

Interpretation of Focus in Haitian Creole *Se*-Clefts

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To appear in “*East and West of The Pentacrest: Linguistic Studies in Honor of Paula Kempchinsky*” volume edited by Gielau, E. and Gupton, T.

Abstract

While past literature on Haitian Creole focus structures primarily concentrates on predicate clefts (see Lefebvre, 1990; DeGraff, 1995; Harbour, 2008; Glaude & Zribi-Hertz, 2012), few authors use empirical data to justify proposed interpretations of clefts. In this paper, we empirically test which interpretations are available in *se*-clefts, expanding on previous work on clefts in Haitian Creole and other languages. Our first experiment investigates the influence of predicate gradability (Harbour, 2008) and syntactic structure (Glaude & Zribi-Hertz, 2012) on predicate cleft interpretation, using a felicity judgment task. Prior work on Haitian *se*-clefts has not discussed the exhaustive inference, an inference conveyed in similar clefts cross-linguistically (see Horn, 1981; Destruel et al., 2015). Our second experiment examines the exhaustivity inference in both predicate and nominal *se*-clefts, comparing Haitian speakers’ judgments to results from similar clefts in other languages, particularly French, via a forced-choice task adapted from Onea & Beaver (2011).

1. Introduction

In the large body of work on information structure, much of the discussion concerning topicalization and focus structures has concentrated on (the realization of) arguments and adjuncts. The focusing of predicates is typically less discussed, often because it seems like there are fewer syntactic options for the placement of a predicate. Cross-linguistically, predicate focus is realized by a range of grammatical strategies, including prosody, morphological markers and syntactic orderings (Zimmermann,

2016). In Haitian Creole, the language of interest in this paper, clefting is often used to focus the predicate of a sentence. Predicate clefts in Haitian Creole are particularly interesting because of the cross-linguistic rarity of predicate clefts compared to argument clefts and because of their similarity to *c'est*-clefts in French, in which predicate clefts are never possible.

Historically, Haitian Creole resulted from the mingling of West African languages and French on the island of Hispaniola during the seventeenth century (DeGraff, 1992). The French language heavily influenced not only the lexicon, but also the syntax of Haitian Creole. The focusing strategy of clefting, which is quite common in French, is prevalent in both languages, and the similarities between the cleft constructions in both languages can be seen in examples (1) and (2).

(1) *C'est Marie qui Jean aime* (French)
ce-be.PRS Marie COMP Jean loves
“It’s MARIE that John loves.”

(2) *Se Mari ki Bouki damou* (Haitian Creole)
se Mari COMP Bouki in.love
“It is MARI that Bouki loves.”

However, cleft sentences in Haitian Creole are more syntactically flexible than cleft sentences in French, allowing for the clefting of predicate structures in addition to the more prototypical clefting of argument structures, such as objects. This syntactic flexibility is likely due to the syntactic possibilities available in the West African languages that mingled with French to create Haitian Creole (see Harbor, 2008).

(3) *Se malad m te malad!* (HC)

Se sick 1SG ANT sick

“I was actually SICK (e.g. not LAZY)./I was REALLY sick.”

(Glaude & Zribi-Hertz, 2012:79)

Prior literature on clefts in Haitian Creole has largely focused on features of the predicate cleft. Researchers have investigated the quantificational scope of predicate movement, the limitations of the types of predicates that can be clefted, and differences between predicate clefts and other types of predicate fronting structures in Haitian Creole (see Larson & Lefebvre, 1991; DeGraff, 1995; Harbor, 2008; Glaude & Zribi-Hertz, 2012). A review of this literature shows that the interpretations and limitations of Haitian predicate clefts are not widely agreed upon. For example, some authors have claimed that non-verbal predicates differ from verbal predicates in interpretation and scope when clefted (DeGraff, 1995). Other authors claim that the differences in the interpretation and distribution of predicate clefts are due to semantic properties of the predicate being clefted (Larson & Lefebvre, 1991; Harbour, 2008). Still others claim that different interpretations of predicate focus are based on the distinction between a “true” predicate cleft (as in (3) above) and another type of predicate fronting permitted in Haitian Creole, illustrated in (4) below (Glaude & Zribi-Hertz, 2012).

(4) *Malad m te malad!* (HC)

sick 1SG ANT sick

“I was SICK (not LAZY).” (Glaude & Zribi-Hertz, 2012: 78)

The distinctions between (3) and (4) will be explored in more detail in the discussion of the syntax and semantics of Haitian cleft structures below.

In nearly all of these prior investigations of Haitian clefts, the interpretations of predicate clefts and other predicate fronting mechanisms

have not been tested empirically, as the interpretations are based on the authors' intuitions. Given the great disparities between conclusions in the literature for both the limitations of the predicate cleft and the interpretations available for predicate clefts, we hope to provide an investigative framework to empirically test which factors influence the interpretations of a predicate cleft. Specifically, we investigate whether differences in interpretation are due to the semantics of the predicate or due to the type of focusing structure used (compare (3) and (4) above). Previous research in Haitian Creole predicate clefts has not examined all of these factors together, nor has anyone (to our knowledge) investigated the interpretation of predicate clefts empirically.

In this paper, we also address an unstudied aspect of the interpretation of Haitian Creole clefts: exhaustivity. While the interpretation of exhaustivity has been observed to varying degrees in other similar cleft structures, such as the French *se*-cleft and the English *it*-cleft (see Destruel, 2012; Destruel et al., 2014), there is nothing in the literature on Haitian clefts that discusses the exhaustivity inference in any type of cleft structure. Thus, we add to a cross-linguistic discussion of the interpretation of cleft structures by collecting empirical data on the interpretation of exhaustivity in argument and predicate clefts in Haitian Creole.

The remainder of the paper is structured as follows: In section 2, we present some background information on linguistic focus, some important features of clefts in Haitian Creole (including contrasts between Haitian *se*-clefts and French *c'est*-clefts and the syntax and semantics of Haitian clefts), and the prior research on the relationship between cleft structures and exhaustivity. In section 3, we introduce our research questions and hypotheses for each of our two experiments. In section 4, we discuss each experiment in detail. We give our conclusions and some discussion of the implications of our results in section 5.

2. Background

2.1 What is focus?

In this paper, we take focus to be an information-structural property with a pragmatic function (see also discussion in the background section of Chapter X in this volume, on contrast in Galician). The focus of an utterance evokes a set of alternative propositions which the speaker takes to be salient (Krifka, 2008), and this in turn conveys information about how the utterance fits into the larger discourse structure. In discourse moves that answer an (implicit) question, focus marks the answering element. In such a case, the focus alternatives must all be possible and congruent answers to the question. For instance, with a question on the grammatical subject in (5), the alternatives from which the focus is selected include those in (6).

(5) Question: Who drank wine?

(6) Alternatives: {Mary drank wine, Paul drank wine, Jerry drank wine, ... Suzy drank wine.}

Crucially for this paper, other parts of the sentence can be focused beyond arguments, in particular predicates, as illustrated in the question-answer pair in (7). In English, the realization of focus is most commonly done via prosody; the focus element, whether it is an argument or a predicate, will bear a pitch accent.

(7) Q: What did Mary do? A: Mary [drank wine]_F

In Haitian Creole, syntax plays a more important role: predicates that are focused are realized sentence-initial, either in a full predicate cleft, as in (8), or in a fronting construction without the typical cleft marker *se*, as in (9).

(8) *Kisa pwofesè a fè?* (HC)

what professor ART do
Se *akeyi* *pwofesè* a *akeyi* *elèv* *yo*.
 SE welcome professor ART welcome student ART.PL
 “What did the professor do? The professor WELCOMED the students.”

(9) *Kisa* *pwofesè* a *fè*?
 what professor ART do
Akeyi *pwofesè* a *akeyi* *elèv* *yo*.
 welcome professor ART welcome student ART.PL
 “What did the professor do? The professor WELCOMED the students.”

Haitian Creole, therefore, can use a cleft construction to bring the predicate into focus. This strategy is unusual crosslinguistically and also contrasts with the limitations on French clefts.

2.2 French and Haitian Creole clefts

As noted in examples (1) and (2), *c'est*-cleft constructions in French are very similar to the *se*-cleft structures in Haitian Creole. Not only are *se* and *c'est* phonological cognates, the Haitian *se*-cleft also resembles the French *c'est*-cleft in following the same pattern of focus-background articulation; the clefted XP is focused and precedes a relative clause-like structure containing backgrounded information. However, some crucial differences set the two cleft structures apart. First, *c'est* in French combines the demonstrative *ce* and a conjugation of the verb *être*, while *se* is a single word that has been analyzed as a copula or as a pronominal element (among other analyses; see Larson & Lefebvre, 1991; DeGraff, 1992). While a great deal has been written on the many functions of *se* in Haitian Creole, it is sufficient to note that the syntactic distributions of *c'est* and *se* in their respective languages are not identical, despite their apparent similarity in

cleft constructions.¹ Even within cleft constructions in the two languages, there are strong distinctions between *c'est*-clefts and *se*-clefts, most notably the fact that in Haitian Creole, clefting is not limited to XPs that are arguments of the predicate. In French and most other Romance languages, *c'est*-clefts and similar clefting constructions can only be used to cleft DPs or a limited set of APs and PPs.

However, in Haitian Creole, *se*-clefts can be used to apply focus to predicate structures that are unavailable for this type of focus movement in other languages. The examples below show the broader range of XPs available for Haitian Creole *se*-clefts.

(10) a. *Kisa li fè? Se vòlè li vòlè lajan leta.*²(HC)
 what 3SG do SE steal 3SG steal money state
 “What did he do? He STOLE state money.”

b. *Qu'est-ce qu'il a fait? *C'est voler qu'il a fait.* (French)
 “What’s he doing? *It’s stealing that he’s doing.”

(11) a. *Pou-kisa Bouki kouche? Se malad li malad.* (HC)
 why Bouki lie-down SE sick 3SG sick
 “Why is Bouki lying down? He is SICK.”

b. *Pourquoi est-ce que Jean se couche? *C'est malade il est.* (Fr.)
 “Why is Jean lying down? (*)It’s sick he is.”

(12) a. *Kote Bouki ye? Se anba tab la li ye.* (HC)
 where Bouki YE SE under table the 3SG YE

¹ *Ce* in French also differs from *se* in Haitian Creole in its distribution and usage. See DeGraff, 1992 for a more complete analysis of *se*.

² In examples (10)-(13), the Haitian Creole examples of *se*-clefts are from DeGraff, 1992: 181-182. Parallel French constructions (part b of each example) show the limitations of the French *c'est*-cleft.

“Where is Bouki? It’s under the table that he is.”

b. *Où est Jean? *C’est dans le jardin il est.* (Fr.)

“Where is Jean? *It is in the garden he is.”

(13)a. *Kisa Bouki ye? Se yon doktè li ye.* (HC)

what Bouki YE SE NUM doctor 3SG YE

“What is Bouki? It’s a doctor that he is.”

b. *Qu’est-ce que c’est Jean? *C’est un doctor il est.* (Fr.)

“What is Jean? *It’s a doctor he is.”

In the examples above, Haitian Creole allows elements to appear in clefting constructions that are not allowed in French clefts: verbs (10), adjectives (11), prepositional phrases (12), and non-specific DPs (13). Each of these constructions can be considered different types of predicates, since Haitian Creole lacks an overt copular construction. Adjectives are often used as stative predicates, while prepositional phrases and non-specific DPs form locative predicates and identificational predicates. From the examples above, it is clear that Haitian Creole *se*-clefts differ from French *c’est*-clefts and English *it*-clefts in that Haitian Creole freely allows predicate clefting for several different types of predicates. French and English use other focus strategies for verbs, adjectives, prepositional phrases and non-specific DPs, instead of using the cleft construction.

Not only do *se*-clefts allow a broader range of clefted elements, they also differ from typical French *c’est*-clefts (and English *it*-clefts) in that they do not always require an overt complementizer between the clefted element and the (background) relative clause. In example (2), reproduced below, the Haitian Creole complementizer *ki* appears in the same position as complementizers in English or French clefts.

(2) *Se Mari ki Bouki damou* (Haitian Creole)

se Mari COMP Bouki in.love

“It is MARI that Bouki loves.”

Ki is not always required in Haitian clefts; in some non-predicate clefts, the complementizer can be dropped to create an equally acceptable sentence. We can remove the *ki* from the clefted sentence without any apparent changes to grammaticality.

(14) *Se Mari Bouki damou.* (HC)

se Mari Bouki in.love

“It is Mari that Bouki loves.” (DeGraff, 1992: 173)

In predicate clefts, the complementizer *ki* does not appear between the clefted predicate and the remainder of the sentence. Each of the example predicate clefts above shows this phenomenon. In fact, including the complementizer in a predicate cleft would create an ungrammatical sentence.

(15) **Se vòlè ki li vòlè lajan leta.*

(16) **Se malad ki li malad.*

This optionality of the *ki* complementizer can be analyzed as indicating that *se*-clefts in Haitian Creole may not necessarily have the typical cleft structure appearing in French *c'est*-clefts and English *it*-clefts: a fronted and focused XP preceding a relative clause which contains the remainder of the proposition. What follows is a brief overview of several syntactic analyses of predicate clefts in Haitian Creole.

2.3 *The syntax of se-clefts*

Since the predicate cleft structure does not exist in French, a vast amount of research has concentrated on analyzing this particular structure to determine its structural components. In the following section, we briefly discuss a few of the proposed syntactic analyses and the possible implications that the underlying structure of the cleft construction may have on the interpretation of the focused information. DeGraff (1992) claims that for *se*-clefts in which the clefted information is an argument of a verb (an object cleft or a subject cleft), the syntactic structure is identical to more traditional *it*-cleft constructions, including French *c'est*-clefts. In other words, the fronted element is raised out of an embedded relative clause and a trace of that element remains in the relative clause. Given the identical nature of both *c'est*-clefts and *se*-clefts in this context, we can expect that argument clefts in Haitian Creole will have similar interpretations and contexts of use as argument *c'est*-clefts in French. In contrast, DeGraff analyzes predicate clefts as having a separate syntactic structure from the typical clefting structure used for arguments. He contends that predicate cleft structures are more accurately described as predicate fronting, in which the predicate is brought to the beginning of the sentence and *se* is included as a subject pronoun for the fronted predicate to satisfy certain phonological and syntactic requirements rather than as a morpheme to introduce a proper cleft (1992). This analysis accounts for the loss of the complementizer *ki* in predicate clefts, since the structure is more accurately a focus fronted construction rather than a full cleft. DeGraff's analysis also allows for the prediction that predicate clefts, given a distinct syntactic structure, might have different semantic interpretations and contextual distributions from argument clefts. A distinction like this would not be surprising, given that it is not unusual for a language to have more than one strategy available for creating focus. Consider, for example, the use of both cleft structures and prosodic marking for English focus in examples (5)- (7). One drawback for this analysis, however, is that it does not account for the repetition of the predicate head, especially in verbal and adjectival predicates, in which the

predicate head is repeated both in the clefted portion of the sentence and in the canonical position.

Other syntactic analyses of predicate clefting attempt to account for the doubling of the predicate head and assume that the predicate head is duplicated in the base clause and one of the copies of the predicate moves to the beginning of the sentence (Harbour, 2008; Glaude & Zribi-Hertz, 2012). These analyses are based on the fact that predicate doubling without movement is attested in Haitian Creole, so the extra copy of the predicate head is not arbitrarily permitted just for predicate clefting.

- (17) *Ou mèt ekri ekri poèm wi.* (HC)
you put write write poem yes
“You can keep on writing poems.” (Harbour, 2008: 858)

This type of ‘low reduplication’ is used for emphasis or to “measure thoroughgoingness or iconic instantiation of the verbal event” (Harbour, 2008:859). That is, the repetition of the verb can be used to mark emphatic focus or introduce an overt event argument in the form of a repeated predicate head. When movement in clefting occurs, the semantics that emerge from the reduplication process may remain as part of the interpretation of the cleft as well. Additionally, the movement of the reduplicated predicate can essentially operate identically to argument cleft movement since the copy that is moving can be considered a type of argument of the main predicate (Harbour, 2008). Harbour’s analysis accounts for the reduplication of some predicate heads while also allowing for both predicate clefts and argument clefts in Haitian Creole to be easily compared to the structure of French *c’est*-clefts. One missing element in Harbour’s analysis is the lack of accounting for the differences in the behavior of the complementizer *ki* in predicate and argument clefts. While both types of clefts can appear without a *ki*, predicate clefts never appear with the complementizer. Since this paper is primarily interested in

exploring the interpretation of predicate clefts in Haitian Creole, and for reasons of space, we leave this particular syntactic concern as an open question for now. In any case, the doubling of the predicate in Haitian Creole is a semantic and syntactic strategy that is not available in French focus constructions and that most likely entered the language via the influence of West African languages (see Aboh, 2006).

In addition to assuming an identical structure for both predicate clefts and argument clefts, an analysis that includes predicate reduplication in the embedded clause before movement into the fronted position can also account for the existence of another predicate focusing structure in Haitian Creole.

(18) *Malad m te malad.* (HC)
 sick 1SG ANT sick

“I was sick (not LAZY).” (Glaude & Zribi-Hertz, 2012: 78)

This sentence is very similar to the predicate cleft in (11a), in which the predicate *malad* is reduplicated and moved to the beginning of a sentence using a *se*-cleft. Because both the structure in (18) and the structure in (11a) focus the predicate, for the sake of emphasizing the contrast between the two structures and maintaining terminological simplicity in this paper, we will refer to the structure in (11a) as a *se* predicate cleft, and the structure in (18) as a non-*se* predicate cleft, even though the structure in (18) may not truly be a cleft at all, but a separate focus fronting construction.

In their analysis of these two types of predicate fronting, Glaude & Zribi-Hertz (2012) claim that only fronted predicates that appear with an overt *se* are truly predicate ‘cleft’ constructions, containing bi-clausal structures similar to an argument cleft structure. They analyze sentences such as those in (18) where a copy of the predicate is fronted without a *se* marker as a mono-clausal structure with a focus-fronted verb. This distinction between the two structures leads to intrinsic differences in

interpretation between the two structures. Glaude & Zribi-Hertz claim that predicate fronting without *se* can only allow a contrastive interpretation of the predicate, while a ‘true predicate cleft’ permits both a contrastive interpretation and an intensive interpretation.

- (19) *Malad li malad* (HC)
 sick 3SG sick
 “He is actually sick (e.g. not DEAD).”/*“He is REALLY SICK.”
- (20) *Se malad li malad*
 SE sick 3SG sick
 “He is actually sick (e.g. not DEAD).”/“He is REALLY SICK.”
 (Glaude & Zribi-Hertz, 2012: 103)

The interpretive distinction between (19) and (20) proposed by Glaude and Zribi-Hertz is not the only possible interpretational difference in the literature. Other analyses suggest that the fronted predicate without *se* is a distinct (syntactic) construction that can add temporal, causal, or factive information to the cleft construction (Harbour, 2008). While focus fronting is not an unusual focus strategy cross-linguistically, it is not clear from the literature whether the structure and semantics of fronted predicates with *se* are distinct from the structure and semantics of fronted predicates without *se*.

The proposed distinction between a fronted predicate combined with *se* (i.e. a *se*-cleft) and a fronted predicate without the typical clefting marker (i.e. a non-*se*-cleft) leads to the question of how different types of focus structures and different types of clefted XPs affect the interpretation in Haitian Creole. In the following section, we discuss some previous analyses of the interpretation of Haitian Creole clefts before proposing an empirical study investigating the use of clefts by Haitian Creole speakers.

2.4 Past accounts of the interpretation of (se-)clefts

As noted in examples (19) and (20) above, Glaude & Zribi-Hertz (2012) predict two possible interpretations of predicate *se*-clefts: a contrastive focus meaning and an intensive meaning. Non-*se* predicate clefts (or ‘Verb Fronted Doubling’ constructions) only have the contrastive meaning and cannot have the intensive interpretation. The contrastive interpretation of both types of predicate clefts has been attested rather widely in the literature (see also Lefebvre, 1990; Larson & Lefebvre, 1991), but there is some argument about when the intensive interpretation can be part of the predicate cleft. Harbour (2008) claims that any type of fronted predicate can have both contrastive and intensive meanings, not making a distinction between the interpretations available for predicate clefts with *se* and non-*se* predicate clefts. He claims that the intensive interpretation of predicate clefts comes from the semantic meaning of ‘maximal degree’ that is added to the predicate through the process of reduplication. Since the intensity or ‘maximum interpretation’ arises from the reduplication rather than from the type of predicate fronting used, the presence or absence of *se* in the fronted construction should not make a difference in the interpretation of the sentence as a whole. Any difference in the availability of the intensity interpretation arises, according to Harbour, from the semantic quality of the predicate head itself. He claims that ungradable state predicates are always incompatible with the intensity interpretation because of their semantic type, which also prohibits these verbs from appearing in the low reduplicated form with the intensive interpretation.

- (21) **Li bileng bileng.* (HC)
3SG bilingual bilingual
“It’s BILINGUAL.” (Harbour, 2008:865)

Because ungradable predicates cannot occur in a low-reduplicated position or with the intensifying adverb ‘really,’ these predicates most likely

cannot appear in clefts. Thus, the sentence *Se bileng li bileng* is predicted to be infelicitous in Haitian Creole (Harbour, 2008).

So far, Harbour (2008) and Glaude & Zribi-Hertz (2012) both claim that contrastive and intensive interpretations are available in predicate clefts, but the origins of the differences of interpretation vary. Glaude & Zribi-Hertz claim a distinction based on syntactic structure, while Harbour limits the interpretations based on the predicate's semantic content. Other authors have also limited the types of predicates that can appear in predicate clefts, but the types of predicates that are claimed to be available are not always the same. Lefebvre (1990) claims that only stage-level predicates are permitted in a predicate cleft because the clefted element is the event argument acting as the focus of the sentence. Individual-level predicates cannot appear as part of a predicate cleft because these predicates do not have an event argument position, thus having no argument to be fronted in a cleft structure. In terms of interpretation, Lefebvre claims that all event argument clefts (predicate clefts) have a contrastive reading without mentioning the possibility or presence of intensity interpretations. Larson & Lefebvre (1991) agree that predicate clefts are event arguments and expand on the interpretation of the event by illustrating that the contrastive interpretation available in a predicate cleft can extend to elements within the event and is not restricted to the predicate head itself.

- (22) *Se mache Jan mache al lekol.* (HC)
SE walk John walk to school
- a. "It is WALK that John did to school (not, e.g., run)."
 - b. "It is WALK TO SCHOOL that John did (not, e.g., run home)."
 - c. "It is to SCHOOL that John walked (not, e.g., to the park)."
- (Larson & Lefebvre, 1991:251)

This flexibility in predicate cleft interpretation seems to indicate that the entire event 'walking to school' is being contrasted in the sentence

above, rather than just the predicate ‘walk.’ This analysis maintains that individual level predicates cannot appear in predicate clefts because these predicates lack an event argument. If, indeed, predicate clefts involve the fronting of an event argument, which can be argued to have a theta-role in the predicate, the interpretations of predicate clefts could have similar properties to other argument clefts, such as subject clefts and object clefts.

From this handful of analyses on the semantic possibilities and limitations for Haitian predicate clefts, it is clear that empirical research in this area will provide a more complete picture of what types of predicates are attested in the use of Haitian Creole and which interpretations can be attributed to them. In experiment 1, we focus on the availability of intensive and contrast interpretations with gradable and non-gradable predicates in order to investigate whether the interpretation is available as a function of the predicate type (as claimed in Harbour, 2008) or as a function of the type of predicate focus used (as proposed in Glaude & Zribi-Hertz, 2012).

2.5 Exhaustivity

We conclude our background section by raising another question concerning interpretation of clefts in Haitian Creole: To what extent is exhaustivity present in Haitian clefts? To the best of our knowledge, this issue is left unexplored in past literature. Exhaustivity is a meaning component often discussed in relation to English *it*-clefts and has been claimed to arise in other cleft constructions cross-linguistically, such as the French *c’est*-cleft (cf. Onea & Beaver, 2011; Destruel et al. 2015). A cleft with an exhaustive interpretation amounts to exhausting the set $\{x \mid P(x)\}$ for the referent of the clefted XP. Thus, the English *it*-cleft in (23), and its French counterpart in (24) are often interpreted as conveying the exhaustivity inference in (25).

(23) It was John who kissed Mary.

(24) *C'est Jean qui a embrassé Marie.*

(25) It was John and no one else who kissed Mary.

The exhaustivity inference is quite robust in English *it*-clefts, but recent empirical investigation of exhaustivity in French clefts indicates that the exhaustivity inference is not as strong (Destruel, 2012). Since Haitian Creole is derived in part from French, it follows to ask whether Haitian *se*-clefts convey the same type of exhaustivity inferences as French *c'est*-clefts. Moreover, since the majority of prior work on clefts and exhaustivity has focused on argument clefts, an investigation into the interpretational differences (or similarities) between predicate clefts and argument clefts in terms of exhaustivity would contribute to prior research in this area. Our second experiment investigates the exhaustivity inferences in Haitian clefts using tasks similar to previous empirical studies in the exhaustivity of clefts in other languages.

3. Research Questions and Hypotheses

From the brief overview of the literature on Haitian clefts presented above, it is clear that there are still many areas of disagreement on the exact structure and interpretation of predicate clefts. A few key questions stick out to us, which we seek to address in this paper.

First, what factors affect the interpretations that are available for a predicate cleft? From the literature, two possible interpretations are available: a **contrastive** interpretation and an **intensive** interpretation. However, past analyses do not agree on the limitations to each interpretation; Glaude & Zribi-Hertz (2012) claim that an intensity interpretation is never available for non-*se* predicate clefts, while Harbour (2008) claims that intensity is available for both types of predicate clefts (with and without *se*) but that ungradable predicate clefts can only have a contrastive interpretation. To compare these two analyses, we focus on the

interactions of three factors in the use of predicate clefts: interpretation of the cleft, gradability of the predicate, and type of cleft structure used. Our hypothesis is that the semantic type of the predicate head will be the main factor in determining the interpretations available for a particular cleft.

Our second research question concerns the interpretation of exhaustivity: Do predicate (and argument) clefts in Haitian Creole carry an exhaustivity inference similar to that conveyed in other languages (Onea & Beaver, 2011; Destruel et al., 2015)? Our hypothesis is that all clefts in Haitian Creole will carry an exhaustivity inference, regardless of whether the cleft is an argument cleft, a predicate cleft with *se*, or a fronted predicate without *se*. Because of the historical relation between French and Haitian Creole, we also predict that the level of exhaustivity in Haitian clefts should be parallel to that found in *c'est*-clefts in French.

4. The Experiments

4.1 Experiment 1: Contrast and Intensity in Predicate Clefts

4.1.1 Goals

Our first experiment investigates whether ambiguity always exists between a contrastive interpretation and an intensive interpretation in predicate clefts. As mentioned previously, most prior literature on Haitian clefts assumes that a contrastive interpretation is available for all clefts, yet some authors claim that predicate clefts are sometimes ambiguous between an intensive interpretation and a contrastive interpretation. However, there is no consensus about where the ambiguity arises. This experiment attempts to tease apart the contributions of the semantics of the predicate head and the type of clefting strategy used in determining which interpretations are available. Harbour (2008) claims that the semantics of the predicate head is the most important factor in the presence or absence of ambiguity between intensive and contrastive readings, while Glaude & Zribi-Hertz (2012)

claim that the type of predicate cleft used is most crucial in determining whether this ambiguity exists.

4.1.2 *Participants*

Two native speakers of Haitian Creole rated the naturalness of a series of sentences containing clefts. Both speakers were between the ages of 25 and 45 and were native speakers of Haitian Creole born and raised in Haiti. They did not move to the United States until post-adolescence. They reported using Haitian Creole as their language of communication at least fifty percent of the time in their everyday life.

4.1.3 *Design & Materials*

For this experiment, we created sixteen short conversations in which the first speaker provides a context and the second speaker responds with a sentence containing a predicate cleft. Subjects read the conversations and indicated the naturalness of the second speaker's response in that context. The conversations were specifically designed to investigate the contributions of each of three factors: interpretation, predicate type, and cleft type. We created conversational contexts in which a contrastive interpretation would be expected and contexts in which an intensive interpretation would be expected. We tested the naturalness of different types of predicates by presenting two gradable predicates - *bo* 'kiss' and *reprimande* 'scold' - and two non-gradable predicates - *repare* 'repair' and *fini* 'finish' in both the contrastive and intensive contexts. Additionally, we used both types of predicate clefts in each context with each type of predicate to see what effect cleft type has on the naturalness of an interpretation. Table 1 presents the three factors and how they were combined in the experiment.

Contrastive Interpretation	Intensive Interpretation
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Gradable Predicate	<i>se</i> cleft	<i>se</i> cleft
	non- <i>se</i> cleft	non- <i>se</i> cleft
Non-Gradable Predicate	<i>se</i> cleft	<i>se</i> cleft
	non- <i>se</i> cleft	non- <i>se</i> cleft

Table 1. Factors in Experiment 1

We presented participants with sixteen different conversations (two conversations per shaded cell in Table 1), and they were asked to judge the naturalness of the clefted sentence on a seven-point Likert scale with values ranging from 1 ‘extremely bad’ on the left to 7 ‘extremely good’ on the right. The conversations were presented in random order to each participant. Examples of a few of the conversational contexts are presented below.³ Subjects were asked to rate only the underlined portion of the sentence as natural or unnatural.

(26) Contrastive context, gradable predicate, *se* cleft

- a. *Jan: Èske ou konn Pòl ak Esther kòmanse renmen? Mwen tande Pòl anbrase Esther nan fèt la wikenn denyea.*
Mari: Non. Se bo Pòl bo Esther nan fèt la. (HC)
- b. *John: Did you know that Paul and Esther started dating? I heard that Paul hugged Esther at the party.*
Mary: No. Paul KISSED Esther at the party.

(27) Intensive context, gradable predicate, non-*se* cleft

- c. *Jan: Mwen panse Pòl damou pou Esther.*
Mari: Mwen dakò. Mwen te wè yo lè yo te rankontre yè. Bo Pòl bo Esther. (HC)
- d. *John: I think that Paul is falling in love with Esther.*

³ Participants were not presented with the English. Translations are provided here for clarity. Our thanks to Kathy Falde for her assistance in translation.

Mary: I think so too. I saw then when they met yesterday. Paul
(really) KISSED Esther.

All the predicates used in the underlined experimental sentences were transitive predicates with overt objects. We also avoided using any aspect markers, as the placement of aspect markers can influence the grammaticality and the interpretation of certain cleft sentences (Larson & Lefebvre, 1991), and created contexts in which the past tense could be assumed without being overtly marked. These considerations allowed for morphological simplicity in each stimulus sentence without requiring specific placement of tense or aspect markers relative to the predicate heads.

4.1.4 Procedure

The sixteen conversations were presented in a randomized order using Qualtrics software. Before the first conversation was presented, subjects were instructed to rate how natural the underlined segment of each conversation sounded to them. For each test item, the conversation was presented first, followed by the question “How natural does the underlined sentence sound in this conversation?” The question appeared next to a seven-point Likert scale ranging from ‘Extremely bad’ on the left (value = 1) to ‘Extremely good’ on the right (value = 7). Each of the intermediary values also had an English description of the number rating above the number, and the rating slider was programmed to allow only integer values. Subjects were instructed implicitly to rate an item as ‘extremely good’ if it sounded like something they would say in a conversation, and to rate an item as ‘extremely bad’ if it sounded strange for any reason. Once a subject gave a rating to a test item, they could click to go to the next conversation. They were not permitted to go back and change answers to previous conversations once they had progressed. All items were displayed for all subjects but in different orders determined by the software.

4.1.5 *Results*

Our hypothesis was that there would not be any significant difference of interpretation based on the type of predicate cleft structure used, but that the semantics of the predicate head itself would determine the acceptability of the predicate. However, the empirical results seem to indicate that both Harbour's and Glaude & Zribi-Hertz's predictions for interpretation are over-stated. The participants in our experiment found all sentence types to be at least somewhat acceptable. The average rating for each sentence was no lower than 5 on the seven-point Likert scale. However, it does seem that certain factors make a sentence less natural-sounding to a native speaker of Haitian Creole.

As shown in Figure 1, the sentences with the best ratings are the sentences that are gradable predicates with an intensive interpretation and non-gradable predicates with a contrastive interpretation, following the predications of Harbour (2008). Additionally, when there is a difference between the ratings for the types of predicate cleft, the non-*se* predicate cleft is always rated lower than the *se* predicate clefts. However, this difference is not limited to the intensive interpretations, as predicted by Glaude & Zribi-Hertz (2012).

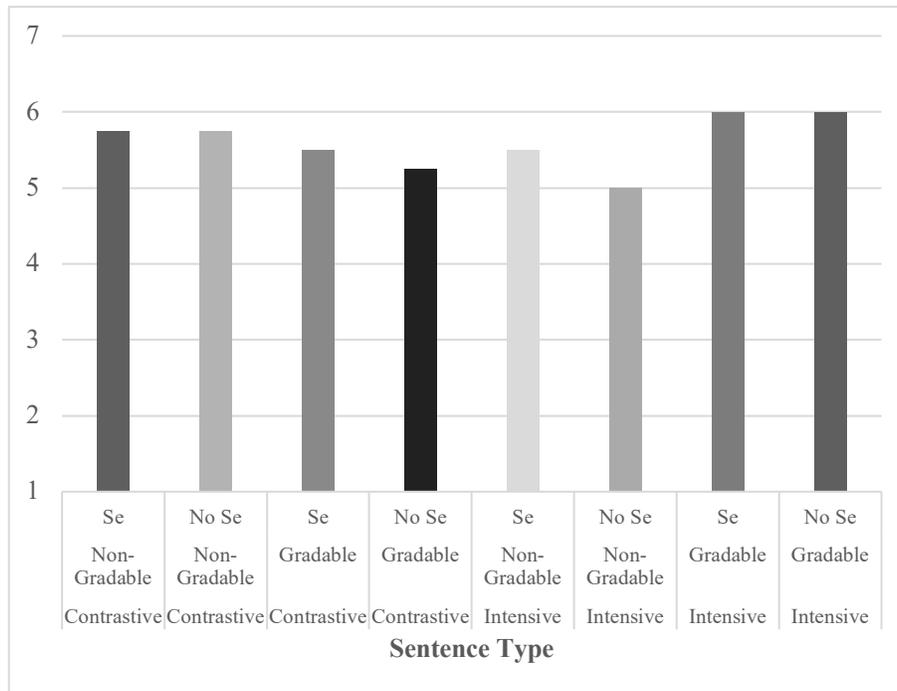


Figure 1. Acceptability Rating by Sentence Type

The results of this experiment suggest that the acceptability of clefted predicates in different interpretation contexts and with different types of predicates is not dependent on a single factor. Instead, it is more likely that a combination of factors leads to acceptability. Further research with a broader range and larger number of contexts could tease apart the relationships between these factors to provide a clearer picture on the limitations of predicate clefts in Haitian Creole.

4.2 Experiment 2: Exhaustivity inference

4.2.1 Participants

Four participants took part in this second study. All were native Haitian speakers who were born and raised in Haiti and moved to the United States as adults.

Two of the four participants did not complete the task, as it was rather long. We have discarded the results for one participant completely,

as this participant completed only half of the task. The other participant that did not complete the task only missed five of the target items, and the missed items were each in different categories of test items.

4.2.2 Design & Materials

This experiment is designed to test the level of exhaustivity in predicate clefts with *se*, and non-*se* predicate clefts compared to argument clefts in Haitian Creole. The task tests whether speakers systematically attribute an exhaustive reading to the cleft sentences relying on the idea that if some aspect of the sentence meaning is not semantically encoded, the speaker must be able to cancel the inference without also denying the truth of the sentence. Therefore, if a speaker does not attribute a strong exhaustive reading to a sentence, he will have no problem adding information to the previous sentence, which would sound contradictory if the speaker instead attributed a strong exhaustive reading to the sentence (i.e. he will tend to overtly contradict a sentence that continues the discourse).

Experimentally, we implemented this design by adapting the forced-choice ‘yes, but...’ task in Onea & Beaver (2011), which has been used for similar cleft constructions in other languages. The experimental stimuli involve a series of question (Q)-answer (A) pairs each followed by a continuation (C) sentence. An example of a test item is shown in (28).

(28)Q: *Ki moun ki akeyi elèv yo?*

“Who welcomed the students?”

a. *Pwofesè a akeyi elèv yo.*

“The professor welcomed the students.” (canonical)

b. *Se pwofesè a ki akeyi elèv yo.*

“It was the professor who welcomed the students.” (cleft)

c. *Sèlman pwofesè a akeyi elèv yo.*

“Only the professor welcomed the students.” (exclusive)

i. *Wi, epi direktè a akeyi elèv yo tou.*

“Yes, and the director also welcomed the students.”

ii. *Wi, men direktè a akeyi elèv yo tou.*

“Yes, but the director also welcomed the students.”

iii. *Non, direktè a akey elèv yo tou.*

“No, the director also welcomed the students.”

The question targets the grammatical subject, object or predicate of the sentence, and is included to ensure that participants correctly identify the focus element. The answer always contains a two-place predicate, a focus argument (or predicate) and a background argument, and differs from the question only in form: it is presented to the participant in a canonical sentence (28a), an exclusive sentence including *sèlman* (‘only’) (28c) or a cleft sentence (28b). Finally, the continuation sentence is introduced by ‘yes, and...’ (28i), a ‘yes, but...’ (28ii), or ‘no...’ (28iii). During the task, only one of the answer options (a, b, or c) is shown per test item, while all of the continuation forms (i-iii) appear for each item. For sentences with a focused predicate, we presented a clefted option with *se* and a clefted option without *se*, giving a total of four different types of clefted sentences: a subject cleft, an object cleft, a predicate *se* cleft, and a predicate non-*se*-cleft. With the exception of the four-way contrast for the clefts, this experiment had a 3x3 design, contrasting canonical sentences, cleft sentences and exclusive sentences for subject, object, and predicate focus with four lexicalizations for each sentence type.

We predict that, if clefts in Haitian Creole do not convey exhaustivity semantically, then the responses to the clefted answer condition should differ from the responses for the exclusive ‘only’ condition. More specifically, the ‘no’ continuation should be selected most frequently, and maybe exclusively, as a felicitous response for the exclusive condition, since this continuation assumes that the focused information conveys exhaustivity semantically and no additional information should be able to be added to the discourse. In contrast, sentences with canonical

word-order and cleft sentences should allow more flexibility of interpretation and more potential felicitous responses, since the two word orders are argued to carry a much weaker exhaustivity inference—i.e. one that is cancelable.

This experiment could show a distinction between the interpretation of argument clefts, such as subject clefts and object clefts, and the interpretation of predicate clefts. If there is a difference in the syntactic structure of argument clefts and predicate clefts, there could also be a distinction between the interpretations inherent to each respective structure. Differences in structure could also lead to a difference in the interpretation of non-*se* predicate clefts and predicate clefts with *se*. Glaude & Zribi-Hertz (2012) claim that non-*se* predicate clefts have structure distinct from that of *se* predicate clefts. If this is the case, we could expect differences in interpretation of the two types of predicate clefts due to differences in syntactic structure. If, however, the exhaustivity inference arises from the pragmatic use of *it*-clefts as a strategy to focus certain information in the proposition, then differences of syntactic structure may be irrelevant for the interpretation of clefts and the presence (or absence) of an exhaustivity inference, since all types of clefts - argument, predicate, and non-*se* clefts alike - are used to confer focus on a particular constituent.

4.2.3 Procedure

Fifty question-answer-continuation items were presented in a randomized order using Qualtrics software. Forty were test items, and ten were fillers. On each trial, participants read a question-answer pair in the upper half of the screen and three continuation sentences in the bottom half of the screen. The instructions emphasized that participants needed to understand each item as being uttered by three different people, thus reading a conversation between three speakers: one asking the question, another answering and the last one supplementing information. The instructions then explained the task: participants select the continuation they judged

most appropriate given the preceding question-answer pair. We emphasized that there was no correct answer and that they should base their judgments on their first impressions. The fillers were designed to ensure that the participants were not just selecting the same answers repeatedly, as the logical answers could only be one of the given options.

Three possible continuations were presented for each of the items: one beginning with *wi, epi...* (“yes, and...”), one beginning with *wi, men...* (“yes, but...”) and one beginning with *non,...* (“no, ...”). These continuations were presented in random order for each item, and participants could only select one of the options. Once an option was selected, the software immediately proceeded to the next question.

4.2.4 Results

The experimental results are given in Figure 2 below in percentages, per sentence type and grammatical function of the focus. Because of the small number of participants, we will not perform a statistical analysis of our results but will simply describe the patterns observed and discuss whether they seem to trend in favor of or against our working hypothesis, which is that both types of predicate clefts will be associated with the same level of exhaustivity, similar to what is found in argument clefts in Haitian Creole.

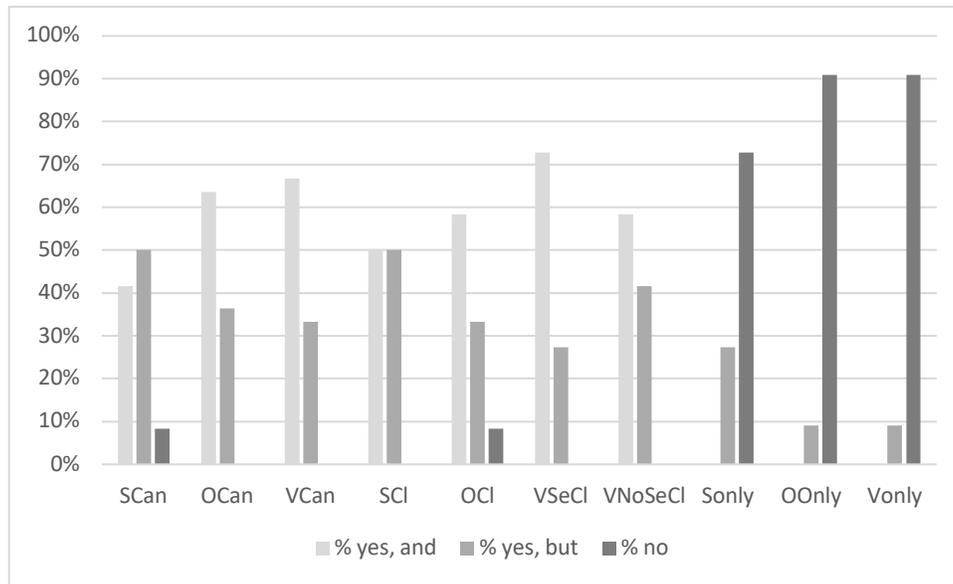


Figure 2. Percentages of continuations selected by sentence form⁴

The results support the prediction that speakers are more likely to overtly contradict a semantically exhaustive sentence (i.e. sentences with an exclusive like *sèlman*) than other types of sentences. Indeed, if an exclusive is present, participants choose to update the conversation with the continuation introduced by *non/no* in the vast majority of cases, regardless of the grammatical function of the focus. As predicted too, a canonical sentence is rarely overtly contradicted because it is not semantically exhaustive: Answers in the canonical form are most typically continued by a simple addition rather than a correction, introduced by *wi, epi* (“yes, and”). Interestingly though, we see a difference between the subject focus cases and the other two grammatical functions, with the former being more frequently continued with the slightly stronger follow-up introduced by *wi*,

⁴ The codes on the x-axis of Figure 2 are as follows: *SCan*, *OCan*, *VCan* respectively refer to subject, object, and predicate focus sentences in the canonical condition (i.e. SVO). *VSeCl* indicates a sentence with a *se* predicate cleft; *VNoSeCl*, a predicate cleft sentence without *se*. *SCl* and *OCl* refer to subject and object cleft sentences respectively. *SOnly*, *OOnly*, *Vonly* respectively refer to subject, object, and predicate focus sentences in the exclusive condition (i.e. *sèlman* ‘only’).

men (“yes, but”)—thus conveying a medium degree of disagreement; not directly accepting the change of focus as an addition to the preceding answer, but not overtly denying it either. The subject position is considered a privileged position in a sentence, carrying information about the subject’s role in the discourse as well as in the sentence. The subject position is often associated with being the topic of the sentence (Casielles-Suárez, 1999), so the combination of a subject, which is typically a topic, with a focus construction may cause the subject cleft to behave different from other clefted elements in Haitian Creole. Even though we did not predict this difference, it is not surprising.

Finally, the pattern observed for the cleft sentences is as follows: As predicted, clefts are rarely followed by a continuation expressing an overt contradiction (*non...*), which suggests that an exhaustive inference, if present, is cancelable and therefore not part of clefts’ semantic meaning. Of most interest are the results for the continuations introduced by *wi* (“yes”), mainly because they differ from what is seen in French where participants significantly prefer the strong continuation introduced by *oui, mais* (“yes, but”) (as reported in Destruel et al., 2015). In our results for Haitian Creole, except in the case of the subject focus, participants are instead more likely to select the weak continuation (i.e. the one introduced by *wi, epi* (“yes, and”). In principle, this pattern suggests that clefts in Haitian Creole are less exhaustive than in French. We turn to discussing our results more generally in the following section.

5. Discussion and Conclusions

In our first experiment, we investigate several factors that are predicted to impact the interpretations of predicate clefts in Haitian Creole. Previous work on predicate clefts does not agree on the range of interpretations available for predicate clefts, the types of predicates allowed in the cleft structure, and the distinction between different types of predicate

focus structures. In our experiment, we tested the influence of syntactic structure on the interpretation of clefts by contrasting the acceptability of a sentence containing a straight-forward *se* cleft with a sentence containing a fronted predicate without the *se* marker. While Harbour (2008) claims that a *se*-cleft and a non-*se*-cleft have at least some similarities in their underlying structures, other authors, including Glaude & Zribi-Hertz claim that these two types of predicate focus structures are syntactically and pragmatically distinct (2012). The data from our experiment suggest that, at least in terms of pragmatic acceptability, these two focus structures are not vastly different from one another. The results further suggest that the acceptability of gradable and non-gradable predicates in clefted focus structures are also very similar (contrary to the predictions of Harbour, 2008), and that both types of predicates can be possible in both an intensive and a contrastive setting. Our original hypothesis that the gradability of the predicate head would be the strongest factor in determining the available interpretation was not confirmed in the data, as all three factors seemed to influence the acceptability of a cleft structure. A larger data set of acceptability judgments from a larger number of speakers could be more informative to weight the relative strength of the influences of syntax and semantics on the preferred interpretation of predicate clefts.

Furthermore, our results suggest that many of the previous predictions about cleft interpretations and the limitations on what predicates can appear in clefts from the literature on Haitian Creole may not be borne out in empirical studies of native speakers. Our data does seem to agree with the predictions that the semantic features of a predicate, the type of focus structure used, and the type of pragmatic context for a given sentence impact the acceptability of a sentence. However, these three factors seem to work together rather than each factor determining the acceptability of a cleft structure individually. Our data is not currently sufficient to show exactly how these three factors interact, but our experimental paradigm can be used on a larger population with a larger number of experimental questions to

tease apart the relationships between these three factors and form a more complete model of how predicate type, syntactic structure, and interpretation interact in the pragmatic use of predicate cleft structures in Haitian Creole.

Given the results of our second experiment, we have concluded that clefts in Haitian Creole are not semantically exhaustive, in line with most experimental studies on exhaustivity in other languages (Onea & Beaver, 2011; Pavlou, 2015), and in line with our hypothesis. Two findings were most interesting, especially in comparison to what is known about exhaustivity in French clefts. First, like in French (and across languages more generally), Haitian Creole seems to display a subject/ non-subject asymmetry, whereby subject focus clefts tend to receive stronger exhaustivity readings. This finding is in line with our hypothesis that predicate clefts should behave similarly to other argument clefts, but highlights the special status of subject focus. Second, unlike in French, clefts, regardless of the grammatical function of the focused element, appear less exhaustive in that participants are willing to supplement a discourse that includes a cleft by simply adding potentially contradictory information (introduced by the weak form “Yes, and”). This finding is interesting because it provides support for the idea proposed in Destruel & DeVeugh-Geiss (under review) that the exhaustive inference is more flexible than assumed even under pragmatic accounts (Horn, 1981): Cross-linguistically, the strength with which the inference is conveyed can vary. Why would that be the case between French and Haitian Creole? We can imagine that because Haitian Creole allows for more possibilities of clefting (e.g. in allowing more grammatical functions), its interpretation is diluted. Further experimental research is obviously needed in order to fully understand the potential differences.

In conclusion, this paper has experimentally investigated questions concerning the interpretation of predicate clefts in Haitian Creole. Firstly, our data shows that predicate clefts can be used to contrast previous

information or to intensify a predicate, and that the acceptability of a predicate focus sentence (whether a *se*-cleft or a non-*se*-cleft) is dependent on the context, the semantic properties of the predicate itself, and the type of predicate focus structure used. The exact interaction of these three factors with one another is not clear, based on our small data set, but further research will benefit from considering syntax, pragmatics, and predicate semantics simultaneously when describing the limitations and uses of Haitian predicate clefts. From a semantic point of view, it appears that, as argued by Zimmermann (2016), there is nothing extremely special about the interpretation of predicate focus when compared to focus on other constituents in the clause, but rather that subjects seem to have a special status—at least with respect to exhaustivity—which is in line with cross-linguistic findings, and the claim found in Zimmermann (2008).

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