Annotated Bibliography:

L2 Pronunciation Research

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1. Introduction

This technical report is an annotated bibliography of L2 pronunciation studies from various fields: linguistics, psychology, education and literature. The four areas were selected to reflect the expertise of the research institute assistants (RIAs) of IERS. This annotated bibliography aims to provide an overview of articles that are published in the area of L2 pronunciation. The RIAs (first six authors of this paper) compiled various articles in spring 2021 as part of the institute-based research activity.

Pronunciation of English is emerging as an important area in education as the Common Test for University Admissions is changing to reflect the needs for better listening and speaking skills of English for communicating with speakers of other languages. This change in the assessment of English language has an impact on English language education as the classroom English needs to reflect the importance of L2 pronunciation, which has not always been successfully integrated into the curriculum.

The goals of this project are two-fold. First, this annotated bibliography aims to provide guidance to educators and researchers about existing studies, though limited in number, on L2 pronunciation. Second, this document showcases expertise of each RIAs who come from diverse research backgrounds. This type of institute joint project serves as a place for them to demonstrate their expertise and also to provide future venues for interdisciplinary collaboration.

Research articles and related texts were identified using the Google Scholar search engine that limits search results to academic work. The results were then transferred into a reference managing tool called Zotero, that is compatible with various other reference managing tools such as RefWork, EndNote, etc. The Zotero bibliography allows easy citation using a plug-in available in Microsoft Word (both in Windows and in Mac). Access to the Zotero bibliography is available upon request.

The rest of this technical report is structured as follows. In section 2, 14 L2 pronunciation articles from the field of linguistics and psycholinguistics are reviewed by Asami and Suzuki. The following section 3 presents an annotated review of 10 L2 pronunciation studies from social psychology perspectives by Deng and Sumlut. The last section 4 summarizes 14 articles on L2 pronunciation from education and literature by Sakurai and Wang.
2. Linguistics and Psycholinguistics by S. Asami and M. Suzuki


This research tested how orthographic forms could affect speech production in experienced Italian learners who had learned English over 10 years. They focused on the effects of silent letters (e.g., /bt/ in debt), vowel spelling, morphemes (e.g., <ed>), and homophonic words (e.g., sun and son) on pronunciation. Based on the orthographical information given during the studies, the participants changed their speech production to the nonnative-like one. For an instance of such a negative effect, the participants were induced to add sounds of silent letters and pronounced the same vowel which was spelled with a vowel digraph longer than the one spelled with a singleton letter.


The researchers examined the relationship among accentedness, comprehensibility, and intelligibility. There were 12 intermediate ESL (English as a Second Language) speakers from each of four language backgrounds (Cantonese, Japanese, Polish, and Spanish). Forty-eight participants were presented with a series of cartoon stories and their narration for the stories was recorded. Twenty-six native English listeners then rated the accentedness and comprehensibility of the L2 narrative samples and the intelligibility of them was determined by the number of nontrivial errors in the samples. The English listeners deemed the L2 speech production strongly accented while its comprehensibility was fairly high. In addition, the strong accentedness did not necessarily interfere with the intelligibility.


This study provides a review approaching the question of what makes L2 learners difficult to learn pronunciation. The review first discussed the common misconceptions about L2 pronunciation. For example, pronunciation is not a musical ability but a cognitive skill which can be developed if there are appropriate opportunities, and the accent does not mainly cause problems with intelligibility. Gilakjani et al. (2011) also described the linguistic, psychological, individual, internal, and external factors which affect L2 pronunciation. Finally, they suggested communicative methods for pronunciation teaching.


The authors examined if language switching could disrupt nonnative English speech production of native Spanish speakers. Ten Spanish native speakers learning English, whose self-report proficiency ranged from the advanced to the native level, participated in their experiment. The sequences of pictures were presented and the participants
named them in either Spanish or English. This experiment revealed that, compared with the trials without language switching, the English trials were more disrupted by sudden language switching and thus the English productions were more accented. Goldrick et al. (2014) argued that the nontarget-language lexical and phonological representations which were partially activated would influence the phonetic processing of the target language.


This study investigates the mispronunciation patterns produced by Japanese learners of English, focusing on the three English voiceless coronal fricatives /s/, /ʃ/, /θ/. The experimental results indicate that learners tend to make pronunciation errors when they pay more attention to their pronunciation. They observed four mispronunciation patterns (L1 interference, hypercorrection, deflected consonant, and quasi-neutralization) in relation to their L1 phonology knowledge.


In this study, the late Spanish learners of French were assessed on their perception and production of two French mid-close/mid-open height vowel contrasts, one of which contrasts was similar to their L1 (the front unrounded /e/-/ɛ/) and the other were dissimilar to any existing L1 category (the front rounded /ø/-/œ/). Their study first found that the similar contrasts were identified better than the dissimilar contracts. The analysis then revealed no correlation between individual performance in perception and production and there was also no effect of L2 perception on L2 production, supporting a partial dissociation between L2 perception and production. Finally, the mixed-effect regression analyses revealed that the L1 phonetic properties could predict L2 production accuracy, which indicates a transfer of individual phonetic categories to L2 production.


This study investigates whether the segmentation of L2 word sounds based on the rhythm of an L1 would change as L2 proficiency developed. In their first study, the Japanese learners of English with high or low English listening ability performed a memory-span task. The task consisted of English words which had five types of phonological structure (CV, CVC, CVCV, CVCC, and CVCVC). The participants heard the increasing series of the words and recalled them aloud in the order of presentation. It revealed that the segmentation of English word sounds of L2 learners with high L2 listening ability was affected by the rhythms of both moras (Japanese) and syllables (English). In the second study, the same memory-span task had been completed by the Chinese monolingual undergraduates and the Chinese learners of Japanese. While the Chinese monolinguals did not indicate the effect of the syllables in
Chinese on the task performance, the Chinese learners of Japanese were affected by the rhythm of Japanese moras. Overall, L2 learners could perceive the segmentation of L2 word sounds differently as the development of their L2. In addition, the rhythm of mora in Japanese may have a strong influence on the perception of English word sounds.


This study explores how L2 learners can successfully acquire the sounds of the L2 languages, focusing on two aspects: “Choice” and “Limits”. “Choice” means self-discipline towards L2 learning such as commitment control or emotional control. However, learners also have “Limits” beyond their control such as the opportunity to use the language or their ability of learning languages. Based on these points, the author encourages teachers to provide opportunities for students to deepen awareness of accent and to assess their learning processes. The author also suggests that researchers should study accents in relation to the individual differences.


This article reports three studies testing a hypothesis that domain-general auditory processing ability determines L2 proficiency for adult learners of English. The domain-general auditory processing ability is measured by discrimination task using synthesized stimuli. L2 proficiency is defined as the ability of distinguishing phonological contrast (tense vs. lax vowels) and grammatical acceptability. The data obtained from 139 participants indicate that auditory processing ability (duration, amplitude rise time, pitch, formant discrimination) is a significant predictor of L2 proficiency across all three groups in the long run despite the differences in experience profiles and their L1. This result is similar to previous findings in children acquiring their L1.


This study reports a preliminary experiment investigating the relationship between pronunciation and listening discrimination. Two Japanese learners of English took the 30-min experimental session three to five times a week. The participants were trained to accurately pronounce and discriminate the /r/-/l/ and /v/-/b/ contrasts, in which training English-words pairs like a river-liver contrast were used. As a result of the trainings, the accuracy of pronunciation and listening discrimination increased.

Solier, C., Perret, C., Baqué, L., & Soum-Favaro, C. (2019). Written training tasks are better than oral training tasks at improving L2 learners’ speech production. *Applied Psycholinguistics, 40*(6), 1455–1480. [https://doi.org/10.1017/S014271641900033X](https://doi.org/10.1017/S014271641900033X)
Comparing written production training tasks with oral production training tasks, this paper examines the effects of orthography on L2 pronunciation. A hundred Moroccan Arabic beginning learners of French first took a repetition task using a list of French words, which measured a baseline of their pronunciation errors on the four target vowels, namely /e/, /i/, /ɑ̃/, and /ɔ̃/. The participants were then assigned to one of five training tasks: repetition of minimal pairs, word repetition with the verbotonal method of phonetic correction (i.e., oral production training tasks), vocalized copy, dictation, and copy (i.e., written production training tasks). After the training session, a posttest (a repetition task) assessed the degree of improvement in L2 pronunciation. Overall, this paper demonstrates that all of the five training tasks increased the accuracy of pronunciation. Moreover, their data indicated that the written production tasks more efficiently improved the participants’ pronunciation than the oral production tasks.


The authors asked the Japanese secondary school students learning English as a foreign language (EFL) to complete a read-aloud task using a short text and a questionnaire asking their attitude toward English pronunciation. The learners’ accentedness was rated based on the outcomes of the read-aloud task. Their study first revealed the positive affective factors underlying the EFL learners’ attitude toward English pronunciation, namely pronunciation importance, Interest in English sounds, and pronunciation confidence. The correlation analysis found that the pronunciation confidence was the only factor which had a positive relationship with the learners’ accentedness. That is, the EFL learners were rated as less accented pronunciation when they rated their confidence highly.


This study examines the effect of word class (noun vs. verb) on the pronunciation accuracy of phonetic segmentation. The Korean-English bilinguals listened to the English sentences and repeated each of them after 1.2 s and 4.0 s delay. This delayed repetition task revealed that the Korean-English bilinguals mispronounced nouns more than verbs. Yeni-Komshian et al. (2001) also asked the Korean-English bilinguals to complete the grammatical judgement task. The results showed that the participants accurately detected incorrect expressions of the third person singular (verb) than the plural (noun). Furthermore, those word-class effects were stronger when the age of acquisition of English was late.


This paper conducted two studies to investigate the ability to perceive and pronounce English phonemes by Japanese children, whose age ranged from three to six. In their first study, the participants were asked to listen to the audio stimulus and vocally repeat each of them. The stimulus consisted of the combinations of a vowel and a consonant
in either structure of CV or VC (e.g., /pi:/, /ip/). Their second study validly estimated the accuracy of the repetition of one-syllable English words using the accurate repetition rates for the stimuli of their first study. Their studies indicated that the difficulty with the perception and pronunciation of the VC/CV-structure sounds could lead to the difficulty with those of English words.
3. Social Psychology by Y. Deng and R. S. Sumlut


This article presents two studies that were conducted 30 years apart to examine the relationship between ethnic group affiliation and L2 pronunciation accuracy (learners’ accent) and its associated behavioral consequences. Participants were L2 learners from two ethnic groups (Francophone and Chinese in Quebec) in two different socio-political contexts (a conflictual and a non-conflictual setting). Participants listened to voice recordings of the same ethnic individuals speaking in L2 and L1 to estimate ethnic group affiliation based on their L2 speech. The results revealed that L2 accent was an indicator of the degree of ethnic affiliation of L2 speakers regardless of listeners’ own degree of ethnic group affiliation. Moreover, the results disclosed that depending on the contexts (a threat to ethnic group identity and none), L2 learning pronunciation implies choosing between the reward of being efficient and the cost of being perceived as not royal to the ethnic group. Finally, pedagogical implications of these findings for L2 pronunciation and further investigations of L2 learners’ ethnic group affiliation are discussed.


This study investigated the relationship between L2 acquisition and the post-maturational social-psychological factor, acculturation, of Chinese international students studying in an American university. Participants were 49 older-arrival-age Chinese-English speakers whose age of arrival in the USA was above 18 years. Two dimensions of the Stephenson Multigroup Acculturation Scale, Ethnic Society Immersion and Dominant Society Immersion subscales were utilized to assess comprehensive attitudes and behaviors related to language, culture, and social interaction. Moreover, L2 sentences reading task and L2 proficiency interview were conducted to evaluate participants’ L2 pronunciation and oral proficiency. It is revealed that participants’ speaking proficiency seemed to be influenced by their degrees of immersion within American society, but their pronunciation is still accented.


This study investigates factors contributing to the multilingual postgraduate students’ accent attitudes toward their own and others’ English varieties in English as a lingua franca (ELF) communication in Japanese universities. A mixed-methods approach, questionnaires and semi-structured interviews, was used to examine their perceptions of different English accents, usage of different accents in different contexts, and factors underlying their accent attitudes concerning their linguistic backgrounds and practices. The results suggested the multifaceted nature of postgraduate multilinguals’ accent attitudes is associated with highly pragmatic motivations such as arrangements for
future professional careers. However, they have indifferent attitudes towards others’ accents.


The authors re-examined research about how social factors influence L2 learners’ acquisition of their pronunciation. Three theoretical concepts (participation in established social groups, how stigma and shame influence L2 pronunciation, and how L2 learners should access imagined communities and identities to become part of the target language community) that apply to the social nature of pronunciation were discussed by examining patterns of L2 use related to social factors. Lastly, the authors proposed a sociolinguistic core for learners of English by delineating five items (interacting and having L2 social networks, using interactional strategies that match one’s intended L2 social group, using sociolinguistic markers in pronunciation, getting dressed to look like a part of the targeted social group, and recognizing limitations in pronunciation improvement and overcoming stigma) that are socially relevant priorities for pronunciation learning and teaching.


Interviews were carried out over a 6-month interval to investigate the acculturation patterns, L2 pronunciation, L2 success, and engagement in social exchange networks of 9 American female participants residing in Norway. Consistent with Schumann’s acculturation theory, it is found that learners engaging in supportive exchange networks within the target culture could effectively reduce cultural distance, thus show higher levels of native-like pronunciation features.


Muftah (2013) examines how social and affective factors such as social networks, attitudes, and integration affect SLA and L2 proficiency through in-depth interviews with four Libyan teenagers. The study demonstrates learners’ active engagement in Australian society and positive attitudes toward native individuals. Acculturation is positively associated with higher levels of oral communicative competence. However, learners’ L2 pronunciation is not well-achieved, and it is not related to their acculturation.

This study examines how aspects of the socio-contextual model are linked to cultural representations of the L2 community relating to the formation of attitudes and beliefs. Participants were 50 minority Francophone university students with higher confidence in an L2 and low ethnonlinguistic vitality (ELV) and 50 majority Anglophone university students with lower confidence in an L2 and high ELV. A path analysis was conducted to study the L2 confidence, contact with the L2 community, identification to both L1 and L2 communities, and cultural representations. The results revealed that L2 learning leads to more positive cultural representations of the L2 community. Depending on the level of L2 confidence, the relationship between L2 confidence and contact with the L2 community differs between minority and majority groups as ethnonlinguistic vitality influences this process.


This article explores the relationship between acculturation and SLA (second language acquisition) based on a model of SLA developed from the Acculturation Model. Social factors (e.g., dominance, attitude, assimilation) and affective factors (e.g., language shock, cultural shock, motivation) are discussed to evaluate the model. It is predicted that the degree of acculturation to the target language influences learners’ language acquisition.


This study investigates the attitudes toward sociocultural identity, accent, and pronunciation of 51 male English learners in Iran. Results show that participants favor native accents more than nonnative accents, attempting to avoid negative stereotypes and racism on the part of native speakers. In relation to identity, participants’ preference for native-like pronunciation can be explained by their attempts to assimilate into communities and interact with native speakers.


This article presents empirical evidence to exhibit the relationship between social context and L2 use from L2 acquisition models developed in the past years. L2 linguistic use, choice, and development are influenced by social and linguistic contexts. In different social contexts, learners intentionally assert social identities through their L2 communication. Longitudinal sociolinguistic research is suggested for future directions.
4. Education and Literature by R. Sakurai and Q. Wang


Following the 2020 reform of Japan's university entrance examination system, private-sector firms will administer the English language proficiency tests that are a significant component of the examinations. Speaking is one of the abilities that will be assessed, and some believe that it will increase the capacity of Japanese people to communicate in English. However, according to this author’s opinion, such expectations are unlikely to be realized.


This paper re-examines the purpose of English pronunciation teaching in the contemporary context where the English language becomes globalized. The author notes that this context largely affects the overall quality of English teaching, pronunciation. The author then traces the changes in teaching goals regarding pronunciation from the 1950s to the present time, highlighting that the concept of intelligibility has been at the center of the current teaching situation. While the recent curriculum guidelines have recommended the “modern-general pronunciation” to be taught in junior high schools, the author suggests that various types of pronunciation should be introduced so that students can acquire a broader understanding of English pronunciation.


This article investigates the role(s) of the katakana syllabary in Japanese discourses, with an emphasis on the discourse producer’s underlying reason for employing katakana for native Japanese phrases and how it impacts word perception. The katakana syllabary is employed to convey that the term in issue is ‘different’ from the norm, creating a visual and conceptual contrast in a frequently shared word or concept, according to the findings. While each writer’s motives may differ, the outcomes of this study show that katakana may be used to conceptualize a dichotomous position in otherwise common notions in any written discourse. This implies that the katakana syllabary’s initial purpose has been expanded through time to become the linguistic option of convenience, with responsibilities ranging from filling lexical gaps to generating meaning gaps in Japanese native words.


Speaking a second language necessitates a variety of abilities, including grammar, vocabulary, and teaching. One of the most crucial abilities in English Language Teaching is pronunciation. The audience will be unable to comprehend speakers who
have really poor pronunciation. Despite the difficulty of learning pronunciation, teaching pronunciation receives the least emphasis in many ESL/EFL classes. The researcher examines the condition of pronunciation instruction from the perspectives of numerous English language instructors, academics. The author found some serious difficulties faced by learners in ESL/EFL classrooms: lack of motivation, lack of exposure to the target language, lack of good attitude toward pronunciation, lack of emphasis on pronunciation by teachers, lack of necessary tools to teach pronunciation by teachers, influence of sounds and rules of learners’ first language on the second language, learners’ problems in English.


The tradition of literary translation from European languages in Japan began in the late 1800s, during the Meiji period of the country. This article uses a quantitative method to look into the state of literary translation from European languages in Japan during this time period, asking how large the community of literary translators was, how productive the average translator was, and whether translation was the primary occupation for the majority of the translators. It was discovered that, while literary translation was published after technical translation had been established for many years and took around a decade to acquire traction, it saw significant development during the Meiji period. This increase peaked between 1902 and 1905, after which it began to decline, and future study might look at the causes of the significant peak in the early twentieth century, as well as the subsequent drop in publishing numbers.


This paper analyzes the adaptation of foreign language words into the Japanese writing system during the Meiji and Showa period. The author investigates the gourmet magazine titled *Gekkan kuidoraku* (later pronounced as *shokudoraku*), analyzing and tracing the various representations of foreign words. The author concludes that while the use of katakana and ruby (a display of hiragana characters to help pronounce kanji or foreign language) was aimed to express foreignness in the Meiji era, rhetorical tropes such as irony were later incorporated into the representations.


This news mainly described the differences between the Center Test and the Common Test for University Admissions. Four changes are: with no more questions about the pronunciation and accent; Listening will be doubled to 100 points; the difficulty of the Common Test will be increased; all the problems will be in English.

Kamiya, N. (2017). Can the National Center Test in Japan be replaced by commercially available private English tests of four skills? In the case of TOEFL Junior
The National Center Test (NCT) is a standardized test that high school graduates must pass in order to be admitted to the majority of Japanese institutions. Due to the fact that NCT presently assesses only the receptive abilities of reading andlistening, it is intended to be replaced with commercially accessible private English exams of four skills (reading, listening, speaking, and writing). However, there has been some criticism over the score comparability between the NCT and the four-skills exams. For example, its incapability to measure four skills (reading, listening, speaking, writing)


This article examines English-origin terms that are either imported from English or invented in Japanese/Korean that are used in Japan and Korea. Many imported English terms take on new meanings in Korean and Japanese, while created words have their own set of meanings. Despite the fact that loanwords are words of English origin, the variety of origination necessitates a new nomenclature to properly define their nature. Finally, it contends that hybrid English terms originating in Japanese/Korean are a significant asset for the future of global English, rather than a weird regionally utilized brew.


This paper investigates English pronunciation teachings in teacher training courses taught in Japanese higher education institutions. The authors collected syllabi from 239 departments that offer training courses, examining how many courses were designed to provide knowledge and skills regarding teaching pronunciation. The results show that there is not enough opportunity to study phonetics in training courses at Japanese universities and colleges, which leads to low confidence in teaching pronunciation among teachers at junior or high school in Japan. Based on this finding, the paper claims the necessity to create courses that allow students to learn teaching pronunciation techniques.


The purpose of this study was to find out the overall effects of pronunciation instruction (PI), as well as the causes and amount of variance in those effects. A thorough search for primary research was undertaken to this goal, generating 86 distinct publications examining the effects of pronunciation instruction. These and other findings are interpreted in terms of their practical and instructional use. The findings are also discussed in connection to directed second language acquisition studies in general, as well as in contrast to previous pronunciation instruction evaluations (e.g. Saito, 2012). In the conclusion, the authors identify areas in pronunciation instruction research that
require more empirical investigation and methodological refinement. In terms of the overall effects of PI, the (weighted) within-group results revealed that learners who received instructional treatments improved by 0.89 standard deviation units compared to their pretreatment performance, while the between-group analyses revealed that experimental learners outperformed control groups by 0.80 standard deviation units. Authors also looked at heterogeneity in the effects of PI as a function of three types of possible moderating variables: settings, treatments, and outcomes, based on theoretical and practical considerations.


In order to analyze the continuities and discontinuities in the condition of knowledge production around race and racial discrimination in contemporary Japan, this article examined passages relating to race in textbooks from the first half of the Meiji period. Investigating the use of words in educational practice helps us to understand how the term “race” was placed in a different position than other terms, and how the Japanese changed their racial status in comparison to others.


This book chapter discusses the issue of *genbun itchi*, the major literary movement that inspired many Meiji intellectuals to engage in a debate about the Japanese writing models to be adapted in the new era. The author presents multiple and contested viewpoints raised in the debate and its underlying background in detail. This chapter concludes by examining two novelist’s approaches to the issue: Yamada Bimyo and Shimamura Hogetsu. While Bimiyo contributed to the establishment of the vernacular as a literary language, Hogetsu offered a new notion of rhetoric expression.


This paper addresses the issue of notating the sounds of English that cannot be captured by the current katakana syllabary. In particular, the article addresses the three major phonetic problems: the sound of *ae*, the difference between the sound of *r* and *l*, and that of *f* and *h*. The paper evaluates the current system for these three cases, pointing out its merits and shortcomings. The author concludes that the effective use of a subscript of katakana can refine the current system as it enables the notation to be closer to the original Japanese pronunciation.
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Linguistics and Psycholinguistics


### Social Psychology


**Education and Literature**


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