# BOOK OF ABSTRACTS

*21ST International Symposium*

Processability Approaches to Language Acquisition

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

WESTERN SYDNEY UNIVERSITY

**PALA 2022 PROGRAMME SCHEDULE**

**VENUE:**

**DAY 1**: WEDNESDAY, 21$^{ST}$ SEPTEMBER 2022

| TIME (MYT) | PROGRAMME | VENUE |
|---|---|---|
| 1:30-2:00PM | Registration of the participants | |
| 2:00-2:20PM | Welcome address & Introduction to the Symposium by IIUM | |
| 2:20-2:45PM | Presentation 1: Huong | |
| 2:45-3:10PM | Presentation 2: Satomi Kawaguchi | |
| 3:10-3:35PM | Presentation 3: Li Ran | |
| 3:35-4:00PM | Presentation 4: Marco | |
| 4:00-4:20PM | Break | |
| 4:20-5:05PM | Plenary Talk 1: Manfred Pienemann | Online |
| 5:05-5:30PM | Presentation 5: Ho Kan Tsui | Online |
| 5:30-5:55PM | Presentation 6: Howard Nicholas | |

**PALA 2022 PROGRAMME SCHEDULE**

**VENUE:**

**DAY 2: THURSDAY, 22<sup>ND</sup> SEPTEMBER 2022**

| TIME (MYT) | PROGRAMME | VENUE |
|---|---|---|
| 2:00-2:25PM | Presentation 7: Ruby | |
| 2:25-2:50PM | Presentation 8: Isriani Hadrini | |
| 2:50-3:15PM | Presentation 9: Fatin | |
| 3:15-4:00PM | Plenary Talk 2: Gisela Håkanson | Online |
| 4:00-4:20PM | Break | |
| 4:20-5:05PM | Plenary Talk 3: Andy Kirkpatrick | Online |
| 5:05-5:30PM | Presentation 10: Emilia | Online |
| 5:30-5:55PM | Presentation 11: Anke Lezing | Online |

**PALA 2022 PROGRAMME SCHEDULE**

**VENUE:**

**DAY 3: FRIDAY, 23rd SEPTEMBER 2022**

| TIME (MYT) | PROGRAMME | VENUE |
|---|---|---|
| 2:00-2:25PM | Presentation 12: Louise | Online |
| 2:25-2:50PM | Presentation 13: Bruno Di Biase & Yuki Itani-Adams | |
| 2:50-3:15PM | Presentation 14: Yin | Online |
| 3:15-3:35PM | Break | |
| 3:35-4:20PM | Plenary 3: Rogaya | |
| 4:20-4:45PM | Presentation 15: Ruiyuan | Online |
| 4:45-5:10PM | Presentation 16: Vi | Online |
| 5:10-5:35PM | Presentation 17: Jacopo | Online |
| 5:35-6:00PM | Manfred Pienemann: Conclusion and Close | Online |

**Speaker: Professor Manfred Pienemann**

**University of Paderborn and Linguistic Engineering Co.**

**PT and Co. How constraints explain SLA.**

The title of this talk may sound contradictory: Something complex can be explained by understanding the constraints that operate on this complex thing. That's exactly the idea, and it goes back to the core idea behind *Processability Theory* which is stated in the opening lines of my 1998 book "Language processing and second language development":

Learnability is defined as a purely logico-mathematical problem (e.g., Berwick and Weinberg 1984). Such a perspective ignores the fact that this problem has to be solved not by an unconstrained computational device, but by a mind that operates within human constraints. (Pienemann, 1998, 1).

In the rationalist tradition, learnability theory contains the following four components:

- The initial state,
- A learning device,
- The target grammar,
- The input to the learner.

The more is included in one component, the less 'work' remains for the other components. However, even with this trade-off, the interaction of the above components overstates the problem the learner has to solve as it permits many hypotheses about the target language (TL) that the learner is unable to entertain, because they cannot be processed by her or him. Therefore, the actual learning problem is smaller than the purely logico-mathematical format suggests, and its reduction can be delineated using the formalisms developed within Processability Theory.

One key problem a theory of (second) language acquisition has to explain is the so-called developmental problem (Felix 1984), i.e. why learners follow specific trajectories when they acquire the target language - with features shared by all learners. Processability Theory delineates the space within which (human)

learners entertain hypotheses. This 'hypothesis space' does not fully determine specific developmental trajectories. It permits different initial hypotheses about the TL and different routes learners can take as they move from one stage to the next. In other words, processing constraints give rise to a hypothesis space that is greatly reduced when compared with the set of hypothesis possible in an unconstrained space.

There is a second set of constraints that operates on hypothesis formation in SLA. This set of constraints operates on the internal dynamics of development known as 'generative entrenchment' (Wimsatt 1986). In this context, the term 'generative' is not related to notions in linguistics. Instead, it refers to an evolutionary aspect of developmental processes. Wimsatt (1986) has shown that in evolutionary (or developmental) processes it is computationally far less costly to retain structural features once they have emerged than to restructure the whole system (or organism). I have applied this notion to developmental processes in L1 and L2 acquisition, and I have proposed that the dynamics inherent in generative entrenchment serve to explain developmental trajectories in L1 and L2 acquisition and the differences between them.

A third set of constrains on SLA is inherent in the dynamics of second language development (and variation) itself. Pienemann, Lanze, Nicholas & Lenzing (2022) have shown that the dynamics of L2 development and variation are subject to mathematically explicable constraints that can be made visible using agent-based modelling. For instance, a learner's specific forget behaviour will amplify the learner's simplification of the L2, resulting in a more extreme variational style that will affect his or her further development. This is an exclusively internal dynamical process that does not require reference to any further or external variables.

In other words, the perspective put forward in this presentation focuses on processes that are internal to the dynamics of the developing system. This does not imply that an influence of external factors is denied. Instead, theory development proceeds on the basis of the kind of reductionism outlined for dynamical systems research by Feldman (2019) in which subsystems are studied without trying to consider everything at once.

This position stands in contrast to approaches that view dynamic processes entirely as a result of the effect of factors external to the process.

Rabiah Tul Adawiyah Mohamed Salleh

International Islamic University Malaysia

**English Syntactic Acquisition Among Malay-English Bilingual Primary School Student**

In the original version of Processability Theory (PT) by Pienemann (1998), the development of learners' L2 morphology and syntax are analysed in the same hierarchy/schedule. In Pienemann, Di Biase and Kawaguchi (2005), the analysis of learners' L2 syntax, inspired by developments in Lexical Functional Grammar (Bresnan 2001), was extended to encompass discourse-pragmatic functions and lexical mapping, which account for higher levels of complexity. These aspects were further expanded by Bettoni and Di Biase (2015) leading to the Prominence Hypothesis and some adjustments regarding the Lexical Mapping Hypothesis. The current study presents the acquisition of English syntax among Malay-English bilingual primary school children from the latter developments. Five nine-year-old children, who have attended the same primary school which employed the Standard Based Curriculum for Primary Schools (KSSR) syllabus for 2 years (i.e., since they were 7 years old) became the informants for this study. The speech output of the children was elicited through two communicative tasks. Based on the Prominence Hypothesis, results demonstrate that the children used canonical word order (SVO) and had progressed to the $XP_{DF}$ canonical word order stage ($TOP_{XP}$ SVO) but had not yet reached the non-canonical word order ($TOP_{XP}$ marked orders). From The Lexical Mapping Hypothesis standpoint, the children were found to use the default thematic mapping (Agent/experiencer mapped on SUBJ, patient/theme mapped on OBJ) as well as the default mapping with additional arguments (Agent/experiencer mapped on SUBJ, patient/theme mapped on OBJ, and other members of the a-structure hierarchy such as goals and locatives, mapped on OBL) but they have not reached the non-default mapping structure (e.g. passives). These findings are significant because these newer PT hypotheses are tested for the first time on the English L2 syntax of bilingual Malay-English children and because of their implications for English curriculum development for Malaysia's primary schools.