Echo Reduplication: When Too-Local Movement Requires PF-Distinctness

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Abstract

This paper provides supporting evidence for a number of hypotheses made in recent models of derivational syntax. The phenomenon under study is *shm*-reduplication in English, a particular instance of the more general, cross-linguistic pattern of echo reduplication. It is argued that the two elements in a reduplicated structure form a chain of two left-peripheral positions that, due to a distinctness requirement within a Spell-Out unit for the Transfer to PF, cannot be mapped onto linear order. A number of seemingly unrelated facts are derived rather naturally: (i) English *shm*-reduplication cannot appear in an argument position; (ii) the two copies involved in *shm*-reduplication are strictly adjacent; (iii) the phonological phrasing of the two copies is not the intonation of a compound; (iv) the discourse context felicitating *shm*-reduplication is not out-of-the-blue; (v) no echo reduplication process yields the reverse order (e.g., with the echo reduplicant preceding the base); and (vi) echo reduplication is never the exponent of a Case- or *wh*-feature.

'We'd better get this business straight,' said Edwin. 'This business of honorifics. I'm *Doctor* Spindrift.'

'Doctor?' Dr. Railton looked wary: delusions of grandeur setting in?

'Yes. I was awarded the degree of Doctor of Philosophy by the University of Pasadena. For a thesis on the semantic implications of the consonant-group "shm" in colloquial American speech.'

(*The Doctor is Sick*, Anthony Burgess, 1960, p.15)

Introduction

The goal of this paper is to offer an account for the syntactic mechanisms and operations involved in a specific type of reduplication in English, so-called *shm*-reduplication as represented in (1) below. Along the way, we will touch on the more general phenomenon of echo reduplication, exemplified by Hindi (2) and Kannada (3). We attempt to relate form and meaning in an indirect way: *through syntax*, rather than adopting an Iconicity Hypothesis (Regier 1998) that there is a direct correspondence and predictability of the form and the meaning of reduplication, as this does not clearly apply to English *shm*-reduplication.

- (1) Money, shmoney, who needs it anyway?
- (2) mãi paan-vaan nahiin khaataa huuN *I paan-ECHO NEG eat-IMPF AUX.1.PRES*'I don't eat paan or other such things.'

[Hindi]

(3) ooda-giida beeDa

run-ECHO PROHIB

'Don't run or do related activities!'

[Kannada (Lidz 2001)]

Anticipating the results of our discussion, the meaning of (more general) echo reduplication results from the interpretation of a syntactic relationship between two almost adjacent syntactic heads. The *phonological reflex* of the fact that they are almost adjacent is that they must be realized with distinct phonological matrices. That is to say, elements that are too close in the syntax require a distinct shape at the PF-interface level. On the other hand, *the semantic requirement* of the Topic-Comment form of *shm*-reduplication is that the two constituents be as locally composable as possible. Thus, two independent and *contradictory* constraints conspire to yield the apparent form-meaning relation in *shm*-reduplication: the mapping-to-LF constraint that a directly compositional relationship must involve elements as local as possible, and the mapping-to-PF constraint that elements that are very local must be distinguishable in order to establish consistent linear order.

On a somewhat larger scale, we provide further evidence for a number of assumptions made in recent syntactic theorizing, in particular syntactic effects displayed by command units, anti-locality conditions, and distinctness in mapping. The picture of syntactic computation that unfolds thus combines recent proposals advanced by Uriagereka (1999), Grohmann (2003), Chomsky (2000 et seq.), and Richards (2002), couched in more long-standing assumptions on the copy theory of movement and linearization deriving from the work of e.g. Kayne (1994), Chomsky (1995), and Nunes (2004), alongside more specific properties of reduplication phenomena (as recently reviewed in Travis 2001, for example).

Reduplication structures can be observed in many languages for many reasons. Concentrating on so-called *shm*-reduplication in English, here we pave the way for our analysis that takes this particular instance of echo reduplication to be an expression of pejorative mood (extended in section 1).

The "syntax of reduplication" has been studied with respect to its *internal* morphological structure quite a bit (Broselow 1982, Travis 2001, Ghomeshi et al. 2003). However, there has been little, if any, work on the *distribution* of echo reduplicants with sentential syntax, which is what we address here.

Shm-reduplication simply cannot occur in an argument position (4) or even target a displaced argument (5):

- (4) *John is always thinking about money, shmoney.
- (5) *Money, shmoney is all that John thinks about.

This is a syntactic generalization that must be captured. Since we are not adopting a constraint-based syntax, we cannot appeal to Optimality-Theoretic principles, such as *SHM-ARGUMENT. Moreover, an attempt to derive the ban on shm-reduplication in argument position from general syntactic principles, such as the ban on adjunction (self-or otherwise) to an argument position (e.g. Chomsky 1986), seems to be on the wrong track. As we will see, echo reduplication in Hindi can occur in argument position, and our proposal derives this difference from English due to interpretive properties localized

¹ Our analysis will focus only on echo reduplication, since it has a very narrow usage compared to total and partial reduplication, which have no consistent meanings cross-linguistically. This is not to say that these phenomena do not merit a syntactic account — it is rather to say that we do not have one for them.

to the clausal sequence. Hence, we must attempt to derive the restriction from the nature of the *interpretative criterion* of these expressions.

Section 1 of this paper will discuss the topic-related nature of *shm*-reduplication. The second section will introduce the ban on too-local syntactic movement, and demonstrate how *shm*-reduplication can be understood as an operation resulting from this constraint. The third section demonstrates how this analysis derives a number of important characteristic properties of *shm*-reduplication. Section 4 develops the analysis further, examining Hindi echo reduplication and typological (non-)properties of echo reduplication.

1 Topicality in Shm-Reduplication

Shm-reduplication is not a "word-internal" phenomenon, immune to syntactic concerns, because its intonational pattern exemplifies that of an XP, not an X^0 . Let us go through the core properties of shm-reduplication (drawing from Nevins & Vaux 2003, who focus on a morpho-phonological description, and the literature cited; see also section 3 below) before we address more analytical issues.

The structure of our fancy is *shm*-reduplication, as illustrated within some naturally occurring contexts in (6) and (7):

- (6) Why? Because we'd rather sleep than see the truth? We'd rather shut our eyes than ask questions? Because we're <u>tired</u>? *Tired, shmired, it's due time we took the blinders off and demanded answers from these elected officials who WORK FOR US.* They do our bidding ... not the other way around. We can't afford to be <u>tired.</u>

 ["An American Midsummer Night's Dream," *Ruminate This*²]
- (7) "Breakfast?! Breakfast shmreakfast, look at the score for God's sake. It's only the second period and I'm winning twelve to two. Breakfasts come and go, Rene, but Hartford, the Whale, they only beat Vancouver maybe once or twice in a lifetime."

[from the movie *Mallrats*, 1995]

It is clear in both examples that what undergoes *shm*-reduplication is the "topic under discussion" (see e.g. Prince 1981, Reinhart 1982, Birner & Ward 1998), which we will henceforth refer to as the *discourse topic*. In (6), the topic of being tired (or politically apathetic) runs as a constant theme throughout the monologue. In (7), the topic of breakfast has been brought up, and is dismissed as much less important than a hockey game. In short, *shm*-reduplication is employed when there is a salient discourse topic, and the speaker wishes to reflect a dismissive attitude towards that topic; we will call this dismissive attitude *pejorative*.

Notice next that a topicalized use of *tired* or *breakfast* could equally well occur in (6)-(7) without the *shm*-reduplicant, and it would simply lack a grammaticalized reflex of the pejorative attitude other than intonation, possibly. Take the "topicalization-alternatives" of the relevant parts in (8) and (9), where we indicate the intonation contour

² This is an online quote, originally posted on August 9, 2002 and last verified by the authors on April 24, 2004 at http://www.ruminatethis.com/archives/000728.html.

simply by '!...':³

- (8) Tired!... It's due time we took the blinders off and demanded answers from these elected officials who WORK FOR US.
- (9) Breakfast!... Look at the score for God's sake.

Without going into articulatory-phonetic details, the discourse topic receives a specific rise-fall intonation in this case. For *breakfast-shmreakfast*, indicating the speaker's dismissive or pejorative attitude, it would be something like H*!H-H*L-L%⁴ — which can even be accompanied by a labial plosion, intake of breath, or a facial expression, for example.⁵ This pejoration relates to the context of the current setting, but also directly to the topic.

In this sense, one might analyze this element — *tired* in (6) or *breakfast* in (7) — as a topic in the left periphery of the clause which it relates to. This would be a high, base-generated topic, as opposed to a sentence-internal expression that is topicalized by displacement (i.e. moved to, say, SpecTopP). We accept this basic premise and fit it in within an articulated left periphery, the sort of "Split Comp" advocated in recent years by Rizzi (1997) and a great deal of related work. For this purpose, take (10) and (11) as the rough structures of (8) and (9), where we idealize (perhaps) and put the imperative verb into the Fin(iteness)-head:

- (10) $\left[\text{TopP Tired Top}^0 \right] \left[\text{TP it's due time we took the blinders off } \dots \right]$
- (11) $\left[\text{TopP Breakfast Top}^0 \right] \left[\text{FinP look-Fin}^0 \right] \left[\text{TP T}^0 \right] \left[\text{VP at the score for God's sake} \right] \right]$

Alternative topic-structures involve a sentence-internal expression moved into the left periphery, as in sentences (12a-c), for example:

- (12) a. Men with beards, Mary really doesn't like __.
 - b. The outcome of the referendum, people are concerned about .
 - c. This paper, all linguistics students should read __ at some point.

To draw from naturally occurring data, as we did for *shm*-reduplication in (6) and (7), consider the following representatives (Birner & Ward 1998: 18, italics in original):

(13) G: Do you like this album? M: Yeah, this song I really like.

[M. Rendell to G. Ward in conversation]

³ Our use of the term *topicalization* is syntactically motivated and does not discriminate between a host of pragmatic functions (see e.g. Birner & Ward 1998 for useful discussion): topicalization refers to any structure which involves a topicalized constituent in the clausal left periphery, be it base-generated or displaced (see the ensuing presentation in the text for more).

⁴ Thanks to Laura Dilley (personal communication, April 2004) for sharing TOBI transcription intuitions on this point.

⁵ See Jouitteau (2004) for compelling arguments that these and analogous non-linguistic gestures can function as syntactic expletives in Atlantic French (which we briefly return to in fn. 15).

(14) C: Have you filled out the Summary Sheet?

T: Yeah. Both the Summary Sheet and the Recording Sheet I've done.

[T. Culp to C. Wessell in conversation]

Yet another way of topicalizing sentence-internal linguistic expressions is by resuming them in their base position, the gap indicated by '__' in (12). Such instances of topicalization are often referred to as (hanging topic) left dislocation. (e.g., Prince 1981, Baltin 1982 for early discussion; Birner & Ward 1998: chap. 2 and Grohmann 2003: chap. 4 for more recent summaries). The left-dislocated correlates of (12) follow below:

- (15) a. *Men with beards*, Mary really doesn't like *those*.
 - b. The outcome of the referendum, people are concerned about it.
 - c. *This paper*, all linguistics students should read *it* at some point.

The aforementioned sources deal in detail with both the syntactic status of and pragmatic issues involved in these cases and finer distinctions among types of topicalization. We will use the term loosely to refer to an element of discourse prominence in the left periphery of the clause. The connection between topicalization and left dislocation structures will be returned to in the next section. We note that, prima facie, left dislocation seems to be "topicalization plus something" (such as resumption). Let us assume that the topic (the left-peripheral expression to the left of the comma indicating an intonational break above) sits in SpecTopP, the specifier of a dedicated topic-projection — regardless of whether it has moved (as in simple topicalization, such as (12)) or is generated there. Since, we argue, *shm*-reduplication serves as pejoration of a topic (under discussion, i.e. a discourse topic at large), it might be revealing to consider the differences and similarities between pejoration by *shm*-reduplication and pejoration by intonation, that is, consider how the italicized utterances in (6) and (7) fit in the picture, with an emphasis on their contrast with (8) and (9).

Topicalization and left dislocation seem to be related in the sense that both involve the grammatical realization of a topic; the former does so by leaving a gap (or simply generating a clause-external topic in the clausal left periphery), the latter by resuming the gap. If the *shm*-reduplicated constituent is a discourse topic inducing the speaker's pejorative evaluation of it, and if such pejoration can also arise without *shm*-reduplication (if accompanied by the relevant phonological and/or gestural processes), we must have a model for the mechanism enabling topicalization. Applying the logic of the argument in the most straightforward manner, if left dislocation is indeed "topicalization plus something," maybe *shm*-reduplication is too — and if so, we would like to know what that *something* is.

The simplest instantiation of this argument would thus assign *shm*-reduplicated pejoration a similar relation to intonation-induced pejoration as hanging topic left dislocation to topicalization: "topicalization plus something" (if (10) and (11) are the correct representations of (8) and (9), which we assume). Repeating (10) and (11) as (16) and (17), consider then a possible implementation of the *shm*-reduplication structures

⁶ As argued for in detail by Grohmann (2003), among many others, hanging topics, as in (15), are basegenerated in the left periphery; see section 2 for brief discussion (and Boeckx 2003, Boeckx & Grohmann 2004 for a movement-alternative based on the dissociation of displacement/Move from Match and Agree).

from (6) and (7), where we leave open for now where exactly the reduplicated expressions sit (indicated by XP):

- (16) $[TopP Tired Top^0 [TP it's due time we took the blinders off ...]]$
- [17] $[T_{\text{opP}}]$ Breakfast T_{opP} $[T_{\text{inP}}]$ $[T_{\text{inP}}]$ $[T_{\text{opP}}]$ at the score for God's sake T_{opP}
- (18) $[T_{opP} \text{ Tired Top}^0][X_P \text{ shmired } X^0][T_P \text{ it's due time } \dots]]]$
- (19) $[T_{\text{TopP}} \text{ Breakfast Top}^0 [X_P \text{ shmreakfast } X^0 [F_{\text{inP}} \text{ look-Fin}^0 [T_P T^0 [V_P \text{ at } \dots]]]]]$

Observe a further parallelism: shm-reduplication may also involve a sentence-internal expression, as in (1) above. Crucially, however, this element must be resumed, as found in hanging topic left dislocation, as the following contrast illustrates ((20a) is repeated from (1)):⁷

- (20) a. *Money, shmoney*, who needs *it/that stuff* anyway?
 - b. *Money, shmoney, who needs __ anyway?

We're focusing here on the left periphery, the internal architecture of a split CP, and in particular on the topic position and a potentially related position for the *shm*-reduplicated expression. Note first that there is good evidence that there is an independent position for the latter, since the discourse topic and the reduplicated element do not form a single phonological unit (see Nevins & Vaux 2003 and section 3.3 below): they do not have the intonation of a compound and thus cannot be reduced to an X^0 constituent. Assuming that only a single phrase can occupy a single specifier, the relevant (reduplicated) part of (18) cannot have the structure in (21):⁸

(i) a. Ed refuses to look after Sheila's *damn* dog.

b. Every Democrat with [a proposal for reform]₁ claims [the stupid thing]₁ deserves public support.

One particularly convincing account of multiple subject constructions (as in Semitic languages or Japanese) is that of Doron (1996), arguably the only comparable instance of (potential) multiple specifiers (see also Doron & Heycock 1999). Doron's analysis for these cases (and Doron & Haycock's extension to Japanese) is based on a predication relation holding of the outer specifier ("Broad Subject") and the clause (including the "Narrow Subject"). In section 4.3. below we provide discussion of the weaknesses of a(ny) predication-approach to *shm*-reduplication. And if, indeed, predication is not part of the analysis of *shm*-reduplication, then it becomes unclear how a second specifier is licensed.

Moreover, analyzing the pejorative element and its *shm*-reduplicated "copy" (in the sense developed in sections 2 and 4.1 below) as belonging to the same projection (either as multiple specifiers or as a specifier-adjunct pair, for example) would abandon the correlation we suggest between *shm*-reduplication and pejoration licensed by prosody or gestures.

⁷ Notice that *that stuff* is a better resumptive than the simple pronoun *it* to underscore the pejorative expression, very much in line with Potts' (2003) discussion of expressive content (such as *Sheila's damn dog* or *the stupid thing* in (i)) giving rise to conventional implicatures:

⁸ Single specifiers are filled by single phrases. But then one could put forth the position that there are multiple specifiers of the same head involved, hence *tired* and *shmired* in (21) could both be specifiers of the same projection. There are a few arguments against this view or variations on it.

(21) $*[T_{opP} \text{ Tired } shmired \text{ Top}^0 [T_P \text{ it's due time } ...]]$

Apart from the prosody-syntax requirement that these be separate syntactic positions, the fact that full clauses can be *shm*-reduplicated makes this point rather clear:

(22) John wants a laptop, John wants a shmaptop, who cares what the brat wants?

To sum up this section: within the general cartographic approach that maps distinct discourse functions to sequenced functional projections (cf. Rizzi 1997, Cinque 1999, and work inspired by these), the pejorative use of *shm*-reduplication deserves its own functional projection. We will propose, and then refine, that the two copies in *shm*-reduplication each inhabit their own distinct functional projection: TopP and PejP. The latter is the locus of reflecting the speaker's attitude and might correspond to an *evaluative* mood.

Evidence for PejP being very high in the clause structure comes from the fact that expressive content scopes above modal verbs:

(23) John said (about his friend Bill) that *the idiot* is his best friend.

The epithet is scoping above the verb *say*, since the matrix utterer's opinion of Bill as an idiot does not reflect the reported author's opinion. Since *the idiot* is not quantificational, this is arguably not QR, and we assume that it involves movement to a dedicated clausal position for speaker-oriented evaluative phrases. If this is correct, we have independent evidence that an evaluative PejP is quite high in the left-periphery, and in cases like (23), arguably involves LF-movement (or one's favourite implementation of covert checking or licensing of features).

To return to the rough characterization that English *shm*-reduplicated pejoration is "topicalization plus something," we now have reason to believe that the structures in (18) and (19) cannot be correct: the order of TopP and XP (now identified as PejP) must be reversed. A closer look at left dislocation structures in the next section confirms this view and extends the parallelism further.

2 An Anti-Locality Approach

In the previous section, we argued that *shm*-reduplication deserves a movement analysis within the left periphery, where a high base-generated topic moves within a split CP to a pejorative projection, the specifier of PejP. In this context, we noted a striking similarity between pejoration through *shm*-reduplication and pejoration through other means (intonation, prosody, gestures, and the like); this similarity receives a unified structural

Finally, an adjunction approach would bring with it numerous problems: for example, why is adjacency between the elements strict, and why is the order fixed? In this respect, an implementation of acyclically adjoining (Lebeaux 1991) the *shm*-reduplicated "copy" would not be of benefit either: it would encounter the same difficulties just mentioned (licensing, positional properties, and so on) and would leave us with an adjunction-operation that inserts an element between specifier and head, rather than simply adjoining it to a given maximal projection.

On the basis of this discussion (and possibly further arguments), we exclude these various X-bartheoretic innovations, on the grounds that any implementation thereof (multiple specifiers, adjunction strategies, predication) does not address the properties derived by the movement account.

analysis involving PejP and TopP. We set out to explain why the two copies are both pronounced, and moreover, why they are pronounced differently. The idea is that the elements in question form a chain roughly within the same command unit (Uriagereka 1999) of two left-peripheral positions, here understood as a structure relevant for morphologizing or spelling out to the interfaces (at least PF). In current terms, the two elements are part of the same Prolific Domain (Grohmann 2003) that, due to a distinctness requirement within the Transfer to PF (Richards 2002), cannot be mapped onto linear order (Kayne 1994).

First, we establish its status within the typology of syntactic objects. On the view that *Money, shmoney, I don't need that stuff anyway* constitutes a semantics of the form: λx . [I don't need x]' ([money]') along with the conventional implicature that the speaker holds a pejorative attitude towards the lexical item under discussion (Potts 2003), the semantic identity of α (the discourse topic)) and β (the *shm*-reduplicated expression) requires an LF generated from a syntactic dependency between α and β . A research program advanced most vociferously by Hornstein (2001) and Grohmann (2003) pursues the view that all syntactic dependencies should be expressed by movement. As a result, the phenomena of local anaphora, control structures, and contrastive left dislocation (on the latter, see below), among others, can plausibly be understood in terms of the copy theory of movement (as presented most clearly in Chomsky 1995 and Nunes 2004), with Case-theoretic and linear-correspondence conditions imposing further requirements on the realization of copies.

Historically, the phenomenon of reduplication has been considered a phonological one that realizes abstract morphological features (e.g., Moravcsik 1978). In contrast, we argue that the dependency relation between the base position of the reduplicandum and the locus of the morpho-syntactic features is one of *syntactic movement*. However, such movement is *too* local, as it never crosses more than one *domain* of sorts, which we will address presently.

Within the anti-locality framework laid out in Grohmann (2000, 2003), the clausal tripartition (VP, Infl, Comp) is taken seriously in structuring the clause into three distinct *Prolific Domains*: a Thematic- or Θ -Domain (creating thematic relations), an Agreement-or Φ -Domain (licensing agreement properties), and a Discourse- or Ω -Domain (establishing discourse information). In line with general minimalist desiderata, Grohmann suggests a single condition that rules out too-local or anti-local movement, and this condition follows from bare output conditions (Chomsky 1995) or, in more current terminology, interface conditions (Chomsky 2000, 2001):

(24) Condition on Domain Exclusivity (Grohmann 2003: 78) For a given Prolific Domain $\Pi\Delta$, an object O in the phrase-marker must receive an exclusive interpretation at the interfaces, unless duplicity of O yields a drastic effect on the output of that $\Pi\Delta$.

⁹ For further arguments in favour of movement and, in particular, against a base-generation analysis in terms of predication, see also section 4.3 below.

¹⁰ As Howard Lasnik (personal communication, March 2004) remarks, the expression *anti-local movement* might be misleading and could better be referred to as *too local movement*. Anti-local movement is that which proceeds too locally to be acceptable by the computational system.

The condition can be skirted, however, through the operation *Copy Spell Out*, which renders the lower copy within a domain *phonologically distinct* (the 'unless'-clause, thus "yield[ing] a drastic effect on the [PF-]output"). Usually this is in the form of a grammatical formative, such as a resumptive pronoun as in German contrastive left dislocation, for example. In fact, this phenomenon arguably offers ideal illustration. We can describe the relevant steps of the derivation as follows: the left-dislocated expression in contrastive left dislocation moves from an IP- or TP-internal position (itself originating in a thematic position within ν P if argument) into the Ω - or Discourse-Domain, targeting SpecTopP. From here it continues to move to the most peripheral position, SpecCP (possibly the projection identified as ForceP in Rizzi 1997). This movement is too local, so that if the Condition on Domain Exclusivity is to be adhered to, something else must happen or the derivation crashes.

The following example is a relevant case at hand (where '...' indicates further structure irrelevant for our discussion; (27) below provides a full derivation):¹¹

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(25) a. [Seinen<sub>i</sub> Vater], den mag [jeder Junge]<sub>i</sub>.

his.ACC father RP.ACC likes every boy

'His father, every boy likes.'
b. [CP seinen Vater C<sup>0</sup> [TopP den mag-Top<sup>0</sup> [TP jeder Junge T<sup>0</sup> [ ... ] ] ] ]
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The left-dislocated phrase, call it XP (italicized and bracketed), and the resumptive pronoun RP (here italicized to indicate co-reference with XP; morphologically, this is a weak demonstrative pronoun), with which it agrees in Case and φ -features, are in the same Prolific Domain (the Discourse-Domain). Crucially, (25) allows a bound variable reading, where in each case a different boy likes his own father. Beyond the absence of Weak Crossover effects as in (25), German contrastive left dislocation displays other signs of reconstruction, such as the presence of Condition A effects, the absence of Condition C effects, or the possibility of left-dislocating idiom chunks (see Grohmann 2003: chap. 4 for discussion and further references).

These properties stand in sharp contrast to hanging topic left dislocation, the only type of left dislocation also present in the grammar of English (see (15) above). Hanging topic left dislocation is illustrated for German with the minimally differing (26):

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(26) a. [Sein<sub>i</sub> Vater], [jeder Junge]*<sub>i/k</sub> mag den/ihn.
his.NOM father every boy likes RP/him.ACC
'His father, every boy likes him.'
b. [CP sein Vater [CP C^0 [TP jeder Junge mag-T^0 [... den/ihn...]]]]
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Hanging topics characteristically show up in nominative case only and the selected Casemarking in the Agreement-Domain shows up on the RP. The RP may be expressed by either the weak demonstrative (as in contrastive left dislocation) or the personal pronominal form; moreover, it may appear in the same position as in contrastive left dislocation (not shown here) or show up in the base position, thus being the obvious counterpart of English left dislocation (as in (26)). These properties further suggest that it

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¹¹ This brief exposition is adapted from Grohmann & Panagiotidis (this volume).

is the RP which is selected by the predicate and inserted into the derivation — in both English and German, and presumably across all languages in which we find this construction.

One analysis made possible by the Condition on Domain Exclusivity within the antilocality framework sketched here is to derive contrastive left dislocation in terms of a (movement) dependency between the left-dislocated XP and the RP, while hanging topics are generated in their surface position, as in standard analyses. By exclusivity, this movement can be understood as the result of Copy Spell Out, a PF-driven wellformedness operation that changes the PF-matrix of the lower of the two copies that are in the same Prolific Domain (where, to repeat, TopP and CP are both part of the Discourse-Domain). Adopting ' \supseteq ' to indicate this change in PF-matrix (an expression's phonetic shape), we may represent the full derivation for (25) as in (27), assuming an Agr-projection to license accusative case and disregarding exact verb-positions or movement (adopted from Grohmann 2003):

[CP seinen Vater
$$C^0$$
 [TopP seinen Vater \Rightarrow den mag-Top 0 [TP jeder Junge T^0 [AgrOP seinen Vater AgrO 0 [VP jeder Junge V^0 [VP seinen Vater Y]]]]]

Take Copy Spell Out to be a repair strategy that applies at a given Prolific Domain as the result of a PF-legibility violation (the too-local movement step). At the point when a Prolific Domain is formed, PF identifies two identical copies of one linguistic expression and cannot deal with them. Spelling out the lower copies provides the "drastic effect" required by the exclusivity condition.

The important question is, why not just delete the lower Ω -Domain copy, instead of changing its phonological form? Based on the empirical evidence that this doesn't happen, we are making a strong claim:

- (28) a. Deletion of lower copies (i.e. decision which to pronounce) happens in PF.
 - b. The Distinctness requirement on *transfer* to PF is ordered prior to deletion.
 - c. Copy Spell Out is the *only* mechanism for allowing convergent transfer of a Spell-Out Domain that contains two copies of one linguistic expression.

Further research is clearly needed to verify (28). However, (25) would clearly satisfy all syntactic and interface requirements if the lower Ω -Domain copy were deleted, but such a structure remains ungrammatical.

The need for PF-distinctness in (25) arises because the movement is between the specifiers of TopP and CP, two positions within the same domain. If this account is on the right track, we should expect to find other mechanisms for PF-distinctness, and subsequently we investigate the question why pronominalization would be the only way to achieve this (which, we argue, it isn't).

Assimilating echo reduplication to other instances of Copy Spell Out provides further support that Copy Spell Out is not an isolated phenomenon limited to insertion of pronominal elements; rather it may involve modification of the phonological form of a copy. Kayne's (1994) Linear Correspondence Axiom (LCA) demands that at most one copy of a syntactic element may be realized within a specified domain, in order to prevent symmetric or reflexive precedence (see also Nunes 2004).

The Condition on Domain Exclusivity is thus a bare output or interface condition: when linearizing, PF cannot deal with two elements receiving the same pronunciation (what we call the PF-matrix) in a contained domain. The contained domain is a given Prolific Domain, a domain for Spell Out; each Prolific Domain sends the information contained in it to the interface components (at least, to PF) where post-syntactic operations insert values into the PF-matrix of linguistic expressions, the syntactic objects manipulated in the course of the derivation. We concentrate on a comparison with left dislocation structures for three reasons:

- (i) *shm*-reduplication shows resemblance with topicalization
- (ii) shm-reduplication invariably takes place in the Ω -Domain
- (iii) shm-reduplication may involve sentence-internal resumption

The discourse properties of *shm*- provide a pejorative reading for the left-peripheral element. However, this element must also be *given* (in the sense of Schwarzschild 1999) within the linguistic context. The reduplicandum occupies two distinct positions, expressing two distinct discourse functions: topicalization and pejoration. Suppose they are instantiated through left-peripheral heads, within the same domain (Top⁰ and Pej⁰, respectively). Then the second copy cannot be realized identically to the first, due to the Condition on Domain Exclusivity (24), resulting in (29):

(29)
$$[PejP]$$
 Binding Theory $Pej^0[TopP]$ Binding Theory Top^0 Shminding Theory Top^0 $[TP]$ we already have the theory of movement $[TP]$

It should become clear at this point that the analysis provided for *shm*-reduplication resembles that of contrastive left dislocation almost to a dot: an element moves within the Ω -Domain from the specifier of TopP to a higher projection — CP in one, PejP in the other case (where we leave open whether PejP is to be identified as the same CP, such as/ or ForceP¹³). This too-local movement can be rescued by Copy Spell Out in form of a resumptive pronoun for the entire expression in contrastive left dislocation. However, in the anti-local variant of pejoration, Copy Spell Out targets only a part of the PF-matrix by

¹³ While it might be tempting to take PejP as the force-encoding head of shm-reduplicated structures (e.g. to

establish the correlation with left dislocation further or to try and reduce the array of functional projections in the left periphery), there are good reasons to doubt this particular identification. As Phoevos Panagiotidis (personal communication, June 2004) suggests, *shm*-reduplicated elements bear an intuitive resemblance to Japanese *wa*-topics and as such are high in the structure by nature. Details remain to be worked out, but he also observes that Cinque (1999) aligns evaluative mood rather low in the clause structure. While pejoration may be an expression of evaluation, it clearly sits higher than Cinque assumes. Whether this occupies the head of the entire clause, however, is quite a different matter. Note first and foremost that *shm*-reduplicated elements (both copies) are high base-generated topics, as discussed at length in section 1, and as such never belong to the theta-structure that builds up a sentence which is pejorated. In this light, it can hardly be justified that it should express the force of a linguistic expression. Besides, if we were to encode pejorative force on a par with other force-bearing expressions (such as interrogative or imperative), we would essentially propose a new formal sentence type — which we do not want to, at least not at this point, without further thought. We thus continue to employ PejP as something below the highest CP-

projection, such as ForceP, and above TopP.

¹² Grohmann (2003) provides further evidence for Copy Spell Out as a consequence of too-local movement within the other Prolific Domains and applies the approach to the nominal layer as well (cf. Grohmann & Haegeman 2003, Ticio 2001, Grohmann & Panagiotidis 2004 [this volume]).

inserting the pejorative marker *shm*- within the expression. Before returning to the details of the analysis, we will present motivation for this understanding of *shm*-reduplication and its properties.

3 Deriving Restrictions

By the general line of the analysis presented above, we derive a number of seemingly unrelated facts about *shm*-reduplication rather naturally.

- **3.1 Positional Restrictions** English *shm*-reduplication cannot appear in an argument position nor can it be moved from one (Nevins & Vaux 2003). All it can do is involve a high hanging topic which is resumed in a clause-internal position (such as a thematic position) or a clause-external discourse topic (i.e. one which is not part of the theta-grid), leaving no gap or other relation to the clause at all.
- (30) a. *Who needs money, shmoney (anyway)?
 - b. *Money, shmoney, who needs __ (anyway)?
- (31) a. *Money, shmoney*, who needs that stuff (anyway)?
 - b. *Breakfast, shmreakfast*, look at the score for God's sake!

This suggests that the discourse topic is generated high, in the clausal left periphery, and moves within this periphery to obtain the pejorative reading.

Naturally, since the *shm*-reduplicated expression is a (discourse) topic by necessity, it may not appear in another non- Ω -position, such as the subject position SpecIP (TP) within the Φ -Domain:

- (32) a. *Money, shmoney is a concept.
 - b. *Money, shmoney ruins everything.
- **3.2 Adjacency Restrictions** The two copies in *shm*-reduplication are strictly adjacent: assuming that linear order is isomomorphic with asymmetric c-command, this means that no phonologically realized syntactic head may c-command β (the lower expression) but not α (the higher one).
- (33) *Money* (*yesterday) *shmoney*, nobody needs that stuff.

This is also what we find in contrastive left dislocation (25): the dislocated expression must be immediately adjacent to the resuming pronominal.

Interestingly, TopP seems to have no restrictions on the size of its specifier. This might be precisely what we expect if it is a phrasal projection that allows pied-piping. In a sentence like (34), for example (repeated from (22) above), we don't want to say that the entire adjunct sentence, merged into TopP, moves to SpecPejP, because intuitively, *laptop* is the topic-at-large to be pejorated. Rather, presumably due to the Left Branch Constraint (Ross 1967, Bošković 2003), the discourse topic *laptop* that is to move to PejP requires overt pied-piping of the entire containing CP (see e.g. Ortiz de Urbina 1989 on clausal pied-piping as a means of obeying movement constraints):

(34) *John wants a laptop, John wants a shmaptop*, who cares what the brat wants!

This would be the result of a derivation in which the entire string *John wants a laptop* is a discourse topic generated in a high position, such as the specifier of TopP, from where it undergoes too-local movement.

- **3.3 Intonational Restrictions** The phonological phrasing of α and β is not the intonation of a compound: compare the single stress of *wálkman* or *cóokie cutter* to that of *móney-shmóney* or *fáncy-shmáncy*.
- (35) a. wálkman, cóokie cutter
 - b. *wálk mán (on the relevant reading), *cóokie cútter
- (36) a. *móney-shmoney, *fáncy-shmancy
 - b. móney-shmóney, fáncy-shmáncy

The consensus in stress-assignment algorithms in the literature is that two distinct prosodic words occupy distinct syntactic projections. Indeed, they do: TopP and PejP

- **3.4 Discourse Restrictions** The discourse context of *shm*-reduplication is not out-of-the-blue.
- (37) A: What happened?
 - B: #Touchdown, shmouchdown, the Redskins just scored!
- (38) A: Are you enjoying the game?
 - B: #Breakfast, shmreakfast, look at the score for God's sake!

Again, under an analysis that designates a topic position for the discourse-dependant expression to be reduplicated, this restriction follows immediately. The answer to a *wh*-question represents new information (focus) and as such cannot be related to TopP.

- **3.5 Order Restrictions** No echo reduplication process yields the reverse order: α is a well-formed phrase, while β represents a phonological modification resulting in a nonsense word. In line with our analysis sketched in (29), then, α sits in the higher SpecPejP position and β in the lower one, SpecTopP; these cannot be reversed:
- (39) *Shmoney, money, who needs it.

The relevant literature reveals that no language with echo reduplication has the copy with fixed-segmentism first (see e.g. Abbi 1992, Fitzpatrick-Cole 1994, Niepokuj 1997, Regier 1998, Moravcsik 1978, and especially Southern 2004). *Phonologists have never been able to derive this property in an interesting way* (stipulations such as ALIGN-RIGHT-SHM only restate the problem). From our *syntactic* analysis, however, it follows automatically.

This otherwise puzzling phonological property of shm-reduplication is derived—why it is always the second (or immediately lower) copy that is dissimilatory. As Grohmann (2003: 243) observes: "It is the lower copy that deletes (it has a less complete set of checked features)." The lower copy is only in TopP, while the higher copy moves on to check pejorative features (where we remain somewhat dubious whether PejP = CP or ForceP of Rizzi 1997, though see fn. 13, and further take wh-elements to sit lower, possibly in a focus position, as also assumed by Rizzi):

(40)
$$[P_{ejP} money_{[uPej,uTop]}] Pej^{0} [T_{opP} money]$$
 shmoney $[uPej,uTop] Top^{0} [F_{ocP} who ...]]]$

Since the lower copy is more deficient (having a superset of the **un**checked features of the higher copy), it is the one subject to *shm*-modification.

A question remains: how come Copy Spell Out may choose between spelling out the lower copy of a too-locally moved expression in its entirety (as in contrastive left dislocation) and modifying its PF-matrix by insertion of a highly specific pejorative *shm*? That is, why is the PF-modification of *shm*-reduplication what it is, and not pronominalization, or an invariant nonce-word?

Moreover, why is it that, when larger chunks of discourse topics are to be pejorated, *shm*- may target the first syllable of the first word or of the last word (Nevins & Vaux 2003)? Consider (41):

- (41) a. Going to the beach, going to the shmeach...
 - b. Going to the beach, shmoing to the beach...

In the next section we examine possible answers that lead to a slight revision of the analysis presented above, while keeping the main assumptions constant. We hope to provoke further investigation to disentangle the remaining issues.

4 A Continued Modification of the Analysis

In the light of the questions just posed, we would like to present a modification of the foregoing analysis, compatible with the anti-locality framework. Our starting point is the same we used previously to motivate syntactic investigation: the comparison with other topic structures.

4.1 Pejoration \neq **Topicalization** The picture that emerged in section 1 was that *shm*-reduplication, understood as pejoration of a discourse topic, can be understood as "topicalization plus something," where *something* here refers to pejoration of the topic under discussion. We drew our main arguments from two sources. First, the *shm*-reduplicated expression is a topic under discussion (discourse topic); second, the extra step shows resemblance to other extra steps involving topics, namely types of left dislocation: hanging topic left dislocation as it materializes in English (a base-generated expression in the left periphery resumed clause-internally) and contrastive left dislocation as found in German (where resumption that is very local can be understood as Copy Spell Out within the left periphery).

This led to the view of *shm*-reduplication as a left-peripheral topic expression that moves too locally and spells out the lower copy by inserting a pejorative *shm*- into its PF-

matrix.

However, the comparison with topic structures only goes so far. This section points out some important differences between the syntax of topics and the syntax of *shm*-reduplication. For starters, consider the following:

- (42) a. *Breakfast, shmreakfast*, look at the score for God's sake!
 - b. *Money, shmoney*, who needs *it/the sh*t* (anyway)?
 - c. *Money, shmoney, I don't need (anyway).
- (43) a. *Breakfast*, look at the score for God's sake!
 - b. *Money*, who needs it/the sh*t (anyway)?
 - c. *Money*, I don't need (anyway).

Both regular topics and shm-reduplicated topics may appear in the left periphery in two ways: by being completely external to the argument structure of the clause they attach to (a-examples) and by relating to a clause-internal element, which is part of the theta-grid, through resumption (b-examples). Resumption, moreover, can be in the usual form of a pronominal, or be an epithet-like "expressive attribute" (Potts 2003): $the\ sh\ t$, underscoring the pejorative intent. But as the difference in acceptability in the c-examples shows, topicalization may also involve the thematic element itself, unlike $sh\ m$ -reduplication, where the pejorative expression may under no circumstances move from a clause-internal position.

A related property of topicalization emphasizes the underlying problem with this comparison. Since at least Chomsky (1977), it has become clear that topicalization is in many ways an instance of *wh*-movement (broadly speaking, A'-movement). Since *wh*-movement may apply successive-cyclically, as in long-distance *wh*-dependencies which employ SpecCP as an escape hatch, it comes as no surprise that topicalization may also span distances across clause-boundaries.

(44) *Money*, everyone knows (that) John thinks (that) I don't need anyway.

Or to use a naturally occurring datum (Birner & Ward 1998: 78):

(45) G: Do you think you'd be more nervous in a job talk or a job interview?

S: *A job talk* I think you'd have somewhat more control over ___.

[S. Pintzuk to G. Ward in conversation]

This stands in contrast to *shm*-reduplication, which seems at first glance to be strictly local and cannot involve movement of the discourse topic ¹⁴:

(i) (?)? *Money, shmoney*, who could doubt (that) <u>he</u> needs *it*.

We leave the potential point of contrast aside. One could, for example, argue that embeddability of pejoration does not go together with an interrogative (as in the clearly ungrammatical (46)). Recall, however, that we apply "topicalization" in the broad sense, applying to all structures that involve a grammaticalized prominence of a discourse-salient element; this understanding of topicalization includes

¹⁴ However, a slight amendment of the structure results in something potentially less odd-sounding:

(46) *Money, shmoney, John's asking who needs it/that stuff.

Note further that, if *shm*-free pejoration of the sort provided in (8) and (9) above is to be related to *shm*-reduplication, it cannot be that the latter is simply "topicalization plus something" — after all, what we see in those cases like (8) and (9) is topicalization coupled with the relevant intonational properties allowing a pejorative construal. Thus something should be present (in the syntax) that allows this construal. Again, within a dedicated-functional-projections approach, the pejorative head Pej⁰ should be involved here too. Recall that the evidence for PejP being very high in the structure comes from the fact that expressive content scopes above modal verbs (repeated from (23):

(47) John said (about his friend Bill) that *the idiot* is his best friend.

The epithet is scoping above the verb *say*, since the matrix utterer's opinion of Bill as an idiot does not reflect the reported author's opinion.

Here is a concrete proposal as to why *shm*- is the modification that allows the second copy to remain distinct from the first: *shm*- is the overt head of PejP that requires overt movement to its specifier.

(48) PejP only requires overt movement when its head is overt.

The overt-movement requirement of left-peripheral heads when they have phonological content has roots in the research inspired by Rizzi (1997), and we adopt it here. Our suggestion is straightforward: the head of PejP in *shm*-reduplication is the morpheme /shm/. For *shm*-less pejoration (of the sort where Pej⁰ is arguably "filled" with the relevant prosodic or gestural instructions), a derivation such as for (8) would look as follows, where the pejorative expression checks its uninterpretable [Pej]-feature covertly, indicated by parentheses:

(49)
$$[PejP (money_{[uPej,uTop]}) Pej^0 [TopP money_{[uPej,uTop]} Top^0 [FocP who needs ...]]]$$

the other two phenomena we discussed, contrastive and hanging topic left dislocation. We find the following clear-cut, cross-linguistic characterization: A'-topicalization (the syntactic operation of fronting a discourse-salient element, leaving behind a gap) and clitic left dislocation (a possible counterpart of contrastive left dislocation which resumes that gap with a clitic) may both be embedded. Left dislocation of the English sort (where the hanging topic is base-generated), however, cannot be embedded. If pejoration as understood as we have presented it here (including the discussion in fn. 13), it results in a base-generated topic, with further movement and "resumption." The result is a structure that potentially may occur embedded, with restrictions due to the embedded context.

This correlation becomes even more relevant when we consider the impossibility of embedding, a ban active for both Atlantic French gestures and pejorative *shm*-reduplication (i).

¹⁵ As pointed out in fn. 5, current work by Mélanie Jouitteau goes in the same direction. Jouitteau (2004), for example, presents evidence for non-linguistic sounds (such as intake of breath) and gestures (facial expressions, movement of hands, etc.) to be used instead of an overtly expressed subject or topic, licensing agreement and, possibly relevant here, clause-typing (but see fn. 13 for a qualification).

Recall that the logic of anti-locality is that the lower copy must be rendered distinct from the higher copy. We propose for pejoration through *shm*-reduplication that the precise mechanism is word-formation between *shm*- and the lower copy:

(50)
$$[P_{ejP} \text{ money } [P_{uPej,uTop}] \text{ shm-Pej}^0 [T_{opP} \text{ money } [P_{uPej,uTop}] \text{ Top}^0 [F_{ocP} \text{ who needs } \dots]]]]$$

The proposal that word-formation can "hide" a lower copy from the LCA has its roots in the work of Nunes (1999), who suggests that cases of more than one copy of a wh-word being spelled out involve word formation with the intermediate complementizer, "converted to a phonological word not subject internally to the LCA (Chomsky 1995: 337)." (51) illustrates:

(51) Kas misline kas o Demiri dikhlâ? whom think.2.SG whom the Demir saw 'Who do you think Demir saw?'

[Romani (Nunes 1999: 232, from McDaniel 1986)]

The only difference between Nunes' cases of a lower copy forming a word with a complementizer and the *shm*-cases considered here is that *shm*- is *phonologically overt*. The other difference is that *shm*- (Pej⁰) is actually the head of the next projection up. However, this does not prevent word-formation, as Julien (2002) demonstrates extensively. For example, many languages have tense as a prefix on the verb. This is completely impossible under the left-adjunction view of head-movement, and hence what Julien proposes is that a word can encompass elements in adjacent projections.

The modification of our proposal that was suggested in this section arrived in two parts. First, we qualified the characterization of shm-reduplication being "topicalization-plus-something": it involves topicalization and it involves something else, but this something else had different properties than the usual suspects (i.e. the types of left dislocation observed across languages). Second, by identifying the Pej-head as being the position in which shm- is merged, we established more clearly the correlation between pejoration through shm-reduplication vs. other means (i.e. those in which Pej^0 is phonetically null). We take this to be another set of positive results, inviting further investigations into the grammatical properties of pejoration. Finally, we introduced the additional step of satisfying the Condition on Domain Exclusivity by word-formation between shm- and the lower specifier, an operation with precedents in the literature.

4.2 What Echo Reduplication is Never an Exponent of To link our analysis to the discussion in section 3, we can make further predictions, explaining why reduplication never is the exponent of Case- or *wh*-movement. The traditional view of reduplication relegates it to the phonology, claiming it is the way a particular language provides the exponent for a feature-checking relation with a head H. That is, most morphologists posit that a particular morpheme in the syntax causes insertion of an abstract RED marker, the instruction to reduplicate. But there is a huge gap: why can't this head H ever be

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 $^{^{16}}$ Reduplication is often employed across languages to mark aspectual distinctions. All of these involve *partial* reduplication, which is outside the focus of our current study (cf. fn. 1). Moreover, aspectual use of reduplication exclusively involve X^0 , not phrasal projections, and the anti-locality approach does not offer

T(ense) or C? If the phonological view is right, reduplication could crop up as the way a hypothetical language realized nominative case or another language realized *wh*-phrases.

(52) Huge Typological Gap

(i) No language uses echo reduplication for nominative or accusative case:

<u>nominative</u>: John-Rohn saw Mary. ('John-NOM saw Mary.')

Mary-Rary saw John. ('Mary-NOM saw John.')

<u>accusative</u>: John saw Mary-Tary. ('John saw Mary-ACC.')

Mary saw John-Tohn. ('Mary saw John-ACC.')

(ii) No language uses echo reduplication to realize simple or complex wh-phrases:

<u>simple wh</u>: You bought something-womething? ('What did you buy?')

Someone-womeone left? ('Who left?')

<u>complex wh</u>: You bought books-wooks? ('Which books did you buy?')

Student-wudent left? ('Which student left?')

This gap falls out automatically within the view of echo reduplication as too-local movement. Recall that the domain-based view carves the tree into the Discourse-Domain, the Agreement-Domain, and the Theta-Domain. Nominative case could never be realized by echo reduplication, because it spans the Agreement- and Theta-Domains, and hence does not require PF-modification of the lower copy. Wh-"movement" (covert or not) involves relations between positions in the Discourse-Domain and the Agreement-Domain, spanning two domains; hence, PF-modification for distinctness is unnecessary.

If the view developed here is correct, we should expect to find other instances of echo reduplication for *Domain-internal* movement. And in fact, the reduplication found in South Asian languages arguably instantiates just such a case, repeated from (2)-(3) above:

(53) mãi paan-vaan nahiin khaataa huuN *I paan-ECHO NEG eat-IMPF AUX.1.PRES*'I don't eat paan or other such things.'

[Hindi]

(54) ooda-giida beeDa

run-ECHO PROHIB

'Don't run or do related activities!'

[Kannada (Lidz 2001)]

This type of echo reduplication can in fact occur within an argument position (for NPs) or on a verb. It is a category-neutral expression of *Generalized Plurality*, as is also found in Japanese *-tati*, which means "X and so on" (Nakanishi & Tomioka 2004). Based on the

predictions on this score, since head movement does not fall under too-local movement (see Grohmann 2003: chap. 2 for discussion).

work of Borer (2004), we take this sort of Generalized Plurality to be an act of converting a count individual into a mass individual. Thus, "I saw John-*tati*" means "I saw a group of people, of whom John is an exemplary representative."

Importantly, both Japanese -tati and the echo reduplicant of Hindi occur inside of Case-markers. The fact that -tati appears even before the Case-marker ga in Japanese is evidence that it is well within the Theta-Domain. It also is the grammaticalized form of 1st and 2nd person pronouns: watashi-tati 'we', anata-tati 'you'. We take this to be evidence that both the First-Merge position of the object and the functional projection GENPLUR (or whatever licenses generalized plurality) are within the Theta-Domain:

If this is the case, movement of *paan* from its base position as the complement of V to the GENPLUR projection is too local and must, by the logic developed here, result in PF-modification of the lower copy, yielding *paan-vaan*.

While these conclusions regarding the syntax and semantics of Hindi echo reduplication await further development, it is worth taking note of some advancements in our understanding that we hope to have made here: Hindi echo reduplication *can* occur in an argument position, but importantly, cannot span a Case-marker (e.g., *paan-ko-vaan as opposed to the grammatical paan-vaan-ko, where -ko is the accusative marker). Moreover, it also does not have compound intonation, always has the modified element as the second copy, and cannot have anything intervene between the two copies. These are all properties we would expect from a movement account of echo reduplication.¹⁷

4.3 Final Considerations We want to wrap up our investigation of *shm*-reduplication in English with two final remarks. One concerns the compatibility of our analysis with a widespread take on left-peripheral, A'-movement structures, namely that *Affect Criteria* drive such operations. The other concerns an interesting suggestion that what makes *shm*-reduplication special might not be pejorative mood-licensing anchored in the clausal left periphery, but a more run-of-the-mill predication structure holding between the discourse topic ("subject") and the *shm*-pejoration ("predicate").

Concerning the first point, it becomes clear that, if our approach is on the right track, the analysis we propose for English *shm*-reduplication with its syntactically derived pejorative interpretation is hardly reconcilable with another prominent research enterprise into the syntax of the left periphery. Rizzi's (1997) original formulation of the (syntax of the) split CP was based largely on general Affect Criteria, to use Haegeman's (1992) terminology for the various criteria that have been proposed for A'-licensing (such as *wh*, focus, topic, relative, etc.). The most recent integration of such Affect Criteria in conditions on movement and locality by Rizzi (2004) shows immediately where the incompatibility lies: Rizzi argues, quite convincingly, that "a phrase meeting a criterion is frozen in place" (Rizzi 2004: 15, ex. (32)). In particular, since Rizzi analyzes topicalization as criterion-driven (to satisfy the Topic-Criterion), the phrase to be *shm*-

¹⁷ However, we leave open the treatment of identical total reduplication, and whether it is the result of movement or not (cf. fn. 1). For instance, Gouguet (2004) proposes that mutual *lack* of c-command between two copies in Chinese resultative reduplication allows Spell Out of both, in compliance with the LCA.

reduplicated cannot first move to the specifier of TopP (and check the Topic-Criterion), and then move on to the specifier of PejP or ForceP (criterion-driven or not).

We propose a weakening of the Topic-Criterion. All of Rizzi's examples banning movement from a topic position involve the complement clause of the verb wonder. The possibility remains that it is not movement from topic positions that is banned, but rather, movement from the complement clause of wonder. Recent work by Krifka (2001, 2003) suggests that the complement of wonder is another root clause: wonder in fact embeds a speech act which differs radically from other embedded clauses. Whether this accounts for the full range of freezing effects or not, it is incumbent on proponents of the topic-freezing principle to provide a further range of frozen configurations.

Consider a purported underlying predication structure next. As Cilene Rodrigues (personal communication, May 2004) points out, a possibly legitimate question may arise when we consider the syntactic and interpretive properties of English *shm*-reduplication. Why not simply say that the relation between the discourse topic and *shm*-reduplicated material is one of subject and predicate? Taking non-verbal predication to be expressed through a small clause (SC), (56) would be an illustration of this idea, where the SC-predication is somehow anchored within (or possibly just outside) the left periphery of the clause it relates to (marked in boldface):

(56) [SC [money] [shmoney]], who needs that stuff anyway?

We want to raise a number of problematic issues and discard the predication-approach as untenable. First, it would be an odd requirement of predication that subject and predicate be virtually identical — not only in meaning, but also in sound: aside from the *shm*- prefix, subject and predicate must be (near-)homophonous as (57) demonstrates. These show further that the near-homophony requirement goes both ways — the predicate must be near-homophonous with the subject and/or the subject must be near-homophonous with the predicate — which would be a very odd property of predication.

Likewise, it can hardly be argued that it is pejoration which makes "shm-predication" so special. If we replace the predicate with a pejorative element picking up on the subject, it does not improve, as (58a) shows; (58b) provides the reverse and equally bad case.

(58) a. *Money, caca, who needs that stuff anyway? b. *Caca, money, who needs that stuff anyway?

Second, the contrast between "*shm*-predication" and more common (non-verbal) predication in the following examples highlight the related oddity that "*shm*-predicates" would then be the only predicates that cannot be modified.¹⁹

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¹⁸ For a stronger formulation, see Grohmann (2003: chap. 2).

¹⁹ It is well known that f^{**king} may modify virtually anything in English — it can even occur as a prosodic infix. We take this to mean that not much credence should be given to the fact that money, f^{**king} shmoney

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[SC [ money ] [ (*bad / *terrible / *stinking / ?f**king) shmoney ] ]
a. [SC [ my house ] [ (very) red ] ]
b. [SC [ the book ] [ (right) on the table ] ]
c. [SC [ John ] [ (really) an idiot ] ]
```

Third, the tight relation between the invariable shm- and the "predicate" deserves attention. Since it is invariable, one might take shm- to be the head of the predication. Here two options could be considered: (i) shm- is a bona fide predicative head and thus sits in whatever position heads the SC (such as a Pred-X⁰ in (61) below). Or (ii) shm-forms a word-internal predication relation before then predicating over the (near-homophonous) subject (shown by a simple SC-structure in (61)); compositionality is just one of the many issues troubling this option. For clarity, we present both options:

```
(61) a. [_{XP} \text{ money } [_{X'} \text{ shm-} X^0 [_{YP} \text{ money }]]]
b. [_{SC} [\text{ money }] [\text{ shm- money }]]
```

Another question that arises with respect to "shm-predication" is: why would the predicate that comes with shm- occur in a fixed position which, moreover, is restricted to clause-peripheral position? Unless the nature of this type of predication is clarified, a predication-approach cannot capture the fact that shm-reduplication targets exactly one of two sites which, moreover, can be integrated into the derivational analysis we provided above.

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(62) a. [SC [going to the beach] [shmoing to the shmeach]], ...
b. [SC [going to the beach] [going to the shmeach]], ...
c. *[SC [going to the beach] [going shmo the beach]], ...
```

To go full circle and return to the nature of the purported predication relation itself, a fifth objection to "shm-predication" might be that the predicate would be odd in yet another way: virtually any category can constitute a "shm-predicate" — as can its projection. On second thought, however, this might not be as odd as it sounds. As Phoevos Panagiotidis (personal communication, June 2004) points out equative predication (John is a teacher or Money is a capitalist instrument) seems to share this property. In fact, a purported "shm-predication" could only possibly be of the equative-type (something like Money is shmoney). And if this is so, it is not at all clear how predication works — what is the predicate, shm- or shmoney, and why are the restrictions at play mentioned in this section and investigated throughout this paper? Such questions raise of course further concerns again about the structure of "shm-predication" (see above). If shmoney is the predicate, there must be internal predication between shm- and money prior to the pejoration of money, shmoney.

5 Concluding Remarks

does not sound too bad to the native ear. Indeed, on a Distributed Morphology account, f^{**k} appears to be category-less, and maximally underspecified.

This paper was concerned with a syntactic account of shm-reduplication in English, in terms of cyclic Spell-Out strategies, that ties in with general observations on the form and meaning of echo reduplication, and proposes the grammaticalization of pejorative evaluation. The focus, however, was on a purely syntactic explanation (as opposed to a morpho-phonological account or even a more "cognitive" approach in terms of iconicity). Contra Regier's (1998) Iconicity Hypothesis, reduplication does not argue for an "anti-Saussurean" direct mediation between semantics and phonology. Rather, by adopting a "syntactocentric" approach (to borrow a term from Ray Jackendoff), we are able to demonstrate how the role of syntax as a mediator, with its own ways to satisfy interface demands, results in this particular linguistic phenomenon. It is not that shm-reduplication reflects pejoration due to sound-symbolism and repetition. It is rather that syntax communicates with the conceptual system in an extremely locally-compositional way, while syntax communicates with the phonological system in a manner that deliberately avoids identity within a local domain. The result of satisfying both interfaces is echo reduplication, where the lower copy is *almost* phonologically identical to the higher one, and a direct interpretive modification thereof. Recent work in syntactic theory and the relation between the computational system and the interfaces makes available an explicit framework in which *shm*-reduplication finds a natural home.

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