

THE SCHEMATIC STRUCTURE OF ENGLISH AND INDONESIAN RESEARCH ARTICLE INTRODUCTIONS

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ABSTRACT

The article reports an investigation on the differences between the schematic structure of English and Indonesian research article introduction. By selecting thirty research articles from each group and analysing them using the CARS model (1990, 2004), this study has unravelled several differences. At the macro level, the English articles respectively have a higher percentage of reviewing items of previous research, indicating gap, and summarising methods. While their Indonesian counterparts tend to have a greater deal with making topic generalisations, presenting positive justifications, and stating the value of the present research. In addition, while the Indonesian articles have more unidentified schematic elements and lack outlining the structure of paper, the English ones demonstrate a higher degree of move reiteration. At the micro level, the English articles are characterised by the use personal deixes as self-mention, and more variation of linguistic clues in claiming centrality. On the other hand, their Indonesian counterparts are depicted by the absence of self-mention, the use of code mixing, and a major tendency in using amplifiers and evaluative adjectives in claiming centrality. These differences might be partially influenced by the writers' culture, knowledge, editorial policy, social environment, and in certain cases, the technical problems.

Key words: Schematic structure, genre analysis, contrastive rhetoric, research article introduction, education.

INTRODUCTION

The growing access to the source of information has recently enabled scholars to disseminate their scholarly works widely, especially in the form of published research articles in a scientific journal. Meanwhile, there has been considerable interest among researchers in analysing the generic structure, discourse features, and history of such publications. Among these aspects, the structure of research articles has been to date the most attractive concern as Swales (2004: 207),

quoting Montgomery (1996), claims it to be 'master narrative of our time'. The introduction section of a research article, being devoted to introducing the research topic to the readers (Yakhontova, 2003:105) as well as attracting interest in the topic and henceforth, the readers (Swales & Feak, 1994:156), is remarkably essential. However, simply like composing the other sections of a research article, writing the introduction is undoubtedly a formidable task and more problematically, academic writers admit encountering more

difficulties in constructing the introduction than its continuation (Swales, 1990:137; Hopkins & Dudley-Evans, 1988).

Many of recent findings of research on the structure of research article introduction dealt with disciplinary variation. Samraj's (2002) findings, for example, suggested that between two interrelated disciplines, i.e. wildlife behavior and conservation biology, variation in the realization of the structure of RAs possibly occurs. She found that RAs of conservation biology promoted greater centrality claims than those of wildlife behavior. Supports for her findings are provided by Shehzad (2005) and Kanoksilapatham (2011) whose research was concerned with the field of computer science and civil engineering respectively. These researchers reported several typical ways the writers of each corresponding discipline realised the schematic structure of their article introductions, which were presumably influenced by their disciplinary conventions. Nevertheless, cross-linguistic studies on cultural variation in the structure of RAs appear to have been given less attention than on the disciplinary variation. Research on the structure of Indonesian research articles is as well limited. In fact, to account for cross-linguistic differences of research article structure is essential since in writing, transfer of L1 to L2 or foreign language often occurs in terms of linguistic pattern and rhetorical convention (Connor, 2002). Similarly, prior contrastive studies on the organization of research articles

across languages (e.g Martin, 2003; Zhang & Hu, 2010) revealed the tendency of different preferences between articles written in different languages. There is also a tendency that genre changes due to temporal and geographical factors partly inherently and partly as a result of intertextual acceptance and rejection (Swales, 2009: 14).

This study investigates the contrast between research article introductions in education across English and Indonesian by addressing (1) elements in the schematic structure, (2) the realization of the schematic structure, and (3) the differences between the schematic structure of the English and Indonesian RAs both at macro and micro level.

METHODS

The data comprise thirty articles in education published in 2010. Fifteen English research articles were collected from internationally recognized refereed journals in education with high impact factor according to Thomson Reuters Journal Citation Report® 2010, involving *Educational Researcher*, *Learning and Instruction*, *Journal of Research in Science Teaching* and *Language Learning and Technology*. Fifteen Indonesian journals were selected from several domestic journals, namely, *Cakrawala Pendidikan*, *Jurnal Pendidikan dan Pembelajaran*, *Jurnal Pendidikan dan Kebudayaan*, and *Jurnal Pendidikan Dasar*. The selection of journals were based on an assumption that

these journals belong to discourse community of educators and educational researchers.

To analyze the schematic structure of these RAIs, a modified CARS by Swales (2004) model as a theoretical framework was used, as follows.

MOVE 1: ESTABLISHING A TERRITORY	
Step 1-1	Claiming centrality and/or
Step 1-2	Making topic generalisations and/or
Step 1-3	Reviewing items of previous research
MOVE 2: ESTABLISHING A NICHE	
Step 2-1A	Indicating a gap or
Step 2-1B	Adding to what is known
Step 2-2	Presenting positive justifications
MOVE 3: PRESENTING THE PRESENT WORK	
Step 3-1	Announcing present research descriptively and/or purposively
Step 3-2	Presenting RQs or hypotheses
Step 3-3	Definitional clarifications
Step 3-4	Summarising methods
Step 3-5	Announcing principal outcomes
Step 3-6	Stating the value of the present research
Step 3-7	Outlining the structure of the paper
Swales (1990, 2004)	

The analysis was then split into three main stages. The first stage of analysis, identification of macro level of each group of RAI, was presented in a table to identify the occurrence of move and steps each research article realizes. Afterward, the frequencies of the total numbers of steps were presented in order to find out the tendency of each step then was followed by the analysis of the move sequence. The next stage of analysis, the identification of micro level of RAI, was the description of linguistic details, including common lexical and tense choices in the realization of each move and step provided with samples

taken from the data. The identification of lexical choices used semantic categories of major word classes based on the work of Biber (2006). At this juncture, the analysis answered research question 1 and 2. Finally, the differences between the schematic structures of each group of research article introductions at macro and micro level were identified and complemented by elaboration about the implications that could be drawn from the findings.

RESULTS AND DISCUSSION

Based on the data, there are two typical types of research article structures: ones

using IMRD-like format have embedded literature review in the introductions while the other ones have dedicated sections for literature review. Those with embedded literature reviews result in long introductions. Nonetheless, the articles in two of the English journals, *Educational Researcher* and *Journal of Research in Science Teaching*, do not clearly state which parts of theirs are the introductions. In response to this, the American Psychological Association (2010:27) whose manual for scientific publication is among the most prominent standards mandating that all types of research articles must have an introduction section which is not necessarily labelled because of the clarity of its position. Secondly, it is easier to identify the introductory parts by observing whether they can match the CARS (1990, 2004) model presented in the theoretical framework. The initial untitled parts, based on my investigation, are much likely to match the three moves thus are regarded as the introduction sections. According to Holmes (1996), some journals might have untitled introductions due to editorial policy, yet those are still recognisable. In their Indonesian counterparts, the issue of untitled introductions is also identified. Two of the journals, *Jurnal Pendidikan dan Pembelajaran* and *Jurnal Pendidikan Dasar* do not clearly state which parts of their articles are the introductions sections. Interestingly, these two journals are likely to use the IMRD-like format. Hence, the

introductions should be the first sections which are untitled and are immediately followed by the method section.

This study shows that in the English data, nearly all the schematic elements in the theoretical framework are available except the step announcing the principal outcome. The data also suggest unidentified schematic elements involving stating implication of findings, describing background information on research setting and justifying hypotheses. Similarly, the Indonesian data also follow the majority of schematic elements in the theoretical framework but with more exceptions. The Indonesian articles miss three steps including adding to what is known, announcing principal outcome, and outlining the structure of paper. The Indonesian articles also demonstrate more unidentified schematic elements. In the realisation of these schematic elements, both English and Indonesian article introductions typical linguistic features which are generally similar but differ to a certain extent.

Move 1 step 1, claiming centrality, it is found that the English data use more linguistic resources while the Indonesians tend to use amplifiers often followed by evaluative adjectives. In the English introductions, common lexical entries used to realise this step are evaluative adjectives such as *important*, *considerable*, *critical*, *major*, *increasing*, *serious*, *vital*, and *prominent*. While common nouns used are cognitive nouns such as *interest*,

attention. The writers also use some amplifiers such as *extensively*, *increasingly*, *significantly*, and the others functioning to emphasise the salience of the topic. Similarly, in the Indonesian data this step is characterised by lexical entries showing the salience of the topic (e.g. *penting* (important), *menentukan* (determinant), *diperlukan* (needed)) often preceded by amplifiers (e.g. *sangat* (extremely), *paling* (most)).

- Assessment of the quality and impact of research output is **important** to all academics. (E2)
- One of the curricular domains in which strategy variety and flexibility **have been extensively investigated** is multidigit subtraction. (E7)
- Untuk mencapai kemampuan itu, kemampuan kolokasi-menyandingkan kata secara tepat, lazim, dan berterima-merupakan **aspek yang sangat menentukan**. (I2) (To achieve such ability, collocational competence- the ability to collocate words appropriately, naturally, and acceptably- is a very determinant aspect.)
- Aktivitas penelitian **merupakan hal yang penting** dilaksanakan oleh guru dalam rangka pengembangan profesi. (I3) (Research activity is an important matter for teachers to do in developing professionalism.)

Move 1 step 2, making topic generalisations, in the English data is mostly realised referring to statement of

practice often using such lexical entries as *use*, *implement*, and *incorporate* as well as statements of phenomena signalled by time adverbials *today* or *now*. In the Indonesian data this also occurs but many articles tend to show problematic phenomena (e.g. *belum optimal* (not optimal), *kurang* (less), *kesulitan* (difficulty), *hambatan* (obstacle)).

- **As today's public schools become** more culturally and economically diverse, the demographic divide between teachers and students deepens. (E1)
- **The use of peer assessment (PA)** in higher education is not new. (E5)
- **Secara umum**, guru hanya memanfaatkan bahan referensi/acuan yang ada di perpustakaan sekolah masing-masing, ataupun dengan membeli di tokobuku. (I2) (Commonly, the teachers simply make use of references in their school libraries or purchase in the bookshops.)
- **Pada saat ini** kegiatan pembelajaran di Perguruan Tinggi (PT) belum dilakukan secara optimal. (I9) (Nowadays, teaching activities in higher education have not yet been done optimally.)

Step 1-3, reviewing items of previous research, in the English articles, the writers use simple present tense, present perfect tense, and past tense. They also use such common nouns referring to the product (*research*, *report*, *study*, *experiment*,

evidence) or the producer (*scholar, author*), mental verbs (*examine, identify, observe, validate, asses*). In their Indonesian counterparts this is less. In the realisation, the writers use common nouns referring to the products of research (*penelitian* (research), *hasil* (result), *temuan* (finding)) or the producers by showing the names of the researchers

- **Karlsdottir and Stefansson (2002) carried out a longitudinal study** over five years, aimed at identifying what differentiates the good from the poor writers and explaining the reasons for the difficulties experienced by some children. (E8)
- **A particularly inspirational study was conducted by Jiang and Nekrasova (2007)**, in which they utilised corpus-derived recurrent word combinations as materials in two online grammaticality-judgment experiments. (E14)
- Adanya pengaruh factor social terhadap perkembangan konsep diri individu **telah dibuktikan** oleh Rosenberg (REF). (I5) (The effect of social factor on individual self-conception development was proved by Rosenberg (REF).)
- **Hal ini ditemukan oleh Gasperz (2007)** yang mencatat bahwa lulusan PT kurang memiliki keterampilan pemecahan masalah (I9) (This was found by Gasperz (2007) noting that graduates of higher education have low skill in problem solving.)

Move 2 step 1, indicating gap, in the English articles, is committed by showing the limitation of previous studies, scarcity of research on the topic, and the other gap indicators utilising typical linguistic features such as attitudinal verbs (*neglect, jeopardise*), attitudinal noun (*uncertainty*), evaluative adjectives indicating negative attribute (*little, limited, lacking*), evaluative adverbs (*inadequately, severely*), negation devices (*not, no*) and contradiction connectors (*however, nevertheless, yet, lamentably*). In the Indonesian this occurs in few articles. Furthermore, the writers of the Indonesian articles use linguistic signals such as negation devices '*belum*' and '*tidak*' as shown below. These two lexical entries are equivalent to the English 'not'.

- Researchers have been arguing for the potential benefits of implementing online PA (REF), **yet have spent little time** identifying how students interpret and what students do in such a learning environment. (E5)
- Most studies in this area **examined a limited number of teaching contexts** with inquiry instruction addressing single science topics. (REF) (E9)
- Namun, penelitian mengenai ketidaklaziman dalam pembelajaran Bahasa Indonesia untuk penutur asing (BIPA) **belum pernah dilakukan**. (I2) (Nevertheless, research on unnaturalness in teaching Bahasa Indonesia as a foreign language has yet not been done)

- Vygotsky **tidak melakukan kajian yang mendalam** tentang bagaimana bahasa secara operasional berfungsi bagi perkembangan hidup manusia. (I15) (Vygotsky did not do an in-depth study on how language operationally functions for the development of human life.)

Move 2-1B, adding to what is known is only realised in the English data. The tense used to realise this step is past tense while the lexical items used are deictic reference (*we*) and activity verb (*extend*). The following excerpt illustrates this step.

- **We tried to extend these studies** by (a) working with a more extensive and systematic set of multidigit subtractions in our tests.... (E7)

The last step in this move, presenting positive justifications, is often by announcing the rationale of the present research, positing ideal ways to fill the gap created which are applied in the research, or by showing the novelty of specific methods used in the previous or present research. The linguistic features for this step in the data are cognitive nouns (e.g. *reason*, *rationale*), mental verbs (*egreed*, *believe*) and the most obvious linguistic signals are positive evaluative adjectives (*robust*, *powerful*). In the Indonesian data this step is quite common. The main indicators for this step are the evaluative adjectives showing a positive attitude (*relevan* (relevant), *tepat* (appropriate),

sesuai (suitable)) and causative connector (*karena* (because)).

- **The inquiry units used in this study feature powerful, dynamic scientific visualizations.** Students use the visualizations to experiment. (E9)
- **There are several reasons** for the focus on this particular educational stage, high school physics, which are elaborated below. Our research is grounded in a theoretical framework centered around students' identity. **We believe** that this focus provides a basis for understanding. (E12)
- Materi pokok larutan elektrolit dan non elektrolit **tepat dibelajarkan** dengan metode inkuiri, karena sifat-sifat larutan elektrolit dan non elektrolit dapat diamati (I7) (The main topic of electrolyte and non-electrolyte solutions is appropriately taught with inquiry method since the characteristics of electrolyte and non-electrolyte solutions can be observed)
- Untuk dapat memenuhi kebutuhan guru bermutu, konsep manajemen strategic **sangat sesuai** untuk diterapkan. (I13) (To meet a demand of qualified teachers, the concept of strategic management is very applicable.)

In move 3, the first step, announcing present research is realised by almost all the articles both in the English and Indonesian data. Common lexical entries used by the writers are common nouns

referring to the producer (*penulis(writer)*, *peneliti (researcher)*) or the product (*penelitian (research)*, *makalah (paper)*), cognitive nouns representing the purpose (*maksud (aim)*, *tujuan (objective)*) or verbs derived from these purposive nouns (*bertujuan (aim)*, *bermaksud (intend)*), communication verbs reflecting the description of the content of the research (*mendeskripsikan (describe)*, *melaporkan (report)*), and spatial deixis (*ini (this)*).

- **This article investigates** the contradiction between the promise of college students of the millennial generation and persistent findings about pre-service teachers' views on cultural diversity... (E1)
- **The analyses reported in the present paper were therefore intended** to (a) examine the general prediction that initially-supported collaborative work leads to social gains alongside achievement gains;. (E6)
- Berdasarkan paparan di atas, maka penulis merasa perlu untuk meneliti, **dengan tujuan** untuk menemukan secara empiris tentang pengaruh variabel konsep diri, sikap siswa pada matematika dan kecemasan terhadap hasil belajar matematika. (I5) (Based on the description above, the writer feels in need of a study intended to empirically find out the effects of variables self-conception, students' attitude toward mathematics and anxiety on mathematics achievement.)

- **Penelitian ini dilaksanakan dengan maksud:** (a) meningkatkan keaktifan mahasiswa dengan membiasakan mahasiswa selalu berfikir... (I6) (This study was conducted to: (a) Improve students' active participation by having them accustomed to think...)

Step 3-2, presenting research question or hypotheses, is also quite common in the both groups of data. In the English data, furthermore, the writers commonly start by using personal deixis such as *I* or *We*. The other common nouns used are technical nouns such as *question*, *hypothesis*, and *research question*. In the Indonesian data, common nouns used to present the research questions are *permasalahan* (problems) and *rumusan masalah* (statement of problems) while common type of verbs used are communication verb (*diajukan (propose)*) and mental verbs (*dirumuskan (formulate)*, *diharapkan (expect)*).

- More specifically, **I aim to address the following questions...** (E1)
- Based on the literature overview, **we formulate the following hypotheses...**(E5)
- **Rumusan hipotesis** yang diuji dalam penelitian ini adalah pemberian pelatihan cara-cara penelusuran referensi dari sumber internet efektif untuk meningkatkan pengetahuan guru-guru SMPN 3 Tabanan tentang cara-cara penelusuran referensi dari sumber internet. (I3) (The hypothesis

examined in the current study is that the training of the tips in searching references from internet sources is effective to improve knowledge of teachers of SMPN 3 Tabanan about the tips in searching references.)

- Berdasarkan paparan latar belakang **masalah penelitian ini** adalah (a) Bagaimanakah penerapan model pembelajaran learning community yang dapat meningkatkan keaktifan mahasiswa? (I6) (Based on the explanation of the background, the problems in this study are (a) How is the learning community teaching model which can improve students' participation applied?

Step 3-3, is similar the previous step, is also common in both groups of data. However, this does not appear to functionally occur to present the present work. Rather, it majorly functions to introduce the general research topic in order to familiarise readers with specific terms with regard to the research topic. To clarify formal and extended definitions, the writers of the English articles use some indicators such as present tense, technical terms (e.g. *phenomenography*, *cooperative learning*, and *collaborative learning*), linking verb (*be*) and relationship verbs (e.g. *refer*, *concern*, *reflect*, *involve*). While in the Indonesian data, common nouns used are *definisi* (*definition*) or *ialah* (*be*) while the verbs used are relationship verbs

such as *merupakan* (*be*), *adalah* (*be*), and the like.

- **Cooperative learning typically involves** highly structured, wide ranging programs of activity, and make use of jigsaw method, in which students carry out individual tasks, and then share outcomes with other members of group members (REF) (E6)
- **By inquiry we refer to** learning experiences that engage students in various combinations of identifying questions, collecting and interpreting evidence, formulating explanations, and communicating their findings, that are consistent with science standards and recent reports (REF) (E9)
- **Definisi kolokasi** dijelaskan oleh Baker (1992) sebagai kecenderungan sejumlah kata untuk bergabung secara teratur dalam suatu bahasa, tetapi kata yang mana dapat berkolokasi dengan kata apa tidak ada hubungannya secara logis. (I2) The definition of collocation is explained by Baker (1992) as a tendency of several words to pair regularly in a language, yet there is no logical relationship between the collocated words.)
- Menurut Sund & Towbridge (1973) **inkuiri diartikan** sebagai proses mendefinisikan dan menyelidiki masalah-masalah, merumuskan hipotesis, merancang eksperimen, menemukan data, dan menggambarkan kesimpulan masalah-masalah tersebut. (I7) (According to Sund &

Towbridge (1973) inquiry is defined as a process of defining and investigating problems, formulating hypotheses, designing experiments, collecting data, and drawing conclusions from such problems.)

Step 3-4 summarising methods, is very common in the English data indicated by more than half of the sample articles realising this while in the Indonesian data this is very uncommon. To realise this, some English writers prefer simple present tense, while the others prefer simple past tense. This step is characterised by the use of technical nouns (*data, control group, units, and model*), abstract nouns (*measurement, design, analysis, assessment, methods, and observation*). Some of them typically mention the subjects of the research using animate nouns such as *children, students, or teacher*. Similar to the English articles, common linguistic features used in the Indonesian articles are lexical entries referring to the participants in the research (e.g. *peneliti (researcher), guru (teacher), siswa (students)*) as well as to the research procedure, and the technical nouns referring to specific method, strategies, or instruments (e.g. *STAD, TGT, strategi (strategy), tes (test)*).

- In order to do this, data from a group-work intervention that led to confirmed achievement gains (Howe, et al, 2007) were examined for evidence of change in classroom relationship, and for

effects on these of social context and group activity. This intervention involved teachers and students from single and mixed-age upper primary (elementary) classes, ... (E6)

- To support the participating teachers, we implemented a targeted professional development model (REFs). (E9)

- Kegiatan pengembangan dan implementasi perangkat dilakukan secara bersama-sama oleh peneliti bersama beberapa orang guru pelajaran IPA SMP. Pemanfaatan perangkat PSBI di kelas dipadukan dengan strategi kooperatif tipe STAD dan TGT. (I8)

(The development activities and implementation of the media were done together among the researchers and several science teachers of SMP. The application of PSBI media in class was integrated with cooperative learning strategies STAD and TGT.)

- Strategi pembelajaran konvensional yang selama ini diterapkan akan diubah dengan strategi pembelajaran pemetaan informasi yang menitikberatkan pada peran guru sebagai fasilitator. Bentuk tes formatif yang akan digunakan adalah bentuk tes formatif pilihan ganda... (I10)

(The conventional teaching strategies that have been so far implemented will be changed with information mapping strategy emphasising the teachers' role as a facilitator. The formative test

type that will be used is multiple choice items ...)

Step, 3-6, is realised less in the English but more in the Indonesian data. The data suggest the use of simple present tense, cognitive noun (*insight*), common nouns (*study, benchmark*), activity verbs (*provide, serve*), and evaluative adjective (*potential*) to realise this step. In the Indonesian data, the use of mental verbs such as *diharapkan* (*expect*) and abstract nouns 'manfaat' (benefit) and 'kontribusi' (contribution) become the most common features of this step.

- ..., this article investigates **not only** the continuities, the themes that permeate the literature, **but also** the discontinuities. Analysis of the changes overtime in the reported findings in the research literature **may provide insights** about today's millennial-generation pre-service teachers that do not emerge from a traditional synthesis.(E1)
- As explained in the method section, the selected authors are assumed to have provided sample of reasonably accomplished scholarship, so that the patterns identified by the analysis **can serve as a potential benchmark** for junior academics in developing their publication profiles. (E2)
- **Hasil penelitian ini dapat memberikan kontribusi** kepada pihak-pihak: (a) guru dan dosen yaitu dapat menguasai dan menerapkan

model pembelajaran keterampilan menulis ilmiah dengan model learning community, ... (16)

(The result of the present study might contribute to the following people: (a) teachers and lecturers, that they can master and apply a model of teaching scientific writing skill with learning community model,...)

- Hasil penelitian ini **diharapkan dapat bermanfaat** dalam upaya meningkatkan kualitas hasil belajar siswa terutama keterampilan berpikir tingkat tinggi dalam bidang IPA di jenjang SMP. (18)
(The result of the present study is expected to be beneficial in an attempt of improving the quality of students' learning outcomes especially of their high order thinking skill in science at SMP level.)

The last step, outlining structure of paper only occurs in the English data. Among the linguistic clues available for this step in the data, sequential connectors (*first, next, then*) become the most apparent indicators. This can be seen below.

- **This articles first reviews** the notion of impact factor as used in Web of Science journal rankings and prior research on Google scholar in the library and information sciences. (E2)
- **The next few sections** will first discuss four domains that are relevant to our conceptual framework: interest,

recognition, performance, and competence. (E12)

Furthermore, the differences between the schematic structures of the two groups are explained in turn. At the macro level, it is found that the data tend to suggest similarities rather than differences. Yet, the

differences are strongly obvious if a closer analysis is taken in terms of the steps. Apart from these, the difference is also found in terms of move sequence in that moves in English articles are more cyclical. The Indonesian articles also suggest more unidentified schematic elements.

Moves	Steps	English RAIs	Indonesian RAIs
		Percentage (%)	Percentage (%)
Move 1	1	13.37	12.59
	2	9.88	20.28
	3	21.51	10.49

In move 1, English articles spend most spaces to review items of previous research, while their Indonesian counterparts mostly prefer making topic generalisations. This finding differs from Zhang & Hu's (2010) findings in which Chinese articles mostly realise step claiming centrality in move 1. Further, previous research in the English context is considered very important as a foundation for new research. As Nwogu (1997) comments, the aim of referring to previous research is to indicate that the current research is originated from a lively tradition of well-known works in the field. This step also corresponds to the next move since the step of gap indication and adding to what is known are often associated with the context of previous research. The Indonesian articles, on the other hand, show making general statements about the

topic as the more preferable step. Similarly, only a few Indonesian articles review previous research, and in some cases the review tends to be theoretical or be based on the writers' own observations. Rather than of cultural differences, it is assumed that the issue of fewer reviews of previous research is more of non-cultural issues. There are at least three possible issues to be the reasons why Indonesian writers have fewer reviews of previous research. First, even though in recent times sources of information are widely available as references, many Indonesian researchers do not have adequate skill in comprehending contents of the references especially written in languages other than their first language. Second most possible reason is the lack of knowledge in searching or accessing the intended references. This can be associated with

lack of knowledge in the advanced use of search engine. The last and weakest possible reason might be the unavailability or inaccessibility of the relevant references.

On the internet, for example, the references the writers need might be available, yet are commercial and unaffordable.

Moves	Steps	English RAIs	Indonesian RAIs
		Percentage (%)	Percentage (%)
Move 2	1A	12.21	1.40
	1B	0.58	0.00
	2	4.65	11.89

Furthermore, for move 2 in English, the highest frequency of occurrence belongs to the step indicating gap. This also confirms Swales' (2004) account that gap indication is the most common way to create a research space. The Indonesian articles, in contrast, more focus on presenting positive justifications rather than indicating gap. This is perhaps the influence of fewer reviews of previous research since gap indication is often associated with criticism

to previous studies. Actually, indicating gap is not necessarily indicated by making criticism to previous research. It can be realized by using polite gap indication by asserting the scarcity of research on the topic or by asserting less investigation on it. This difference seems cultural and confirms the previous study by Zhang and Hu (2010) that eastern mindset tends to be associated with being humble and avoiding criticism to others' works.

Moves	Steps	English RAIs	Indonesian RAIs
		Percentage (%)	Percentage (%)
Move 3	1	12.79	14.69
	2	5.81	6.29
	3	5.23	6.29
	4	6.98	1.40
	5	0.00	0.00
	6	1.16	4.20
	7	1.74	0.00

In move 3, the difference between English and Indonesian is that Indonesian articles have more frequencies in stating the value of present research but fewer frequencies in summarizing methods. In summarizing methods, 7 out of 15 English articles realize this, implying that this step is common in English RAIs while in their Indonesian counterparts, it is very few; only 2 out of 15 RAIs realizing this step. However, the ways the English and Indonesian articles realize this step are similar by describing the research procedure, design, often subjects/objects of research and the role they play in the research. Additionally, in stating the value of present research, Indonesian articles have 4.20 % of step frequencies compared to the English ones with 1.16 % of total available steps. Nevertheless, the differences in the other remaining steps such as presenting RQs or hypotheses and definitional clarifications in this move are relatively insignificant. In step definitional clarifications, for example, although the percentage of its frequencies in Indonesian articles is slightly higher than in the English articles, both are equal in its actual numbers. The motive why writers define terms could be that they assume that their readers are unfamiliar with the terms. This might occur due to a very wide range of audiences of the journals in which the articles are published. The sample journals in this study cover a very broad area in education; hence it is not surprising that

definitional clarifications are necessary to accommodate wider audiences. Finally, outlining the structure of the articles is very uncommon in the Indonesian articles since none of the sample articles realize this step. Whereas, 3 out of 15 articles realize this in the English data, implying that this step is also relatively uncommon in the English educational articles.

In general, the linguistic features the English and Indonesian RAIs used to realize the schematic structure are relatively similar with the following exceptions. For step 1-1, in claiming centrality, the English and Indonesian RAIs have a relatively similar number of RAIs realizing this step. Nonetheless, in its realizations the English writers employ more various lexical entries and linguistic resources. English articles use several lexical items actually having equivalences in Indonesian such as *challenge* and *interest* or use statements that the research topic has attracted many previous researchers. These variations in this step realization seem to be uncommon in the educational research articles in the Indonesian context. Instead, the Indonesian writers tend to mostly use amplifiers (e.g. *sangat (extremely)*, *paling (most)*) often followed by evaluative adjectives (e.g. *penting (important)*, *kuat (strong)*)

In step 1-2, making topic generalizations, the differences between the English and Indonesian articles is that

the English ones typically realize this step in very brief sentences while the Indonesian ones tend to make longer generalizations of topics. In some cases, Indonesian articles also realize this step by identifying problems occurring in the phenomena under study which are indicated by nouns representing problematic phenomena (e.g. *kesulitan* (difficulty), *hambatan* (obstacle)). One might think that this phenomenon is the influence of the nature of research. While it is true that some research methods such as classroom action research and educational design research are established to solve real world problems in education, the numbers of the Indonesian research articles reporting studies that employ these methods are few; only three articles are based on these methods. Further, the numbers of Indonesian articles realizing this step are greater than their English counterparts.

For step 3-1, the difference that can be found is in terms of lexical entries used; none of Indonesian articles use personal deixis *I* and *We* as self-mention. This might be considered very informal and less academic in the Indonesian educational contexts to use such personal deixis, while it is very common to use such linguistic features in the English articles. In an interesting paper on self-mention in research articles, Hyland (2001) points out that self-mention has a role to construct a credible authorial identity. By using self-mention, the writers attempt to show their

unique roles in interpreting phenomena. On the other hand, Hyland (2001) contends that the use of impersonality (avoidance of self-mention) is an approach to amplify the credibility of the writers and to elicit the authority from the reader. Perhaps the writers of Indonesian articles and Indonesian journal editors still adopt the positivist view that academic research is best displayed as if without any human agency in its process.

In presenting RQs the English articles based on the data invariably use *research questions* or *questions* while the Indonesian articles mostly use *statements of problems* or simply *problems* to refer to research questions. This phenomenon might be the influence of social environment in the Indonesian research context in that statements of problems have been conventionalized to refer to research questions.

For the step of definitional clarifications, the difference between the English and Indonesian RAls is the use of *code mixing* in Indonesian articles. Some articles define terms or refer to previous authors' claims by citing their English version without any translation attached. The probable motivation for this occurrence is to gain wider audiences and to show the expertise of the writers in the field. The following excerpts illustrate the *code mixing*.

- Sejalan dengan itu, dalam *Oxford Collocations Dictionary* (2002:vii) dijelaskan bahwa **kolokasi adalah** "the

way words combine in a language to produce a natural-sounding speech and writing". (13)

- Gluek (1996) mengatakan bahwa: **management strategic is concept of the set decision and action which result in formulating strategy and its implementation to achieve of the corporation".** (113)

For the remaining steps in move 3, except outlining the structure of paper and announcing principal outcomes, the differences in linguistic realization do not seem notable and therefore it is safe to assume that these remaining steps suggest similarities rather than differences at the micro level.

CONCLUSION AND SUGGESTION

In the English data, nearly all the schematic elements in the theoretical framework are available except the step announcing the principal outcome. The Indonesian data follow the majority of schematic elements in the theoretical framework but with more exceptions. In the realization of these schematic elements, both English and Indonesian article introductions make use of typical linguistic features which are generally similar but differ to a certain extent. At the macro level in terms of moves, the findings suggest similarities rather than differences yet in terms of steps, significant differences are quite apparent in each move. Despite the differences irrespective of the language

with which the RAIs are written, there seems to be a tendency that educational scientists do not normally announce their findings in the introduction sections. The differences in presenting RQs or hypotheses and definitional clarifications are also minor. It is recommended that the teaching of genre is still recommended especially for adult learners because it helps them get started with piece of academic writing. Regarding the cultural variation in the schematic structures, exposing the differences is crucial to sensitize EFL students therefore the pattern they apply and the realization they perform can match the international standard as English is increasingly becoming global academic Lingua Franca. These may also imply the importance of knowledge of the differences between genre realized in different cultures that can be incorporated when designing material and tasks for English academic writing for EFL students.

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APPENDIX

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