AIPS STRG Jonathan Paramore

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In linguistics, a long-standing debate concerns the relationship between the abstract organization of speech sounds (phonology) and the physical production and perception of speech sounds (phonetics), known as the phonetics-phonology interface. Research on vowel nasalization – which refers to vowels produced with airflow passing through both the mouth and nose simultaneously - has provided fertile ground to explore this phenomenon. Some linguists argue that distinct nasalization patterns for vowels preceding nasal consonants provides evidence for two distinct inputs to speech production: (1) language-specific phonological processes for nasalization patterns that are planned and (2) universal phonetic processes for nasalization patterns that result from physiological constraints on the vocal tract (Solé, 1992, 2007; Kramer, 2017). Still, others use nasalization data to argue for the bifurcation of planned nasalization patterns into language-specific phonological processes on the one hand and language-specific phonetic processes on the other (Cohn, 1993). Teasing apart planned nasalization patterns into both phonological and phonetic rules assumes that phonetics can act on the speech input and result in language-specific phonetic realizations, whereas the opposing view treats phonetics as largely mechanical and universal, meaning that all planned processes are phonological. However, very few nasalization studies include more than a handful of speakers in their experiments, and most of the data is sourced from European languages. Consequently, our understanding of nasalization and its broader theoretical implications is confined to a small number of languages, most of which derive from shared linguistic ancestors. Without a thorough analysis of nasalization across a more diverse pool of languages that incorporates a larger number of participants, the import of nasalization for the phonetics-phonology interface debate will remain elusive. My project – Nasalization in Punjabi and Mankiyali – seeks to fill this gap by conducting sufficiently sized nasalization studies in a region in which little phonetic research on nasalization has been conducted, and in which languages with both contrastive (nasalization that changes meaning) and non-contrastive vowel nasalization abound. I am applying for the AIPS 2023 short-term research grant to Pakistan to conduct experiments and publish a paper on the features of nasalization in the two Pakistani languages mentioned above, both of which utilize nasalization as a prominent feature. The main questions I am seeking to answer are (1) what are the nasalization patterns of Punjabi and Mankiyali (a highly endangered and understudied language in Mansehra District, KPK), and (2) how do these patterns inform our understanding of the phonetics-phonology interface? I plan to travel to Islamabad this summer for approximately four weeks to collect nasalization data to answer these questions. Last summer, I traveled to Pakistan to co-lead a language documentation training workshop at Allama Iqbal Open University, so I will collaborate with my colleagues at the Centre for Language and Translation Studies (CELTS) at Allama Iqbal to secure lodging, a location to conduct the experiments, and to recruit participants for the Punjabi portion of the study. In addition, while there, I plan to collaborate with Dr. Ghulam Ali, the director of CELTS, to lead another workshop aimed at teaching participants best practices for designing a linguistic experiment, collecting nazalization data, and using oro-nasal airflow equipment. Due to my continued work with the Mankiyali speech community, I have several contacts that I plan to work with to recruit participants for the Mankiyali experiment. I intend to collect oro-nasal airflow measurements from approximately 30 speakers of each language using the Dualview airflow measurement system from Glottal Enterprises. I predict that the diverse implementation of nasalization in these two languages will demonstrate that

nasalization can be both planned and phonetic, meaning that language-specific phonetic rules do in fact play a part in forming the speech input.