Abstract: This article aims to implement Processability Theory (PT) to Bahasa Indonesia or Indonesian language and to identify developmental stages for question formation in the setting of Bahasa Indonesia as a second language (ISL). PT provides a theoretical framework in making predictions about the course of language development, in this case the question formation acquisition. This study proposes developmental stages of question formation in ISL setting by contrasting the lexical functional grammar of Indonesian question as compared to ESL question formation. Four stages of ISL question formation were proposed. The proposed stages serve as the basis for data analysis and to show its plausibility.

Keywords: question formation, Bahasa Indonesia as a second language, processability theory

Questions are central to teaching and learning processes (Mackey, 1999). Mackey further argues that the process of questioning and answering facilitates acquisition because such interaction provide learners with the input in the form of conversational and linguistic variation they could uptake. When teaching Indonesian as a Second Language (ISL), I frequently encounter ‘grammatically-incorrect questions’ from students. The most common one has been: halaman apa? which should be halaman yang mana? (which page?) or halaman berapa? (what page?). Rather than taking such question as an ‘error’, Pienemann (2005), in his Processability Theory (PT), believes that it indicates developmental process of question formation acquisition.
This article aims to implement PT to Indonesian and to identify developmental stages for question formation in an ISL setting. The acquisitional stages of Indonesian lexicon has already been developed by Kushartanti (2005) and Dardjowijoyo (2000), however the developmental stages for question formation in ISL context has not been addressed so far. Theoretically, Indonesian has an important role to expand the testability of PT due to its distinctive typological characteristics. So far, PT has been tested out against various languages, to name a few, French and German, Arabic, Japanese, and Chinese. Nevertheless, among those languages, Indonesian might be the only language with ‘dual behaviour’ (Travis, 2008) and ‘zero copula’ (Stassen, 1994). Dual behavior means that the linguistic behaviour of Indonesian situates in between Western Malayo-Polynesian and English. For example, in terms of question formation, Indonesian and Malagasy/Tagalog employ relativization strategy (relative particle: yang in Indonesian - no in Malagasy) to form wh-fronting. In addition, Indonesian categorically resides in the SVO language, like English does. Zero copula means that the language does not have any precise copula, unlike English whose copula is ‘be’ (Stassen, 1994). Such unique typological characteristic lends itself a distinctive testing ground to PT, particularly for developmental stages in question formation.

PT provides a theoretical framework in making predictions about the course of language development by looking at ‘which second language forms are processable at which developmental stage and which variants of grammatical forms may occur at any given stage’ (Pienemann, 2005: ix). Pienemann (1998a; 1998b; 2005) has reflected that despite the predictive power PT has offered to project the course of grammar development, the theory is not to question ‘how’ some particular grammatical forms are arrived at. Hence, I would focus on the ‘what’ developmental stages of question formation in ISL setting are. The present study tries to find out to what extent can PT be used to explain for ISL question formation stages and whether the hypothesized ISL question formation stages can be applied to analyze the developmental stages of question formation to an ISL learner.

This study is, therefore, significant for two reasons. First, theoretically, there have been very little researches on developmental stages of question formation in ISL. Establishing an account of developmental stages in ISL setting is therefore significant not only in the field of general Second Language Acquisition (SLA) but also in the field of ISL acquisition. Second, practically, this study attempts to test out its hypothesized question formation stages to an ISL learner. The descriptive distributional analysis would model how the stages are put into practice to check whether the hypothesized stages are plausible.

In attempt to answer the questions, this essay would firstly map a brief theoretical account of developmental stages for question formation in PT framework. As ISL question formation has not been addressed so far, I would therefore contextualize the stages with Indonesian by contrasting the lexical functional grammar (LFG) of English and Indonesian. The hypothesized stages of ISL question formation would be the basis for data analysis.

**Processability Theory and ESL Question Formation Stages**

PT believes that a learner cannot process what she cannot process due to the unavailability of processing procedures. As far as PT concerned, the hierarchical nature of language processing procedures implies a corollary that the procedure of each lower stage is a prerequisite for the activation of the higher stages (Pienemann, 1998a;
processing procedures needed to generate the forms. The hierarchy of processing procedures is shown in Table 1.

Table 1. Hierarchy of processing procedures (adapted from Pienemann, 1998b: 87)

<table>
<thead>
<tr>
<th>Stages</th>
<th>Processing Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Subordinate clause procedure</td>
</tr>
<tr>
<td>5</td>
<td>S-procedure; inter-phrasal morphemes; exchange of information between internal constituents</td>
</tr>
<tr>
<td>4</td>
<td>Simplified S-procedure; exchange of information from internal to salient constituents</td>
</tr>
<tr>
<td>3</td>
<td>Phrasal morphemes</td>
</tr>
<tr>
<td>2</td>
<td>Canonical word order; lexical morphemes; no exchange of information</td>
</tr>
<tr>
<td>1</td>
<td>Lemma access or words</td>
</tr>
</tbody>
</table>

Under the framework of PT, research on developmental stages has been initiated by Pienemann and his colleagues. Grammatical encoding procedure is employed to formalize the development of language from the simplest and shortest form to a more complex structure. The grammar categories are, then, arranged based on the sequence of language processing procedures.

Nevertheless the ‘reduced’ and ‘explicit’ way of PT (Pienemann, 1998a), the theory is applicable in allowing SLA researchers to develop incremental approach to language acquisition forms. Even, PT is claimed as the paradigm of stages (Dyson, 2005). SLA researchers, such as Lightbown and Spada (1999) continued the work by concentrating on the stages of ESL question development. They argue that ‘second language learners learn to form questions in a sequence of development which is similar in most respect to first language question development’ (Lightbown & Spada, 1999: 79). Table 2 was firstly developed by Pienemann et al (1988 in Lightbown and Spada, 1999), then refined by Lightbown and Spada (1999). Table 2 shows that ESL learners acquire question formation in a sequence of development which moves gradually similar following the universal hierarchy of processing procedures (Table 1).

To apply PT into developmental sequence of ISL question formation, I would contextualize Lightbown and Spada’s (1999) question formation stages with Indonesian. The contrastive analysis of ESL into ISL is possible for, as I have outlined in the beginning, Indonesian has a considerably close typological distance with English (Travis, 2008). In other words, they share some basic grammatical structures which enable us to compare and contrast.

Indonesian Grammatical Description of Question

As the basis for contrasting the developmental stages of ESL and ISL question formation, I would present description of Indonesian question grammar following Sneddon (2000) and Djenar (2003). Generally, Indonesian
question grammar could be categorized into four, i.e. yes/no questions, wh-questions, question tag, and indirect questions. They are summarized as follows.

1. Yes/No Questions

Yes/no questions are questions with an answer of ya [yes] or tidak [no] (Sneddon, 2000). Usually, it is preceded by apa or apakah.

Apa(kah) ini buku Anda? [Is this your book?]

2. Wh-Questions

In English, wh-questions (what, who, where, when, why) require specific information (Djenar, 2003). The Indonesian equivalents of these questions are:

<table>
<thead>
<tr>
<th>English</th>
<th>Indonesian</th>
</tr>
</thead>
<tbody>
<tr>
<td>what</td>
<td>apa</td>
</tr>
<tr>
<td>what’s that?</td>
<td>apa itu?</td>
</tr>
<tr>
<td>who</td>
<td>siapa</td>
</tr>
<tr>
<td>who is he?</td>
<td>siapa dia?</td>
</tr>
<tr>
<td>where</td>
<td>di mana</td>
</tr>
<tr>
<td>where’s Mom?</td>
<td>di mana Ibu?</td>
</tr>
<tr>
<td>when</td>
<td>kapan</td>
</tr>
<tr>
<td>when was she born?</td>
<td>kapan dia lahir?</td>
</tr>
<tr>
<td>why</td>
<td>mengapa</td>
</tr>
<tr>
<td>why should you go?</td>
<td>mengapa harus pergi?</td>
</tr>
</tbody>
</table>

Table 2. Developmental stages for question formation in ESL setting (adapted from Lightbown and Spada 1999: 79)

<table>
<thead>
<tr>
<th>Stages</th>
<th>Question Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Complex questions</td>
</tr>
<tr>
<td></td>
<td>Question tag</td>
</tr>
<tr>
<td></td>
<td>Negative question</td>
</tr>
<tr>
<td></td>
<td>Embedded question</td>
</tr>
<tr>
<td>5</td>
<td>Inversion in wh-questions</td>
</tr>
<tr>
<td></td>
<td>Inverted wh-questions with ‘do’</td>
</tr>
<tr>
<td></td>
<td>Inverted wh-questions with auxiliaries other than ‘do’</td>
</tr>
<tr>
<td>4</td>
<td>Inversion in wh- + copula and ‘yes/no’ questions</td>
</tr>
<tr>
<td></td>
<td>wh- + copula</td>
</tr>
<tr>
<td></td>
<td>auxiliary other than ‘do’ in ‘yes/no’ questions</td>
</tr>
<tr>
<td>3</td>
<td>Fronting</td>
</tr>
<tr>
<td></td>
<td>wh-fronting, no inversion</td>
</tr>
<tr>
<td></td>
<td>do-fronting</td>
</tr>
<tr>
<td></td>
<td>other fronting</td>
</tr>
<tr>
<td>2</td>
<td>Declarative word order</td>
</tr>
<tr>
<td></td>
<td>No inversion, no fronting</td>
</tr>
<tr>
<td>1</td>
<td>Single words, formulae or sentence fragments</td>
</tr>
</tbody>
</table>

| bagaimana [how]   | bagaimana membukanya? [how to open it?] |
|                   | yang mana [which] yang mana punyamu? [which one is yours?] |
|                   | berapa [how much] berapa harganya? [how much is the cost?] |

3. Question Tag

The tag of a question seeks for confirmation or agreement from the listener (Sneddon, 2000). Unlike English tag uses finite, Indonesian employs bukan (formal) or ya (less formal) at the end of the sentence.

Dia guru, bukan? [He’s a teacher, isn’t he?]

4. Indirect Questions

Indirect question is a question placed within a statement, functioning as noun phrase (Sneddon, 2000).

Saya tidak tahu kapan dia akan pindah. [I wonder when she’ll move]

Apakah Anda tahu kapan dia pindah? [Do you know when she’ll move?]

The above statements mean the same and also have two clauses (main and sub-clause). Yet, the former is formed in a more indirect way than the latter.
METHOD
This is a case study of an ISL learner who has been working as a nurse for more than 20 years. She is a passionate learner proven by her enrolment as a student of Development Studies at La Trobe University since 2005 despite her medical-related activities at work and family commitment at home. She has also been taking Indonesian since 2006 as a minor unit. Her interest in learning the language was triggered by her second visit to Indonesia in 2002 after the first one in 1980. The passion of Indonesian learning notwithstanding, university was the only place she could practice with the language.

This study is descriptive qualitative with three data collection techniques, i.e. role play, think-out loud and interview. Through role play, five transactional and three casual conversation data was collected aimed to elicit questions. Think-out loud technique was aimed to capture the process of question formation. To enquire attitude, motivation, and language learning method of the learner, I employed interview. The raw data were then transcribed and selected for analysis purpose.

The data collection was not aimed to measure the participant’s question development. This could only be done by a longitudinal study which allows researcher to analyze changes in question development. But due to time constraint, case study is carried out with an aim to apply whether the hypothesized ISL question formation could analyze speech events. Therefore, the data gained would be cross-checked against the hypothesized ISL question formation. Although embarking from LFG, this study, however, does not provide any statistical data of the corpus analyzed. Rather, relevant data would be presented in the discussion to describe and evaluate the extent the learner has acquired question formation.

FINDINGS AND DISCUSSION
Hypothesized ISL Question Formation
This section aims to present a hypothesis of developmental stages of question formation in ISL context based on PT and ESL question formation stages. Contextualizing the stages of Lightbown and Spada (1999) with Indonesian, four stages were proposed, as shown in Table 3. These stages were hypothesized by contrasting the LFG of Indonesian question as compared to ESL question formation (Table 2).

Table 3. Stages in the development of Indonesian question formation

<table>
<thead>
<tr>
<th>Stage</th>
<th>Question-TYPES</th>
<th>Examples</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex questions</td>
<td>Apakah kamu tahu bahwa mobilnya baru?</td>
<td>[Do you know that the car is new?]</td>
<td></td>
</tr>
<tr>
<td>Embedded question</td>
<td></td>
<td></td>
<td>Learner uses indirect way of questioning by embedding a clause in a question or a statement implying question.</td>
</tr>
<tr>
<td>4</td>
<td>Negative question</td>
<td>‘Mengapa kamu tidak memberi tahu saya bahwa mobilnya baru?’</td>
<td>[Why don’t you tell me that the car is new?]</td>
</tr>
<tr>
<td></td>
<td>Indirect question</td>
<td>‘Saya tidak tahu apakah mobilnya baru.’</td>
<td>[I don’t know whether his car is new.]</td>
</tr>
<tr>
<td>3</td>
<td>Wh-fronting</td>
<td>‘Dimanakah mobil barunya?’</td>
<td>Learner questions by</td>
</tr>
</tbody>
</table>
As compared to the table of question formation offered by Lightbown and Spada (1999) (ESL stages of question), my proposed table (ISL stages of question) has less number of stages. In formulating the ISL stages of questions, I jumped from stage 3 to stage 6 as Indonesian grammar of question formation does not have it. Despite some similar grammatical features Indonesian and English share (such as the SVO order), there are some syntactical differences. For developmental consideration (that the procedure of lower level is a prerequisite for the activation of the higher level), however, I would build on the discussion from the lowest stage.

Stage 1 in ISL and ESL are the same, i.e. single words, formulae or sentence fragments. It is based on PT hierarchy of processing procedures which starts from lemma access (table 1). The second stage of, declarative word order, is also the same both in ISL and ESL cases. This stage also complies with the processing procedure hierarchy, i.e. canonical order. Stage 3, the wh-, negative, and other fronting, share some similarities with stage 3 ESL. The similar patterns are the wh- and other fronting by topicalizing the wh- words and other question attributes in the beginning of a sentence. The difference is Indonesian does not have any do/does/did (this would further impact on the absence of ESL stage 5), therefore, ISL stage does not have any do-fronting. Rather, ISL fronting type of question could be formed by negative fronting started by the word ‘bukan/bukankah’.

The LFG account of ESL question stage 4 and 5 is incompatible with the architecture of Indonesian question syntax. In other words, the absence of inversion in wh- + copula and ‘yes/no’ questions (stage 4 in ESL stages of question) and inversion in wh-questions (stage 5) is because Indonesian is a zero-copula language (Stassen, 1994). It does not have any precise copula unlike English having ‘be’ (is, am, are, was, were). Even if Indonesian has one, it is a form of ‘copula-like’, i.e. itu, which could also serve as determiner. See the example below.

\[ \text{Dia itu seorang profesor} = \text{Dia seorang profesor} \]
[He is a professor] [He is a professor]

In this case, ‘itu’ functions as topicalizer which introduces the predicate in topic-comment construction. In many cases, ‘itu’ mostly functions as determiner.

\[ \text{Rumah itu dijual} \]
[That house is sold]
Despite these dual functions, ‘itu’ (as copula-like) could not properly occur after wh-. Therefore, stage 4 is absent in ISL question formation stages. The absence of inversion in wh-questions (ESL stage 5) is because Indonesian does not have any finite (do, does, did), therefore no finite nor auxiliaries could be fronted. This also impacts on the highest stage, complex questions. The missing part in Indonesian complex questions is question tag. It is not categorically placed in complex question because its formation does not need any tag like English. The tag of Indonesian employs the word ‘bukan’, ‘kan’ or ‘ya’ in all speech events.

The highest stage (stage 4) is equivalent to Subordinate clause procedure (according to hierarchy processing procedures) and complex questions (based on ESL question stages). At this level, the learner has acquired the syntactic features after phrasal morphemes. This means that the learner is able to accumulate the previous (lemma, morphemes, and phrasal) features and integrate them into complex question.

ISL Learner’s Question Formation

The data was collected for three hours and was splitted into three sessions, i.e. role play, think-out loud technique, and interview. Questions to analyze yielded from the role play and think out loud technique, the learner produced a sentence fragment ‘mau dibantu?’ [need a help?] which is fragmented from ‘apakah Anda mau dibantu?’ [do you need a help?]. This type of question also appeared in other speech events as follows.

1.a. Ada pecel di restoran ini?
   → Apakah ada pecel di restoran ini?
   [Any ‘pecel’ in this restaurant?]
   [Is there any ‘pecel’ in this restaurant?]

1.b. Sudah punya nomor saya?
   → Apakah Anda sudah punya nomor saya?
   [Got my mobile phone number?]
   [Have you got my mobile phone number?]

The fragmented version of question (both 1.a. and 1.b.; on the left side of the arrows) cannot be judged as ‘error’ although they are ‘syntactically incomplete’. Learner built on the question formation from a minimal number of structural properties regardless of incompleteness. More significantly, syntactic incompleteness indicates that learner preserves the basic structure, afterwards she might refine it. Pienemann called this as ‘generative entrenchment’ (Pienemann 1998a; 1998b; 2005).

Stage 2 – Declarative word order

At this stage, learner asked questions for enquiries (to seek confirmation and information). By expressing the meaning in an SVO order and rising its intonation, the statement sounds like a question. With the SVO order, learner has presumably acquired the concept of default lexical mapping (Pienemann, 2005). This means that the learner mounted the subject (the most prominent role in the hierarchy) as the ‘topic’, and placed the object as theme. To sound like a question, the learner rose up intonation of this SVO clause or sentence. The questions of this stage she produced were:
Stage 3 – Fronting

In both question-eliciting activities (role play and think-out loud), the learner showed that she had acquired the wh-fronting and other fronting. The wh-fronting questions she produced were:

- **Mengapa Anda mengunjungi Boston?**  
  [Why do you visit Boston?]
- **Mengapa kopor saya terlalu berat?**  
  [Why is my luggage too heavy?]
- **Kapan Anda bisa menjemput saya di Bandara?**  
  [When will you pick me up?]
- **Di mana Ibu?**  
  [Where is Mom?]
- **Di mana pintu lima?**  
  [Where is gate 5?]

The learner did not produce any negative fronting. Yet, other fronting was, as follows.

- **Apa Anda bisa menyetir saya ke hotel?**  
  [Could you drive me to the hotel?]

Other than the example above, in this category (other fronting) the learner varied the extent of the questions from a lengthy formation to the shortest one. See the comparisons below.

3. **a. Jam berapa?**  
   [What time?]
3. **b. Jam berapa sekarang?**  
   [What time is it now?]

4. **a. Apa Anda tahu di mana perpustakaan?**  
   [Do you know where the library is?]
4. **b. Jam berapa pesawat mendarat di Bandara?**  
   [What time does the plane touch down the airport?]

4. **c. Mengapa foto di sini tidak terlihat seperti Anda?**  
   [Why doesn’t this picture look like you?]
4. **d. Mengapa Anda tidak memakai sabuk pengaman?**  
   [Why don’t you fasten the seatbelt?]

Question 4.a and 4.b demonstrate embedded questions, whereas question 4.c. and 4.d. are the evidence that the learner has acquired negative question. The learner has acquired the skills of combining two clauses to form a question. The first clause is the main clause and the second one is the subordinate clause. In Pienemann’s words, the learner would achieve the subordinate clause procedure only if she has acquired

3.c. **Jam berapa bus ke Universitas La Trobe?**  
   [What time is the bus to La Trobe University?]

Those three questions were produced during the role play. Variation indicates that the learner has acquired the basic structure of other-fronting (in this case ‘adverbial time’) in Indonesian, that is ‘jam berapa’. It is evident that she could vary the form by adding more elements such as ‘sekarang’ (as adverbial of time) and ‘bus ke Universitas La Trobe’ (as complements). PT views the variation emerges at this stage as a development that the learner has acquired the basic form of other-fronting type of question. PT, however, does not attempt to explain the reason of why an L2 learner varies question (Pienemann, 1998a); e.g. why did the learner use 3.b. in the role play, but she used 3.c. in think-out loud session. These speech events, however, affirm the basic thesis of PT, that ‘stages cannot be skipped’ (Pienemann, 1998b: 13).

Stage 4 – Complex questions

The learner has reached the highest stage of question formation by demonstrating her competence through producing complex questions. She managed to use both embedded and negative questions as follow.
the previous stages (lemma, morphemes and phrasals). The learner, however, did not demonstrate any of indirect question.

**Indonesian Question Formation: An Insight**

Seeing the stages from a bigger picture, the yielded questions distributed in all stages show that the learner has acquired ISL question formation, from the simplest formation (lemma or word level) up to the most complex one (subordinate clause). These phenomena confirm Pienemann’s (1998a; 1998b; 2005) hypothesis that developmental sequences are incremental and stages cannot be skipped. In other words, to learn a higher level of question, learner should have acquired the previous stage. Skipping stage is likely not possible as it implies gap in processing procedures for language acquisition (Pienemann, 1998b).

While carrying out role play and think out loud procedure of guessing questions on a picture, the learner showed greater variety of questions. However, it is likely that the frequency of question stage 2 (declarative word order) and 3 (fronting) is higher than stage 1 (single words) and 4 (complex questions). Relating this empirical fact with the way the learner practices Indonesian, mostly by reading and using it in the classroom (information received from the interview), could be interpreted as a causality. This means that the habit of using the language in real social context would influence the question formation. The passion of Indonesian learning notwithstanding, university was the only place she could practice with the language.

Another key point is about the missing feature in the stage, i.e. negative fronting and indirect question. This absence might be due to instrument limitation, that the instrument failed to trigger the production of that particular type of question.

**CONCLUSION**

This study proposes developmental stages of question formation in ISL setting by contrasting the LFG of Indonesian question as compared to ESL question formation. Four stages of ISL question formation were proposed. The proposed stages serve as the basis for data analysis and to show its plausibility. It is evident that the empirical data confirms the hypothesis.

Nevertheless, as this study focuses on hypothesizing ISL question stages from linguistic typology, its limitations open up future research orientation. *First*, to test out PT (or any other SLA theories), a longitudinal study is more reliable. Longitudinal study could provide a description of linguistic performance within a considerable length of time, thus changes could be analyzed more accurately (Meisel et al., 1981). *Second*, typologically, it is not sufficient to establish a plausible ISL question formation by contextualizing ESL question formation by only two characteristics of Indonesian, i.e. dual-behavior and zero copula. Therefore, there should be a more detailed typological distance analysis.

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