form. The only option is to see *grand* as a noun just like *G*.

Law's SE account can of course be seen as a variant of Kayne's, thus the "something close to it" that Kayne (2012:82) alludes to. Under the SE accounts, the learner should go through similar steps in acquiring the monetary *grand*, summarized in (85).

(85) Steps of acquisition of the monetary *grand* in an SE account

Step 1: The learner is exposed to expressions such as *ten grand* and deduces *grand*'s meaning of $1000.
Step 2: The learner analyzes *grand* as an adjective.
Step 3: The learner imposes necessary SEs to fulfill *grand*'s syntactic requirements as an adjective and the semantics of $1,000.

Crucially, the steps assumed here are *logical*, not necessarily *chronological*. The nominal analysis is immediately available at Step 1. For an adjectival account, the first problem with Step 2 is that it is contingent upon a number of necessary, but by no means sufficient, conditions. First, the learner must not have exposure to the monetary *grand* in its *-s* plural form, e.g., *ten grands* or *spend grands*, exactly a starting assumption of Kayne's. Second, the learner must not have exposure to *grand* used as a noun elsewhere, another starting assumption of Kayne's. Third, the learner must have prior general knowledge of *grand* used as an adjective, and, in Kayne's account, the specific knowledge of *grand total*. Only if all three conditions are met, the adjectival analysis is available to compete with the nominal analysis.

In language acquisition there is a well-established principle known as the Uniqueness Principle or One-to-One Mapping, that unique mappings between form and meaning are preferred (e.g., Slobin 1973; Berwick 1985; Clark 1987; Randall 1990; van Riemsdijk 2002). From this perspective, the adjectival account loses out because of the necessity of Step 3 and thus the complex non-transparent mapping between form and meaning. To compound the problem, Step 3 requires prior knowledge of the [Num Adj] construction, e.g., *three small, one medium*, to fulfill the syntax and semantics required in the phrasal account. The nominal account, on the other hand,

[43] Kayne (2012:82; fn. 23) notes some potential counterexamples in French. Also, the Mandarin Chinese 二百 '*er bai*' and 兩百 '*liang bai*' (two hundred) are synonymous.

is immediately available at Step 1, and allows the meaning *thousand bucks* to be straightforwardly expressed by *grand* as a noun.[44]

However, the above discussion on the possible acquisition of the two particular source forms is purely academic, and based on the assumption that the semantic content of the source is identical with that of the surface. The two sources forms are in fact not learnable, let alone inevitable, for they are not semantically equivalent to the surface form intended. As an anonymous reviewer points out, a source form with SEs can be learnable. Whatever way is at the speaker's disposal to acquire the meaning of monetary *grand* without SEs, the same way would be at his or her disposal for acquiring that meaning with SEs. After all, acquisition of phrasal idioms is not much different from that of lexical items. It is therefore important to reiterate two crucial points. First, an SE in a source form is learnable only if the syntax and semantics of the SE are fully available from the surface form. This is not true for the two SE accounts considered. Second, in the nominal analysis, there is really nothing special about *grand*, which is a simple monetary term just like other such terms, whose nominal status is unmistakable, e.g., *nickel* for '*five cents*' and *G* for *thousand bucks*. Learners come to acquire the monetary *grand* in precisely the same manner they acquire *nickel* and *G*.

6 Concluding remarks

For expressions like *ten grand*, Kayne (2012) and Law (2012) propose a underlying source form 'ten THOUSAND BUCKS IN grand TOTAL' and 'ten THOUSAND grand BUCKS', respectively. Capital letters indicate silent elements (SEs). This paper first discusses the general properties of SEs and then re-examines the two SE accounts. A canonical lexical item is seen as a collection of formal features (FF), PF-features (PFF), and LF-features (LFF). Given that a lexical item (LI) must have FF to participate in syntax, three types of non-canonical LIs obtain: (1) expletives: no LFF, (2) SEs: no PFF, (3) null expletives: no LFF, no PFF. Based on this taxonomy, we are able to answer the two questions Simpson (2012) poses regarding *grand*'s SEs proposed by Kayne (2012) and Law (2012), repeated in (86).

(86) Simpson's (2012) Two Questions Regarding *grand*'s SEs

a. Must the source form with SEs be semantically equivalent to the surface form with pronounced counterparts?

b. Are SEs different from lexical elements whose phonetic matrix is deleted by ellipsis?

[44] An anonymous reviewer asks, "…in the dialects that do not have *grands* and yet treat it as a noun, why doesn't the learner put the plural *-s* on *grand*, much like children in Berko's study who put *-s* on words that they never heard before, e.g., *wug-wugs*?" In fact, the learner most likely *does* produce *grands*, in the same manner that s/he treats *deer/deers* and *sheep/sheeps* at the stage when s/he over-generalizes the plural *-s* (e.g., Cazen 1968; Ingram 1989). The reviewer then asks, "…why should the learner, without the knowledge of *grand* used as an adjective elsewhere, analyze *grand* as a noun? He/she may not analyze it as an adjective, but why a noun?" Because we assume that *grand* in [Num grand] has these two analyses at most.

The answer to both questions is affirmative. SEs differ from their pronounced counterparts only in their lack of PFF but share the same LFF. SEs and ellipsis are thus different in that SEs are based-generated, while ellipsis silences pronounceable elements in derivation.

We then demonstrate that the two SE accounts of *grand* are problematic in two regards. First, the proposed source forms must be stipulated as continuous strings, much like idioms, and yet, they do not form a constituent like idioms. Second, the underlying sources and the surface forms are *not* semantically equivalent. Another fundamental empirical issue is that Kayne, Law, and Simpson's claim that nowhere does *grand* look like a noun except in its monetary use is incorrect, as *grands* can refer to *grand pianos*, *grandparents*, *grandchildren*, *grand championships*, etc. We further demonstrate that their claim that the plural form *grands* in the monetary sense does not exist in today's English is not true either. Corpus data clearly show the earlier plural form *grands* is still in use, though far less common than the bare plural form. The acquisition issue is the final straw to the SE accounts, which require unnecessary and unrealistic prior conditions of language development. The lexical alternative we offer treats *grand* as a simple noun, whose plural morphology is on a par with that of *nickel* and the acronymized *G*, and thus nicely situates *grand* among other similar terms such as *penny*, *nickel*, *quarter*, *buck*, *greenback*, *thou*, *G*, *mil*, etc.

The paper is uncharacteristic among those related to silent or null elements in generative syntax, in that it does not propose any abstract sophisticated structures or movements. However, the spirit of generative syntax, as a discipline that follows the same principles of natural sciences, is the pursuit of simplicity and elegance. The simple theory of lexical items as bundles of features in fact predicts the existence of meaningless items, or expletives, as well as soundless items, or SEs. Yet, as non-canonical lexical items, their occurrence must be syntactically and semantically motivated and constrained. From a philosophical point of view, the two SE accounts are rather reminiscent of the notion of constructions in early Transformational Grammar with various construction-specific transformations as well as Construction Grammar (e.g., Goldberg 1995, 2006), i.e., only in the precise construction and exact sequence of 'THOUSAND BUCKS IN grand TOTAL' or 'THOUSAND grand BUCKS' can these lexical items converge to produce the meaning of the monetary *grand*, 'thousand bucks'. Such a notion of constructions is not compatible with the fundamental philosophy of the Principles and Parameters framework of the generative paradigm, where constructions are seen as mere epiphenomena. Our paper, if successful, demonstrates that the current proliferation of SEs needs to be curbed and a return to the fundamental scientific spirit of generative syntax is essential in proposing and evaluating SEs.

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