#### 研究成果報告書 科学研究費助成事業

今和 元年 6 月 1 1 日現在

機関番号: 15401

研究種目: 基盤研究(C)(一般)

研究期間: 2016~2018

課題番号: 16K02922

研究課題名 (和文) Exploring the Relationship between Productive Vocabulary Knowledge and Second Language Oral Ability

研究課題名(英文)Exploring the Relationship between Productive Vocabulary Knowledge and Second Language Oral Ability

#### 研究代表者

CLENTON JONATHAN (Clenton, Jonathan)

広島大学・総合科学研究科・准教授

研究者番号:80762434

交付決定額(研究期間全体):(直接経費) 3,500,000円

研究成果の概要(和文):本研究結果は、発表語彙知識の測定の際に、さまざまな語彙テストタスク使用の重要性を確認したという点で、第二言語語彙習得研究への有用な示唆を与えるものと考える。本研究では、スピーキングタスク中で使用している語彙運用能力とLex30(語彙連想タスク)の点数に有意な相関関係がみられた。この結果は、その他の従来の発表語彙タスクよりも、語彙運用能力と密接な関係があることを示唆する。また、本研究は(Lex30が測っていると考えられる)語彙のフォームの知識(例:スペルの知識)の発達が(PVLTが測っていると考えられる)その他の語彙知識(例:意味や文法に関する語彙知識)を先行するという可能性を示唆す

## 研究成果の学術的意義や社会的意義

The current study represents an important development in determining which aspects of vocabulary relate to second language fluency. Replicating and using different vocabulary tasks might support

, and lead to the creation of an implicational scale of spoken vocabulary knowledge.

研究成果の概要(英文): The study have potentially useful implications for second language acquisition research. We report that different tasks might be better employed for specific research purposes. In using Lex30, a simple task based on word association, the study supports suggestions that it appears more aligned to the ability to use the words (than other productive vocabulary knowledge tasks). This implication we feel is borne out by our reporting significant correlations between the vocabulary used in response to the scenario / speaking tasks (scen) and the Lex30 score. We suggest that this interpretation is important because it appears that the Lex30 task light tap the participant's specific vocabulary knowledge. We suggest that some aspects of vocabulary might lag behind others to the extent that knowledge of form (which we believe Lex30 accesses) comes before other aspects of knowledge (e.g. semantic, and grammatical knowledge (which others suggest the PVLT measures).

研究分野: vocabulary and fluency

+-ワード: fluency vocabulary productive receptive implicational

# 1.研究開始当初の背景

The research began with my interest in vocabulary knowledge. A paper published with a colleague (Fitzpatrick and Clenton, 2017) in TESOL Quarterly suggested that vocabulary tests are inconsistent in terms of the knowledge they elicit. Tests differ according to quality and quantity of the vocabulary knowledge they elicit. This (2017) paper suggested that further papers should examine the extent to which vocabulary knowledge changes, according to quantity and quality, in terms of its use. This, then, led to earlier investigations (e.g. Uchihara and Clenton, 2018) which examined the extent to which vocabulary size changes according to speaking. I therefore wanted to explore in greater detail, the extent to which vocabulary knowledge in use in speaking relates to a variety of different speaking measures.

#### 2.研究の目的

The design of the research was to explore the extent to which vocabulary knowledge relates to various measures of speaking ability. The research led to collaboration with leading researchers in this area (e.g. De Jong, Saito, Uchihara), in exploring the extent to which vocabulary knowledge (understood according to breadth and depth) varied according to a variety of different speaking task demands and measures. This led to work examining vocabulary knowledge in relation to measuring aspects of fluency, vocabulary knowledge according to independent ratings of speech, and according to different speaking task types (such as the various task types existing in the IELTS speaking tests).

#### 3.研究の方法

The research method consisted of partial replications of earlier research, this took the form of various threads. One thread, consistent throughout all studies, considered vocabulary knowledge according to breadth and depth, or quantity and quality. These two aspects of knowledge relate to the model in Fitzpatrick and Clenton (2017) the 'vocabulary capture map'. The vocabulary capture map was then used in the studies in order to attempt to explain the various aspects of vocabulary knowledge in relation to the speaking task types. The replications, therefore, adopted methods used in earlier papers. This includes papers by De Jong et al (2012, 2013, 2015), De Jong and Mora (2017), Saito (2015, 2016, 2019), and Tavakoli (2017).

#### 4. 研究成果

The results relate to each independent study (below). The results support earlier papers that demonstrate relationships between speaking and vocabulary knowledge amongst advanced second language learner populations. The current project shows that the relationship between speaking and vocabulary knowledge can be indicated by task. In other words, for advanced second language users, the vocabulary task demands indicate knowledge of multiple aspects of vocabulary knowledge; for lower proficiency users, the vocabulary task demands indicate knowledge of fewer aspects of vocabulary knowledge (such as a threshold knowledge).

The findings from the current study, in which we investigate the vocabulary knowledge and fluency of a pre-intermediate participant group, are to some extent consistent with earlier fluency studies (e.g. De Jong et al., 201; De Jong and Mora, 2017;). The current study, although using different vocabulary measures, supports De Jong et al.'s (2013) finding that a higher vocabulary score correlates negatively and significantly with the number of silent pauses (Lex30) and filled pauses (NVLT). Regarding the number of silent pauses per second, we suggest this finding relates to Lex30 potentially tapping into aspects of fluent speech to the extent that our pre-intermediate participants used items from the same frequency bands for the written and fluency tasks. Second, regarding the number of filled pauses per second, the higher the NVLT scores, the fewer filled pauses in the speech measures. This specific finding, we feel, is more difficult to respond to, and we agree with Kremmel and Schmitt (2018) who suggest that 'interpreting scores from... form meaning formats as the ability to employ the target vocabulary in language use may be questionable' (p. 390). We suggest that further comparisons between receptive vocabulary level tests and fluency measures might inform this specific finding. We might tentatively, however, infer that the comparison between NVLT task scores and the number of filled pauses per second

might relate to 'mastery' of vocabulary items (Kremmel and Schmitt, 2018: p.390) that exists in about 55-65% of cases.

The findings of the current study have potentially useful implications for second language acquisition research. We suggest that different tasks might be better employed for specific research purposes. In using Lex30, the study supports Clenton et al.'s (2019) suggestion that it appears more aligned to the ability to use the words (than other productive vocabulary knowledge tasks). This implication we feel is borne out by the significant correlations between the vocabulary used in response to the scenario / speaking tasks (scen) and the Lex30 scores. While we appreciate that this finding might be exclusive to the proficiency of the participants in the study, we suggest that this interpretation is important because it appears that the Lex30 task might tap the participant's specific vocabulary knowledge. Clenton et al. (2019) suggest that some aspects of vocabulary might lag behind others to the extent that knowledge of form (which we believe Lex30 accesses) comes before other aspects of knowledge (e.g. semantic, and grammatical knowledge (which they suggest the PVLT measures). We believe the current study confirms that Lex30 scores predict aspects of fluency at a pre-intermediate level of proficiency, for the specific participants examined in the current study. However, we suggest that future studies explore suggestions (e.g. Webb and Chang, 2012; Zhang and Lu, 2013) that aspects of vocabulary knowledge develop inconsistently with increases in proficiency. We propose that for studies involving higher-level learners a test such as the PVLT (alongside other productive vocabulary tasks such as Lex30) might help to inform how the quality of vocabulary knowledge changes with proficiency. We also believe that the different receptive vocabulary task scores in the current study support the notion that different vocabulary tasks tap different aspects of knowledge. We wonder whether the development of a model akin to Fitzpatrick and Clenton's (2017) vocabulary task capture model, designed for productive vocabulary measures, might be possible for receptive vocabulary tasks.

### 5. 主な発表論文等

#### [雑誌論文](計 2 件)

- 1. <u>Clenton, J.</u>, De Jong, N. H., Clingwall, D., & <u>Fraser, S</u>. (2019; *under review, submitted to System)*. Investigating the Extent to Which Vocabulary Knowledge and Skills Can Predict Aspects Of Fluency.
- 2. <u>Clenton, J.,</u> Elmetaher, H., & Uchihara, T. (2019; *under review, submitted to Studies in Second Language Acquisition).* Investigating Productive Vocabulary Knowledge Development: A Task-Based Approach.

#### [学会発表](計 10 件)

- 1. 2nd International Conference on Bilingualism, Bilinguals, lexical frequency profiles, and fluency development., <u>Clenton., J</u>, 2nd International Conference on Bilingualism, Malta, 2019, With Invitation, University of Malta
- 2. Interpreting vocabulary knowledge task scores: implications for vocabulary assessment development. Elmetaher, Hosam; <u>Clenton</u>, Jon, The annual international conference of the Asian Association for Language Assessment, 2018, With Invitation, Shanghai, China
- 3. Standards in Language Assessment: investigating lexical frequency profiles from vocabulary and speaking tasks., <u>Clenton</u>, J., Clingwall., D, & <u>Fraser. S.</u>, The annual international conference of the Asian Association for Language Assessment, With Invitation, 2018
- 4. Investigating lexical frequency profiles from vocabulary and speaking tasks. <u>Clenton, J., Clingwall., D., and Fraser., S., EuroSLA, 2018, With Invitation, Munster, Germany</u>
- 5. Investigating the impact of vocabulary, pausing, and task type on fluency, Clingwall, D., Clenton, J., Fraser, S., American Association for Applied Linguistics 2018 Conference Chicago, Illinois. March 23 to March 25th 2018, With Invitation
- 6. Evaluating measures of oral proficiency and vocabulary with monologic, quasi-dialogic, and dialogic speaking tasks, Clingwall, D., Clenton, J., Fraser, S.,

- Language Assessment Research, Ames, Iowa.March 21-23, 2018, With Invitation
- 7. Vocabulary knowledge and oral ability: exploring multiple theories and potential relationships, <u>Jon Clenton</u>, Dion Clingwall, <u>Simon Fraser</u>, Association for Language Testing and Assessment of Australia and New Zealand Monday 27 to Wednesday 29 November, 2017, With Invitation
- 8. Investigating Relationships between Second Language Oral Ability and Vocabulary Knowledge: Impacts on Teaching and Learning, Dion Clingwall, <u>Jon Clenton</u>, and <u>Simon Fraser</u>, Asian Association for Language Assessment, May 31, 2017, With Invitation
- 9. Exploring Relationships Between Second Language Oral Ability and Vocabulary Knowledge (2017), <u>Jon Clenton. Simon Fraser</u>. Dion Clingwall, American Association of Applied Linguistics, 2017, Without Invitation, Portland
- 10. Investigating the Potential Relationships between L2 Speaking Performance and Productive Vocabulary (2017), Kazuya Saito. Takumi Uchihara. <u>Jon Clenton.</u>, American Association of Applied Linguistics, 2017, Without Invitation, Portland

# 〔図書〕(計 1 件)

(2020, Routledge publishing). <u>Jon Clenton</u>, Paul Booth (accepted for publication) Vocabulary and the Four Skills: Pedagogy, Practice, and Implications for Teaching Vocabulary.

〔その他〕

ホームページ等

 $\underline{\text{http://seeds.office.hiroshima-u.ac.jp/profile/en.ef1cc5016152d2df520e17560c007669.ht}}\\ \underline{\text{ml}}$ 

#### 6. 研究組織

(1)研究分担者

研究分担者氏名:フレイザー サイモン

ローマ字氏名: Fraser Simon 所属研究機関名: 広島大学

部局名:外国語教育研究センター

職名:教授

研究者番号 (8 桁): 10403510

研究分担者氏名:安仁屋 宗正 ローマ字氏名:Aniya Sosei 所属研究機関名:広島大学 部局名:総合科学研究科

職名:名誉教授

研究者番号(8桁):60202652

科研費による研究は、研究者の自覚と責任において実施するものです。そのため、研究の実施や研究成果の公表等については、国の要請等に基づくものではなく、その研究成果に関する見解や責任は、研究者個人に帰属されます。