

Western University

Scholarship@Western

SASAH 4th Year Capstone and Other Projects:
Publications

School for Advanced Studies in the Arts and
Humanities (SASAH)

Fall 2021

My Experience as a Phonetics Research Assistant

Damaris Holmes

Follow this and additional works at: <https://ir.lib.uwo.ca/sasahr4pub>



Part of the [Anthropological Linguistics and Sociolinguistics Commons](#), and the [French Linguistics Commons](#)

Damaris Holmes

Dr. Barbara Bruce

ARTHUM 4490F

August 22, 2021

My Experience as a Phonetics Research Assistant

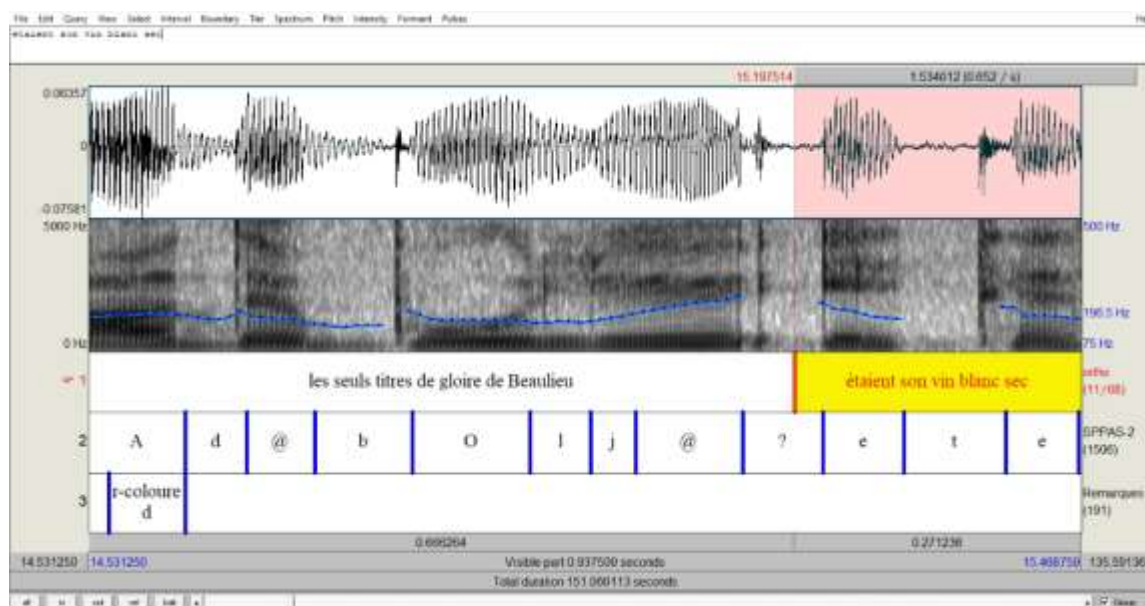
As someone with a stable living situation, I have been extremely fortunate these past 18 months to have faced relatively insignificant life challenges. I always try to keep this perspective and having had the fortune to participate in a few exchanges, I generally consider myself someone who is able to roll with the punches quite well. Having started in June 2020, my internship as a Research Assistant for Dr. Jeff Tennant has unintentionally reflected the small yet impactful difficulties I have nonetheless faced and mostly surmounted this year. Reflecting upon my placement has allowed me to document my wins and losses and to thoroughly consider how these impact my next steps.

When my third-year exchange was abruptly cut short in March 2020, I began looking for a meaningful way to fill my summer. In an attempt to wield my newly acquired networking strategies from 3380Y, I reached out to someone in the linguistics department about potential volunteer opportunities. To my delight, I was put in contact with Dr. Jeff Tennant who offered me a contract as an RA for the summer. I was excited to contribute to a project where I could learn more about my field of study, and this position was the quintessential demonstration of “how is this knowledge applicable in the real (research) world”. Jeff had taught my introductory phonetics course in second year and I knew he was a dedicated and passionate linguist and teacher. As someone who cares about the success of his students, I was concerned that my selection was a result of pity for me having had my exchange disrupted rather than for merit; I

had done well in Jeff's course, but it was far from my best mark. I felt that in order to prove the potential inconvenience worth it, I would have to perform as perfectly as possible. This feeling resulted in a few difficulties in the first few months, primarily a hesitation to ask extended questions or for clarification. While performing my tasks as directed, failing to fully understand the broad scope of the project resulted in an inability to plan ahead and creatively implement measures that would make the analysis easier down the road. Because of this uncertainty, I think our supervisory relationship began quite hesitantly. Jeff is not someone to push a student if they don't seem to want to be pushed, and my tentativeness came off as a lack of interest. This hesitancy was compounded by my insecurity. Because the only experience I'd had in phonetics was in this intro course, I doubted the value and validity of my contributions. As the only student on the project, I had no one with whom I could compare my experience. As I became more comfortable in my role and confident in my work, I began asking questions. Because I was able to articulate my knowledge gaps and interest, Jeff was able to provide me with the resources necessary for me to learn about the topic of rhythm analysis which has ultimately enabled me to think critically about my work and begin employing pre-emptive measures to facilitate later work. The more I worked, the more certain I became about what I did not know, and once I could articulate my difficulties and put them into clear questions, things started looking up.

I was hired to support an ongoing research project examining the rhythm and intonation of the speech of Ontario Francophones. The data and results collected in this study will be contributed to the Phonologie du Francais Contemporain (PFC) corpus which contains resources and information about the phonology of modern French across the world. My primary role is preparing sociolinguistic data for analysis. Sociolinguistic interviews had been conducted and recorded in the first couple years of this project. From the audio, the first step is to

orthographically transcribe the content of the interview. Jeff then inputs the audio and orthographic transcription into a software which attempts to phonetically transcribe the speech with a phonetic alphabet called SAMPA and to align each phoneme with the audio in a TextGrid. While the automatic aligner is helpful, it is far from perfect meaning everything needs to be double checked. My primary role is to take the output from the aligner and, using a software called Praat, manually check the alignment of each sound a speaker makes in 3-6 minutes of speech against the audio, spectrogram, and sound wave. For the first 12 months of my work, I was generally aligning files to move the project forward as a whole. In June, my work was focused on preparing for the CLA conference which included not only preparing data, but also revising a script and preparing a PowerPoint presentation for our session. Since July, my data preparation work has remained the same, however the work is contributing to a new project on the rhythm and intonation of the English of Haitian Torontonians. This work is being done in anticipation of the 2021 PAC (Phonologie de l'Anglais Contemporain) conference at the beginning of September.



Sound Wave

Spectrogram

Orthographic Transcription

Phonetic Transcription

Comments

PFC

Project: <https://www.projet-pfc.net/>

Due to both the nature of this research project and how work has changed because of COVID, I did my work remotely and independently meeting with Jeff once a week over Zoom for updates and clarifications. The primary defining challenges of this role have been the remote independence and the communication barriers that follow. While I began my placement already employing skills learned from school which was beneficial, I also had to expand upon these skills in new ways based on both the nature of the work and the context in which we were working.

School indirectly teaches you many skills, from time management and organisation to communication, collaboration, and effective presentation. SASAH has been really helpful in directly addressing the value of these skills and in making you aware of them, helping you apply them more effectively. Many of these skills have been in play since the beginning of my work term with Jeff. I have kept thorough documentation of my hours, attempted to keep as regular of a schedule as possible, and when provided with readings or project updates, I have made sure to keep notes so that I can stay on top of my work and progress in my level of contributions. During the process of familiarisation, I was faced with two primary challenges. The first was learning to adapt to a professional research context. Having completed only course-based research projects, I was familiar with the process of research but not entirely prepared for the scale of a multi-year project. Aside from weekly meetings, my data preparation work is also largely independent; I am responsible for tracking my hours and determining and maintaining a reasonable pace throughout the week, all remotely. Working independently with such a large amount of data forced me to develop a system to both track my work and stay regimented. That said, working alone often made it difficult to understand my impact on the project which led me to be less enthusiastic about my work.

Once I was passed the communication barrier caused by the imposter syndrome and I understood the goal of the project, I was able to better situate myself within the project despite the independence and to understand the value of my contribution. Coming into this role, I did not expect to be so impacted by the independent nature of the work as with previous tasks, the full lifecycle of the project was always visible to me. Modifying my organisational strategies for this context and allowing myself to ask questions has enabled me to fully engage in and make a notable impact on this project. While soft skills like time management have been particularly key working online, I am happy also that I have had the opportunity to work on some hard skills as well such as reading spectrograms, effectively using Praat, and discerning the critical information to be understood from a research paper in which the vast majority of information goes over my head. Going into this role with a solid foundation of soft skills eased my transition to applying them in new ways and helped me progress in my role.

In exposing me to so many new subjects, SASAH has trained me to become comfortable directly addressing my knowledge gaps. Once I had logged enough hours and refamiliarized myself with Praat enough to get past the imposter syndrome, I began asking questions. This is when the quality of my work and my relationship with my supervisor began improving. Once this communication line was open, Jeff could see the foundation of knowledge that I was bringing to the work and it became easier to capitalise on and expand upon it. My contract was extended, I was given readings and the incredible opportunity to discuss them one on one with a researcher in the field, and later in the year I would have the chance to co-present at an international conference. Soon after I had asked Jeff if he could provide me with some foundational readings on rhythm metrics, we were having an involved discussion about a classic study when he remarked how wonderful it was that I was truly interested in the topic, something

that he hadn't come across before with his RAs. Around this time a few months into my work with Jeff, I became acutely aware of how poor communication can undermine so much of your work. Once the lines were open, my pre-existing skills and my potential were made evident, and the work became that much more engaging for us both. Another example of the impact of communication is an interaction we had in the weeks leading up to the CLA conference. Two weeks before our CLA presentation, there was a decision made to shift the analysis to the free speech data set. This data set, unlike the read passage set, had not yet had the alignment checked on it, meaning I would have 10 days to do work that would comfortably fit in a month. While my lingering imposter syndrome was encouraging me to get through the work without voicing my timing concerns to my supervisor, I knew it was important to communicate honestly about what I thought was feasible for me to accomplish in those two weeks. I immediately began work and at our next meeting explained my concerns about timing. Jeff was working on a few files himself and recognised the labour-intensive nature of the work left to be done. As such, we decided it would be prudent to have more frequent meetings leading up to the conference such that we could set small, feasible deadlines and ensure that our goals remained realistic. At these meetings, we were able to modify our schedule as needed and to articulate more specifically what was required for the analysis such that it was not necessary to manually check and apply the parameters to the entirety of each file. While concerned about the quantity of work leading to the CLA conference, being honest with my supervisor resulted in the ability to develop strategies with him in response to these concerns and to manage the concerns effectively.

Communication has been especially important with a supervisor like Jeff. Jeff is kind to the extent that unless you take the first step in indicating that you would like a challenge, he will not push you. The mentor relationship was static in the first couple months while I struggled with

imposter syndrome. The better the communication became, the more obviously open I was to being mentored, the better Jeff mentored. Once I realised that that responsibility was on me, I could and did act on it.

Developing my hard skills in a new domain has in turn proved useful in my school as well, especially with the capstone IRP. Skimming tens of articles per month and understanding how research is a patchwork of previous studies helped me understand the goal of a research project as the interpretation of data with respect to other research with the purpose of inciting new questions. With the IRP, this helped me be at peace with a project that did not present a “complete” result. Clear and confident communication with my supervisor was what ultimately allowed me to exercise and subsequently develop both the soft and hard skills with which I had come into this placement.

As with all challenges however, it’s easier to be diligent in your problem solving over the short term rather than maintaining them over the long. Maintaining good communication while working remotely became difficult in new ways as the project extended past the summer. Research work operates on a much larger schedule than schoolwork. As a multiyear project and one of many projects Jeff is working on, hard deadlines are infrequent and there were some low periods during which mine and my supervisor’s attention was elsewhere. As the online semesters brought with them unanticipated amounts of anxiety for me, it became easy to lose scope of the larger goal of the project, always focusing on completing smaller-scale school projects one after another. When I surfaced during a schoolwork lull, working on a seemingly endless quantity of data with no visible goal became increasingly less appetising. This lack of motivation was further amplified by the fact that the work required me to be at a computer when every long

school day was already spent in that position. Unlike with schoolwork, research work operates on a much longer timeframe over which I found managing my motivation difficult.

In January 2021, Jeff told me his plan to present at the annual Canadian Linguistics Association (CLA) conference in June. Not only did he want my help in completing the requisite research for this event, but he wanted me to work with him throughout. While the end of term was still extremely busy and stressful, the renewed sense of purpose and value helped me work through my last full term to get to the conference. In collaborating with Jeff through to the conference, from cramming last minute data preparation, to finalising the results slide of the PowerPoint hours before the presentation, to having the opportunity to present the first half of our talk, I was able to experience not only the exaggerated slow period of the research year, but also the intensity of the busy times. The effects of the improved communication skills I developed over the course of the year were manifest here as well. Not only has communication allowed us to implement strategies to efficiently overcome challenges, but it also afforded me the confidence to offer help in areas in which I am skilled. Seeing that Jeff would be working on the analysis until the last minute, I offered to make the PowerPoint to relieve him of some of the work for which he was very grateful. Applying both the necessary organisational skills which afford me flexibility and the confidence to communicate openly with my supervisor has aided in the fostering of a positive work relationship. This in turn has yielded several incredible opportunities such as co-presenting at this international conference and being invited to contribute to a new project. Ultimately, the effective application of the organisational skills learned over my four years at Western and the communication skills learned during this placement were what resulted in the successful presentation of our research at the CLA conference. Despite a low period, the continued demonstration of my engagement with and

interest in this work throughout the year afforded me the opportunity to participate in ways above and beyond what I had originally expected from this job.

dernière mise à jour : 6 juin 2021 | latest update: June 6, 2021

Association canadienne de linguistique | Canadian Linguistic Association
 Congrès de 2021 | 2021 Annual Meeting
 Programme préliminaire | Preliminary program

Événements spéciaux | Special Events

- Séance spéciale sur la pédagogie (vendredi) | Special session on pedagogy (Friday)
- Célébrez le 10e anniversaire du Musée canadien des langues! (samedi) | Celebrate the Canadian Language Museum's 10th Anniversary! (Saturday)
- Orientations futures; Comité ad hoc de l'ACL sur les langues autochtones (dimanche) | CLA Indigenous Language Ad Hoc Committee, future directions (Sunday)
- Table ronde : Qu'est-ce que je peux faire avec un diplôme en linguistique? (lundi) | Round table: What can I do with a degree in linguistics? (Monday)

NB: Toutes les heures sont exprimées en GMT-0400 (HAE). | All times are shown in GMT-0400 (EDT).

dernière mise à jour : 6 juin 2021 | latest update: June 6, 2021

4:30 - 4:45	Pause Break	
4:45 - 5:30	Prix national d'excellence : Communication plénière (Lauréate 2020) National Achievement Award: Plenary talk (2020 Recipient) Johanne Paradis (Alberta) <i>Risk and protective factors in the bilingual development of Syrian refugee children recently arrived in Canada</i>	
5:30 - 5:45	Pause Break	
	Syntaxe Syntax	Changement et variation linguistique Language variation and change
	présidée par/chaired by: Jila Ghomesli	présidée par/chaired by: Brittany O'Neil
5:45 - 6:15	Suhur Tughipour (Toronto) <i>Deriving two types of applicatives: The case of Persian <i>pooyā</i> predicates</i>	Christian Thompson & Sky Onosson (Saskatchewan, Manitoba) <i>Phonetic change in the grammaticalization of Brazilian Portuguese "tipo"</i>
6:15 - 6:45	Ariene Stevens, Yvonne Denny, Barbara Sylliboy & Dianne Friesen (T'u'n L'uuey Et-mawlukwatimuk, Eskasoni Band, Victoria) <i>Argument mapping in Mi'kmaq</i>	Jeff Tennant & Dumaris Holmes (Western) <i>Prosodic rhythm in Northeastern Ontario Francophones' French and English</i>

Unfortunately, I had not yet become familiar enough managing the undulating business of the research sphere after a year. After the CLA conference, Jeff and I conferred as to the next steps of the project and upon conclusion that it would involve another very lengthy round of data preparation, I began to burn out. While preparing for the conference, Jeff had lowered the

priority on some other obligations to which he then needed to attend leaving me to forge ahead on my own. At that time, I was beginning two other part time jobs and a summer day school course. Once again, I found myself both without a concrete goal in sight for this project and exhausted and anxious from other spheres of my life. I'm not sure if Jeff sensed it, if he needed a change himself, or if it was dumb luck both times, but yet again when I was at an all-time motivational low, something new came up. A project Jeff had been working on with a French colleague on the rhythm and intonation of the speech of Haitian Torontonians was gaining some traction and had been accepted as a talk at a conference in Toulouse at the beginning of September. With the permission of his colleague and citing the great work I had done on the PFC corpus, Jeff invited me onto the project to do some similar data preparation. Though the work is much the same, having both a hard deadline to work towards and a renewed sense of validation has once again reinvigorated me.

PAC Conference: <https://pac2021.sciencesconf.org/>

Application of rhythm metrics to Toronto Haitian English

Yvonique Lacoste, Université Lyon 2
Jeff Tennant, Western University
Damaris Holmes, Western University

This paper explores the prosodic rhythm of the English spoken by Haitian-Canadians residing in Toronto, Ontario. Grounded in the context of research on the sociolinguistics of Canadian English varieties (Hoffman & Walker 2010, Nagy et al. 2014, Zetter & Peters 2013), and on rhythm in language contact situations (Kamrakala et al. 2016), this study extends to the prosodic level from previous analyses of segmental variation in this community of English speakers (Lacoste 2019, 2015), and draws on a pilot study conducted by Lacoste & Tennant (2017) which examined variation in the prosodic rhythm of Toronto Haitians.

Based on a larger data sample than Lacoste & Tennant (2017), this paper investigates the following rhythm metrics in the speech of 24 Canadians of Haitian descent who were interviewed using the Labovian sociolinguistic technique: ΔV , ΔC , and ΔV (Ramus et al. 1999); nPVI-V (Low et al. 2000); VarcoV and VarcoC (Dellwa & Wagner 2003, White & Mattys 2007). The corpus includes two groups of speakers: 1) Haitians born in Haiti and living in Toronto, both of whose parents are Haitian, and whose mother tongue is not English (but Haitian Creole and/or French); 2) Haitians born in Canada, whose parents are both Haitian, who have English as a dominant language, or as a language in which they have native-like competence. We hypothesize that Haitian French and Haitian Creole are, like European French (Low et al. 2000), Canadian French (Kamrakala et al. 2016), and other Caribbean Creoles and varieties of English (Thomas & Carter 2006), more syllable-timed than the English of 'mainstream' Canadians. That is, speakers who were born in Haiti and have Haitian Creole or French as their dominant language are expected to show a more syllable-timed rhythmic pattern, represented by lower values for ΔV , ΔC , nPVI-V, VarcoV, and VarcoC, and higher values for ΔV , than speakers born in Canada, who will be expected to show a more stress-timed rhythmic pattern, reflected by higher values for ΔV , ΔC , nPVI-V, VarcoV, and VarcoC, and lower values for ΔV .

Our pilot study based on 12 speakers (6 from each group) was inconclusive for most metrics but did show a significant difference between the groups for VarcoV (vowel duration variation, normalized for speech rate) which supported our hypothesis. In this study, we extend the analysis to the entire corpus of 24 speakers. We also delve further into the data by plotting pairs of rhythm metrics using Correlator (Ukai & Rameno 2009). The results of this rhythm analysis are interpreted in light of previous findings on segmental production reported in Lacoste (2019) which show important variation among Toronto Haitians born in Haiti for phonological variables such as non-postvocalic /s/, intervocalic /t/ or (th), revealing phonetic variants that may be attributable to influence from Haitian Creole and/or French, or from Anglophone Caribbean varieties spoken in Toronto. Toronto Haitians who were born in Canada, however, produce a higher level of phonetic variants typically found in 'mainstream' Canadian English. We also discuss our findings in light of those of Sims (2019) for Haitian Americans.

Results are discussed in relation to how the English prosodic system of Toronto Haitians is situated vis-à-vis the local Toronto English variety, 'mainstream' Canadian English as well as Anglophone Caribbean varieties, and we ask to what extent a Haitian variety of English is becoming apparent in the Toronto area.

References

While I pride myself in my growth over the past year of work, this is one area in which I am not satisfied with the degree of progress I have made. I have been an RA for Jeff for over a year now, I have been involved in so much of the process, I have demonstrated my interest and investment in the outcome, and I have worked hard to improve my communication with him. As such, this position which was initially designed for repetitive data preparation by short term student workers, has evolved. While both Jeff and I recognise this implicitly, I think it would have been beneficial for my own ease of communication to have had an explicit conversation to this end. I am uncertain as to how much this cycle of burnout was perpetuated by the normal chaos of the final year of university versus by the drastic lifestyle changes forced upon us by the pandemic, but in the future, it will be imperative for me to recognise this happening before it gets to such extreme lows. Reflecting upon this cycle of burnout has allowed me to recognise that sometimes in my excessive pride, I wrongfully equate the need for a change, even with such a repetitive task, to weakness. I have learned this year that it is important and normal to switch focus when you need to and that doing so can be an effective strategy for preventing burnout.

Participating in the internship program has also been of great value to me in ascertaining how I personally can draw value from a degree in the arts and humanities. Over the past couple years, I have recognised my frustration at how introductory and seemingly impractical much of what I have learned in my undergrad in linguistics has been. It seems as though if you want to fully understand even a basic linguistics article, graduate school is a must. My frustration only increased at a round-table event I attended on the final day of the CLA conference. The topic was what to do with a degree in linguistics if you don't want to go into research. The panelists all had interesting jobs, though not at all related to linguistics, and were very articulate in identifying the more transferable skills gained as a linguist. Near the end of the session a peer of mine raised her

hand to ask if there was anyone there who only had an undergrad who could speak to their experience. To our dismay, all of the panelists had some form of grad school with the vast majority toting a PhD. My experience working for Jeff has fortunately shifted my perspective on the matter for the better. The combination of working with Jeff and the career workshops in which we participated in fourth year gave me the tools and confidence to identify the transferrable skills I have from my undergrad. The internship in particular has provided me the opportunity to practice applying these skills in new ways which has made me more confident in my ability to do so in the future.

Time and again I have realised how important it is to be able to articulate both what you like and dislike in a job to best inform your future decisions. Participating in this conference allowed me to look at my work with Jeff in relation to other research in Canada and across the world and to identify the common goals of the research community. My experience has therefore also provided some clarity as to the type of work structure I may enjoy. With research, there are of course tangible goals such as publishing papers, but these are often proposals without an incontestable claim. In my limited experience with linguistics research, the process is always continual and the published works throughout this process are created with the intent to provide information about a bigger goal and to incite even more questions rather than to produce complete, polished answers; the emphasis is on understanding the process. The SASAH capstone IRP primed me for this realisation. With COVID and the ambitious scope of the original proposals, my project underwent frequent modifications and many IRPs took the form of proposals for future work. I have found that with this type of project, I am more able to appreciate the work I am doing and to prioritise quality and understanding rather than being stressed about completing it to an acceptable level to submit. This realisation has prompted me to

reflect upon and allowed me to articulate what type of role I might best fit as a career. In contrast with research, many jobs are driven by immediate results. Though I would not fit a full-time research position, I appreciate the growth mindset and would like to work in a role which allows me to employ creative thinking to execute projects which build upon each other and work towards a common, long-term goal. While I appreciate the focus on learning and process that comes with the long-term work in research, I am drawn to a setting that would provide me with more regular and concrete subgoals. Working at an organisation with a central mandate around which smaller efforts are structured is a categorisation I will be prioritising in my job search.

This internship has been an incredibly valuable experience for me. In presenting an opportunity to apply and identify the guidance provided by SASAH in a real work setting, it has given me increased confidence in the value of my arts degree. Working with Jeff has also tangibly reinforced the importance of asking questions and keeping communication open. I am self-assured in my diverse foundational skills and having the opportunity to apply them effectively in a new context reassures me that I will be able to do so again in my first job. It has been an important lesson in having confidence in my own abilities and adaptability. Recognising the tangible effects that applying skills learned in this process and in school has had on my work has been extremely rewarding. I anticipate that, having reflected upon the experience, I will be able to navigate future inevitable imposter syndrome with greater ease as well. Not only this, but I have once again had the opportunity to challenge my resilience in the face of so many unprecedented internship plan changes. I am so grateful to my internship network, both Dr. Bruce and Jeff for their flexibility and kindness in helping me navigate these changes.

I have had the unique opportunity to watch my peers' EL presentations and subsequently their trajectory into grad school or exciting new jobs this summer all while I am still in my

placement. Seeing this progression has been incredibly encouraging and is a very close-to-home demonstration of the tangible impact an EL learning opportunity can have on your future when you have learned how to get the most from your placement and how to market your skills and experiences effectively. Both in reflecting upon my experience and preparing my presentation to reflect publicly, it has become more evident for me just how much I have gained from this placement. Presenting also provides a new source of excitement as while in the linguistics sphere my work may not be overly exciting, non-linguists have fresher eyes with which they can also view this placement as the exciting opportunity and project that it has been for me. Though this RAship was not originally my plan A, or B, or even C for my EL placement, detailing my experience has made me recognise that I have in no way been shortchanged by the numerous changes in plan. Ultimately, my work as a research assistant for Jeff provided me with direction and purpose throughout this past year. Having a consistent source of challenge for an extended duration has allowed me to recognise and appreciate my growth in an otherwise frustrating and perpetually changing year. I am so grateful to Dr. Bruce for working with me through these challenges and in doing so, modelling the level of flexibility to which I aspire. I am also grateful to my supervisor for working so patiently with me and for so generously seeing and helping me realise what can only be the very first bit of my potential.