Which English accent is better for international maritime communication? A plenary speech at the 2023 International Conference on Maritime Education

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Abstract. It is crucial to develop maritime professionals' command of English since English is used as a shared language (lingua franca) among maritime professionals coming from different language and cultural backgrounds. An interesting question about learning English as a lingua franca is which English accent second-language (L2) English speakers should aspire to. Drawing on previous research and the speaker's own empirical work Dai and Roever (2019), in this talk I discuss how first-language (L1) and L2 English accents affect listeners' comprehension, attitude and familiarity with the speakers' speech. I conclude with implications for English language teaching and learning for maritime professionals who use English as a shared language in international maritime communication.

1 Introduction

I am grateful for the opportunity to share my thoughts on maritime education from a linguistic lens. My research program centres on professional communication in intercultural contexts and with a background in applied linguistics, my interests are geared towards language and communication. Therefore, for this plenary speech, my focus will be very specific: I will be talking about maritime communication within the broader context of maritime education. The question I would like to raise is when it comes to effective international maritime communication, which variety of English, or more specifically, which English accent should we aspire to?

1.1 English in maritime communication

It is shared knowledge that communication is pivotal to any type of professional work and when it comes to maritime communication, previous research has indicated that over 80% of maritime accidents were caused by human errors, largely due to failure in communication [1]. Without much surprise, the absence of effective communication is integral to these accidents. Yercan et al. (2012) went further to assert that limitation in "competence in

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English" [1, p. 216] plays an indispensable role here. These empirical observations have raised important questions about the role of English and competence in English in effective maritime communication. Why does English feature so greatly in maritime communication? Why are we emphasizing English out of all the languages that multilingual maritime professionals can speak?

If we look at maritime communication policy documents, for example, the IMO Standard Maritime Communication Phrases specified that when it comes to navigational purposes, in maritime communication there should be a common language that is used by people from different language backgrounds [2]. The language they agreed on was English. A similar policy document from the Convention for the Safety of Life at Sea [3] also stated that "English shall be used on the bridge as the working language for bridge-to-bridge and bridge-to-shore safety communication as well as for communications on board between the pilot and bridge watch-keeping personnel" (p. 465). Again, English was treated as almost the de facto language for maritime communication.

The privileging of English over other languages in maritime communication was caused by a range of historical and socioeconomic factors. Ever since the Second World War, English has become the dominant language for international trade and commerce. It is the international language that people tend to use when they come from different linguistic and cultural backgrounds. It is the shared language that many people have learned in school. All these driving forces have somehow enabled English to fall into this de facto position for international communication, but this lingua franca status of English also raises an interesting question: which variety of English should we stick to?

1.2 English as a lingua franca and English accents

Here what I mean by lingua franca is that English in these international communication settings is used as a shared language by people who often have different first languages (L1), for example, people who grew up speaking Vietnamese or Thai. When these L1 speakers of Vietnamese or Thai need to communicate with one another in international maritime settings, if the other party cannot speak Vietnamese or Thai, they often have to rely on English, which is most likely a language both parties have learnt to speak. But the interesting question resurfaces when we look at the population that speaks English. In 2016 we had 1.5 billion people speaking English and among them, 1.1 billion were speakers who did not speak English as their first language [4]. First-language speakers of English only account for 27% of the total number of English speakers with the majority being speakers who use English as their second, third or fourth language.

This reality makes us wonder: is it still reasonable to use L1 English varieties as a benchmark for teaching, learning and real-world practice? More specifically in the international maritime communication context, which type of English should maritime professionals aspire to? And if we further specify this question, which accent should maritime professionals aim to acquire? Is it, for example, the North American English accent, Australian English accent, or British English accent? What about the maritime professionals' own accents, say Vietnamese English accent or Thai English accent?

Dissanayake (2017) argues that in the context such as maritime communication where speakers do not always communicate with native speakers of English in cases of ship-to-ship, ship-to-shore and onboard communications, it is confusing and does not really make sense to teach maritime professionals to speak like L1 speakers of English [5]. If we try to enforce standards or certain features of L1-English varieties, it is counterintuitive because L1 English varieties are not the common English varieties that are used in the maritime industry. A related question is which English accent is "better" for international maritime communication. Here I am using double quotation marks to problematize this notion. There

has been specific research on English accents in maritime communication. Uchida and Tagaki (2012) noted that accent comprehension difficulty is a major contributing factor when it comes to miscommunication in the maritime industry [6]. Interestingly they found that informants in their study rated Korean, Indonesian and Thai seafarers' English much clearer than British seafarers'. What this means is that these participants somehow found non-L1-English accents much easier to comprehend than L1-English accents, such as British or North American English accents, which have conventionally been used as the learning objective or the gold standard of English accent in English language learning and teaching.

1.3 Accent comprehensibility, familiarity and attitude

The question of which English accent is the preferred one in international professional communication often hinges on the issue of comprehensibility. Are L1 speakers always more comprehensible than non-native speakers when it comes to English accents? Does L1 accents lead to more effective, error-free communication? Some related questions include the role of accent familiarity in accent comprehensibility. If you are more familiar with a particular type of English accent, does it make this accent more comprehensible to you? Apart from comprehensibility and familiarity, a third issue is accent attitude. If you somehow hold a certain English variety or English accent more favourably, how does it impact your ability to comprehend this accent?

If we turn to existing research on L1 and L2 accents, there is clear evidence suggesting that a familiarity effect exists. What was found is that if you are more familiar with a particular type of accent, whether it is British English accent, Vietnamese English accent or Thai English accent, you tend to find it easier to comprehend people who speak with that accent [7-9]. There is also a phenomenon termed the shared-L1 effect in accent comprehension. What it means is that when you have someone whose L1 matches the L1 of the speaker, they tend to find the other person's speech much easier to comprehend when both of them speak an additional language [10]. For example, if you have a maritime professional whose L1 is Thai and then when they talk in English to another maritime professional whose L1 is also Thai, they will find it a lot easier to understand each other, compared to, for example, when they speak English with someone whose L1 is Vietnamese.

Research has also been conducted on accent perception, which is about our attitudes towards accents. Sometimes we hear people say "Oh I think the British English accent is so beautiful. It sounds so nice. I really want to acquire that particular type of accent. I want to speak like so and so, like someone who grew up in Britain". But these types of accent preferences are actually learned behaviour. Butler (2007) looked at the types of English accents in English listening input that was given to English learners. The author noticed that when you expose, for example, a group of learners with an accent that was held in high prestige in their educational settings, for example, the North American English accent, these learners will find the North American English accent more favourable, even though their comprehension of the North American English accent is not different from their comprehension of their L1-English accent, which in the author's study, is the Korean English accent [11]. Accent preference and our attitudes towards accent are therefore the result of social learning.

1.4 Case study: Dai & Roever (2019)

Having laid out the broader context of maritime communication and the questions English accents pose to maritime communication, now I will share with you a research study, Dai and Roever (2019), which I conducted to unpack these interrelated questions in relation to

accent comprehension, familiarity and attitude [12]. I will interpret the findings of this study in the broader conversation we are having about maritime communication.

For Dai and Roever (2019) I wanted to look at three specific research questions. Question one is twofold: 1a) what is the difference in the performance of four L1-homogeneous adolescent participant groups when you give them a listening test recorded in four different English accent versions? What this question means is I wanted to see when we give adolescent participants different English accents, do they perform differently in a listening test recorded in these accents? This question is particularly pertinent in relation to whether listeners comprehend their shared-L1 accent better or not compared to accents from speakers who do not share the listeners' L1. The second part of question one, 1b), is to look at if there is an accent effect on comprehensibility, does the effect impact performance differently depending on the listening tasks?

The second research question is: what is the difference in how students perceive the four accents in terms of familiarity, comprehensibility and attitude? This question taps into the three key concepts we discussed earlier in relation to the role accent plays in effective communication.

The third and final research question is: what is the relationship between listening test results and participants' self-reports of accent familiarity, comprehensibility and attitude? For this question what I want to find out is the relationship between what we can measure in experimental situations versus what people subjectively report about their degrees of familiarity, comprehensibility and attitude towards certain accents.

These questions might seem a little bit vague at this stage, but they will become a lot clearer as we move on to the study design and findings.

1.5 Study design

In this section, I will explain how I designed this study. I first recruited 253 15-year-old Chinese-L1 students in China. These were adolescent students in China who spoke Chinese as their first language. The rationale for researching adolescent participants is that their perception of accents was less biased by social learning, prejudice or certain favourable attitudes towards any particular varieties of English. This links to the aforementioned connection between accent attitude and accent comprehensibility.

What I then did was administering a preliminary listening test to recruit 80 out of the 253 students, making sure that the selected 80 students had similar proficiency in English. The purpose of that is to ensure language proficiency did not impact their perception or their comprehensibility of different English accents. In other words, what happened was that 1) I had 80 students with comparable English proficiency, 2) I divided them into four different groups with minimal between-group difference in terms of background variables, and 3) I then chose four English accents to record four versions of the same listening test for these four groups of students. The four accents selected were Australian English, Vietnamese English, Spanish English and Mandarin English accents. I chose Mandarin because it was the matched, shared-L1 accent with the students. Australian English accent was selected because it represented one of the L1-English accents. Vietnamese and Spanish were in the mix to ascertain the influence of accents that students were not familiar with because none of the students reported any prior experience with either accent.

Concurrent with recruiting student participants, I selected a speaker for each of the four different versions of the test. I initially chose twelve speakers and then I used the accent scale developed in Ockey and French (2014) to select one speaker per accent [9]. This was to make sure that the four selected speakers for Mandarin, Australian, Vietnamese, and Spanish English accents were similar in accent strength and identifiability. The purpose of this standardization process was to ensure that any difference observed in the listening test results

could be explained predominantly by the difference in accents, not by, for example, how strong a particular accent was or how easily identifiable a particular accent was.

In terms of the specifics of the listening test, interested readers can refer to Dai & Roever (2019) for details. What I did in practice was that I had the same language listening test recorded in four different accents as mentioned earlier. I then asked each of the four groups of students to take one version of the test. The test had three sections; the student participants had to complete 1) picture recognition tasks, 2) true-or-false judgement questions, and 3) gap-filling tasks. I removed some items that did not have good reliability indexes and kept 21 out of the original 30 items.

Apart from the listening test, I also administered a subjective perception questionnaire to all 80 students with the questionnaire asking them how familiar they found the accent in their particular version of the test, how comprehensible they found the accent of their test version, and what their attitude was towards that particular accented test version. Here for clarity, I would like to reiterate that the 80 students were divided into four groups, with each group listening to one particular version of the same test. What I mean by version is that the test was recorded in four different accented versions so 20 of the students listened to the Mandarin accented version, 20 to the Vietnamese version, 20 to the Spanish version and 20 to the Australian version. The content of the test was the same with the only difference being the accent the test was recorded in.

2 Results

Now let us have a quick look at the results from this study. I will be quite brief here but if you have any questions about the statistics and details, please refer to the original publication Dai and Roever (2019). Overall, we noticed that the students who took the Mandarin version scored significantly higher than the three other groups. It is worth bearing in mind that these participants were adolescent students whose first language was Mandarin. Therefore, when their first language matched the listening test speaker's first language, and in this case, it was Mandarin to Mandarin, participants found the speaker's accent much easier to comprehend. We should also note that the results were objectively measured through a listening test instead of what participants subjectively perceived.

As to question 1b) regarding task impact, we identified a differential impact of task type on accent comprehension as measured by the test. For all three task types – picture recognition, true/false judgement and gap completion, the participants who took the Mandarin version always performed much better than the students who took the other three versions. Nevertheless, there were some subtle differences. For gap completion, this shared-L1 effect was much stronger than picture recognition and true/false judgment. What this means is that when it comes to identifying and filling in specific information, the shared-L1 effect of accent is much stronger than for other types of activities.

Now let us move on to participant perception as I asked the participants to complete a questionnaire about their perceived familiarity, attitudes and comprehensibility towards the accented listening test they were given. When it comes to familiarity, interestingly, the participants actually found the Spanish accent more familiar than the Mandarin accent. Similarly, they also found the Spanish accent more favourable than all the other accents even more so than their own first language accent, which was the Mandarin accent. As to participants' subjective judgement of accent comprehensibility, they did find the Mandarin accent more easily comprehensible, followed by Spanish, Vietnamese and Australian. The difference was statistically significant, so it indicates that participants' differentiation was inferential: it was not just a random result; if you conducted this study again on a different day or with a different group of participants you are likely going to arrive at the same findings. Results based on inferential statistics are therefore more reliable and reproducible.

One thing worth particular attention is that the native English accent of the four, the Australian English accent, was considered by participants to be the least comprehensible in their subjective judgement. If we revisit participants; reported attitude and familiarity, the Australian accent also scored quite low. When it comes to participants' attitudes towards the Australian accent, most of the 20 adolescent participants who listened to it did not really like it. Unfortunately, neither did they find it very familiar either. If we examine the objective test results again, we can see that the group that was exposed to the Australian English accent also did not score very high when it comes to objectively measured criteria of listening comprehension. What this means is that when participants took the listening test and if the test was recorded in an L1-English accent, the listening material was not as easily comprehensible as not only the shared-L1 accent version (Mandarin), or in this case, but also the non-L1 accent version (Spanish).

Finally, to answer research question three, in order to look at the correlation or the relationship between objectively measured test scores and subjectively measured perceptions, I conducted correlational analyses among the results. What I found was that the test scores did correlate significantly and positively with all three measures in the questionnaire, namely familiarity, comprehensibility and attitude. What this means is that if for example, a participant found the Mandarin English accent more comprehensible in the test, they were likely to find it more comprehensible, more familiar and more likeable in the subjective perception questionnaire.

3 Discussion

Having discussed the specifics and findings from Dai and Roever (2019), let us now return to the broader conversation we are having today about accents in international communication contexts. Dai and Roever (2019) offered convincing evidence in support of the existence of a shared-L1 advantage, concurring with findings from previous research [10, 13]. To reiterate, what a shared-L1 effect means is that if your first language is Thai and then you speak in English with someone whose first language is also Thai, you will then most likely find the other person much easier to understand compared to you speaking in English with someone whose first language is Japanese or Korean. This shared-L1 effect has implications for real-world communication teaching and training.

Sometimes we have educators in language learning and language education who proclaim that we need to only use certain accents in the listening input because if one includes, for example, some language learners' L1 English accent, you would be disadvantaging other learners who speak different L1s. You see this argument played out frequently in standardized international English language tests: so far tests such as IELTS and TOEFL still limit their listening input to L1 English accents, namely, British, North American, Australian, New Zealand and Canadian English accents. Their argument is that when we include, for example, L2-English accents such as Chinese or Vietnamese, some groups of test-takers (e.g., the ones that speak Chinese and Vietnamese as their L1s) will be unfairly advantaged because of this shared-L1 effect. In practice, I would argue that if we expose test-takers to different English accents in the listening test, for example in dialogic tasks, these subtle differences tend to get evened out. Therefore, a shared-L1 effect should not deter language teachers and assessors from incorporating learners' L1 accents in listening input.

We also notice this shared-L1 effect impacts various tasks differently with gap completion items most susceptible to the shared-L1 effect. What this means is that if you need to capture specific concrete information such as filling some gaps, then this shared-L1 effect would be much stronger.

In terms of participants' subjective perception, the Mandarin English accent in this study was perceived to be the most comprehensible. This supports the long line of research

evidencing that when your L1 matches your interlocutor's L1, you tend to find their speech more comprehensible, not only at an objectively measurable level but also at a subjective perception level. What Dai and Roever (2019) did find, which was quite unexpected, was that the Australian English accent, an L1 accent, neither facilitated participants' performance in the actual listening test nor was it judged more comprehensible in their subjective questionnaire evaluation. This finding shows that preference for L1 accents needs to be problematized since there is little empirical grounding for L1 accents being inherently more comprehensible than L2 accents.

This study also noticed that familiarity was quite difficult to judge for L2 speakers. Remember that these adolescent L1-Chinese participants rated Spanish, and Vietnamese to a large extent, more familiar than Mandarin. More familiarity with either accent is not possible in this case because the participants in this study had been exposed to the Mandarin English accent a lot more frequently than the Vietnamese or Spanish English accents.

Finally, there was no significant between-group difference in participants' attitudes towards any of the four accents. This shows that when we do not inform people of the nationalities of the speakers they talk to, or if the listeners are not able to identify the nationalities of the speakers, the listeners then do not have a clear preference for any of speakers' accents. This shows that when we sometimes hear people say, "Oh I just love the British English accent, American English accent, or Australian English accent for whatever reason", these types of favourable attitudes are largely the result of social learning. This can be due to how certain varieties of the English language are marketed, the socioeconomic power behind different English varieties, and the prestige people attached to different accents, but fundamentally these favourable attitudes are not inherent. There is nothing inherently better about a particular variety of English or a particular type of English accent; we are largely conditioned to believe that some are better than others.

3.1 Implications of Dai and Roever (2019) for maritime communication

Now that we have discussed the findings from Dai and Roever (2019), let us now go back to the question I raised at the beginning of this talk: do we really have an English variety or English accent that we should aspire to in maritime communication? Are some English varieties or accents inherently better than others? My answer to that question is no. English is a language that we all use for international professional communication. This is again due to many historical reasons, and this might change in the future, but it is the reality for now. However, the lingua franca status of English does not imply that L1 English varieties are necessarily better in a measurable sense, whether subjectively or objectively, as evidenced by Dai and Roever (2019). L2 English language users should take ownership of English and formulate realistic learning goals while they try to develop competence in the English language. If English is a shared language, then why sometimes do we see some L2-English speakers spending years trying to just sound like for example, an L1 British English speaker?

The next take-home message from this talk is about the shared-L1 effect, which has proven to facilitate comprehension. This is a very important message for different stakeholder groups because it helps to destigmatize L2-English accents. When we have speakers using English in lingua franca situations, speakers tend to communicate more effortlessly with those who share the same L1 as they do.

As to accent preference, we now can say with certainty that it is a social construct rather than a definite quality. We now have a clearer understanding that people's preferences towards certain accents are shaped by social conditioning.

One key point from this talk is that L1-English accents are not always the most comprehensible ones, which applies to the maritime communication context. As Uchida and Tagaki (2012) concisely demonstrate, maritime professionals in their study found Thai,

Korean and Indonesian English accents clearer than the British English accent, a finding that Dai and Roever (2019) corroborate. The implication for maritime communication pedagogy is that we need to expose maritime communicators or learners of maritime communication to a wider range of English accents instead of just British or North American English accents. What we need to do is to give them the opportunity to familiarize themselves with different types of English accents, both L1 and L2 English accents, so that when they go out into the real world, they do not have pre-established notions or biases towards certain English accents. Because English is used as a lingua franca in maritime communication, giving seafarers the opportunity to get used to different English accents is conducive to better and more effective performance in their jobs. Current maritime communication training materials unfortunately still have a long way to go towards a better representation of the lingua franca nature of English in maritime communication [2-3].

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