FOCUS, POLYNESIAN *KO, AND LANGUAGE CHANGE (HOW MORPHOSYNTAX IS, AND IS NOT, LIKE RATS)

Jason Brown   Karsten Koch
University of Auckland   University of Calgary[1]

1.   Preface

In this paper, we draw a parallel between a morpheme found in most Polynesian languages, and the Polynesian rat (*Rattus exulans*). While this may seem an unusual comparison, the nature of the parallel is grounded in the diachronic spread of both the Polynesian languages and the Polynesian rat, both of which were dispersed throughout the region by Polynesian travelers. The parallel has a deeper diachronic link: the Polynesian rat has been used as a methodological tool for dating human settlement in the islands (e.g. Holdaway 1996, Matisoo-Smith & Robins 2004, Wilmhurst & Higham 2004, Wilmhurst et al. 2008). The focus of the paper is the morpheme *ko, and we claim that this particle and its morphosyntax, like rats, spread throughout VSO Polynesia and has remained remarkably stable over time. Thus, like rats, *ko can be used as a sort of diachronic landmark. Unlike rats, however, this particle is subject to loss/erosion in language communities that have shifted, or are in the process of shifting, to SVO order.

2.   Introduction

In Polynesian, a nominal preceded by *ko may precede the verb under certain pragmatic conditions, as shown in the following example from Rarotongan (Penrhyn dialect, East Polynesian):

(1)   ko ta-ku   tamaiti tee kaa   hano.   *Rarotongan*
        ko dominant.possession-1sg child   def inceptive   go
        'It is my child who will go.' (Yasuda 1968:84)

The majority of Polynesian languages are verb-initial, and *ko structures are striking in that they allow for a nominal to precede the lexical verb (Clark 1976 for overview).
        The question that we address here is, What accounts for the uniformity of *ko expressions (within and across languages)? Clark has summed up the attempts of many linguists, stating "Most grammarians ... have been content to apply *vague semantic terms such as "focus"* ... to sum up the total range of

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functions." (Clark 1976:45). We take up Clark's challenge to find a unified historical semantic explanation BUT with **a precisely defined focus**: a syntactic feature that triggers a semantic-pragmatic object, discourse alternatives (Rooth 1985, 1992; von Stechow 1990, Krifka 1992, 2006, 2007). Our proposal is that *ko structures indicate that the nominal following *ko is focused, and that in SVO languages, the link between initial position and predicate/focus is lost, along with changes in, or complete loss of *ko structures. Our objective in this paper is to observe the patterns that are found in the Polynesian Outliers, where we expect to find certain patterns of erosion, such as: clefts being stable, wh-structures being unstable, and association with focus particles switching from a strictly adverbial to both an adverbial and adnominal use.

After giving some background on focus (sec. 3) and Polynesian (sec. 4), we show that the focus predictions hold in the VSO languages, but that in the SVO systems, *ko structures undergo (i) shifts away from initial position or (ii) loss of *ko altogether (sec. 5). Section 6 concludes.

3. Some Assumptions Concerning Focus

Since Clark's (1976) work, semanticists have developed more formal, precise notions of "focus". We aim to provide a formal semantic explanation for *ko marking in Polynesian by adopting assumptions from Alternative Semantics (Rooth 1985, 1992) and the Structured Meaning approach (von Stechow 1990, Krifka 1992, 2006). Under this view, focus triggers a semantic object: a set of alternatives. This semantic object is relevant for the interpretation of a linguistic expression. Adopting this viewpoint yields a set of predictions, which we outline below.

First, consider (2), where 'Maya' is contrasted with other alternative tree-climbers, where in English focus is marked via prosodic prominence (indicated by ALL CAPS):

(2)   [MAya]$_{FOCUS}$ climbed the tree.
       ordinary semantic meaning: CLIMB(MAYA)(TREE)
       focus semantic meaning: {CLIMB(MAYA)(TREE), CLIMB(TIM)(TREE),
       CLIMB(JO)(TREE) ...}

Our first prediction is thus as follows: as a first clue to focus, in informal descriptions in existing literature, *ko structures should be described as marking "contrast," "emphasis," and so on. We expect this to be true both of clefts and equatives: the *ko-marked nominal in an equative should be the focused one.

Next, wh-words are taken to be inherently focused (e.g. Krifka 2007); under a standard approach, the meaning of a question is thus a set of alternatives (e.g. Hamblin 1973):

(3)   [Who]$_{FOCUS}$ climbed the tree?
       meaning: {CLIMB(MAYA)(TREE), CLIMB(TIM)(TREE), CLIMB(JO)(TREE) ...}

Our second prediction is therefore that wh-questions may display parallels with declarative *ko structures (e.g. use of *ko).

The third prediction is that question and answers should display congruent FOCUS marking (e.g. Beaver & Clark 2008). The idea behind this principle is that the use of coherent discourse alternatives will result in coherent conversation (whereas the improper use of alternatives results in incoherent conversation). Take the following question/answer pair; in (4), the alternatives in the question and answer are equivalent due to matching FOCUS marking, so conversation is coherent. In (5), the FOCUS marking and alternatives do not match, leading to incoherent conversation.

(4)   Q: [Who]$_{FOCUS}$ climbed the tree?
        A: [MAya]$_{FOCUS}$ climbed the tree.
        alternative set in Q:
        { CLIMB(MAYA)(TREE), CLIMB(TIM)(TREE), CLIMB(JO)(TREE) ...}
        alternative set in A:
        { CLIMB(MAYA)(TREE), CLIMB(TIM)(TREE), CLIMB(JO)(TREE) ...}

(5)   Q: [Who]$_{FOCUS}$ climbed the tree?
        A: # Maya climbed [the TREE]$_{FOCUS}$.
        alternative set in Q:
        { CLIMB(MAYA)(TREE), CLIMB(TIM)(TREE), CLIMB(JO)(TREE) ...}
        alternative set in A:
        { CLIMB(MAYA)(TREE), CLIMB(MAYA)(FENCE), CLIMB(MAYA)(STEPS) ...}

Thus, in a question-answer sequence, wh-questions and *ko structures should FOCUS mark the same constituent (the same nominal).

Next, focus sensitive expressions like *only* depend on focus alternative sets for proper interpretation. The following sentences differ in focus marking, and are also true in different contexts.

(6)   Sally only chased [the CAT]$_{FOCUS}$.
        [true if there are no other alternatives that Sally chased, i.e. the dog, the kids, the plumber ...]

(7)   Sally only [CHASed]$_{FOCUS}$ the cat.
        [true if there is no other relevant relation between Sally and the cat, i.e. catching, kicking, feeding, ...]

In other words, *only* must be interpreted as being associated with the focus (as shown with subscript$_1$ in (8) for example (6)). A standard conclusion is that the denotation of *only* makes reference to the semantic object of focus alternatives (e.g. Rooth 1992, Krifka 2006).

(8)   a. *required interpretation of (6)*: Sally only$_1$ chased [the CAT]$_{FOCUS,1}$.
        b. *impossible interpretation of (6)*: *Sally only$_1$ chased$_1$ [the CAT]$_{FOCUS}$.

For our fourth prediction, we expect that Polynesian equivalents of *only,* when combining with nominals in VSO languages, must be interpreted semantically with *ko-marked nominals (and not nominals that are *in situ* in VSO structures).

Finally, contrastive topics are taken as containing a FOCUS marking (Roberts 1996, Büring 1997, 2003, Krifka 2007).

(9)   A: What do your siblings do?
        B: [My [SISter]FOCUS]TOPIC [studies MEDicine]FOCUS, and
               [my [BROther]FOCUS]TOPIC is [working on a FREIGHT ship]FOCUS.
                                                        (Krifka 2007:44)

These topics may be expressed in 'frame-setting' comma phrases (Chafe 1976):

(10)   [(As for) [JAMES]FOCUS]TOPIC, he is arriving [toMORrow]FOCUS.

Krifka (2007) unifies both types in (9) and (10) as 'delimitation,' the generalization being that delimitators contain FOCUS marking. Thus, our fifth FOCUS-related prediction is that some uses of *ko may be described as "topic" structures.

We have outlined a set of predictions about FOCUS which we can apply to a fairly well-documented language family. This gives a unified semantic account for a quite diverse range of morphosyntactic structures (e.g. various cleft types, specificational and predicational equatives, topics, wh-forms, and use of focus-sensitive expressions), though it should be noted that we do not cover all uses of *ko (see Clark 1976 for further discussion; Massam et al. 2006 for a thorough and unified account of *ko* structures in Niuean).

4.   Brief Background On Relevant Polynesian Facts

The primary division in the Polynesian family is between the Tongic group (including Tongan and Niuean) and Nuclear Polynesian, the latter of which breaks down into Eastern Polynesian, the Central Eastern groups, and Rapanui. The remaining languages have historically been grouped into the Samoic-Outlier group (Pawley 1967), though more recently many of the languages in this group (such as Samoan, Tuvaluan, Tokelauan, and other northern Outliers) have been shown to be more closely related to Eastern Polynesian. Important for our purposes, some of the Outliers (including West Futunan, Luangiua, Nukuoro and Vaeakau-Taumako) have shifted to SVO word order (Clark 1976, 1994).

With respect to the morpheme itself, we find it surfacing as ko, kō, (or <go> in Nukuoro), 'o, or 'ō (the latter two with glottal stop instead of [k]). The 'o versions are found in exactly those languages with the historical shift from /k/ to glottal stop. As the proto-consonant is /k/ (Biggs 1978), we will refer to the morpheme as *ko.

Use of *ko has been reported in focus, topic, wh-question, cleft, and equative structures in the literature. There are more detailed discussions about the various functions of *ko* by Besnier 1986 (Tuvaluan), Hooper 1991, 1993 (Tokelauan), Massam 2000, 2005 (Niuean), Seiter 1979 (Niuean), Bauer 1991 (Maori), Pearce 1999 (Maori), and Custis 2004 (Tongan), among others. We embrace the multitude of approaches, as we expect this kind of variety, based on our definition of focus in section 2. If focus is a semantic object (alternatives) relevant for the interpretation of a linguistic expression, then we predict different structures can make different semantic use of the focus alternatives.

5   Testing the Predictions

We go about testing predictions here by providing examples from a wide range of Polynesian languages. We start with forms in the V-initial systems, looking at languages from each major branch of the family (Tongic, Nuclear Polynesian, and VSO Outliers) where data is available, and then conclude each prediction by looking at how *ko structures have changed or eroded in SVO systems.

For the SVO Outliers, we expect that the strong link between initial predicate and focus in the VSO languages has been severed. This is because subjects are typically backgrounded and non-focused. Thus, we expect *ko to move away from initial position in the SVO systems, and, as its usefulness as a general marker of nominal focus declines, to be lost altogether.

5.1   Prediction 1: *ko Structures Mark "Contrast," "Emphasis," etc.

Clark (1976:45) observes that this is a common description of *ko structures. This is especially true in cleft-like structures; but also predicted for *ko-NP-NP equatives. We give examples of each in turn. Glosses are taken from the source.

5.1.1   Clefts

In the Tongic, branch, Ball (2009:62) remarks of Tongan *ko* that *ko* is followed by "a phrase in focus" and then "a clause-like phrase ... which is presupposed." Although the terms are not formally defined, this is reminiscent of the formal focus/background distinction of von Stechow (1990) and Krifka (1992, 2006). In other words, this is a cleft which FOCUS marks the clefted nominal after *ko*.

(11)   *Ko   XP-focus   Presupposed proposition* (Ball 2009: 62)
         Ko   Pita   na'á   ne   fai 'a   e   ngāué.   *Tongan*
         Ko   Peter   past   3SG do ABS DET word.DEF
         'It was Peter that did the work.' (data from Churchward 1953: 103)

In Nuclear Polynesian, Du Feu (1996: 68-69) describes *ko* in Rapanui as one of several subject "fronting" particles, which vary with degree of emphasis or obligation (12). Yasuda (1968:61) remarks that "ko indicates that the subject or object is emphasized" in Rarotongan (Penrhyn dialect) (13). In North

Marquesan (Ùa Pou dialect), Mutu & Teikitutoua (2002) gloss *ò* (from *ko) as "focus" (14). For Hawaiian Elbert & Pukui (1979:172) note that "... indeed, each phrase beginning with *'o* is emphatic" (15).

(12) Ko Rui i rava'a o te 'ura.   *Rapanui*
     FOC Rui PA catch POS +SPE lobster
     'Rui is the one who has caught the fish [sic].' (Du Feu 1996:68, ex. 333)

(13) ko ta-ku   tamaiti tee kaa   hano. *Rarotongan*
     ko dominant.possession-1sg child   DEF inceptive go
     'It is my child who will go.' (Yasuda 1968:84)

(14) Ò koe   te   i   kite.   *North Marquesan*
     FOC you.SG   REL   PAST know
     'You are the one who knows.' (Mutu & Teikitutoua 2002: 41)

(15) 'O wau ke   hā'awi aku   nei   i kēia iā'oe. *Hawaiian*
     'O 1SG PRESENT give   away PRESENT OBJ this to.you
     '*I* give this to you.' (Alexander 1968, cited in Elbert and Rupui 1979:132)

An example of a VSO Outlier, Pukapukan also exhibits *ko* clefts, described as "a focusing construction" by Salisbury (2002:428):

(16) Ko te keté   (te mea) na kāvea   e   Tele.   *Pukapukan*
     PRD A basket-DA (A thing) T take-CIA AG Tele.
     'It's that basket which was taken by Tele.' (Salisbury 2002:434, ex. 655)

Next we turn to the SVO Outliers. A cleft structure may still be retained (though just for singular definites in Luangiua, (17)); in West Futunan, clefts lack *ko (18), while in Vaeakau-Taumako, there does not appear to be a dedicated cleft structure at all (Næss and Hovdhaugen 2011). Thus, the shift to SVO is correlated with some loss of *ko in cleft structures.

(17) o ke   poi u   make.   *Luangiua*
     o DEF.SG.ART dog   IMMED die
     'It was the dog that died.' (Salmond 1974:154)

(18) Jein ni   hlika ta   kuli.   *West Futunan*
     Jein TNS startle ART   dog
     'It was Jein the dog startled.' (Dougherty 1983:132, ex. 383)

5.1.2 Equatives

A second type of structure commonly using an initial *ko-NP is an equative, where what follows the *ko-NP is a second nominal, not a clausal remnant. Our prediction here remains the same: the *ko-NP is marked as focused. The

additional expectation is that reversing the order of the nominal reverses the focus marking. While the role of emphasis in equatives has been less thoroughly described, there are some grammatical descriptions confirming our hypothesis. For example, Elbert & Pukui (1979:132) note that in Hawaiian verbless sentences, "emphasis" may be shown by the same transformation seen in clefts: fronted 'o-nominals are focused. For further data, see also Moyse-Faurie (2004:305) on Wallisian (East Uvean) & Futunian (East Futuna) equatives.

(19) The 'o-NP in equatives is "emphasized"   *Hawaiian*
     a.   'O   ia   ke   ali'i.
           'o   3SG   DET   chief
           'HE is the chief.'
     b.   'O   ke   ali'i   nō   ia.
           'o   DET   chief   nō   3SG
           'He's the CHIEF.' (adapted from Elbert and Pukui 1979:132)

For SVO systems, we use Nukuoro as an example. Interestingly, while in the V-initial systems *ko-NPs are the initial NP in an equative, in SVO systems, it is typically the second NP that is marked with *ko. But the generalization holds: the *ko-marked NP is the focused one (though now it is no longer initial).

(20) a.   Tama   madua   go   [Iaidemalo]FOCUS.   *Nukuoro*
           child   old   go   Iaidemalo
           'The oldest child was [Iaidemalo]FOCUS.'
     b.   Iaidemalo   go   [tama   dane   madua]FOCUS.
           Iaidemalo   go   child   male   old
           'Iaidemalo was [the oldest male child]FOCUS.' (Carroll 1965:37)

Thus, there is a move of focus away from initial position. Moreover, in some SVO languages, *ko may be lost altogether in equatives (typically first in predicational equatives, and then specificational equatives). Thus, in specificational equatives, use of *ko is optional in Luangiua (Salmond 1974), generally retained in Vaeakau-Taumako (Næss and Hovdhaugen 2011), but has been lost in West Futunan altogether (Dougherty 1983).

5.2   Prediction 2: Wh-Questions May Employ *ko

*ko is widely used in some wh-questions; subject wh-words appear to be most likely to be preceded by *ko.[2] This suggests that, since a widespread syntactic function of *ko is as a predicativizer, to allow nominals to appear in the initial predicate position, 'who' wh-forms are also nominals. Other wh-expressions

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[2] We restrict our discussion primarily to 'who' here as this most robustly appears with *ko across the family. The actual distribution of wh-words in the family includes in situ forms, both with and without *ko. This suggests that the spread of *ko to wh-words was either incomplete, and/or is eroding more rapidly than in other *ko structures. Thanks to Frank Lichtenberk for drawing our attention to this issue.

may not appear with *ko, and in many instances this is for straightforward morphosyntactic reasons: they are verbs or adverbs.

Recall that wh-words are already taken to be inherently focus marked – so why do some additionally appear in *ko structures?[3] Natural language has much redundancy: it's functionally useful to mark focus more than once (e.g. cleft structure plus prosody in English). The following data shows the widespread use of *ko with 'who' forms across VSO Polynesian languages.

Tongic
(21) Ko hai ia na'a ne kaiha'asi 'a e ika *Tongan*
Ko who 3PERS PAST 3PERS steal ABS DET fish
'Who stole the fish?" (lit: "Who is the one that he/she stole the fish?")
(Custis 2004: 124-125)

Nuclear Polynesian:
(22) Ko vai te-i haka-tupu *Rarotongan*
Ko who DET-PAST CAUSATIVE-grow
i te peka-peka.
DIRECT.COMMENT DET trouble
'Who is the one that caused the trouble?' (Yasuda 1968:83)

(23) Ò ai tēnei e tekao (nei)? *North Marquesan*
FOC who this IMPF talk (now)
'Who is this who is speaking?' (Mutu & Teikitutoua 2002:69)

(24) 'O wai ke kumu? *Hawaiian*
(SUBJ.) who the teacher
'Who's the teacher?' (Elbert & Pukui 1979:119-120)

VSO Outlier:
(25) 'O le ā le mea 'ua tupu? *Samoan*
PRES ART what ART thing PERF happen
'What is the thing that happened?' (Mosel & Hovdhaugen 1992:489)

Turning to the SVO systems, 'who' forms are also generally fronted and retain *ko. However, we find that *ko is not used with West Futunan 'who' (26), and though "nearly always" used with 'who' in Vaeakau-Taumako (Næss and Hovdhaugen 2011:403), it evidently is sometimes absent with 'who' in Vaeakau-Taumako as well.

(26) Akai tano eigoa? *West Futunan*
who his name
'Who is he?, Who (What) is his name?' (Dougherty 1983: 85)

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[3] Thanks to David Nash for raising this excellent question. We attempt some speculative answers here.

Moreover, *ko + 'who' forms are possible both in fronted and in *in situ* positions in Vaeakau-Taumako and Luangiua (27), something that we are not certain is possible in V-initial systems (and, again, by extension, in Proto-Polynesian). This would again represent a migration of a *ko-marked form away from the initial position as part of the shift to SVO word order.

(27) kama   la   o   ai?   *Luangiua*
      person that   o   who
      'Who is that?' (Salmond 1974:222)

5.3   Prediction 3: Question-Answer Congruence

In a question-answer sequence, wh-questions and *ko structures should FOCUS mark the same constituent (the same nominal). Those sources which list question and answer pairs provide data consistent with this prediction. For example, for Tuvaluan, Besnier (1986:247-248) notes that "ko-marked structures are typically encountered in answers to information questions ... in which the use of an unmarked preposed noun phrase, in contrast, would be infelicitous." Here are examples of questions and answers that both use *ko, from across the family.

Tongic:
(28) Q: haia ti ko   e   motu   fē   *Niuean*
            right so PRED   C   island which
                  e   tupuaga haau   ko   e motu ko   Niue kia?
                  ABS.C birth   GEN.2SG PRED C island PRED Niue Q3
            'Right, so which island were you born in? Was it Niue so?'

      A: Ko   e   motu   ko   Niue. Ko   e, ko e   matua fifine
            PRED C   island PRED   Niue PRED C PRED C   parent female
                  haaku   fanau   i   Samoa.
                  GEN.1SG   born   LOC.P   Samoa
            'Island of Niue. My, my mother was born in Samoa.'
                                                        (Massam et al. 2011)

Nuclear Polynesian:
(29) Q: Ko ai te   me'e nei? A: Ko Vero.   *Rapanui*
            FOC INT +SPE thing PPD   FOC Vero
            'Who is that person?'   'Vero.' (Du Feu 1996:19, ex. 33)

(30) Q: 'O   wai ke kumu? A: 'O   Kimo ke   kumu
            (SUBJ.) who the teacher (SUBJ.) Jim the teacher
            'Who's the teacher?'   'Jim is the teacher.'
                                    (*Hawaiian,* Elbert and Pukui 1979:120)

VSO Outliers:

(31) Q: Ko tea te mea na?   A: Ko te kapu rau niu.   *Anuta*
            'What is that object?'   'A coconut leaf hat.'
                                                            (Feinberg 1977: 78)

(32) Q: Ko ai? Po ko ai?   A: Ko Moa.   *Rennellese*
            'Who? So who?'   'Moa.'   (Elbert 1988:105)

For the SVO Outliers, we have found no clear data as of yet. We might just note that in West Futunan, which has lost *ko, question-answer congruence trivially does not depend on *ko marking in answers.

5.4   Prediction 4: Association With *Only/Just*

Under the widespread account of *ko nominals (except for *ko topics) as nominal predicates, we expect that, in the V-initial systems, equivalents of focus sensitive expressions like *only/just* or *also* are predicative (e.g. adverbial) and not adnominal. In other words, to associate semantically with a nominal, that nominal must be focused: it must be *ko-marked (predicative), and not in situ.

In the Tongic branch of the VSO languages, we turn to an example from Niuean. In Niuean, what is glossed as the "emphatic" particle *nī* generates an 'only' interpretation with a *ko*-marked nominal:

(33) ko e tipolo agaia nī   ne   inu   ai   a   lautolu. *Niuean*
      ko e lime   still EMPH   NFUT drink PRON ABS they
      'It's still only lime juice that they are drinking.' (Massam 2000:104, 14d)

Adding focus marking and association with focus subscripts yields:

(34) a. attested interpretation:
            ko [e tipolo]$_{FOCUS,1}$ agaia nī$_1$ ne   inu   ai   a   lautolu.
            ko e lime   still EMPH   NFUT drink PRN   ABS   they
            'It's still only$_1$ [lime juice]$_{FOCUS,1}$ that they are drinking.'
            (and not orange juice)

      b. unattested interpretation:
            * ko [e tipolo]$_{FOCUS}$ agaia nī$_1$ ne   inu   ai   a lautolu$_1$.
              ko e lime   still EMPH   NFUT drink PRON ABS they
            * 'It's still [lime juice]$_{FOCUS}$ that only$_1$ they$_1$ are drinking.'
            (and not you)

The conclusion is that *nī* must associate with a *ko*-marked, FOCUS-marked nominal, and not with an in situ nominal that lacks grammatical FOCUS marking. Other data in this section follows the same generalization for the V-initial systems. (35) shows Rarotongan *hua* 'just,' (36) *anaiho* 'only' in North Marquesan, and (37) Tokelauan *nā* 'only.'

Nuclear Polynesian:

(35) Ko   [ia]$_{FOCUS,1}$ hua$_1$?   *Rarotongan*
     FOCUS   3SG   just
     'Is he all by himself?' (Yasuda 1968:110)

(36) Ò   [ia]$_{FOCUS,1}$ anaiho$_1$ à   taù   i   kite.   *North Marquesan*
     FOC   he   only   INT mine PAST know
     'He is the only one indeed that I know.' (Mutu & Teikitutoua 2002: 87)

VSO "Outliers":

(37) Nā$_1$ ko   [nā tamaiti]$_{FOCUS,1}$ te   na   olo.   *Tokelauan*
     just   ko   DET children   DET T/A go.pl
     i. 'It was only the children that went.' (Hooper 1993: 211, ex. 7)
     ii. unattested interpretation: * 'The only thing the children did was go.'

Under the widespread assumption that *ko marked nominals are initial nominal predicates, 'just/only' here is a predicative modifier, and not a nominal modifier. This can be compared to English *only*, which can be used for both predicative (38a) and nominal (38b) modification:

(38) a.   Gretchen only$_1$ [DANces]$_{FOC,1}$ (she does not sing).
     b.   Only$_1$ [GRETchen]$_{FOC,1}$ dances (her sister does not dance).

We get variation in English but not in the V-initial Polynesian languages because in Polynesian, focus is tied to the predicate position: in situ nominals are not a focus position. In contrast, in English, focus is not tied to a single grammatical position, but is marked via prosody.

In the SVO systems, once the link between focus and the initial predicate position is severed with the change in word order, we expect focus sensitive expressions to have more flexible behaviours. They should be able to (i) associate with non-initial material, and (ii) associate adnominally as well as adverbally. This is because, as in situ nominals can be focus marked, the SVO languages will require adnominal as well as adverbial focus sensitive expressions. The data below show representative examples from Vaeakau-Taumako showing these two predictions are borne out. In (39), *hua* 'just' associates with a non-initial predicative nominal, and not the initial demonstrative. In (40), *na* 'only' associates with an initial subject nominal, that is not *ko*-marked (*na* is a demonstrative that takes on *only* interpretations in constructions like these – Næss and Hovdhaugen 2011:443).

(39) ne   [ni   ngata hua$_1$ loa   ne kutu   i   kaenga o-ku]$_{FOC,1}$
     DEM.1   PL.SP snake just EMPH PFV stay.PL LDA village POSS-1SG.POS
     'These are just$_1$ [some snakes that live in my village]$_{FOC,1}$.'
     (Næss and Hovdhaugen 2011:273)   *Vaeakau-Taumako*

(40) [a   koe]_{FOC,1} na_1 kē   ko   nohine o-ku.
      PERS 2SG   only really TOP wife   POSS-1SG.POSS
      'Only_1 [you]_{FOC,1} are my wife.' (Næss and Hovdhaugen 2011:188,265)

5.5   Prediction 5: some uses of *ko may be described as "topic" forms

This is a common use of *ko throughout the VSO languages.

Tongic:
(41) Ko mele na'a ne   kaiha'asi 'a   e   ika.   *Tongan*
      Ko Mele PAST 3PERS steal   ABS DET fish
      'Mele, she stole the fish.'   (Custis 2004: 124)

Nuclear Polynesian:
(42) Mea taahae te TV me   ngaa   hiriwa,   *New Zealand Maori*
      Thing stolen the TV with the.PL silver
            engari   ko   ngaa rama   mea   inu   katoa.
            but   TOP the.PL booze thing drink all
      'They stole the TV and the silver, but as for the booze, it was all drunk.'
      (Bauer 1993:236)

VSO Outlier:
(43) Ko Sa'oangaba, teengaa te tautupu'a e hai kinai.   *Rennellese*
      'As for Sa'oangaba, this is the story told about him.'
      (Elbert (1988:104) describes *ko* as a 'topic marker')

        In the shift to SVO word order, Clark (1976) proposes that a major
language-internal factor was the reinterpretation of initial topics as subjects,
with an accompanying loss of *ko. Thus, we expect that there generally will be
no *ko-marked topics in SVO systems. As far as we can tell, this is generally the
case, with one wrinkle: in Vaeakau-Taumako, there is a distinction between
clause-external and clause-internal topics. In clause-external topics (which are
the *ko topics found in V-initial systems and Proto-Polynesian), *ko is not used,
consistent with Clark's hypothesis (43). However, *ko shows up with a clause-
internal topic form, which may be used to switch topic reference (44).

(43) A iau te tangata nei toa a iau na nga tela no tele la.   *Vaeakau-Taumako*
      a   iau te   tangata ne-i   to-a   a   iau
      pers   1sg sg.sp   man   pfv-3sg take-tr   pers   1sg
      na   nga te-la   no   tele   la
      dem.2   pron.3 sg.sp-dem.3 ipfv   run   dem.3
      'As for me, the man who took me is that one walking there.'
      (Næss and Hovdhaugen 2011:333)

(44)   (*He_i went and entered the house, and then*)   *Vaeakau-Taumako*
        ko te tai tau Pileni la koi tukuange po ....
        ko   te   tai   tau   Pileni la   ko-i   taku-a   ange   po ....
        top sg.sp person of   Pileni dem.3 incp-3sg say-tr   go.along comp
        'the man_j from Pileni said, ….' (Næss and Hovdhaugen 2011:264)

It's not clear to us whether this clause-internal *ko-topic still has focus semantics – some uses are unlike (44) in that they clearly refer to a recurring topic and do not obviously trigger any reference to alternatives. Since Vaeakau-Taumako appears to lack clefts, one explanation may be that, following Clark, *ko-topics were reinterpreted as subjects and lost *ko; but in a separate development, *ko-clefts were reinterpreted as clause-internal topics, with retention of *ko. This latter reinterpretation was plausibly triggered by the fact that Vaeakau-Taumako has no formal relative marking (Næss 2000: 72-73), which may make clefts hard to distinguish from non-clefted forms.

6.   Discussion

The semantic explanation that we endorse here provides a unified historical account of the behaviour of various *ko structures across the Polynesian languages; i.e. the different distributions of *ko that defy a unified synchronic morphosyntactic explanation (various clefts, equatives, topics, wh-forms, and with focus-sensitive expressions). It also makes new predictions that have not always formed part of the complete picture of Polynesian *ko, namely its use as a diagnostic in question-answer congruence, and in association with focus.

        With a shift to an SVO order, the link between initial predicate position and focus is lost, giving rise to the use of *ko-forms in non-initial positions, and even complete loss of *ko-marked structures. Thus, the maintenance of a discourse category, focus, leads to the remarkable consistency across space and time in the VSO languages. Once initial NPs are reinterpreted as subjects (resulting in the shift to SVO word order), the link between initial predicate and FOCUS is lost. This leads to fairly radical grammatical change, as diagnosed by *ko structures. There is some variation however, as clefts and 'who' questions appear most likely to retain an initial *ko-form; equatives shift *ko to the second nominal (or lose it altogether); clause-external topics lose *ko; and focus sensitive expressions reliably develop adnominal uses that are no longer dependent on *ko-marking in order to express semantic focus on a nominal.

        In conclusion, we find the nature of *ko to have a close parallel in the Polynesian rat: they both were dispersed by Polynesian migration, and they both can be used as markers of diachronic stability, to some extent. Where they differ is in the Outliers, where while rats are still present, *ko structures have eroded and changed over time in those languages that shifted to SVO word order.

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