The status of 'auxiliary verbs' in Thai

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1. Introduction

This paper looks into the syntactic category of words such as \textit{ca}? 'will, kh\ddot{a}\ddot{a}y 'ever', and \textit{kho\ddot{i}k\ddot{a}\ddot{a}n} 'rather' which are referred to as preverbs by Kullavanijaya (1968), as modals by Noss (1964) and Sriphen (1982), and as auxiliaries in Panupong (1970), Ekniyom (1981) and Savetamalya (1987). The list of 'auxiliary' words to be tested here includes only those which precede verbs, and thus exclude words such as \textit{yu\ddot{u}} which occur in a postverb position.

Working within the lexicase dependency framework, Savetamalya (1987) proposes a dependency analysis of auxiliaries as main verbs, in which the regent verb is the head of the construction (cf. Starosta 1977:73; 1988). In this paper, I point out certain characteristics of these 'auxiliaries' which are not accounted for in Savetamalya (1987) and test the syntactic status of these words. I then propose a more limited set of auxiliary verbs in Thai.

This paper is divided into six sections. The first section provides an introduction. The second section discusses phenomena not accounted for by Savetamalya (1987). The third section discusses the test used to identify the syntactic category of 'auxiliary verbs'. The fourth section presents the results. The fifth section discusses possible solutions to the problem raised. The final section presents a conclusion.

2. Problems

Savetamalya (1987:21), who works within the lexicase dependency grammar, identifies auxiliary verbs as words signifying the meanings of mood, aspect, intention, and obligation. She analyzes auxiliary verbs as extension intransitive verbs expecting a non-finite verb complement.
intransitive verbs expecting a non-finite verb complement. However, they differ from other verbs of this class both in their semantic limitations and in their ability to command any non-auxiliary verbs within the same finite domain. For example, the auxiliary intransitive verb ?āat 'may' precedes and commands the non-auxiliary intransitive verb khīt₂ 'to think', as in (1a), but not vice versa, as in (1b). The requirement that the auxiliary verb ?āat requires a non-finite verb dependent is shown by the implied contextual feature [4[-fint]] in the lexical matrix of ?āat.

(1a)

\[
\begin{array}{c}
\text{nøy} \\
\text{Noy} \\
\text{+N} \\
\text{Nom} \\
\text{PAT} \\
\text{actr} \\
\end{array}
\quad
\begin{array}{c}
\text{2ndex} \\
\text{+fint} \\
\text{+xtns} \\
\text{-trns} \\
\text{-trns} \\
\text{-fint} \\
\text{-fint} \\
\end{array}
\quad
\begin{array}{c}
\text{khīt}, \\
\text{think} \\
\text{+xtns} \\
\text{-fint} \\
\text{-fint} \\
\text{+N} \\
\end{array}
\quad
\begin{array}{c}
\text{klāp} \\
\text{return} \\
\text{4ndex} \\
\text{5ndex} \\
\text{bāan} \\
\end{array}
\quad
\begin{array}{c}
\text{4[-fint]} \\
\end{array}
\]

'Noy may consider returning home.'

(1b)

\[
\begin{array}{c}
\text{nøy} \\
\text{Noy} \\
\text{+N} \\
\text{Nom} \\
\text{PAT} \\
\text{actr} \\
\end{array}
\quad
\begin{array}{c}
\text{khīt} \\
\text{think} \\
\text{+xtns} \\
\text{-trns} \\
\text{-trns} \\
\text{-fint} \\
\text{-fint} \\
\end{array}
\quad
\begin{array}{c}
\text{?āat} \\
\text{may} \\
\text{+N} \\
\text{+V} \\
\text{+V} \\
\text{+xlr} \\
\text{+xlr} \\
\end{array}
\quad
\begin{array}{c}
\text{klāp} \\
\text{return} \\
\text{house} \\
\text{bāan} \\
\end{array}
\quad
\begin{array}{c}
\text{5ndex} \\
\end{array}
\]

'Noy thinks (she) may return home.'

Even though Savetamalya's analysis provides a nice account of the dependency relationship between auxiliary verbs and other verbs in Thai, the verb dependency analysis encounters the following problems. First of all, some of these words (e.g. khānkhān 'rather') may also precede sentence-final adverbs, for example, the frequency adverb bhāy 'often' in (2a) and the resultative adverb dī dī 'good' in (3a). By the definition of auxiliary verbs, they should cooccur with a non-finite verb
dependent, rather than an adverb dependent. In these examples, the requirement for a non-finite verb complement is not satisfied and yet these sentences are acceptable.

(2a) khâw pay thîi nân khônkhâan\nhe go at there rather\n1index 2ndex 3ndex 4ndex 5ndex\n+N +V +V\nNom +fint +xrlr +xtns \nPAT -xrlr -trns ?((+V))$^4$\nactr -xtns ?[-fint]

bûy often 6ndex +Adv +dgre

'He went there rather often.'

(3a) khâw phûut khûy dii khân
he speak rather good up
1index 2ndex 3ndex 4ndex 5ndex
+N +V +V +Adv +Adv
Nom +fint +xrlr +rslt +path
PAT -trns +xtns +slnt
actr -xrlr -trns ?((+V)) ?[-fint]

'He gradually spoke better.'

Moreover, examples (2a) and (3a) above and (4a) and (5a) below also illustrate the fact that non-auxiliary intransitive verbs such as pay3 'to go', phûut 'to speak', phayayaam 'to try' and tâtsîncay 'to decide' may precede the supposed non-finite auxiliary verbs khônkhâan 'rather', khûy 'gradually', cà? 'will' and tûy 'must' within the same finite domain. This fact violates the requirement that auxiliary verbs precede and command other non-finite verbs, rather than vice versa (cf. Savetamalya 1987:21) and raises a question about the status of auxiliary verbs in Thai.
(4a)  kôy  phayayaam  căʔ  khãay
Koy  try  will  sell
1ndex  2ndex  3ndex  4ndex
+N  +V  +V  +V
Nom  +fint  +xlry  +trns
PAT  +xtns  +xtns  -fint
actr  -trns  -fint
        -xlry  -trns
          3[-fint]  4[-fint]

càkkayaan
bicycle
5ndex
+N

'Koy tried to sell her bicycle.'

(5a)  nát  tàtsîncay₁  tŋ  klâp₄  bânî
Nat  decide  must  return  house
1ndex  2ndex  3ndex  4ndex  5ndex
+N  +V  +V  +V  +N
Nom  +fint  +xlry  +lctn
PAT  +xtns  +xtns  -fint
actr  -trns  -fint
        -xlry  -trns
          3[-fint]  4[-fint]

'Nat decided that she must return home.'

Having discussed problems in the verbal analysis of auxiliaries, I will attempt to reexamine the syntactic categories of these 'auxiliary verbs' by testing the position in which the negation adverb mây 'not' occupies with relation to these putative 'auxiliary verbs' in a root predicate clause. Specifically, when these words occur after a subject, as opposed to at the end of a clause, do they precede or follow the negation word mây?

3. The Root Predicate with Negation Word mây

In Thai, the negation adverb mây 'not' may precede a verb or a sentence-final adverb. Even though mây may not differentiate verbs from adverbs when they occur after another verb, as shown in (6) and (7), this adverb mây may distinguish
verbs from adverbs when it precedes the forms in question in a root predicate clause. A root predicate clause refers to a simple clause which contains only one predicate.

*Mây before an adverb occurring sentence-finally:*

(6) kháw pay thî nân mây by
    he go at there NEG often
    +V +Adv

    'He does not go there often.'

*Mây before an embedded verb:*

(7) kháw kradòt mây khâam rûa
    he jump NEG cross fence
    +V +V

    'He jumped but did not make it over the fence.'

In a root predicate clause, only a verb may occur in construction with the negation adverb mây, as shown in (8a), (8b), and (8c). Both root predicate nouns and root predicate prepositions occur in construction with mâychây 'not true', rather than with mây 'not'. An adverb, on the other hand, may not occur at all as a root predicate in a sentence, as shown in (8d) and cannot occur with the negation word mây in (8e).

**Negation in root clauses:**

(8a) kháw mây/*mâychây pay
    he NEG go
    +V
    -trns

    'He is not going.'

(8b) náŋsû nû *mây/mâychây khǒčn thøø
    book this NEG POSS you
    +N
    +prdc

    'This book is not yours.'
(8c) nāṃsī nū *māy/māychāy sāmrāp thāc
book this NEG for you
    +P
    +prdc

'This book is not for you.'

(8d) *khāw wāy nāṃsī thīi nū
he lying book at here
    +Adv
    -prdc

'He left a book lying here.'

(8e) *khāw māy/māychāy wāy nāṃsī
he NEG lying book
    +Adv
    -prdc

thīi nū
at here

'He did not leave a book here.'

Thus, in a root clause containing a subject, if these 'auxiliary verbs' may follow the negation word māy, they are identified as verbs, at least when occurring in that environment. This conclusion is based on the fact that every verb may be preceded by the negation word māy.⁶

If these 'auxiliary verbs' can only precede but never follow māy, they are analyzed as adverbs.⁷ Since these adverbs may occur with any verb subject to pragmatic considerations, they are not subcategorized by verbs and hence are adjuncts.

4. Results

Figure 1 shows that words which can only precede but never follow māy in the post-subject position are regarded as adverbs. Eight words which may follow māy, namely ñatt 'may', hēncā 'to seem', khōt 'gradually', khēs 'ever', khuan 'should', nāa 'likely', mua 'to be absorbed in' and tōn 'must' are shown to be verbs by this negation test.
<table>
<thead>
<tr>
<th>words</th>
<th>before</th>
<th>after</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pàat 'may'</td>
<td>+</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>că 'will'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>chák 'begin to'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>cuan 'almost'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>hencà 'seem'</td>
<td>+</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>kamlu 'in'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>progress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kâôt 'happen'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>khêxy 'ever'</td>
<td>+</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>khoì 'may'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>khônkhaa 'rather'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>khôy 'gradually'</td>
<td>-</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>khuun 'should'</td>
<td>+</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>kiap 'almost'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>kò 'also'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>mák 'often'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>mua 'be absorbed in'</td>
<td>-</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>nàa 'likely'</td>
<td>-</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>phèny 'just'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>thèep 'almost'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>tòñ 'must'</td>
<td>+</td>
<td>+</td>
<td>V</td>
</tr>
<tr>
<td>yánt 'still'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
<tr>
<td>yànn 'apt to'</td>
<td>+</td>
<td>-</td>
<td>Adv</td>
</tr>
</tbody>
</table>

Figure 1: Application of the Position of Negation Test to putative 'Auxiliary Verbs' in the Post-subject Position

However, concluding that words which may follow mây are verbs leaves unresolved problems with the forms khôy 'gradually' and tòñ 'must', as shown earlier in (3a) and (5a). That is, both of them may be preceded and commanded by the non-auxiliary verbs phùut 'to speak' and tâtsâncay, 'to decide,' respectively. Moreover, the form khôy in (3a) is followed by an adverb rather than a non-finite verb, as it should be if it were an auxiliary verb. The following section presents possible solutions.
5. Possible Solutions and Discussion

Two possible solutions to account for the forms *kh.Øy* 'gradually' and *t.Ø* 'must' in (3a) and (5a) are: 1) *kh.Øy* and *t.Ø* might be treated as adverbs like *càʔ* 'will' and *kh.Ønkhâaŋ* 'rather', so that they may follow any non-auxiliary verbs and so that *kh.Øy* may precede an adverb without any violation of constraints on the distribution of auxiliary verbs, or; 2) the forms *kh.Øy* and *t.Ø* might be analyzed as belonging to two distinct lexical entries: *kh.Øy₁* 'gradually' and *t.Ø₁* 'must' would then be auxiliary verbs while *kh.Øy₂* 'gradually' and *t.Ø₂* 'must' would be adverbs.

The first alternative would contradict the test result shown in figure 1, which suggests that they are verbs since they may follow the negation word *mây*. Moreover, by considering these two words to be adverbs, one would lose the important and otherwise absolute generalization about verbs. That is, not only verbs but also adverbs would be able to occur as a predicate in a root clause.

In the second alternative, because there would be two separate lexical items for each of the forms *kh.Øy* and *t.Ø*, there would be no contradiction in the result of the negation test. Moreover, one could then explain why examples (3a) and (5a) are acceptable. That is, there exist the verbs *t.Ø₁* and *kh.Ø₁*, which may follow *mây* in a post-subject position and there are adverbs *t.Ø₂* and *kh.Ø₂* which modify the following verbs or adverbs. Hence these adverbs *t.Ø₂* and *kh.Ø₂* may follow non-auxiliary verbs and precede both verbs and adverbs which they modify, as exemplified in (3a) and (5a).

This study favors this second possibility based on evidence from the following 'grammatically significant environment criterion' in lexicase. The grammatically significant environment criterion plays an important role in separating a form which occurs in separate syntactic environments into distinct lexical items and syntactic subclasses. While the form *kh.Øy* may occur in both environments a and b, the form *kh.Øy* can occur only in the environment a. Hence, the form *kh.Øy* in the two environments must belong to two lexical items and syntactic subclasses.
(9a) kháw khɔy₁ phûut dìi khîn
he gradually speak good up
+V +V
+xlr'y -fint

'He gradually spoke better.'

(9b) kháw phûut khɔy₂ dìi khîn
he speak gradually good up
+V +Adv

'He spoke gradually better.'

(10a) kháw khɔey phûut dìi kwàa ní
he ever speak good than this
+V +V
+xlr'y -fint

'He once spoke better than this.'

(10b) *kháw phûut khɔey dìi kwàa ní
he speak ever good than this
+V +V
+xlr'y

'He spoke ever better than this.'

Considering some of the words expressing mood and aspect to be adverbs, rather than auxiliary verbs as in Savetamalya's analysis, enables us to explain the following: 1) why forms such as khɔinkháan 'rather' and khɔy₂ 'gradually' may precede frequency adverbs, as in (2b), and resultative adverbs, as in (3b); and 2) why cà? 'will', which has long been a puzzle, and tɔŋ₂ 'must' may directly follow and be commanded by non- auxiliary verbs, as in (4b) and (5b). In other words, analyzing these words as adverbs rather than auxiliary verbs solves the problem of their occurrence after a non-auxiliary verb and before an adverb. Khɔinkháan 'rather', khɔy₂ 'gradually', cà? 'will', and tɔŋ₂ 'must' are adverbs, which precede verbs and adverbs over which they have semantic scope. Since they are not grammatically required by their regent, these adverbs are adjunct dependents of any words they precede and modify.
(2b) khâw pay thîi nân khônkhâaŋ
he go at there rather
1ndex 2ndex 3ndex 4ndex 5ndex +Adv
+AdvV +fint
+Adv -trns

'bôy
often
6ndex
+Adv
+dgre
5(+[+Adv])

'He went there rather often.'

(3b) khâw phûut khôy₂ dîi khîn
he speak rather good up
1ndex 2ndex 3ndex 4ndex 5ndex +Adv +Adv
+N +Adv +Adv +Adv +Adv
Nom +fint +rslt +path
PAT -trns 3(+[+Adv]) +slnt

'He gradually spoke better.'

(4b) kôy phayayaam câ? khâay câkkayaan
Koy try will sell bicycle
1ndex 2ndex 3ndex 4ndex 5ndex +Adv +trns +N
+N +Adv +fint
Nom +fint +fint
PAT +xtns 3(+[+Adv])
actr -trns 4[-fint]

'Koy tried to sell her bicycle.'
(5b) nát tàtsǐncay tōn̄g klàp bâan
Nat decide must return house
Index 2ndex 3ndex 4ndex 5ndex
+N +V +Adv +lctn +N
Nom +fint -fint
PAT +xtns -trns
actr -trns -xlry
4[-fint]

'Nat decided that she must return home.'

Maintaining Savetamalya's (1987) dependency analysis of auxiliary verbs, I illustrate in example (11) with a lexicase stemma and lexical matrices how a true auxiliary verb precedes and commands other verbs, while an adverb is always subordinate to a following verb or adverb. I will also adopt Savetamalya's (1987) cooccurrence restriction for true auxiliary verbs in Thai and for forms which are identified in this study as adverbs signifying mood and aspect.

(11)

| ?àat | may |
| kháw 2ndex | khít, |
| he +V | think |
| Index +prjc că? 4ndex nǐi |
| +N +xlry will +V escape |
| Nom +xtns 3ndex +prjc 5ndex |
| PAT -fact +Adv +xtns +V |
| -mnnr -fint -trns |
| -trns -mnnr -xtns |
| 1([+Nom]) -mnpl |
| 1 [+PAT] -trns |
| 1 [+actr] -xlry |
| 4 [-fint] 1 [+actr] |
| 5 [-fint] 3 ([+Adv]) |

'He may consider escaping.'
In (11), the auxiliary verb ที่ 'may' precedes and caps-commands the non-auxiliary verb คิด 'to think'. Since the adverb ที่ 'will' may occur with any verb and has the following verb คิด 'to think' in its scope, it is an adjunct dependent of คิด 'to think'.

I will further claim that the following four auxiliary verbs are prime auxiliaries: ที่ 'may', เหมือน 'to seem', ควร 'should', and น่า 'likely'. That is, they are lexically finite (Starosta 1977:83; Pagotto 1987:482; Savetamalya 1987:26). Example (12a) shows that a prime auxiliary verb may precede and command another non-finite non-prime auxiliary verb. Examples (12b) and (12c) show that a prime auxiliary verb may not be preceded and commanded by other verbs. Moreover, both sentences are unacceptable because the requirement for a non-finite verb dependent is not satisfied.

```
(12a) ช้าน ที่ will ต้อง must ไป pay
I may must go
1index 2index 3index 4index 5index
+N +V +Adv +V +V
Nom +fint +xlry -fint
PAT +prim -prim -fint
actr +xlry -fint 3([-Adv])
4([-fint]) 5([-fint])
```

ช้านมาย
Chiangmai
6index
+N

'I may have to go to Chiangmai.'
(12b) *chán tông₁ ?àat₁ cà? pay
I must may will go

Index 2ndex 3ndex 4ndex 5ndex
Nom +V +V +Adv +V +V
PAT +fint +fint -fint -fint
actr +xlrty +prim 3(+Adv)
-prim +xlrty
?[-fint] 5[-fint]

chiañmây
Chiangmai
6ndex
+N

'I must may go to Chiangmai.'

(12c) *chán ?àat₁ cà? khuan₁ pay
I may will should go

Index 2ndex 3ndex 4ndex 5ndex
+N +V +Adv +V +V
Nom +fint +fint -fint -fint
PAT +prim +prim
actr +xlrty +xlrty
?[-fint] 5[-fint] 3(+Adv)

chiañmây
Chiangmai
6ndex
+N

'I may should go to Chiangmai tomorrow.'

6. Summary

This study finds that words which are referred to as 'auxiliary verbs' in Thai are in fact belong to two syntactic category: adverbs and verbs. Those words which may precede an adverb and follow a non-auxiliary verb are adverbs. The others, which are limited in number, are true auxiliary verbs.

In summary, I support Savetamalya’s dependency analysis of auxiliary verbs but limit the number of auxiliary verbs in Thai. There are eight auxiliary verbs, namely ?àat 'may',
hêncà? 'to seem', khuan, 'should', nâa 'likely', khêay 'ever' khêy, 'gradually', mua 'absorb' in', and têñ, 'must', the first four of which are prime auxiliary verbs. The following is the list of words in Savetamalya (1987) which have been reanalyzed as adverbs in this study.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cā?</td>
<td>'will'</td>
<td>kiañ</td>
<td>'almost'</td>
</tr>
<tr>
<td>cháñk</td>
<td>'begin to'</td>
<td>kâñ</td>
<td>'also'</td>
</tr>
<tr>
<td>cuan</td>
<td>'almost'</td>
<td>máñ</td>
<td>'often'</td>
</tr>
<tr>
<td>kamlañ</td>
<td>'in progress'</td>
<td>phêñ</td>
<td>'just'</td>
</tr>
<tr>
<td>kôñ</td>
<td>'happen'</td>
<td>thêep</td>
<td>'almost'</td>
</tr>
<tr>
<td>khorñ</td>
<td>'may'</td>
<td>têñ</td>
<td>'must'</td>
</tr>
<tr>
<td>khêýchâañ</td>
<td>'rather'</td>
<td>yañ</td>
<td>'still'</td>
</tr>
<tr>
<td>khêøyñy</td>
<td>'gradually'</td>
<td>yêm</td>
<td>'apt to'</td>
</tr>
</tbody>
</table>

Because the test employed in this study to identify the syntactic categories of these words is limited to the position of the negation word in a root clause, in conjunction with the grammatically significant environment criteria, the conclusions presented here are tentative and would benefit from supporting study.

NOTES

1 I am grateful to Professor Stanley Starosta and Professor William O'Grady for their valuable comments and criticism on the earlier draft of this paper. Any remaining mistakes are naturally mine.

2 Within the lexicase framework, the notion 'command' is defined as an indirect syntactic relationship between words. X commands Y iff:
   (a) X cap-commands Y, or
   (b) X cap-commands Z and Z commands Y.
   Cap-command: X cap-commands Y if X is the regent of Y.

3 The number of subscript reflects the number of homophonous forms for forms which are found to belong to more than one lexical item.

4 Note the difference between the parentheses and brackets on a word class contextual feature and on other kinds of contextual features. The parentheses for a contextual feature referring to word classes, such as [?(+V)], indicate simply that the word permits a verb as its dependent,
and say nothing about the dependent being an adjunct or a complement. The square brackets on a contextual feature such as [?[-fint]], on the other hand, indicate that the regent requires a non-finite complement, in contrast with the parentheses on [?([-fint]) which indicate that a non-finite verb is an adjunct, since it is allowed but not required.

5 When I conducted the research for this paper, all of the Thais I have checked with agree that the sentence is totally unacceptable. However, to my surprise, at the SEALs IV conference, a small number of Thai linguists argued that this sentence is acceptable. They did not, however, provide the context within which acceptable usage may occur.

6 The only exception to this claim is the copula verb khit 'to be' which may not occur with any negation words (cf. Warotamasikkhadit 1976:233).

7 This hypothesis is based on the fact that all verbs except khit may follow the negation word māy.

8 Note that the English translation is wrong for exactly the same reason.

**ABBREVIATIONS**

<table>
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<tr>
<th>ac</th>
<th>actor</th>
<th>P</th>
<th>Preposition</th>
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<td>Adverb</td>
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REFERENCES


