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“The Map of it All”: Quantitative Mapping of Foreign Language in James Joyce’s *Ulysses*

By

Alyssa Krueger

Claremont Graduate University

2021

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Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Alyssa Krueger as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in English.

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Abstract

“The Map of it All”: Quantitative Mapping of Foreign Language in James Joyce’s *Ulysses*

By

Alyssa Krueger

Claremont Graduate University: 2021

Readers of James Joyce’s *Ulysses* know that it is a cosmopolitan (multilingual) novel, but most do not know just how many foreign words Joyce used, altered, and inserted throughout the writing process, nor do they know the final tally in the 1922 Shakespeare & Co. edition. This dissertation approaches Joyce’s foreign language from a quantitative and genetic perspective, counting all 2,525 foreign words and attributing each to episodes and characters to visualize where and how foreign language manifests in the novel. Genetic data in turn reveals that *Ulysses* was not always quite so multilingual but instead became *more foreign* during the writing process. My study explores these foreign words as one type of the ‘disunities’ that Andrew Gibson proposes as entry points for understanding a modernist text’s unique *mimesis*. I explore these foreign interruptions as contributing to a consistent sense of worldliness, or multiculturalism, in the novel. Finally, I turn toward reader-response theory and neuroscientific evidence to explore the foreign words of *Ulysses* as units of unfamiliarity that slow readers and elicit higher levels of neurological activity, ultimately helping readers learn to read differently.

Acknowledgments

Looking back at the past seven and a half years, my time at CGU seems somewhat of a blur. What is clear to me, though, is that I started the program as a student filled with uncertainty, but I am leaving, despite the career (and many other) uncertainties of COVID-19, as a more competent and confident scholar and teacher – and with a much stronger sense of self and purpose. There are many people to thank for helping me on this journey.

I'm grateful for the generosity and feedback I've received in classes with Professors Lori Anne Ferrell and David Luis-Brown, as well as Professor Ferrell's encouragement of my fledgling attempts at service here at CGU (here's to you, Humanities in Action – you were short-lived but created with love). I also wouldn't be the writer or teacher I am today without the training of, and my colleagues at, the Center for Writing and Rhetoric; thank you for the camaraderie and the skill to build on what was still raw ability. And a hearty thanks to Professor Enda Duffy at UC Santa Barbara for his kindness and support in pursuing Irish language learning.

I must also say thank you – a million times, thank you – to Ashley Johnson and Emily Schuck, who somehow always found the time to read my (quite) rough drafts and provide substantial feedback when my mind was too cluttered and stressed to function well. (Thank you also for the many texts and calls to complain, panic, and de-stress.) Their support and skills helped me untangle my knot of ideas and retain sanity.

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faith in me and my work has helped me find the energy and belief I needed to keep writing and eventually succeed, even when some of life's setbacks left me drained.

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Finally, I must thank Kurt, Renie, Corey, and Brendan Krueger. My brothers taught me to not take myself too seriously, which has become invaluable for me in academia (and life). My father showed me how to nurture and to persevere, even through life's difficulties and my own mistakes; his ability to be always present, even when on business trips, provided the stable foundation that I and my family needed to flourish. And finally, thank you to my mother, who taught me how to dream. She saw my talents and hopes and gave me the encouragement and space necessary to pursue my goals and become whoever *I* wanted to be. She gave me the support she never had – it is, in a large part, *her* success that I was the first woman in the family to go to college at all, let alone attain a doctorate. This dissertation belongs to her as well as to me.

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Introduction

Leopold Bloom's assertion, "Numbers it is," (*U* 11.830) might be used to sum up this dissertation (it is, after all, as the title announces, a quantitative project), although one hopes that his observation following purposefully faulty math, "Do anything you like with figures juggling," (*U* 11.832) does not prove to be the case here. Bloom's claim is correct; despite many claims to an ineffable quality of art that science and mathematics can never break down into formulas, numbers (or mathematics) can be found in both art and life. Musicians know that songs, bars, and even notes are broken down by numbers and fractions. Botanists know of the connection between many plants' leaf placement and the Fibonacci sequence. And although literature contains many mysteries that I would not argue can be solved by mathematics, each work is nonetheless composed of some countable number of words. Sometimes, counting can help us find interesting ways to understand ideas and works of art, even if it doesn't solve or explain that ineffability so valued by art lovers. This interest in what counting could reveal helped direct this project down a quantitative path to understanding foreign language in James Joyce's *Ulysses* differently. In this dissertation I employ quantitative and genetic methods to extend existing work on Joyce's foreign language use, counting all 2,525 foreign words in *Ulysses* and attributing each to an episode and speaker before applying the same quantitative methods to genetic study to observe how and where the word counts changed. Counting the foreign words provides a perspective from which individual uses of foreign language – apparent anomalies when seen alone – can be seen instead as a larger body of words which create particular reader-effects. As a whole, the foreign words serve as an international 'background noise' contributing to *Ulysses*'s worldly *mimesis* rather than as momentary diversions within a

monolingual novel. There may not be a clear-cut ‘formula’ for how Joyce uses foreign language, but counting nonetheless supports exploration of how the words work in the novel.

Joyce may not have known the languages he used in *Ulysses* (we may consider him a sort of genius, but 25 languages would be asking a bit much, even for him), but he didn’t *need* to know them. The point of studying the significance of foreign words in the novel is not to prove Joyce’s knowledge of them, but rather to explore the symbolic importance these words can carry when viewed within the context of Joyce’s foreign language use as a whole. After all, we know that his additions often seem haphazard: Erika Rosiers and Wim Van Mierlo point out that for *Finnegans Wake*, Joyce “used the language indexes in notebook VI.B.46, seemingly adding words at random to various parts of the book,” “to some extent... ‘throwing in’ clusters of foreign words without paying much attention to meaning.”ⁱⁱ Rosiers and Van Mierlo assert that sound and universality “were more important than meaning.”ⁱⁱⁱ If this is true, it drives home the need for a less translation-centric, more distant reading of Joyce’s foreign words and their effect on the novel and reading experience. Counting becomes a useful tool when studying foreign words as important for their sounds rather than their meanings. A typical reading practice can easily skim over unfamiliar words, but counting enables a different sort of reading process, one that allows readers to see (and ‘hear’) the foreign words by bringing them out of the text to study as a unit.

In this work I study *Ulysses* from such a perspective, exploring the ways that foreign words in the novel provide a type of background (or ambient) noise for the novel that reflects the reality of an increasingly globalizing world. *Ulysses* contains, after all, 25 languages besides English; no single reader could understand so many words and languages, so we must admit the possibility that they’re *not supposed to understand*. These words disorient, forcing the discomfort of not knowing, just as the increasing hybridity and interconnectedness of the world

confuses and unmoors nationalistic identification. The intermingled foreign and English language of *Ulysses* creates the foundation for the beauty of this work's unusual *mimesis*.

Before delving further into *Ulysses* and its unique brand of multilingualism, I will first consider the role of foreign language in literature as well as the ways scholars have already explored and understood Joyce's multilingualism. Despite Ferdinand de Saussure's assertion of the "arbitrary nature of the sign," language is still often used with the innocent, unquestioning ease of those who believe in the straightforward nature of language and communication.ⁱⁱⁱ In literature, this "customary ring of naturalness," as Theodor Adorno calls it, is often disrupted with difficult vocabulary and the insertion of foreign elements.^{iv} These linguistic challenges highlight the illusion that "what is said is immediately equivalent to what is meant."^v Foreign language use reminds readers of the false simplicity of their own language, for, "by acknowledging itself as a token," Adorno explains, "the foreign word reminds us bluntly that all real language has something of the token in it."^{vi} Loan words (or in Maria Lauret's terminology, 'wanderwords') behave as "*Zellen des Widerstands*"¹ in the written word and provide a clear ingress to the study of linguistic "foreignness" in literature.^{vii}

The practice of using foreign words and phrases in literature is an old one, as scholars and artists have long made finding the *bons mots* a primary goal. For some writers, this language use has come across as simply a technique for illustrating one's intellect or a habit derived from tradition. Lauret, in *Wanderwords: Language Migration in American Literature*, excludes two such types of multilingualism: first, the "incidental, yet habitual use of words and phrases in languages other than English in nineteenth-century American writing" and, second, that of

¹ "Cells of resistance"

writers like T.S. Eliot and Ezra Pound, who, although they “may have partaken of migrant cultures and inserted other languages” into their English work, nonetheless “did so primarily by way of heteroglot quotation; their poetic practice was not about representing a multilingual world so much as to produce an erudite, multilingual (inter-) text.”^{viii} “*Intra*-textual multilingualism,” on the other hand, relies less on allusion and quotation and, instead, uses foreign words for their own sake.^{ix} Now a common literary feature, loan words remain nowhere more present than in the later works of Joyce, which feature both *inter*- and *intra*- textual multilingualism. Though Joyce’s novels are defined as ‘English’ novels, in *Ulysses* and especially *Finnegans Wake*, he rejects a monolingual perspective. Phrases from Italian, Irish, German, and more are grafted into the narrative and dialogue of *Ulysses*; Laurent Milesi cites as many as a dozen languages in the novel, but the novel actually contains, as I have stated, 2,525 foreign words from 25 different languages.^x *Finnegans Wake* moves further, ignoring continental boundaries to extend beyond European languages, including within the text, to name just a few, Japanese, Breton, Armenian, Eskimo, and even the artificial Esperanto. The “combinatory linguistics” of this novel, Milesi writes, “can be made to oscillate between 70 and 80” foreign idioms.^{xi} In “Wonderful Vocables: Joyce and the Neurolinguistics of Language Talent,” Maria Kager explains that Joyce is typically considered a “polyglot experimenter,” but using neurolinguistics theory, she complicates this definition by asserting that Joyce is also a bilingual writer.^{xii} Linguistic studies pervade Joyce scholarship, composing such an important part of the field that collections like *James Joyce and the Difference of Language* and *Doubtful Points: Joyce and Punctuation* abound. In *European Joyce Studies*’ 24th volume, *A Long the Krommerun*, Joyce’s Wakean language forms the connecting theme between papers such as Kager’s study of neurolinguistics and Tim Conley’s exploration of Joyce’s relationship to mathematics as a potentially universal language.^{xiii} Cleary,

Joyce's eccentric language continues to fascinate readers and to provide fruitful avenues of study.

Within the study of Joyce's language are several explorations of, more specifically, Joyce's multilingualism. In "Esperantic Modernism," Nico Israel connects the utopian language, Esperanto, with Joyce's multilingualism. He argues that "Joyce's novels incubate a pregnant pause, in which the dream of a universal language, a gift of tongues, collides with the 'warpeace' of history, of nations, and of everyday life."^{xiv} Joyce's work challenges not only "a national (or monolingual) literary tradition,"^{xv} as Israel argues, but a naïve hope for universal language. The foreign words of *Ulysses* destroy any possibility of monolingualism in the novel, let alone a linguistic utopia; the sheer number of foreign words and languages prevents full understanding by any single reader and creates a consistent sense of "unknowingness" and distance. Rosa Maria Bosinelli explores this connection between foreign elements and distance in the novel, focusing primarily on Joyce's Italian and exploring "the interplay between English and foreign words in Joyce's texts," which "results in an estrangement or 'foreignizing' of the word, which opens a space for the presence of the 'stranger' in Joyce's language."^{xvi} Joyce's "multilingual texts," Bosinelli asserts, "address both the monolingual English reader and the foreign reader with the result of displacing them both"; in Joyce's novels, no one can achieve complacent comfort.^{xvii} Just as Bosinelli claims that Joyce's use of English and foreign words together "expose[s] the presence of 'the stranger in language,'" Milesi asserts that Joyce's language "pris[es] open the complicity between the national and the natural," "countering it through defamiliarization and babelization."^{xviii} Milesi's work recasts Joyce's language into a "more politicized framework, as a manifestation of (and reflection on) processes of *creolization* in language," focusing primarily on *Finnegans Wake* and its "synthetic idiom."^{xix} Indeed, as Milesi asserts elsewhere, "What

Joyce's dream of a universal language makes clear is that global communication is not achieved through the reduction of difference and meaning to a mythically common denominator but by multiplying and cross-fertilizing localisms."^{xx} What these studies of Joyce's multilingualism make clear is that Joyce's language avoids myths of linguistic purity or utopianism and instead consistently drops the reader into moments of discomfort via the unfamiliar.

As multilingual and unfamiliar as *Ulysses* is, at the center of Joyce's blurred regional, dialectal, and linguistic boundaries is Dublin. Declan Kiberd writes that *Ulysses* "celebrated the ways in which a life could be simultaneously cosmopolitan and supremely local."^{xxi} Dublin is, after all, quite important to the novel; Enda Duffy argues that the constant naming of streets, shops, and landmarks reveals that "the ideal reader of the novel would have been a Dubliner well versed in the physical aspects of the city in 1904," implying "a local community."^{xxii} In contrast, in "Disorienting Dublin," Eric Bulson asserts that Joyce's Dublin, and the place-names and directions given in *Ulysses*, disorients readers.^{xxiii} Yet even as Dublin and her local voice(s) take center stage, Milesi asserts that Joyce's hybrid language illustrates "miscegenation with foreign idioms."^{xxiv} Readers, then, are left with apparently opposing but simultaneous threads in *Ulysses*: the novel is both mappable and disorienting, local and cosmopolitan, *English and foreign*.

By existing in these "both/and" spaces, *Ulysses* mirrors (and exaggerates) the fact that language is never isolated, nor is it immune to the influence of "outside" sources. The "linguistic otherness" that R. Brandon Kershner identifies in Joyce's work helps us "become familiar with the devices [Joyce] has made us master," leaving readers, Donald Davidson tells us, to find themselves "removed a certain distance from our own language, our usual selves, and our society. We join Joyce as outcasts, temporarily freed, or so it seems, from the nets of our language and our culture."^{xxv} Joyce's language, in essence, highlights the ways that our voices, in

daily (and literary) life, are “filled with others’ words, varying degrees of otherness, or varying degrees of ‘our own-ness,’ varying degrees of awareness or detachment.”^{xxvi} In other words, *Ulysses* reflects Bakhtin’s heteroglossia, defined as “another’s speech in another’s language, serving to express authorial intentions but in a refracted way.”^{xxvii} Within *Ulysses*, we encounter our own voices, which are already filled with “varying degrees of otherness.”^{xxviii}

As ‘other,’ the unknowability of these linguistic elements alienates and distances the reader. Still, the novel reflects the reality of language as experienced by all – the truth that all language is, in essence, polyglot. The ‘ideal’ polyglot reader of this text, however, doesn’t exist. Wolfgang Iser defines an ideal reader as having “an identical code to that of the author” and “shar[ing] the intentions underlying this process” of codifying pre-existing codes in the text.^{xxix} But if this were possible, Iser writes, “communication would then be quite superfluous, for one only communicates that which is *not* already shared by sender and receiver.”^{xxx} The ideal reader for this text, then, is perhaps only Joyce himself. No other reader knows every language from which Joyce draws his foreign words; even Joyce himself didn’t actually know all these languages, often using his dictionaries or pulling from texts he encountered. The preponderance of foreign words from such a variety of languages highlights the impossibility of an identical code between writer and reader. What reader would have the exact linguistic methods and source texts as Joyce? Besides, for many readers, it would ring false that a hybrid language composed of twelve, twenty-five, or even more languages represents linguistic reality. How, then, can Joyce’s multilingual novel represent reality?

Joyce himself, in his essays on Mangan, espoused “a more authentic experience of the Real,” resulting in a “renegotiation of literary realism.”^{xxxi} A study of the reality portrayed in *Ulysses*, then, should focus not on naturalistic forms of realism or *mimesis* but rather on reality as

defined by experience. It is not the words themselves which reflect reality, but their placement alongside English and each other, which necessarily affects reader experience. Adorno suggests foreign words signify something “real” by relation to the primary language; it is their placement alongside and yet separate to the primary language that makes up their meaning. He explains that “the discrepancy between the foreign word and the language can be made to serve the expression of truth.”^{xxxii} To discover the possible “truths,” as we interpret them, in *Ulysses*, we must learn to see the “real” in more fluid ways than traditional realistic representation.

Books like *Ulysses* are often dismissed as *unrealistic* due to their deviation from “normal” reality and traditional methods of representation. Robert Scholes and Robert Kellogg, however, argue that “the tendency to apply the standards of nineteenth-century realism to all fiction naturally has disadvantages for our understanding of every other kind of narrative.”^{xxxiii} Andrew Gibson echoes this, explaining that “critics nonetheless continue to take the realist novel as the norm for fiction, and to assimilate other forms to it.”^{xxxiv} Instead, Gibson argues, “untidiness in narrative can serve mimetic ends.”^{xxxv} Katie Wales claims that Joyce’s complex correspondences and parallels were “obviously intended to serve to minimise the traditional notion of ‘mimesis’ or ‘realism’ in the novel,” and the novel does indeed jar any reader expecting the realism of *Robinson Crusoe*, *Middlemarch*, or even the more subjective, but still recognizable, realism of some of Joyce’s contemporaries, such as Ernest Hemingway or Virginia Woolf.^{xxxvi} However, Gibson’s approach to novels like *Ulysses* lays the groundwork for a mimetic perspective, if we approach “unorthodox narrative techniques” as “modes of ‘discovery.’”^{xxxvii} In Gibson’s conception of modernist *mimesis*, disruptions in these novels should be studied from the perspective of such works’ *unique* logic, rather than through the logic of traditional realism. The contradiction inherent in such “disorders,” he argues, “is often a

major source of the vitality of non-realist forms of narrative.^{xxxviii} Who is the audience for such a varied linguistic experience? When studied as potentially meaningful disunities, however, the foreign words may represent elements of reality.

Study of Joyce's language and its disunities must inevitably address the hybridity of his novelistic vocabulary. Milesi notes Joyce's texts both "incorporated a growing number of foreign tongues" and "emphasized the quaintly alien nature of defamiliarized English *within* English itself," describing this process as "linguistic decolonization."^{xxxix} Jean Michel Rabaté views Joyce's language more from the perspective of globalization, linking Joyce to "a cosmopolitan modernism that saw itself as part of a more and more unified Europe in which English would function as a universal vehicular language, while heralding an international future marked by globalization and hybridity."^{xl} These studies tend to focus study of Joycean language on its general hybridity, specific languages, or his manipulation of English.

Such projects have benefitted from concordances compiled over the last century of Joycean criticism, including Clive Hart's *A Concordance to Finnegans Wake*, Miles Hanley's *Word Index to James Joyce's Ulysses*, Hans Walter Gabler and Wolfhard Steppe's *A Handlist to James Joyce's "Ulysses,"* and a handful of lexicons for individual languages.^{xli} These concordances provide exegetical views of Joyce's foreign language use and compile every word (or every word in a category) in one convenient resource—their very existence advances the perspective that to understand Joyce is to understand every single word. Indexes and concordances have practiced computational work, laying the groundwork for further quantitative work by gathering and in several cases counting words in *Ulysses*. While concordances provide essential reference points for Joyce's language, however, a more distant view of the foreign

words in *Ulysses* (what they are, how many there are, and where they occur) is difficult to envision with these projects alone.

This project pursues a more comprehensive study of foreign language in *Ulysses*, using quantitative and genetic methods to understand this linguistic and symbolic category in the novel from a broader perspective. I am extending the work of indexes and concordances by counting, rather than simply recording, those words; quantitative study allows us to hear the words, shifting the focus from signified to signifier and divorcing the word from the necessity of its being understood in translation. It is the quantification of foreign sounds that reveals these words' contribution to symbolism and characterization in *Ulysses*, helping us understand why the novel *feels* the way it does while also challenging traditional understandings of *Ulysses*. To further challenge typical qualitative understandings of the novel, the genetic portion of my work outlines change and growth: knowing that the number of foreign words increased during the writing process indicates attention paid to the use of such language. If Joyce added words from 12 different languages to the novel after the *Little Review* publication (on top of the 13 already included), then we should ask why he did so. The text becomes more global (even if still primarily Euro-centric) as time goes by, and we know that *Finnegans Wake* contains the 70 or 80 languages or dialects that Milesi identifies, indicating that Joyce's writing was always in a process of globalization. *Finnegans Wake* receives much of the attention when it comes to Joyce's multilingualism, but the numbers reveal that while writing *Ulysses*, Joyce was already becoming the multilingual writer we know of in the *Wake*.

The multilingualism of *Ulysses*, however, isn't important only for its meaning within the novel. Chapters one and two explore Joyce's foreign language as a function within the text, exploring the extent to which the novel is multilingual and the effects that foreign words create

within it. In chapter three, however, I turn to observation of the impact of 2,525 foreign words *on the reader*. *Ulysses* is and has been, after all, read by many lay and scholarly readers alike, and the popularity of celebrations such as Bloomsday around the world indicates that the novel has a strong effect on its readers. Walter Slatoff writes that “One feels a little foolish having to begin by insisting that works of literature exist, in part, at least, in order to be read, that we do in fact read them, and that it is worth thinking about what happens when we do.”^{xlii} Perhaps the idea that books affect readers is obvious; it remains, however, an oft-ignored element of scholarly study. The last portion of this work turns back toward the reader, taking the results of quantitative and genetic study to understand one facet of the reader-effects *Ulysses* creates. Wolfgang Iser identifies literary work as having “two poles, which we might call the artistic and the aesthetic: the artistic pole is the author’s text and the aesthetic is the realization accomplished by the reader.”^{xliii} Quantification can encourage a refocusing on the aesthetic experience of the reader: we can quantify certain elements of the text to identify and understand the variety of possible qualitative experiences available to readers.

Given Joyce’s known penchant for linguistic and interlinguistic playfulness, defining characteristics must be set for the words that are counted as “foreign” in the novel and the methodology chosen for this work. The first step of this process was to gather all the known foreign words in *Ulysses* into one place. Such data gathering, even for the comparatively less-worldly novel of his final two, would, of course, be intensive. I am grateful, in this regard, for the indexes and concordances mentioned above. My initial work included transferring word lists from Hanley’s *Word Index to James Joyce’s Ulysses* into my data files. I chose Hanley’s work primarily for his specific marking (and setting apart) of foreign words; I used his “Foreign Words and Phrases” appendix, but I also scoured the rest of the index, where I often found words

that were foreign but not marked as such or listed in the appendix. I followed this with cross-referencing to the indexing, annotating, and editing work of scholars such as Don Gifford, Hans Walter Gabler, and Brandon O Hehir for accuracy and, of course, for information on foreign words that had been missed by both Hanley and I, whether due to oversight or to unfamiliarity with those languages (words like, for instance, the Quois' "jigajig" in 'Circe' [*U* 15.1138]).^{xliv} During this process, I contended with questions of quantitative language work, the most important initial question being: which words would I count? Literary quantitative work does not always include articles (a, the) due to their frequency. These words may in fact skew data, for while they would, of course, be the most frequent words, this fact wouldn't provide meaningful interpretations of or insights into an author's or novel's language. However, early on I decided to include these in my foreign language counts (and, thus, to also retain articles in the English word counts used for comparison), as even words like Bloom's "la la lala la la" in 'Lotus Eaters' (the end of the refrain, "*Là ci darem la mano*") contribute to the foreign *sounds* of the novel (*U* 5.227-8).

Working in a language with as much cross-fertilization as English, another question inevitably arose: should loanwords count as foreign words or English words? As I began defining words as foreign (or not), I often found words that I would have assumed were foreign but were now considered part of the English language and some words that sounded English to my ears but were, in fact, defined as "borrowings" in the Oxford English Dictionary (OED). Some of these I expected, as words like 'mirage' clearly recall their foreign origins, but it quickly became clear that I needed to address the issue of what "foreign" meant in the novel besides simply relying on Joyce's use of italics (particularly because I soon realized that Joyce's italicization is inconsistent). Curiosity, and my lack of familiarity with the depths of

etymological study, led me to check the etymology for far more words in the *OED* than originally planned. Defining a loanword is complicated, as Philip Durkin points out in *Borrowed Words: A History of Loanwords in English*, and my working definition for this data falls into that same contested scholarly space.

For the purposes of this project, I have followed a few rules taken from the *OED*'s methodology for borrowed words, as explained by Durkin in *Borrowed Words*. The first rule is that only words listed as borrowed from the year 1500 or later will be counted as such. Durkin points out that from the age of printing (1470s Britain), "the nature of our evidence for tracing the linguistic history of English changes dramatically. There is an enormous amount of data from printed books." He also emphasizes the strength of the evidence base for loanwords post- vs. pre-1500, explaining that after 1500, "we do not find the sorts of large-scale disparities in dates of attestation within word groups that would be expected if there were major problems with our evidence base." A second important determiner of borrowings in my data was that no words could be counted as such if their date of attestation in the *OED* was after 1900. Although Joyce did not begin writing *Ulysses* until 1914, and the novel was not published until 1922, a word incorporated into English by, say, 1910 or 1915 may have been heard, by Joyce, as an "English" term in common usage – or it may not have. As Joyce would have been only 18 in 1900, this seems a more reasonable time for him to have had exposure to certain loanwords *as* loanwords, rather than as foreign ones. The final, and most important, rule for "transplants" was that I would, in general, follow the *OED*'s own designations. Although results and decisions may differ by individual researcher, the group of scholars responsible for the designations in the *OED* have already accounted for considerations of prevalence and usage. In other words, although some words could be considered code-switches rather than loanwords, based on their usage in a

text or prevalence in the wider language, these scholars have already considered these factors and come to a decision. In my own data, I have chosen to follow their expertise – if they have labeled a word as borrowed, so, too, have I (thus eliminating it from my primary foreign-word list). It is important to note that my data may, despite my best efforts, be incomplete. This is, unfortunately, inevitable. As Durkin writes,

even the *OED* is very far from containing every word that has ever occurred in discourse in English: because of the nature of the English lexicon (or indeed the lexicon of any language) it would be impossible for any dictionary ever to do this. Loanwords are one of the areas where the lexicon is very readily extendible.^{xlv}

Despite this unfortunate and inevitable limitation, some interesting patterns can be gleaned from the numbers, particularly in connection with the rest of the data on foreign language in the novel, as I will explore in the following chapters. While I was unfortunately unable to use the “borrowings” category for the primary purposes of this dissertation, the digression provides further detail for clarifying the boundaries I used while identifying foreign words.

Finally, the methodology for this project would be incomplete without discussion of perhaps the most contentious language use in *Ulysses*: Irish. I have included Irish words in the word counts and, in fact, devoted a full chapter to the language. While presenting an early version of this chapter at the 2018 American Conference for Irish Studies in Cork, the issue of calling the Irish language “foreign” was, rightly, brought up. As I discuss in chapter three, the choice to include Irish in this study while at the same time retaining use of the term “foreign” was not made to ignore assertions that the Irish language is the native tongue of Ireland. Irish was not, however, the language Joyce grew up speaking, nor did he learn enough later in life to do more than claim the “aspirational self-description” of Irish speaker with which, as Barry McCrea tells us, Joyce replied to the 1901 census.^{xlvi} Although Irish was not foreign to Joyce in that it was the ancient (and, in some areas more than others, the still-surviving) language of his

country, and although he would have heard it in Ireland, it was foreign to him by virtue of his lack of knowledge or facility with it. Additionally, English is the primary language of the novel, even if scholarship has shown that this definition is more fluid than may be expected. Although this project uses the term “foreign,” an alternate and perhaps more accurate definition of its goals is to study “world” languages in *Ulysses* – languages that just so happen to be foreign when viewed against the primary language Joyce chose for the text. I also choose to include in the category of “Irish words” Anglicized (Hiberno-English) Irish words. As I mention in chapter two, although Irish has become a minor language in the nation, the efforts of cultural groups like the Gaelic League have led to the alteration of English as it is spoken in Ireland; Irish language has adapted despite (or perhaps because of) its suppression, surviving through its altered forms and its influence on the language of Ireland’s oppressors. To acknowledge this linguistic adaptability and the extent of Irish influence on the English of Joyce’s nation (and on Joyce’s own language), I have chosen to include Anglicized Irish words in my Irish-language data.

The following sections of this introduction provide breakdowns of each chapter, which explore foreign words in the novel as ‘background noise,’ a new understanding of Joyce’s use of Irish language through quantitative and genetic study, and a return to consideration of the reader by way of studying possible effects that foreign words may have on the reading experience.

Chapter One

An early note for *Ulysses* reads that to “make folk learn easy,” then “foreign words; proper names” are “tabu”; Joyce’s work seems to take this notion as challenge rather than model.^{xlvii} Approximately one percent of the novel is composed of foreign words. Despite extant Joyce scholarship that records non-English words and phrases, few works discuss the function of these non-English words and languages as a whole. My research suggests they act as background

noise glossed over by many readers. This chapter portrays foreign words as the “disunities” that Andrew Gibson deems central to understanding modernist texts and their intrinsic logic.^{xlviii} These words push readers to ignore them or to rely on extratextual support. But in a novel that uses linguistic play as a central logic, foreign words support the narrative experimentation of the novel, as we can see through their numbers and patterns within episodes, characters, and successive versions of the text. I posit here that in observing the foreign language of *Ulysses* from a digital and genetic perspective – visualizing word counts and usage patterns – these “incoherences” reveal themselves as “background noise” that increases through revisions. A digital view of foreign words reveals this ambient noise, and a continuity between fragmented characters and episodes surfaces. Rather than translating and “normalizing” these words for English readers, counting the foreign words of the text advances the words as sounds, contributing to the playful, worldly, and often uncomfortable “logic” of *Ulysses*.

Chapter Two

There may be only 273 Irish words in *Ulysses*, but this relatively small number, compared to the 264,448 total word units in the novel, and how it grew during the writing process (making the novel *more Irish*), helps us explore the Irish element of *Ulysses*’s linguistic puzzle. While scholars have explored the use of Irish language in the novel (often in relation to the Citizen) as well as Joyce’s Irish politics, I contend that the number of Irish words uncovers the increasing importance of Irish language in the novel. Genetic and quantitative study, particularly when paired, can reveal preoccupations in the novel, and Irish shows up again and again in increasing numbers. The Irish words of the novel often supplement or create symbolic meaning, and viewing the larger group of countable words allows us to also look past the

assumed “feel” of the novel’s language to understand how the novel creates that experience – and where our assumptions may go wrong.

Chapter Three

Ulysses contains 2,525 foreign words from 25 different languages. Despite the temptingly “concrete” nature of numbers in humanistic studies, however, numbers don’t solve literary puzzles in and of themselves. Someone else could study these numbers and use them to support another analysis entirely. So why count? This chapter explores some limitations of quantitative literary analysis and proposes an alternative perspective for the value of knowing how many foreign words there are in *Ulysses*. Instead of focusing on numbers as interpretative evidence, in this chapter I will focus on what these numbers (and *Ulysses* itself) *do* for readers. Literary scholarship traditionally conducts intra-novelistic interpretation, or the interpretation of and within the novel itself. But *Ulysses* is a well-beloved novel by more than academics. Despite its difficulty, readers continue to turn to it almost one hundred years after its publication. An important consideration, then, is why readers love this novel and how it *affects them*. *Ulysses* seems a form of mental exercise, and this chapter will approach it, and its foreign words specifically, from the perspective of *reader-effects*. Instead of focusing on what the text is supposed to *mean*, this chapter will use neuroscientific evidence for how the brain responds to unfamiliar words during the reading process to explore the effects of the 2,525 foreign words in *Ulysses*. Counting, from this perspective, allows for discovery of potential reader-effects that we normally take for granted and for further understanding of why the book affects readers the way it does. After all, these foreign words are too numerous *not* to impact readers. Foreign words, I will argue, along with *Ulysses*’s other ‘unexpected’ elements, force readers to slow down and

work harder for meaning, acting as a sort of mental linguistic stimulant and startling us out of normalcy.

ⁱ Rosiers, Erika and Wim Van Mierlo, "Neutral auxiliaries and universal idioms: Otto Jespersen in *Work in Progress*," *James Joyce: The Study of Languages*, ed. Dirk Van Hulle (Burssels: P. Lang, 2002), 66.

ⁱⁱ Ibid.

ⁱⁱⁱ de Saussure, Ferdinand, *Course in General Linguistics*, tr. Wade Baskin, ed. Perry Meisel and Haun Saussy (New York: Columbia University Press, 2011), 68.

^{iv} Adorno, Theodor, "Words from Abroad," *Notes to Literature*, vol. 1, tr. Shierry Weber Nicholsen (New York: Columbia University Press, 1974), 189.

^v Ibid.

^{vi} Ibid.

^{vii} Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014); Adorno, Theodor, *Noten Zur Literatur*, vol. 2 (Berlin: Suhrkamp, 1958).

^{viii} Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 4.

^{ix} Ibid., 5.

^x Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 3.

^{xi} Milesi, Laurent. "Joyce, Language, and Languages." *Palgrave Advances in James Joyce Studies*. ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 153.

^{xii} Maria Kager, "Wonderful Vocables: Joyce and the Neurolinguistics of Language Talent," *A Long the Krommerun: Selected Papers from the Utrecht James Joyce Symposium: Xxiv International James Joyce Symposium, Utrecht University, 15th-20th June 2014, European Joyce Studies*, 24, Ed. Onno Rutger Kosters, Tim Conley, and Peter Jan de Voogd (Leiden: Brill Rodopi, 2016), 109.

^{xiii} Tim Conley, "Waking 'for an equality of relations,'" *A Long the Krommerun: Selected Papers from the Utrecht James Joyce Symposium: Xxiv International James Joyce Symposium, Utrecht University, 15th-20th June 2014, European Joyce Studies*, 24, Ed. Onno Rutger Kosters, Tim Conley, and Peter Jan de Voogd (Leiden: Brill Rodopi, 2016), 2016.

^{xiv} Nico Israel, "Esperantic Modernism: Joyce, Universal Language, and Political Gesture," *Modernism/Modernity*, 24, no. 1 (2017), 15.

^{xv} Ibid.

^{xvi} Bosinelli, Rosa Maria Bollettieri, "Joyce Slipping Across the Borders of English: The Stranger in Language," *James Joyce Quarterly* 38:3/4 (Spring – Summer, 2001), 395.

^{xvii} Ibid.

^{xviii} Ibid., 396; Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 4.

^{xix} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 14-5.

^{xx} Milesi, Laurent. "Joyce, Language, and Languages." *Palgrave Advances in James Joyce Studies*. ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 151.

^{xxi} Kiberd, Declan, *Ulysses and Us: The Art of Everyday Life in Joyce's Masterpiece* (New York: W.W. Norton & Company, Inc., 2009), 22.

^{xxii} Duffy, Enda, "Disappearing Dublin," *Semicolonial Joyce*, Ed. Derek Attridge and Marjorie Howes (Cambridge: Cambridge University Press, 2000), 47.

^{xxiii} Bulson, Eric, "Disorienting Dublin," *Making Space in the Works of James Joyce* (New York: Routledge, 2011).

^{xxiv} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 6.

^{xxv} Kershner, R. Brandon, "Dialogical and intertextual Joyce," *Palgrave Advances in James Joyce Studies*, ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 183; Davidson, Donald, "James Joyce and Humpty Dumpty (1989)," *Truth, Language and History* (Oxford: Clarendon Press, 2005), 157.

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- ^{xxvi} Kershner, R. Brandon, "Dialogical and intertextual Joyce," *Palgrave Advances in James Joyce Studies*, ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 89.
- ^{xxvii} Bakhtin, Mikhail M., "Discourse in the Novel," *Dialogic Imagination: Four Essays* (Austin: University of Texas Press, 1981) 324.
- ^{xxviii} Kershner, R. Brandon, "Dialogical and intertextual Joyce," *Palgrave Advances in James Joyce Studies*, ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 89.
- ^{xxix} Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 29.
- ^{xxx} Ibid.
- ^{xxxi} Tonetto, Maria Grazia, "Joyce's Vision of Realism: A New Source," *Genetic Joyce Studies* 12 (Spring 2012), 2.
- ^{xxxii} Adorno, Theodor, "Words from Abroad," *Notes to Literature*, vol. 1, tr. Shierry Weber Nicholsen (New York: Columbia University Press, 1974), 189.
- ^{xxxiii} Scholes, Robert E. and Robert Kellogg, *The Nature of Narrative* (New York: Oxford University Press, 1966), 6.
- ^{xxxiv} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin's Press, 1990), 1.
- ^{xxxv} Ibid., 8.
- ^{xxxvi} Wales, Katie, *The Language of James Joyce* (New York: St. Martin's Press, 1992), 69-70.
- ^{xxxvii} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin's Press, 1990), 16.
- ^{xxxviii} Ibid., 11.
- ^{xxxix} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 6.
- ^{xl} Rabaté, Jean-Michel, "Introduction," *Palgrave Advances in James Joyce Studies*, ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 4.
- ^{xli} Other foreign-language lexicons for Joyce's work include: O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967); Bonheim, Helmut, *A Lexicon of the German in Finnegans Wake* (Berkeley: University of California Press, 1967); O Hehir, Brendan and John M. Dillon, *A Classical Lexicon for Finnegans Wake: A Glossary of the Greek and Latin in the Major Works of Joyce, Including Finnegans Wake, the Poems, Dubliners, Stephen Hero, A Portrait of the Artist as a Young Man, Exiles, and Ulysses* (Berkeley: University of California Press, 1977).
- ^{xlii} Slatoff, Walter, *With Respect to Readers: Dimensions of Literary Response* (Ithaca: Cornell University Press, 1970), 3.
- ^{xliii} Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 21.
- ^{xliv} I must also acknowledge the usefulness of Ronan Crowley and Joshua Schäuble's Online Edition of Gabler's *Ulysses: A Digital Critical and Synoptic Edition*, which provided much-needed speed during the process of finding and attributing many of the words myself, during my genetic work and when attributing words to episodes and speakers (Joyce, James, *Ulysses: A Digital Critical and Synoptic Edition*, ed. Hans Walter Gabler, Wolfhard Steppe, and Claus Melchior, <http://ulysses.online/index.html>).
- ^{xlvi} Durkin, Philip, *Borrowed Words: A History of Loanwords in English* (Oxford: Oxford University Press, 2014), 424.
- ^{xlvi} McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 23.
- ^{xlvi} This is reproduced and attributed to François Cassandre's *La Rhétorique d'Aristote en François* (Paris, 1654), Book II, section x in Joyce's *Notes and Early Drafts for Ulysses: Selections from the Buffalo Collection*, ed. Phillip F. Herring (Charlottesville, Virginia: University Press of Virginia, 1977), 26.
- ^{xlvi} Andrew Gibson, *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett* (New York, NY: St. Martin's Press, 1990), 1-4.

Chapter One: Global Sounds: Counting Foreign Words in *Ulysses*

Joyce's work seems to take as challenge rather than model his early note, copied from François Cassandre's *La Rhétorique d'Aristote en François* (1654): to "make folk learn easy," then "foreign words; proper names" are "tabu."^{xlix} There are, in fact, 2,525 foreign words in *Ulysses*, composing approximately one percent of the novel. The Joycean community has acknowledged, identified, and annotated foreign words and phrases (defined for the purposes of this project, as I detailed in the introduction, as non-English); Miles Hanley's "Foreign Words and Phrases" list, for example, closed out his 1936 *Word Index to James Joyce's Ulysses*. Much of the existing work on Joyce's use of foreign languages, however, focuses on *Finnegans Wake* more than *Ulysses*.ⁱ *Ulysses* may be a "book of linguistic intersections," but study of its non-English elements has been eclipsed by the more extreme hybridity of *Finnegans Wake*.^{li} Scholarly works such as Laurent Milesi's collection *James Joyce and the Difference of Language*, Katie Wales's *The Language of James Joyce*, and Maria Kager's work on the "polyglot" Joyce analyze his use of language. Still, the works that study foreign language in *Ulysses* often focus on single foreign languages, Joyce's "polyglot" nature in general, or Joyce's manipulations of language within English itself.

My work, however, combines a quantitative view of language with close study of the text to refocus attention on foreign words and the sense of worldliness they add to *Ulysses*. In counting the number of foreign words in the novel I found a total of 2,525 and attributed each of them to episodes, characters, and narrators, allowing for a broader view of foreign language use in *Ulysses*. This chapter utilizes counting as a primary method for highlighting the non-English words of the novel to reveal effects and meanings that would be more difficult to identify in traditional readings or in a closer study of individual words or languages within the novel. Works

like Hanley's word index, precursors to this type of study, serve important scholarly functions; as Hanley himself writes, "For students of style, imagery, and literary technique, its uses are many."^{lii} An index is certainly useful for research which starts from a particular word or theme: a scholar may wish to discover how a theme is portrayed in the novel and find all words that reflect that theme, or they may wish to see how many times specific, pre-determined words occur in the novel. In fact, the ultimate purpose of Hanley's index was, essentially, to be a practice in indexing: his ultimate goal was to create an index to "a large body of natural, spoken English – including a study of word frequency" which "would be valuable to educators, psychologists, and students of language" as well as for his desired project of indexing the contents of his collection of phonograph records.^{liii} While he does tell the reader that there are 2,206 words in the "Foreign Words and Phrases" index, he omits these words from all of his word-frequency tables because this was, specifically, to be an "analysis of English vocabulary."^{liv} Ignoring the foreign words was appropriate for Hanley's goal of studying word frequency and developing a better understanding of (and reference work for) spoken English. For the purposes of studying Joyce's literary language, however, such neglect skews the ways we understand his language as a whole. Counting foreign words and visualizing these numbers helps broaden the scope of index-based work to see more than individual examples for which scholars might search with preconceived ideas.

Rather than cataloguing the foreign words of *Ulysses* for such highly focused research, I *count* the foreign words of the novel to reveal the ways readers can "hear" the non-English sounds. To hear these words means, in this context, not only to momentarily register their appearance on the page but to recognize their effect on readers' experience. Numbers, for example, can help readers understand why characters and episodes sound certain ways to us:

Why does Molly sound “unworldly,” Bloom less Irish than the rest of the Dubliners, or ‘Cyclops’ monolingual (or bilingual, including Irish) and xenophobic? Each of these assumptions and more are complicated by the results of this counting endeavor. Taking an even broader view, numbers help us understand how the various languages of *Ulysses* can work together to affect reader experience. Those 2,525 foreign words in the novel, once viewed all together, reveal the fact that *Ulysses* is composed of 25 foreign languages, rather than the dozen that Laurent Milesi, for example, claimed for it.^{lv} In fact, knowing these numbers and situating them in the context of genetic work reveals that this number, as I’ll explore further, increased from the *Little Review* to the 1922 publication of *Ulysses*. The novel was once not quite so linguistically cosmopolitan. Given the fact that the presence of so many languages should guarantee that no single reader could process all of them on their own, these numbers reveal the importance of considering the effect of many languages, concentrated in one novel, on readers. They must inevitably enact a disorienting function: even as Joyce gives concrete details about Dublin’s streets, shops, and pubs, he uses unfamiliar words, making the ground of knowledge on which a reader stands more uncertain. Individuals may understand *most* of *Ulysses* (linguistically, at least) but they won’t understand it *all* without help. This is where numbers help us to realize the functions of such foreign language use; if the numbers show us that one reader couldn’t possibly understand all the words, then we must consider the idea that readers are *not supposed to know*. They are, instead, supposed to hear the words pass them by and experience the disorientation inherent in the presence of so many unknowns. The multilingualism of *Ulysses*, when viewed in the context of its numbers, simultaneously overwhelms and encourages consideration of the potential symbolic importance of the words for readerly experience.

Even beyond *Ulysses*, scholars have noted the multilingualism of modernism and its importance for meaning-making in these texts: Rebecca Walkowitz's study of modernist cosmopolitanism, Emily Hayman's focus on the "multilingual fragments" of twentieth-century British literature, and Emily Dalgarno's analysis of Virginia Woolf's relationship to foreign language are just some examples.^{lvi} Many literary studies of language use quantitative methods, and words, as "the smallest clearly meaningful units," have been an important unit of study in many of these projects. Most quantitative analysis of literature, though, is not focused on the question of counting languages and foreign words.^{lvii} Quantitative approaches are often "associated with questions of authorship and style, but they can also be used to investigate larger interpretive issues like plot, theme, genre, period, tone, and modality."^{lviii} Word or unit types in these studies often focus on criteria such as word length, clause length, or thematic relationship. In the initial data-gathering stages of this project, I instead focused less on semantics or 'themed' words and more on counting alone to find trends or effects of the foreign language units that may traditionally be overlooked. A quantitative study of foreign language in *Ulysses* brings foreign words and their interpretive potential back into focus, pushing readers to be more conscious of the "sound" of these words. Counting such small, easily-missed items in a text refocuses attention and reveals the *sense* created by "adding up" these moments of difficulty: in this case, a sense of worldliness or, in other words, the overwhelming multilingualism that destabilizes readerly comfort.

My research focuses on the possibilities of meaning contained in viewing the non-English words in *Ulysses* as background noise normally glossed over by readers: in other words, ambient sound made vis[aud]ible again through a digital view of numbers and placement. This chapter studies foreign words as the type of "disunities" that Andrew Gibson deems central to

understanding modernist texts and their intrinsic logic. Gibson argues in *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett* that “critics...continue to take the realist novel as the norm for fiction, and to assimilate other forms to it,” rather than approaching texts “primarily in terms of [their] intrinsic logic; as, firstly, an activity of mind, rather than a set of representations.”^{lix} Turning to language and its role in a novel’s logic, foreign words, or, as Maria Lauret terms them, *wanderwords*, simultaneously stand out and blend in with the text through a reader’s decision either to ignore them or to rely on extratextual support for translation and interpretation.^{lx} But in a novel that uses linguistic play as a central logic, foreign words can support the narrative experimentation of the novel, as we see through their numbers within episodes, characters, and successive versions of the text.

Despite the large number of foreign words in *Ulysses*, Joyce may not have expected or anticipated a reader who would know all the languages involved. Instead, he may have imagined a more “worldly” reader who heard other languages around them as life became increasingly globalized through travel and easy communication – readers who would have some familiarity with the experience of sitting within the discomfort of an unfamiliar language. Joyce’s readers, contemporary or future, experience many of the foreign words of the novel as opaque and, perhaps, somewhat less important than the rest of the English text. Counting the foreign words in a text, rather than translating and “normalizing” them, advances the words as sounds, contributing to the playful, worldly, and often uncomfortable “logic” of *Ulysses*. Obviously, translation is invaluable, but there is a reason for the cliché, “Lost in translation.” The numbers instead provide another tool that turns the focus away from traditional ways of understanding language (translation or definition, for instance) and towards an emphasis on how *Joyce’s* language system works and how it affects the reading experience. Visualizing those numbers reveals how foreign language

contributes to characterization and thematic development in the novel. If we miss the *volume* of foreign words, we miss the big picture. Numbers reject the illusion of control that translation provides. Part of the beauty of *Finnegans Wake* for readers, for example, is sitting in discomfort as they wade through linguistic play that leaves them questioning the sound and meaning of every word; readers must work for meaning. We all know the claim about Joyce being at the end of English in *Finnegans Wake*, but quantitative study of the language of *Ulysses* and its evolution during the writing process reveals Joyce was already on that road and facing the end of the English language. Counting and visualizing foreign words pushes us into the discomfort of not knowing that becomes so vital to *Finnegans Wake*, reminding readers to relinquish their dictionaries and instead sit in the silence of no immediate, comprehensible meaning for these “disruptions” of comfortable monolingualism.

A useful starting point for analysis of foreign words’ function within English-language texts is Maria Lauret’s conception of “wanderwords,” which she defines as non-English words in English-language texts:

Usually marked in italics, as if to emphasize their strangeness, wanderwords are freighted with the other-cultural meanings wrapped up in their different looks and sounds. Yet, surrounded by English and swallowed up in the flow of our reading, whether or not they are made intelligible by context or translation, we tend to ignore them.^{lxi}

This unconscious tendency to ignore unfamiliar words, even with translation assistance, often plays a role in the reading of *Ulysses*, as well. Don Gifford’s ‘*Ulysses*’ *Annotated* provides significant notes and translations to aid interpretation, and modern readers can also turn to easily accessible, although often unreliable, translations from Google for a quick and easy understanding of, at least, the literal meanings of Joyce’s non-English words. Lay readers – and quite possibly many scholarly readers – tend to either skip over these words or use translation to understand them through an English-language lens. “Yet,” Lauret explains, “...wanderwords

suggest the spectral presence of languages...which resurface at significant moments to do a particular job of what Boelhauer called ‘ethnic semiosis,’ that is, to signal cultural difference of the lived (and often still *living*) kind.”^{lxii} Lauret’s analysis, focused specifically on the “spectral presence” of other languages in migrant American literature, can be productively applied to the over 2,000 non-English words in *Ulysses*, offering a view of these words (and their numbers) as signifiers. For Joyce, after all, “language does not mean the English language; it means a medium capable of suggestion, implication and evocation; a medium as free as any art medium should be, and as the dance at its best can be,” and Joyce’s “notion of ‘language’ comprises ideas about at least all of the languages with which he was acquainted and quite possibly others, too.”^{lxiii} As with Lauret’s “wanderwords,” foreign words and phrases act as signs in *Ulysses*. Joyce’s use of foreign language allows him to insert cultural difference and a (more) worldly perspective while undermining English from within. Joyce himself wrote, “I cannot express myself in English without enclosing myself in a tradition,” leading to his desire to “fly by the nets” of language.^{lxiv} Despite Joyce’s praise of English as “‘the most wonderful language in the world,’” his “project is to inhabit English, to use it, but not to submit to its limits or its bounds.”^{lxv} Ellmann describes how Joyce “used *Ulysses* to demonstrate that even English, that best of languages, was inadequate.”^{lxvi} Foreign words, beyond supplementing English vocabulary in *Ulysses*, act as nodes of rebellion within English and carriers of multicultural meaning and interaction, reflecting a “spectral presence” that resists the linguistic hegemony of so many of the nationalistic movements that were already or became popular during Joyce’s time.^{lxvii}

Many such groups have pushed the purity and superiority of their own mother tongue, leading to “many popular and misleading beliefs...about why a language should become internationally successful. It is quite common to hear people claim that a language is a

paragon.”^{lxviii} English is no stranger to this rhetoric, as “it is often suggested...that there must be something inherently beautiful or logical about the structure of English, in order to explain why it is now so widely used.”^{lxix} English does, perhaps, seem “internationally appealing” due to its “‘familiarity’...deriving from the way [it] has over the centuries borrowed thousands of new words from the languages to which it has been in contact.”^{lxx} The historical “blending” of languages so central to the history of the English language contradicts the purity argument. As for the “global English” argument, perhaps that, too, is more idealistic than true. The larger political debate is outside the scope of this chapter, but as we turn back to *Ulysses*, it seems clear that Joyce’s language simultaneously reflects the historically “international” nature of English and highlights its limits. English may absorb many languages – this can be seen in the number of borrowed words found in *Ulysses* and, on a larger scale, the *OED* (see “Introduction”) – but it is, at times, still insufficient for Joyce. He seems to have looked to foreign languages enough that we are left questioning the idea of English as the great, “global” language *par excellence*.

Finnegans Wake makes the inadequacy of English (for Joyce) abundantly clear. Looking closely at the number of foreign words in *Ulysses* reveals the beginning of this process, allowing us to reconsider Joyce’s relationship to English as an artist. Perhaps this data and re-evaluation of Joyce’s relationship to English can help expand our understanding of questions involving the superiority of the English (or any other) language. Many critics have already addressed Joyce’s politics, and scholars like Valerie Bénéjam, Enda Duffy, and Laurent Milesi have, in postcolonial studies, identified Joyce as less politically apathetic (or even disdainful) than early readers and Joyce himself portrayed; some of these studies have, in fact, gone so far as to call Joyce an Irish nationalist (although a different sort of nationalist than the type Joyce criticizes in ‘Cyclops’).^{lxxi} It has become clearer in the nearly one hundred years since Shakespeare and Co.

published *Ulysses* that Joyce was, indeed, political – and anti-imperial, like Stephen in his declaration that he is “a servant of two masters...an English and an Italian” (*U* 1.638). The proliferation of languages in the novel reflects such anti-imperialism, which becomes clear through quantitative analysis. Imperialism centers around control, often using methods of organization and definition to perpetuate control through knowledge, but the presence of so many languages (too many for one reader to know) precludes any possibility of completely *knowing Ulysses* (or at least of knowing it without aid).

Knowing how often Joyce uses foreign words highlights this sense of unknowability, revealing how this particular group of words impacts the experience of reading *Ulysses*. Even a brief glance at Joyce’s notesheets will reveal the interest with which he recorded foreign words and phrases, and genetic study reveals an increase in multilingualism during the writing process (a 127.6 percent increase, in fact, from the *Little Review Ulysses* to the 1922 Shakespeare and Company publication, as I will discuss further on). I argue that this multilingualism is not a purely intertextual/allusional practice like that of modernists such as Eliot and Pound. Although Joyce’s work does engage in intertextual multilingualism, the ways foreign words manifest in the novel reveal their additional role in character development. A general view of the use of non-English words in *Ulysses* can engage these words as revealing ‘in-between’ spaces, which, as Homi Bhabha argues, “provide the terrain for elaborating strategies of selfhood – singular or communal – that initiate new signs of identity, innovative sites of collaboration, and contestation, in the act of defining the idea of society itself.”^{lxxii} We see many borders in the novel: Irish vs. English (the Citizen vs. the “Sassenachs” [*U* 12.1190]), Christian vs. Jewish (the Citizen and many Dubliners vs. Bloom), Irish nationalists vs. everyone else (the Citizen vs. “the shoneens that can’t speak their own language” [*U* 12.680]), and even, more generally, insiders vs.

outsiders (most of the Dubliners vs. Leopold Bloom and Stephen Dedalus). Even more specifically, we see borders and barriers within relationships: Bloom and Molly, Bloom and other Dubliners, Stephen and Ireland, or Stephen and his family. This is a novel *of* in-between spaces, where characters, societies, and nations create identities in “the overlap and displacement of domains of difference.”^{lxxiii}

The existence of non-English words in an English text supplements the creation of a sense of borders within the novel, created from pre-existing tensions between cultures and even the language barrier that exists for non-polyglot readers. These words can also, through their associations in context, indicate deeper and often more complex borders between and within people. Readers already know that in ‘Cyclops,’ the Citizen erects clear borders between himself and non-Irish (and non-nationalist) people and, in the process, between himself and Bloom, as a representation of foreign ‘contamination.’ Towards the end of the episode, when Bloom has finally given up on trying to connect with the pubgoers, following the Citizen’s “By Jesus, I’ll crucify him so I will,” the narrator of the parody scenes takes over with a dramatized description of events, peppered with foreign (mostly Hungarian) words (*U* 12.1812). Among the names and words listed, we see “Nagyaságos uram Lipóti Virag,” and “Százharminczbrojűgulyas-Dugulás.”^{lxxiv} The passage continues with the casual French *éclat* and the Irish words *agus* and *Slieve*, and it concludes with “*Visszontlátásra, kedvés barátom! Visszontlátásra!* Gone but not forgotten.”^{lxxv} Immediately after the final rupture between Bloom and the Citizen, the use of Hungarian phrases and names, along with a sprinkling of words from other languages, highlights the border between the two (and between the groups or types of people whom they represent) through the strangeness, for a monolingual English reader, of the foreign words’ sounds. These words act not only as a continuation of the novel’s background noise of “foreignness” but,

through those sounds *in this moment*, a representation of the distance between Bloom and the others. This border is, for the reader, experiential; as the borders between characters become more divisive, the foreign words serve to make the reader *experience* the distance through their own lack of familiarity with the foreign words. Each Hungarian, Irish, or French word used creates a moment of pause as the text confronts the reader with the distance inherent in not knowing. The foreign words here cause the reader to experience the cultural and social alienation that Bloom experiences with the Citizen, but the reader may not become aware of the foreign words here unless they explore foreign language quantitatively. Quantitative study becomes a reading process by which words are highlighted and re-highlighted – without the process of counting and gathering data, I would not have been aware of this moment and its significance.

Stephen experiences a similar, although self-imposed, border (alienation) in ‘Scylla and Charybdis,’ when we see the fleeting moment of recognition and presumed judgement over Mr. Best’s Irish reader: Best “rested an innocent book on the edge of the desk, smiling his defiance. His private papers in the original. *Ta an bad ar an tir. Taim in mo shagart.* Put beurla on it, littlejohn.”^{lxxvi} This moment of linguistic “strangeness,” however, does not solely use the unfamiliarity of the language to represent borders. This moment also reveals Stephen’s insecurities around language and nationalism as well as his disdain for the constraints of Irish nationalism and Ireland in general. It seems clear that Stephen understands enough Irish to a) have an expectation, most likely based on his schooling, for what types of phrases would be in an Irish reader and b) understand basic phrases.^{lxxvii} The Irish words, then, are most likely not as foreign to Stephen as one might expect. He does, however, have a strained relationship with his country, Irish nationalism, and Irish language, so these words act primarily as indicators of Stephen’s inner struggles of feeling like an outsider in his home. Moments such as these

illustrate some of the ways non-English words punctuate moments of cultural or interpersonal barriers. Using Joyce's known penchant for being obsessive about words and sentences, we can assume that these moments are not simply the actions of a haphazard polyglot; Laurent Milesi indicates that Joyce's desire to "transcend all languages beyond the reach of tradition...cannot simply be seen as a purely aesthetic gesture."^{lxxviii} Joyce, we know, chose his words with care. His constant entanglement with language, foreign or otherwise, leaves traces of linguistic and cultural borders throughout *Ulysses*.

Building on Lauret's idea of "wanderwords," these traces of the 'other' in *Ulysses* also reflect Andrew Gibson's conception of mimesis.^{lxxix} Gibson's focus on intrinsic logic and the "disunities" of texts provides an important framework for study of these languages and the role they play. Gibson, discussing scholars' reliance on norms of realist fiction when studying most narratives, observes that it "is still unusual to find a narrative text approached primarily in terms of its intrinsic logic; as, firstly, an activity of mind, rather than a set of representations."^{lxxx} He observes that some works, however, exist in a liminal space between realist and postmodern works ("with their evident strangeness"). The works of authors like Conrad, Woolf, and Joyce (particularly *Ulysses*) live a "double existence," and they proceed "simultaneously from different and even opposed assumptions. Effectively, they lack the epistemological certainties of other forms of narrative."^{lxxxi} Gibson turns back to Aristotle's definition of mimesis, which would be closer to 'expression' than to 'imitation.' Samuel Butcher, whose commentary on Aristotle's *Poetics* Joyce used, "wrote that 'imitation' was synonymous with 'producing' or 'creating according to a true idea,' which implies a dynamic theory of imitation linked with living processes."^{lxxxii} Modern neo-Aristotelianism, Gibson argues, equates mimetic art with representational art, and thus "there is still a continuing struggle to find modes of reading that are

truly appropriate to works such as *Ulysses* or *The Trial*.^{lxxxiii} Since Aristotle “stressed the value of unity, harmony, consistency and coherence, especially logical coherence,” Gibson argues that any “adequate response to” texts like *Ulysses* “will involve being alert to their disunities and incoherences, and recognising the significance of such ‘disorders’, within the narratives as wholes. Certain kinds of incoherence actually contribute vitally to their meaning and effect.”^{lxxxiv} Contradiction, he argues, “is often a major source of the vitality of non-realist forms of narrative,” and novels like *Ulysses* “work by changing the shapes we confer on the world, together with the language in which they are cast.”^{lxxxv} The foreign words of the novel act as such contradictions and disunities, sometimes confusing the reader, sometimes interrupting the flow of narrative when the reader turns to translation assistance, and sometimes creating a gap of knowledge when they are ignored altogether due to their unfamiliarity. Following Gibson’s assertion that “[e]xamining the narrative anomalies in *Ulysses* can similarly bring us closer to the experience of reading it, and the meaning of that experience, than any study of Joyce’s use of Homer,” this work will highlight the “noise” of *Ulysses*’s disruptive foreign words, revealing their role as what Gibson calls “incoherences” (moments difficult to easily fit within a novel’s logical unity) and the functions they play, acting to both challenge readers and provide a type of consistency throughout the novel.^{lxxxvi} These “disorders” of a text are not “mimetic” by way of mirror-like, easily-recognized representations of the world (like the attempts of naturalists). Instead, they “contribute vitally to [the] meaning and effect” of novels like *Ulysses* if they are studied as disorders to decode, rather than moments of incoherence to fit into conventional order.^{lxxxvii}

Foreign words in *Ulysses* reveal their role as both disunities and enablers of continuity when we view them from a distance; specifically, looking at their numbers helps us see how

many of these words exist and *where* they live in the novel. As has been mentioned, many readers either ignore foreign words in a text or turn immediately to supplementary materials to understand the words through their own native tongue, thus normalizing the text from the point of view of a monolingual reader. The text becomes flattened, losing whatever meanings and perspectives the word carried as part of its native baggage. The “foreign-ness,” though, is central to the impact these words have on the novel; the sounds of the words, more than their meanings, are vital, and translation eliminates that sound. World literature often falls prey to the translation strategy, as many readers turn to translations of great novels into their own languages. Gayatri Spivak doesn’t “believe the humanities can be global,” but she does argue against total uniformization: “I think our task is to supplement the uniformization necessary for globality. We must therefore learn to think of ourselves as the custodians of the world’s wealth of languages, not as impresarios of a multicultural circus in English.”^{lxxxviii} Complete reliance on translation must inevitably cause a loss of richness – of the cultural context carried by words. For example, if a reader either glances over foreign words or relies on translation, phrases like the Citizen’s “To hell with the bloody brutal Sassenachs and their *patois*” lose the deeper context and meaning created by words like “Sassenachs” and “*patois*” (*U* 12.1190-1). With these two words, a reader who turns to Google Translate will find unsatisfactory translations: *Sassenach* (Irish) apparently means “Sassenach” in English, and *patois* (French) means “patois” in English. Thus far, a first attempt at understanding yields nothing. Upon deeper examination, a reader finds that *Sassenach*, whether you turn to the *Oxford English Dictionary* or the *Foclóir Gaeilge-Béarla* (Irish-English Dictionary), means “English [people].”^{lxxxix} This provides some context needed to understand the scene. The Citizen has much disdain for the English - the context within the chapter alone conveys this. However, if one has some knowledge of Irish language and Irish

history, they will know that *Sassenach* came to carry the weight of colonial tensions, becoming a derisive term for the English within the very language they had attempted to eliminate and illustrating far more depth than the simple translation of “English.” As for *patois* (French), referring to a dialect “differing substantially from the standard written language of the country” or “a rural or provincial form of speech,” this choice of word is interesting in that the Citizen is using it in reference to English, which was, at that time, *the* formal, standard language in both England and Ireland, yet the Citizen has firmly set himself within the perspective of Ireland as the “center.”^{xc} Simple translation leaves us bereft of some meaning yet again.

Perhaps it is never possible to ascertain these contexts and understandings as readers. Most readers do *not* speak or read all 25 of the foreign languages used in *Ulysses*, and I certainly didn’t know most of the words I encountered in this research. For many readers, the answer to a lack of understanding when faced with foreign words is to translate, but it’s worth questioning again whether Joyce expected his readers to know these words. While many of his fellow modernists would have had enough education to know at least one language aside from English, readers who knew (or now know) twenty-six languages would be rare, if they existed at all. Perhaps Joyce wanted educated, worldly readers, but I’d like to offer an alternative: translation alone isn’t the answer. It’s the concentration of foreign language, rather than individual words’ definitions, that reveal the sound of the text and possibilities for its meaning. Granted, some of these words do, through their meanings, reflect themes of the novel, but not every word does. This project lays aside futile attempts at perfect understanding through translation alone, instead focusing on Joyce’s language system as the important mode of reading here, and the proportions of foreign words (and when, where, and how they appear when viewed from a distance) provide us with a method for understanding this system outside of individual examples such as those

above. Looking at the concentration of foreign words reveals that they are important for more than just their contributions to a cosmopolitan style in *Ulysses*; if the novel uses words from more languages than any one reader could know (twenty-six, including English), then they must be important for more than their translational meaning. As I have mentioned, this problem of quantity – *too much* quantity, in this case – is important because of the disorienting position it puts the reader in. Joyce himself didn't know all these words or languages (without the aid of dictionaries), so while translational meaning may supplement interpretations, it should not be counted as the only method for interpreting the function of Joyce's foreign words.

We may not ever know the cultural context and meaning of every word in every language – we are, after all, human readers, and even AI readers like Google miss important contexts – but we can at the very least pay more attention to foreign words in a text to re-highlight moments of strangeness and attempt to identify possible meanings in their usage, both individually and as larger groupings. The *experience* of these words in the course of reading is key to understanding the foreign language in *Ulysses*, as only when we read the entire novel, repeatedly encountering moments of untranslatability along the way, does the full extent of Joyce's multilingualism begin to be felt. Donald Davidson argues that by “fragmenting familiar languages and recycling the raw material Joyce provokes the reader into involuntary collaboration, and enlists him as a member of his private linguistic community.”^{xc} If we distance ourselves from the text and count foreign words, attributing them to speakers and episodes, we can begin to hear these words as noise and engage in that private linguistic community. These words, within their textual contexts, reflect the “revelling in the aesthetic possibilities of semantic, orthographic and aural difference when languages come into contact” that Lauret identifies in American migrant texts, but the awareness of these fruitful incoherences are often lost in readers' instincts to translate.^{xcii} Maria

Kager, writing on Joyce and Kafka, identifies that neither “was able to regard his native language as completely his own, yet neither chose to write in an alternative one. Instead, they attacked language as they wrote – an assault that both authors conducted by including foreign languages.”^{xciii} With this assault, Joyce effects the deterritorialization identified by Gilles Deleuze and Félix Guattari as a major element of Kafka’s writing, creating a minor literature by finding (and creating) his own “jargon” within the major language and “hollow[ing] the language out and...becom[ing] the nomad and the immigrant and the gypsy of [his] own language.”^{xciv} I would argue that Joyce’s use of foreign language challenges the referential and mythic tongues (the languages of sense and culture and of spiritual reterritorialization) from within, acting as nodes of resistance not only by rejecting the hegemony of English language but also by highlighting the ways English (and all language) is *already* challenged and altered by the words it incorporates from the languages with which it interacts. In other words, these foreign units resist the “artificiality and fictiveness” of single-minded nationalisms simply by their presence.^{xcv} Study of foreign words in *Ulysses* must not allow “the would-be multicultural, monolingual reader to stay in the comfort zone of English as a global language, ‘why-would-I-need-to-know-anything-else?’”^{xcvi} A digital look at the numbers of foreign words in the novel allows us to hear them as they were meant to be heard – as ambient noise continuously pushing against the hegemony of English and forcing readers to exist outside their monolingual comfort zone.

As I mentioned upon opening this chapter, of the 264,448 word-units in *Ulysses*, 2,525 are non-English words. In such a large novel, one percent of the text doesn’t seem a particularly impressive or impactful number. As we know, however, Joyce utilizes many tools to challenge his reader and convey meaning. Nothing is ever simple with Joyce, and foreign words are

another tool at his disposal. If we look first at an episode-by-episode overview of where these words show up in the text, we can see that although the foreign word counts per episode vary, the overall percentage of foreign to total words per episode remains fairly consistent, creating a sense that readers are repeatedly being challenged to sit in the discomfort of not knowing and to

work for meaning in the text.

Percentages of foreign words per episode can be roughly placed into two categories: twelve episodes consisting of less than one percent foreign words and five episodes consisting of between one and two percent foreign words (see Figure 1). Outside of these two categories

is the outlier, ‘Proteus,’ coming in at 3.8 percent. Some of these numbers will be explored further – for now, an overview reveals a relative consistency to the ratios of foreign words in the text. As total word counts increase by episode, so too do the number of foreign words, ultimately keeping the ambient, foreign noise consistent as we read the novel. Despite the discontinuity and fragmentation between characters, narrators, and styles in the novel, the presence of foreign words provides a sense of continuity: even as styles, narrators, and characters come and go, readers can expect to find evidence of a cosmopolitan sensibility around the next corner. Also interesting to note is the nature of the episodes in each of the two main categories mentioned above. The higher of the two categories, episodes composed of between one and two percent foreign words, reveals a tendency towards more foreign words in episodes where the text zooms

out to include larger populations.^{xcvii} Just as, in the reality of recent Western imperialist history, English began to incorporate more and more words from other languages as it spread to larger populations, the ambient noise of the text increases as the major characters begin to be surrounded by larger groups of people. This novel may be set in Dublin rather than England (from which English moved outward), but the tendency feels familiar: the higher the number of people in any given moment, the higher the likelihood of hearing unfamiliar words or sounds. Since English is the major tongue of Ireland but not her ‘mother’ tongue (and especially given the influence of Irish on the tongue of its oppressors), an expansion into larger groups of people in Dublin must necessarily carry potential for sounds that are not ‘originally’ English. That Joyce includes more than just Irish in the ‘foreign’ sounds that pervade his English highlights his tendencies for cosmopolitanism and against dogmatic nationalisms. If his novel is to expand outward to challenge the limits of English, it must do so through an abundance of worldly sources.

Further analysis must focus more specifically on individual characters’ or episodes’ use of foreign words, because the numbers in *Ulysses* provide, beyond an overarching trend representing something about the ‘world,’ another avenue for understanding character development. Like the rhizome metaphor of Deleuze and Guattari’s Kafka analysis, this quantitative analysis of foreign words is one entrance into the rhizome of *Ulysses*: one of many possible paths to find meaning in a text.^{xcviii} Foreign language can be followed as a path with multiple avenues and alleyways, one of which is that of character usage. Counting the foreign words of individual characters uncovers the ‘noise’ of their thoughts, which in turn can lead to further understanding of their inner world. Joyce doesn’t only create his own ‘jargon’ (private language); he creates an inner, private language for each major character (as well as some

others). The outlier of Figure 1 provides a useful entry point: ‘Proteus’ (and, more specifically, Stephen) contains the highest percentage of foreign words of any episode.^{xcix} Stephen himself, throughout the novel, either speaks or thinks a total of 430 foreign words throughout the novel, about 62 percent more than the next

highest foreign language user, Bloom (see Figure 2).^c His ranking makes sense based on what we know of Stephen. Not only is he the “wordiest” character (in his own head, at least), but he is also an artist and a scholar, has lived in France, and strains against the perceived chains of Ireland and her two masters, England and Rome (*U* 1.638). The foreign word makeup of ‘Proteus’ comes as no surprise, then, confirming some of what we already knew about Stephen. However, while most of the time, foreign words maintain a somewhat stable presence in the novel and provide a source of continuity, they also contribute to the odd mimesis of *Ulysses* as a whole. Just as the foreign word percentages of the more populated episodes practice mimesis through the creation of increased ambient noise, so too does ‘Proteus’ fit within the logic of *Ulysses* by reflecting Stephen’s mental reality (as well as his own tendencies toward linguistic manipulation). The episode’s foreign words thus align with the role of foreign words in the rest of the novel even as their numbers break with the consistency of word ratios. In ‘Proteus,’ we hear Stephen’s worldly and scholarly aspirations through his language; we experience the weight of literary and scholarly worlds on Stephen’s psyche. Foreign words, through their *quantity*, supplement characterization. It is the numbers here that highlight elements of Stephen’s

character by allowing us to ‘hear’ Stephen’s personal language as developed through his relationship with various languages.

We already know about the relationships of Stephen to French (or Italian, or Irish), Bloom to Hebrew, and Molly to Spanish, based on their personal histories alone. But similarly to Stephen, a broader look at the numbers of foreign words used by Bloom and Molly illustrates the connection, within the logic of *Ulysses*’ language system, between foreign language and identity. The quantity of foreign words per character, particularly when compared to other characters’ numbers, reflects elements of personality or personal history that we may otherwise miss. Joseph Valente describes Bloom as “a Hungarian-Irish baptized Jew, the very image of Ireland’s unacknowledged ethnocultural hybridity.”^{ci} Bloom speaks or thinks words from nine languages

throughout the novel, making him an equal of Stephen in this respect, despite his lower numbers of actual words (see Figure 2). Bloom is quite worldly, despite the fact that he is not the scholar or artist. As might be expected, given his family’s religious

beliefs prior to their migration to Dublin, Bloom speaks or thinks the most Hebrew of the novel – not by much, but if we include the Hebrew of some of the characters in ‘Circe,’ whom Bloom presumably imagines, we can attribute much more of the novel’s Hebrew to Bloom. There are, as we can see in Figure 3, 40 Hebrew words in ‘Circe’ alone (almost half of all the Hebrew in the novel) and 26 in ‘Ithaca,’ which gives Bloom and his psyche much attention. As for the other half of the national identity that Valente attributes to Bloom, Irish, it is notable that Bloom speaks (mostly in ‘Circe’) or thinks 26 Irish words, only 10 shy of Stephen’s total and equal to

the Citizen's own usage, despite the Citizen's vehement arguments for Irish people to speak their own language (see Figure 4).^{cii} At least some of those words are used in disparaging reference to the Citizen (Bloom's "*Slan leath*" password, for instance, given to the Figure in Mabbot Street [*U* 15.220-1]), but the "dream" Bloom of the novel nonetheless uses enough Irish phrases to compete with the Citizen. In fact, most of Bloom's Irish words are his own, rather than repeat words heard from the Citizen, including the garbled Irish phrase "*sgeul i mbarr bata coisde gan capall*" in 'Circe' (*U* 15.1771-2) or "*Faugh a ballagh!*" ("Clear the way!") in 'Nausicaa' (*U* 13.1149).^{ciii} Bloom ranks third in Irish usage, despite the Citizen's attempted persecution of him as a foreigner and a Jew, reflecting the hybridity described by Valente; this hybridity becomes clear when the numbers reveal Bloom's own personal, inner language.

Molly's characterization is similarly reflected through her language. Despite seeming unlearned when compared with Stephen and Bloom, she uses words from a surprising six languages (five besides English: French, Italian, Latin, Irish, and Spanish). By looking at the numbers (both number of languages and number of words used), we learn something about Molly that we wouldn't expect: with 87 foreign words thought or spoken, Molly is more "worldly" than we might imagine. Granted, her total is less than a third of Bloom's, but given that Molly receives far less page time than Bloom, and thinks or speaks substantially in only one episode, 87 words seems more impactful than might be expected. If Bloom, who thinks or speaks in eleven episodes (if we don't count the less direct speech of 'Oxen of the Sun' and 'Ithaca'), spoke 87 words in each episode, his foreign word total would be 957. Even if we narrow down to

episodes that are what we might deem primarily ‘Bloom’ episodes (in other words, the six episodes with significant amounts of Bloom’s thought: ‘Calypso,’ ‘Lotus Eaters,’ ‘Hades,’ ‘Lestrygonians,’ ‘Sirens,’ and ‘Nausicaa’), an 87-word-per-episode pattern

would leave him with 522 foreign words (still more than Stephen’s total). Instead, Bloom, as we can see in Figure 2, thinks or speaks 286 foreign words over the course of the whole novel.

Molly, then, illustrates a (relatively) strong concentration of foreign words in comparison.

Without the numbers, we would not see Molly’s personal language, which reveals even her, one of the less ‘worldly’ and educated of the characters, as more international than might be expected.

Among the five foreign languages that make up those 87 words from Molly are two important ones for her own character: Spanish and Irish. Molly’s Irish word total, in fact, comes in at fourth place with 13 words (see Figure 5), although many of her Irish words are Anglicized.

While she presumably never learned Irish, during her adulthood in Ireland she would have picked up some words, albeit mostly in these Anglicized forms. Among these, aside from her occasional thought for *Sinn Fein* (*U* 18.383; *U* 18.1227), are such words as

“plabberly” (*U* 18.195) and “skeezing” (*U* 18.290). Far more important than her Irish usage,

however, is her use of Spanish, into which she slips often in ‘Penelope.’ With 43 words, she uses

the most Spanish of all the characters and a little less than half the Spanish used in the novel (see Figure 6). Molly, who spent her childhood in Gibraltar, knew Spanish, although English is presumably her first language. She only speaks a

full Spanish sentence (or mock conversation) once: “I dont feel a day older than then I wonder could I get my tongue round any of the Spanish como esta usted muy bien gracias y usted see I havent forgotten it all I thought I had only for the grammar” (*U* 18.1470-3). This elementary Spanish conversation sounds perhaps more like that of an elementary Spanish student rather than a that of a once-bilingual speaker, but outside of this one conscious use of Spanish, Molly engages with the language throughout her midnight soliloquy with phrases such as “he gave me a great mirada” (*U* 18.512), “leave me with a child embarazada” (*U* 18.801-2), “I could do the criada” (*U* 18.801-2), and several more. Molly takes some pride in her Spanish heritage and words, thinking about Stephen, “I can tell him the Spanish and he tell me the Italian then hell see Im not so ignorant” (*U* 18.1476-7). Some of the words she uses could be relegated to unimportant details, the normal names for items or phrases from specific memories (“bravo toro” (*U* 18.632), “mantillas” (*U* 18.633), etc.), but Molly does use English rather than Spanish to identify other such items in these Spanish scenes, including “and the Spanish girls laughing in their shawls and their tall combs” (*U* 18.1586-7). She switches back and forth, seemingly without awareness except in one or two instances, and although many of these Spanish phrases are simply triggered by memories of Gibraltar, they nonetheless contribute to the representation of a reality lived by a woman who is of two cultures: English-speaking Irish and Spanish-speaking Irish military families in Gibraltar, two identities that were already hybrid before

uniting in Molly. These experiences blend together to create the particular perspective of Molly Bloom, a woman who has participated in two cultures, who is a beloved (or desired) outsider in Dublin, and who is married to an often ignored or derided outsider in Dublin. While readers do see her foreign words float by in the ‘Penelope’ monologue, counting these words and comparing them to the usage of other characters allows us to hear the ambient Spanish and Irish tones of her thoughts and see how these numbers reflect the reality of Molly’s experience. In fact, Joyce seems to have been thinking specifically about Molly’s ‘Spanish-ness,’ as we can see in his late notes for typescripts and galleys.^{civ} In the ‘Penelope’ notes, he lists several examples of Spanish words or phrases, three of which he adds to the episode, and one which he “translates” and adds. “Majestad” (*U* 18.762), “embarazada” (*U* 18.802), “mantillas” (*U* 18.633), and “posadas” (*U* 18.1595) were all added to the episode via placards in November 1921, taken from Joyce’s late notes for the episode. Molly was, it seems, not Spanish enough before November 1921. Only by studying the numbers of foreign words, as well as the ways they grew throughout the writing of *Ulysses*, can we take seeming linguistic incoherences – moments where the reader may not understand the words or the reason for their appearance – and instead hear the foreign sounds and trace the ways they reflect important elements of characterization in the novel. We would not see how Joyce created more dimensionality within Molly without this knowledge of foreign word quantities and their growth during the writing process.

Outside of individual characters, looking more closely at language use by episode also helps us read and interpret these non-English “disunities.” The episodes of *Ulysses* often seem fragmented due to their highly individualized styles. Gibson writes of narratives in general that “Narrators, of course, can clash with each other or themselves. There may be conflicts between voices or perspectives *within* narratives.”^{cv} *Ulysses* certainly reflects this to an extreme, giving

almost every episode its own narrator with their own “speech” style and, in episodes like ‘Aeolus’ or ‘Circe,’ a unique visual style via page layout. This can often be disorienting; Richard Kain acknowledges that Joyce “has been accused of lacking a philosophy, and being merely interested in words.”^{cvi} Kain answers, however, that “rather than a philosophy he had a vision of the interrelatedness of everything. This vision he reflected, refracted, and distorted through language.”^{cvi} A closer look at some of the ways that foreign words are woven into specific episodes can illustrate this vision reflected and distorted through language. In particular, ‘Circe,’ ‘Cyclops,’ and ‘Oxen of the Sun’ illustrate interesting manifestations of foreign word usage. ‘Circe,’ arguably the most difficult episode of the novel, manages to interweave a grand total of 510 foreign words while maintaining such a fantastic style and “plot” that the high number of

foreign words can still be easily missed (see Figure 7). ‘Fantastic’ narratives often involve “hesitation and doubleness,” “refus[ing] to confirm a particular order of the world as somehow existing there, behind the language of the text” and “engender[ing] hesitation.”^{cvi} ‘Circe’

certainly refuses to confirm any “normal” order of the world, and it does not provide the reader with an easy avenue for interpretation. Study of its foreign word usage, however, may provide one possible direction; it is, after all, “arguably the most multilingual episode of *Ulysses*.”^{cix} If

we look at the numbers, this becomes clear: although by percentage, the episode's foreign

makeup (1.4 percent of the total word count) is only third after 'Proteus' and 'Scylla and Charybdis,' by raw numbers it contains, on its own, approximately one third of all foreign

Fig. 8.2	Irish	Latin	French	Italian	Spanish	Hebrew	German	Greek	Hungarian	Misc. ²
Telemachus	X	X	X				X	X		X
Nestor	X	X	X							
Proteus	X	X	X	X		X	X	X		X
Calypso	X	X		X	X	X				
Lotus Eaters	X	X	X	X	X	X				
Hades	X	X	X	X						
Aeolus	X	X	X	X		X		X		
Lestrygonians	X		X	X		X				
Scylla and Charybdis	X	X	X	X	X		X	X		X
Wandering Rocks	X	X	X	X	X					
Sirens	X	X	X	X			X			
Cyclops	X	X	X	X	X	X	X	X	X	X
Nausicaa	X	X	X	X	X					
Oxen of the Sun	X	X	X	X	X	X	X	X		X
Circe	X	X	X	X	X	X	X	X	X	X
Eumaeus	X	X	X	X	X		X	X		X
Ithaca	X	X		X	X	X	X	X	X	
Penelope	X	X	X	X	X					X

words in *Ulysses*. The numbers reveal the ways that 'Circe' "caricature[s]" the multilingualism of 'Proteus,' while at the same time constituting an intensification of the multiplicity of languages

to be found there."^{cx} While 'Proteus' uses nine foreign languages, 'Circe' reaches a grand total of fifteen (see Figures 8.1 and 8.2).^{cxii} Stephen may play at multilingualism, but 'Circe, as it seems to do generally, wins the game of one-upmanship in the world of global languages.

² This column includes any languages that appear in three episodes or fewer. These include:

Telemachus: Hindi, Welsh

Proteus: Hindi, Swedish

Scylla and Charybdis: Sanskrit

Cyclops: Japanese, Polish, Portuguese, Serbo-Croatian, Turkish, Yoruba

Oxen of the Sun: Arabic

Circe: Arabic, Hindi, Persian, Romanian, Sanskrit, Yiddish

Eumaeus: Old Church Slavonic

Penelope: Afrikaans

This is one of those “incoherences” Gibson claims we must study, seeming odd and confusing when viewed on its own. When viewed as numbers in relation to other episodes and the themes and logic of the novel, however, it fits. The novels are connected by their somewhat stable use of foreign words, and the multilingualism of ‘Circe’ mirrors and amplifies the multilingual ‘Proteus,’ as it reflects and amplifies most elements of the novel. Like some of the structural episode pairings that David Hayman points out (‘Proteus’ and ‘Penelope,’ ‘Proteus’ and ‘Nausicaa,’ etc.), ‘Circe’ and ‘Proteus’ form a pairing here through both the internationalism of their language and their portrayal of the unconscious.^{cxii} In ‘Proteus’ we hear Stephen’s thoughts (including all the meandering, subconscious turns his mind makes), while in ‘Circe’ Bloom’s (or perhaps the novel’s) subconscious takes over, acting out dream sequences and unconscious desires. In each episode, reality consistently interrupts. Within this pairing, foreign language and the unconscious also seem to be paired. Even Molly’s unconscious seems to use more foreign words than we might expect in daily life; with whom would she speak Spanish regularly in Dublin? Foreign words seem to exist more in the unconscious of the novel and its characters than in their actual speech. Foreign words are, perhaps, more natural and permitted in the quiet of one’s mind in this novel, where characters can meander linguistically and culturally without fear of criticism or ostracization – or, in Stephen’s case, perhaps, of political attachments. The internationalism of *Ulysses*, however, is so fundamental to its structure and character that we can, when we count the words, find foreign language thriving below the surface.

Looking more closely at ‘Circe,’ the confusing noise of its particular multilingualism is highlighted by pleas for or teasing about “universal language.” Stephen speaks of the possibility of gesture as a “universal language, the gift of tongues rendering visible not the lay sense but the

first entelechy, the structural rhythm,” Bloom campaigns for “esperanto the universal language with universal brotherhood. No more patriotism of barspongers and dropsical imposters,” and Lynch teases that Stephen “likes dialectic, the universal language” (*U* 15.105-7; *U* 15.1691-2; *U* 15.4726). Despite the recurrence of this concept of a universal language, the language, characters, and activities of ‘Circe’ remain confusingly hybrid, resisting easy understanding rather than coalescing into a universally understood system of signifiers. Language and reflections on language circulate and frame the novel, hinting and poking fun at its own multilingual nature. Gibson highlights in *Joyce’s Revenge* that ‘Circe’ “turns Dublin – and the account of Dublin that has preceded it – inside out. In doing so, it insistently reveals the ‘stranger’ in places where we had not previously noticed him.”^{cxiii} Noting the issue of Anglicization, Gibson observes that ‘Circe’ “is primarily concerned...with a cultural English presence barely noticed by critics.”^{cxiv} If we focus on one way culture manifests – language – we can see that ‘strangers’ in this episode also appear as foreign words interrupting the normalized flow of English and reflecting the continuous presence of the international in the novel. Rather than using only Irish to counter English language and culture, however, as many Gaelic-Leaguers were wont to do, a worldly ‘Circe’ makes use of, as I have shown, 15 languages, rejecting single-minded nationalist focus on a glorified Irish as a key to rebellion against English language and rule. The proliferation of tongues and rejection of narrow political views accentuates the process of reterritorialization, extending and evolving the jargon already developing before this episode. ‘Circe’ uses quantity and exaggeration to highlight themes in the novel, whether through foreign words, fantastic and bawdy visions, or crowds of characters.^{cxv} Connecting the episode’s foreign word usage to that of other episodes, and studying those words

through the lens of the episode's particular style and logic, allows us to find just how these befuddling scenes still fit within the logic of *Ulysses*.

The use of foreign words in 'Oxen of the Sun' and 'Cyclops' also aligns with the logic of *Ulysses*, a playful linguistic logic in which cosmopolitanism, difficulty, and the evolving nature of language and human existence all feature, all the while subverting linguistic expectations. Both episodes come with specific expectations, given their themes and the parodical elements (or structures) used by Joyce. Looking at 'Cyclops' first, a reader's own impressions of the episode, combined with commonly-accepted scholarly analyses of it, leads to an understanding of the episode as poking fun at and criticizing the "one-eyed nationalism" of strident Irish nationalists – particularly those in the Gaelic League – as represented by the character of the Citizen. As I will explore further in Chapter 2, the narrator's natural and at times mocking use of Irish highlights the Citizen's own linguistic blunders, despite his aggressive assertions that Irishmen should speak Irish. Even outside of Irish usage, language plays a key role in the parody and humor of the episode, as Gibson points out in *Joyce's Revenge: History, Politics, and Aesthetics in Ulysses*:

Linguistically, much of the humour in 'Cyclops' is at the expense of clumsy attempts to match Gaelic idiom with a sort of 'approximate English'. It was that 'approximation' where there was and could be no real unity that Joyce would have no truck with. His laughter refuses to accept the validity of the revivalist enterprise. Rather, it pushes that enterprise back, relativizes it, mockingly demonstrates its cultural shallowness.^{cxvi}

Joyce uses language itself to highlight the absurdity of "Anglo-Irish, revivalist history" claims to representation of the "soul of Ireland," all the while relying "heavily on English and Anglo-Irish cultural constructs."^{cxvii} Joyce plays with both "Irishized" English and Irish itself to highlight the absurd extremism of certain types of nationalism. For the moment, however, I will focus on the languages other than Irish or English used in 'Cyclops.' Looking back to an episode-by-episode

breakdown of foreign words in *Ulysses* (see Figure 1), we can see that in terms of percentage of foreign words within each episode, ‘Cyclops’ lies within the second category laid out earlier in this chapter – that of episodes with slightly *larger* percentages of foreign words. By percentage

ranking, ‘Cyclops’ comes in fourth of all the episodes with 1.35 percent of its words being non-English ones. Looking purely at a tally of the numbers of foreign words per episode, rather than percentage, however, ‘Cyclops’ actually comes in

second after ‘Circe,’ with 296 foreign words (see Figure 7). Either way we look at these numbers, the foreign word contingent in ‘Cyclops’ is surprisingly high. Prior to completing this research, I expected to find that ‘Cyclops’ contained the most Irish words (which it does), but the xenophobic elements portrayed by the Citizen led me to hypothesize that its general foreign word count would be one of the

lowest in the novel. Imagine my surprise when the episode revealed itself as fairly international, with a word count ahead of even Stephen-centric episodes (‘Proteus’ or ‘Scylla and Charybdis,’

for example), which I expected to take the lead. The quantitative method, in this case, brings to light linguistic elements otherwise lost in the shuffle of English words, foreign words, portmanteaux, altered spellings, and onomatopoeia. Besides this, as seen in Figure 7, ‘Cyclops’ actually ties ‘Circe’ for first place in total number of languages used (15 total). Once placed within the context of all the novel’s foreign language counts and analyzed from the perspective of *Ulysses* as a novel that is worldly and challenging of both readers’ expectations and comfort, these numbers begin to find their place within the novel’s logic. Not only does Joyce, in this episode, disrupt the hegemony of English, but he challenges the attempt to subvert English through a single, so-called ‘pure’ Irish – or any language of any nation claimed as a ‘pure’ linguistic medium. The Citizen himself mixes languages (consciously or unconsciously, it’s unclear), as explored in the example above of his description of the “Sassenach” language as “*patois*” (*U* 12.1191). Foreign language also pops into the narration; in Rumbold’s ascent to the scaffold (in one of the longer parodic scenes), several languages are thrown in at once through the cheering of “excitable foreign delegates”: “*hoch, banzai, eljen, zivio, chinchin, polla kronia, hiphip, vive, Allah*, amid which the ringing *evviva* of the delegate of the land of song...was easily distinguishable” (*U* 12.599-604). In this string of words alone the narrator uses nine languages: German (*hoch*), Japanese (*banzai*), Hungarian (*eljen*), Serbo-Croatian (*zivio*), English (both pidgin English, *chinchin*, and American slang, *hiphip*), Greek (*polla kronia*), French, (*vive*), Arabic (*Allah*), and Italian (*evviva*). This passage is also preceded by another that uses names and titles from several languages, including Hungarian, Spanish, German, and more and followed by Latin and French words and phrases such as *non plus ultra*, *fiancée*, and *entourage* (*U* 12.556-69; *U* 12.636, 12.667, 12.675). The text is littered with languages – when we count them all, the episode illustrates a surprisingly international surface, working against the

xenophobic Citizen. Counting, as the numbers continue to reveal, facilitates ‘hearing’ the underlying foreign sounds of the novel. In this way, ‘Cyclops’ follows the “rules” of *Ulysses* by pushing against linguistic hegemony and challenging the reader (and the Citizen) through linguistic strangeness.

‘Oxen of the Sun’ continues this practice of subversion and internationalism. Readers are already aware of the “frightful jumble of pidgin English, nigger English, Cockney, Irish, Bowery slang and broken doggerel,” as described by Joyce, at the end of the episode – it startles and confuses the reader enough that this particular linguistic medley cannot be ignored.^{cxviii} Ellen Carol Jones describes this “hybrid language” as “breach[ing] boundaries,” arguing that it “stages itself as same and other in a double-voicing” and “politicizes cultural differences through dialogic contestation, a double-languaging. Such language effects what Bhabha terms a “‘hybrid’ moment of political change.”^{cxix} Jones describes the end product of this chapter on literary history and its “hybrid” ending as a “‘redismembering’ of [English and Anglo-Irish] history through the hybrid languages of the dispossessed, the migrant, the diasporic.”^{cxx} However, “Oxen” uses more than parody, dialect, and slang to enact the “estranging” of “the languages of a totalizing imperial and colonial culture” that Jones describes.^{cxxi} This was another episode I expected, upon beginning this research, to contain some of the fewest foreign words; despite the medley of dialects at the end, the structural and stylistic focus on the development of English literary history led me to such a hypothesis. The episode’s “succession of styles,” as Declan Kiberd points out, may mimic “the slow evolution of the English language from Anglo-Saxon to American slang,” but prior to discovering the actual foreign-word numbers, I expected that evolution to be primarily limited to English.^{cxxii} Joyce’s language yet again surprised me, illustrating once more the perspective that can be gained from a wider, digital view of foreign

language counts in the novel. Instead of aligning with my expectations, ‘Oxen of the Sun,’ like ‘Cyclops,’ fits into the same category of a higher percentage of foreign words. Technically the

episode with the sixth-highest percentage of foreign words, its 1.29 percent is nonetheless on par with the foreign percentages of ‘Wandering Rocks,’ ‘Cyclops,’ and ‘Circe,’ all of which are not far behind the 1.72 percent of ‘Scylla and

Charybdis’ (see Figure 1). Additionally, it contains words from nine languages, the same number as Stephen uses in ‘Proteus’ and one more than ‘Scylla and Charybdis’ (see Figure 8.1). These numbers reveal further layers within the “palimpsest of traces of doubtful origin” described by Jones.^{cxxiii} The episode is riddled with Latin medical terms and international allusions even before that final pidgin section, along with

casual phrases such as “*marchand de capotes*,” “*livre*,” “*avec lui*,” “*ventre biche*,” “*sans blague*,” “*fiat!*” and more (U 14.776; U 14.777; U 14.780; U 14.781; U 14.783; U 14.1070).

Indeed, even the birth, described by Rabaté as Mrs. Purefoy “giv[ing] birth less to a baby than to

a medley of pidgins, all the idioms that attest that English is indeed a world language well adapted to globalization and hybridization,” is announced using a foreign word: “Meanwhile the skill and patience of the physician had brought about a happy *accouchement*” (*U* 14.1310-1).^{cxxiv}

If ‘Oxen of the Sun’ charts the development of literary history, it also, through the fetal development and *accouchement* central to its theme, announces the birth of the more “worldly,” international novel that we see in ‘Circe.’ Indeed, as I noted earlier, ‘Circe,’ directly following ‘Oxen of the Sun,’ contains the largest number of foreign words, with a sizeable jump from the 264 of ‘Oxen of the Sun’ (and from the second highest number of words, 296, in ‘Cyclops’; see

Figure 1). Although the

percentage of foreign words based on total word count is still within the one to two percent range mentioned above (1.4 percent), the increase in numbers and the international circus of ‘Circe’ seems a stark

change from the historical English language of ‘Oxen of the Sun.’ The number of foreign words per episode may drop again in the final three episodes, but the multilingualism born in ‘Oxen of the Sun’ and given space for play in ‘Circe’ is, eventually, given free rein in *Finnegans Wake*. It is given a symbolic birth in ‘Oxen of the Sun,’ where foreign words in this episode subvert the English-centric literary history, planting moments of international, multilingual rebellion within the parodies of writers deemed important to the development of English language and literature.

Yet again, the numbers here reveal a disruption of linguistic expectations while simultaneously aligning the episode with the multilingual logic that challenges readers throughout the novel.

Study of the numbers of foreign language usage – the pattern of multilingual “noise” consistent throughout each episode – reveals a continuity even among the fragmented and varied styles of *Ulysses*. Within that relative consistency, we see that the largest jumps in numbers of foreign words occur in moments of transformation, when the text transitions to new narrative experiments. When we follow Stephen to Sandymount in ‘Proteus’ and the text switches to almost complete stream of consciousness and the thoughts of a scholar and artist, the number of foreign words jumps from the eleven in ‘Nestor’ to 210 (see Figure 1). After a few episodes of getting used to Bloom’s thoughts and the routines and workings of Dublin, the foreign word count jumps again from 46 in ‘Lestrygonians’ to 206 in ‘Scylla and Charybdis.’ Then, when we first see Joyce experimenting with two narrators (with widely differing sensibilities) in ‘Cyclops,’ the numbers jump from 68 in ‘Sirens’ to 296. And finally, we see the jump to 264 foreign words in ‘Oxen of the Sun’ and finally to 525 in ‘Circe.’ If *Finnegans Wake*, with its extreme linguistic and narrative experimentation (of both the foreign and more ‘familiar’ varieties), is the ‘end’ point and the culmination of Joyce’s creative career, the foreign word numbers in *Ulysses* allow us to see the road to *Finnegans Wake*.

The quantities of foreign language usage explored thus far illustrate the role of foreign words in the published novel, but foreign language in Joyce’s writing process also deserves attention. Joyce’s notesheets indicate that he worked with foreign languages throughout his process; in these, he recorded words and phrases he encountered, sometimes using them, sometimes leaving them out of the novel completely, and sometimes finding inspiration from them. As with later wordlists for *Finnegans Wake*, Joyce created similar linguistic collections in

his notes for *Ulysses*. Within the notesheets for ‘Nausicaa’ is a list of Slovene words and their meanings, none of which made their way into the text.^{cxxxv} Joyce also wrote a list of names for various types of bodies of water around the world in the notesheets for ‘Ithaca,’ most of which he did use in the episode, creating a sense of “international waters” via language.^{cxxxvi} Aside from these word lists, Joyce also found inspiration from foreign words and phrases, even if he did not end up using the foreign words themselves. Several foreign word entries in the notesheets ended up in the text via either translation or plot points. A brief list of these exogenetic examples and their textual usage includes:

“brutto amata bella” → “Pretty girls and ugly men marrying. Beauty and the beast” (*U* 13.836-7)^{cxxxvii}
 “voyage autour de ma belle,” → “Life, love, voyage round your own little world” (*U* 13.1093-4)^{cxxxviii}
 “LB c’est mon frère” → “Bloom: My more than Brother!” (*U* 15.1600)^{cxxxix}
 “Besos los pies de usted, señora” → “I kiss the feet of you senorita theres some sense in that” (*U* 18.1405)^{cxxx}
 “Walpurgisnacht” → The burning of Dublin in Circe (*U* 15.4660-97)^{cxxxxi}

At times almost direct translation, at times simply Bloom’s reinterpretation (Walpurgisnacht, on which ‘Circe’ is modeled, is a holiday in Germany celebrated by the lighting of bonfires, playing pranks, and making loud noises to keep evil at bay, featured also in Goethe’s *Faust*), these notes reveal consistent engagement with foreign words and ideas.^{cxxxii} Many more foreign words existed as early as the notesheets for *Ulysses*, and some disappeared thereafter. Whether or not each individual word made its way into the text, what these words indicate is Joyce’s early engagement with not only his own multilingualism (reading and writing in languages other than English, as he did easily even in letters) but also with a practice of recording potential foreign words for the text, even from languages completely unfamiliar to him. Daniel Ferrer and Michael Groden write that “genetic criticism must take into consideration the après-texte as well as the avant-texte..., the text being only one possible realization of a matrix that precedes it and in

some cases goes on after it.”^{cxxxiii} By reading foreign words quantitatively in the *avant-texte*, we find a version of *Ulysses* that was, if ever so slightly, less international and more easily understood by a monolingual reader. A genetic reading of foreign words in *Ulysses* also creates an *après-texte* laden with international weight and representative of a linguistic and cultural self-awareness. Ferrer and Groden propose that genetic documents “open dizzying new ranges of potentialities”; one such potentiality is that of an even more worldly novel than previously imagined, made more worldly through Joyce’s continuous interaction with international words. Joyce jotted down in the ‘Circe’ notesheets the phrase “international jamboree.”^{cxxxiv} Perhaps ‘Circe’ is the international jamboree of the novel, but internationalism and multilingualism certainly pervade the creative process of *Ulysses* as a whole.

Despite the “international jamboree” of *Ulysses*, scholars discussing Joyce’s multilingualism often focus on *Finnegans Wake*. Milesi writes of the *Wake* that the narrative’s “aim is far from the consolidation of an existing national idiom in a ‘gathering’ gesture but rather to allow all languages, ‘major’ or ‘minor,’ to interact and coexist within the versatile entity of the Wakean portmanteau.”^{cxxxv} The portmanteau, however, is being built, and the languages drawn in, as early as *Ulysses*, as the number of foreign words in the final novel, alongside a look at how those numbers came to be, reveals. Like a linguistic Noah’s ark, *Ulysses* gathers languages in singles, pairs, and groups. Milesi attributes to *Ulysses* a dozen foreign languages, “mainly used to enhance motifs or for purposes of characterization.”^{cxxxvi} This is certainly true, but as I have argued, the foreign languages of the novel - 25 instead of the 12 mentioned by Milesi – end up acting as more than a tool for enhancing motifs or characterization; they connect the varied pieces of the puzzle that is *Ulysses* by acting as a worldly and often subversive ambient noise. Language does, as Edmund Epstein argues, have “its free play conceded to it, frequently to the

distress of readers,” but foreign language specifically did not always run *quite* so rampant in the text.^{cxxxvii} A look at the foreign words present in the episodes serialized in *Little Review* reveals a pattern of increased multilingualism in the writing of *Ulysses*. Yet again, we see Joyce on the

road to *Finnegans Wake*, steadily laying the groundwork and challenging English language and literature from within. In the versions of each episode up through the first

half of ‘Oxen of the Sun’ published in the *Little Review*, Joyce included 1,068 foreign words, but by the time the entire novel was published in 1922, *Ulysses* had gained an additional 1,457 (see Figure 9). That’s a 127.6 percent increase: Where did it come from? Most of these new words, 1,115 of them, were added through the episodes not published in the *Little Review*; some were used as early as the episode drafts, while some were added as late as the typescripts and proofs – I will address these latter additions shortly. As for the *Little Review* episodes, the foreign words of those initial versions of the episodes increased by 281 words, or 23 percent (see Figure 10).

This aligns with Joyce’s typical pattern of “revising” by addition when expanding the novel for publication, and this alignment of his

multilingual revisions with his revision norm also allowed for the foreign word counts and percentages in the *Little Review* episodes to align with the numbers of later episodes, creating the continuity I have been exploring. Besides the increased numbers, the foreign language revisions

also illustrate Joyce's continued interest in choosing the "right" words for his novel, as he replaced some of his English words with foreign ones, rather than relying only on addition. I will look briefly at three such examples, two in 'Cyclops' and one in 'Penelope': "*patois*," which I discussed earlier, was originally "language" (changed in printer's typescript in 1921), "Jacob *agus* Jacob" originally read "Jacob and Jacob" (changed in page proofs in November 1921), and "gave me a great eye" in 'Penelope' became "gave me a great *mirada*" (changed in the page proofs in January 1922) (*U* 12.1191; *U* 12.1825; *U* 18.512). These late-stage replacements not only add an international element to the text but add contextual meaning that would otherwise not exist within the English-only phrases. *Patois*, as shown in the analysis above, adds a layer of politically laden insult. In the eyes of the English – and, unfortunately, many Irishmen and women – Irish was considered a provincial and uncultured language, but the Citizen here belittles the English language using a derogatory term from another language entirely. If Joyce had kept "language" instead of "*patois*," this layer would never have existed in the text. Similarly, "*agus*" makes its way into the passage discussed above, where the narrator makes use of several Hungarian phrases immediately after the Citizen begins to lose his temper in response to his own xenophobic anger. The text highlights its own international nature as the Citizen rails against Bloom and allows his bigotry full reign. Although "*agus*," the word for "and" in Irish, is only one word, it nonetheless increases the foreign element of this passage as it rebels against the Citizen's antagonism, and it does so in the very language he touts throughout the episode. Finally, in 'Penelope,' the simple change from "eye" to "*mirada*" highlights Molly's lingering connections to her Spanish upbringing, recalling the Gibraltar atmosphere as it still lives in Molly's memories. The foreign language additions to the text are not simply about adding *more* noise; by changing English words to foreign words, the easily understood (by English speakers)

English noise is transformed into the unfamiliar noise of foreign tongues. As we can see by the foreign word counts from the *Little Review* and through such foreign word replacements, the noise of *Ulysses* becomes increasingly international.

Post-*Little Review*, the trend towards globalization continued, as we can see in both the number of late-stage foreign word additions and the growth of the total number of languages used. In *Ulysses in Progress*, Michael Groden delineates three stages of the writing process for *Ulysses*; in the third and final stage, he explains, stylistic elaboration and the addition of symbolic details predominates.^{cxxxviii} Looking at the additions of foreign words in the typescripts, proofs, and placards of 1921-1922, it becomes clear that foreign language additions and alterations in the novel also fit within this third stage of composition. In these late revisions and additions, at least 164 foreign words are added (see Figure 11) – these compose approximately 11.7 percent of the foreign words added after the *Little Review* publication. Late

additions and changes like “*a chara*,” “*Sraid na Bretaine Bheag*,” “*agus*,” and “*Lamh Dearg Abu*” made the Citizen and

‘Cyclops’ more Irish, and the insertion of phrases like “*Visszontlátásra, kedvös barátom!*” as discussed above, increased the level of non-English and non-Irish words working within ‘Cyclops’ to challenge the Citizen’s xenophobic rhetoric (*U* 12.751; *U* 12.898; *U* 12.1825; *U* 12.1211-2; *U* 12.1841). Molly’s own speech also becomes more international, primarily through the expansion of her Spanish: at least 15 of her 90 Spanish words were added in typescripts, proofs, or placards, including “*mirada*,” discussed above, “*mantillas*,”

“banderilleros,” “bravo toro,” “embarazada,” and “castanets” (see Figure 12; *U* 18.512; *U* 18.633; *U* 18.631; *U* 18.632; *U* 18.802; *U* 18.1596). Molly becomes *more* Spanish just as the Citizen becomes *more* Irish and the novel becomes *more* international. Until the very end, this internationalism grew, creating a sense, when observing these changes through their numbers, of an increasingly global work.

Of perhaps more note than the word count itself is the increase in the number of languages used by the novel. From the *Little Review* episodes to the 1922 publication, 12 languages were added anew to *Ulysses* (see Figure 13), bringing the total number of languages up to 25 from the *Little Review* total of 13 (which aligns more closely with Milesi's count). Not

only does the *content* – the words themselves – of the novel become more international, but the *type* of content – the variety of languages used – becomes more and more global. I must note that of these

new languages in the text, all were added in small numbers – between one and eighteen. Despite such low numbers, these language additions are notable primarily for their cultural identities and geographic origins. Of the 12 “new” languages to the text, six are languages of cultures outside of Europe; of the other six languages, none had, at this point in history, levels of influence on par

with that of major European languages like English, French, German, and so forth. Through the addition of words, though small in number, from these 12 languages, *Ulysses* became a slightly less Euro-centric novel and less confined to traditional languages of power and influence. Milesi writes that in *Finnegans Wake*, “Joyce’s mature literary idiom took on a more fully rounded Bloomian generosity and acceptance”; I would argue that the process of becoming so begins in the writing of *Ulysses*, as Joyce reached for words and languages unfamiliar to him and to many of his readers.^{cxxxix} If *Finnegans Wake* represents, as many argue, hybridity (linguistic and otherwise), *Ulysses*, then, represents the process of globalization.

Most scholars have heard Joyce’s reasoning for setting his works in Dublin: “For myself, I always write about Dublin because if I can get to the heart of Dublin, I can get to the heart of all the cities of the world. In the particular is contained the universal.”^{cxl} Joyce’s use of the people and places of Dublin to approach ideas about what may be universal in human experience, however, is not the only way *Ulysses* – and the Dublin of the novel – attempts to contain the world. By counting the foreign words of the novel (reminding ourselves of the sounds we often forget we’re hearing), as well as the ways their numbers grew in the writing process, we find the foreign at the heart of Joyce’s Dublin. Other cities and nations of the world are provided with space in the novel through words, and they provide the city of the text with ambient international noise and, as a map of the languages of the novel reveals, connections to many nations, although many are still unrepresented (see Figures 14a and 14b³). *Ulysses* layers

³ It is important here to note a limitation of this project: Due to the linguistic effects of colonization and the natural processes of linguistic evolution, mapping the linguistic representation of countries in a novel quickly becomes complicated. This issue is certainly important to consider, but out of the scope of this project. To at least address this issue, if ever so briefly, I have included both Figures 14a and 14b. In Figure 14a, I have highlighted only countries of linguistic “origin” (which in and of itself is complicated territory, outside the scope of the current work). In Figure 14b, I have highlighted countries in which any of the languages used in the novel are national and/or primary languages, which reveals the extent of linguistic diaspora. The primary purpose of these maps is to visualize the extent of Joyce’s general linguistic reach in *Ulysses*.

levels of linguistic “strangeness,” challenging readers as it does in so many other ways. Joyce may have been at the end of the English language in *Finnegans Wake*, but in *Ulysses*, he is

Fig. 14a and 14b: Languages in *Ulysses*

Esri, FAO, NOAA | Esri, FAO, NOAA | Esri, FAO, NOAA

Esri, FAO, NOAA | Esri, FAO, NOAA | Esri, FAO, NOAA

already reaching the limitations of English and on the road to the experimentation (international and otherwise) of his final novel. Looking at the linguistic numbers of *Ulysses*, a question comes to mind: How can texts undermine linguistic and cultural hegemony and challenge readers while maintaining enough linguistic consistency to retain those readers and to keep them coming back for more interpretations and ideas over

the course of generations? *Ulysses* may not be a truly “world” novel when we consider it in a global context, as many languages and cultures are, in fact, still excluded. Looking at the foreign word counts, however, forces us to avoid tendencies towards Anglicization and translation-reliant interpretations. Through these counts, which force us to register sounds normally heard unknowingly, we can hear what level of “worldliness” the novel did achieve.

^{xlix} This is reproduced and attributed to François Cassandre's *La Rhétorique d'Aristote en François* (Paris, 1654), Book II, section x, in *Joyce's Notes and Early Drafts for Ulysses: Selections from the Buffalo Collection*, ed. Phillip F. Herring (Charlottesville, Virginia: University Press of Virginia, 1977), 26.

ⁱ Conley, Tim. "Language and Languages." *James Joyce in Context*. Ed. John McCourt (Cambridge: Cambridge University Press, 2009), 310.

^{li} Ibid.

^{lii} Hanley, Miles L. *Word Index to James Joyce's Ulysses* (Madison: University of Wisconsin Press, 1953), iv.

^{liii} Ibid., iii.

^{liv} Ibid., 379. A note regarding the 2,206 foreign words stated by Hanley: this does not seem to include some of the foreign words sprinkled throughout the primary index, some of which did not end up in the Foreign Words and Phrases index.

^{lv} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 3.

^{lvi} Walkowitz, Rebecca L. *Cosmopolitan Style: Modernism Beyond the Nation* (New York: Columbia University Press, 2006); Dalgarno, Emily. *Virginia Woolf and the Migrations of Language* (Cambridge: Cambridge University Press, 2012); Hayman, Emily. "Inimical Languages: Conflicts of Multilingualism in British Modernist Literature." Ph.D. diss., Columbia University, 2014.

^{lvii} Hoover, David. L. "Quantitative Analysis and Literary Studies." *A Companion to Digital Literary Studies*. Ed. Siemens, Raymond George and Susan Schreiban (Malden, MA: Blackwell Publishing, Ltd., 2007), 519.

^{lviii} Ibid., 517.

^{lix} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin's Press, 1990), 1.

^{lx} Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014).

^{lxi} Lauret's study focuses specifically on American migrant literature written in English. Her distinction between wanderwords in migrant literature and wanderwords used by such authors as T.S. Eliot and Ezra Pound will be explored below (Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 2).

^{lxii} Ibid., 3.

^{lxiii} McAlmon, Robert. "Mr. Joyce Directs an Irish Word Ballet." *Our Exagmination Round his Factification for Incamination of Work in Progress* (New York: New Directions, 1962), 106-7; Conley, Tim. "Language and Languages." *James Joyce in Context*. Ed. John McCourt (Cambridge: Cambridge University Press, 2009), 311.

^{lxiv} Quoted in Milesi, Laurent. "Joyce, Language, and Languages." *Palgrave Advances in James Joyce Studies*. Ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 144.

^{lxv} Ellmann, Richard. *James Joyce: New and Revised Edition*. (New York: Oxford University Press), 382; Kager, Maria. "Of Sirens Silent and Loud: The Language Wars of Joyce and Kafka." *James Joyce Quarterly* 49:1 (Fall 2011), 43.

^{lxvi} Ellmann, Richard. *James Joyce: New and Revised Edition*. (New York: Oxford University Press), 397.

^{lxvii} While using the framework provided by Lauret, it is important to address the differences between the migrant texts she studies and Joyce's work. She defines "migrant writing" or cultures as "cultures 'for which the experience of geographical movement and resettlement was formative'" and "'whose migration included the crossing of linguistic borders'" (Lauret 2). Joyce, in contrast, is better defined as a writer of exile. Despite his departure from his home country and subsequent "crossing of linguistic borders," his experience cannot fairly or accurately be called that of "migrant culture." His border-crossing was certainly formative for him, but he did not participate in a wider migrant culture in the same ways as some of the American migrant writers studied by Lauret.

^{lxviii} Crystal, David. *English as a Global Language*. Second edition (Cambridge: Cambridge University Press, 2012), 7.

^{lxix} Ibid.

^{lxx} Ibid., 8.

^{lxxi} Bénéjam, Valérie, "Passports, Ports, and Portraits: Joyce's Harboursing of Irish Identity," *Genetic Joyce Studies* 5 (2005); Duffy, Enda, *The Subaltern Ulysses* (Minneapolis: University of Minnesota Press, 1994); Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003).

^{lxxii} Bhabha, Homi K. *The Location of Culture* (London: Routledge, 2004), 2.

^{lxxiii} Ibid.

^{lxxiv} U 12.1816; “Nagyaságos uram” meaning “Your greatness, my lord” (Gifford, Don and Robert J. Seidman. *Ulysses Annotated: Notes for James Joyce’s Ulysses*. 2nd edition (Berkeley: University of California Press, 1988), 12.1816; U 12.1818; Százharminczbrojúgulyas-Dugulás, “allowing for the misspelling of ‘borju,’ not ‘broju,’” means “one hundred and thirty veal gulyas blockage or constipation” (Ungar, Andras. *Joyce’s Ulysses as National Epic: Epic Mimesis and the Political History of the Nation State* (Gainesville: University Press of Florida, 2002), 56.)

^{lxxv} U 12.1819, meaning “dazzling effect” in French; U 12.1825, meaning “and” in Irish; U 12.1833, from “sliabh,” meaning “mountain” in Irish (O Hehir, Brendan. *A Gaelic Lexicon for Finnegans Wake and Glossary for Joyce’s Other Works* (Berkeley: University of California Press, 1967), 347); U 12.1841, meaning “See you again, my dear friend! See you again [Good-bye]!” in Hungarian (Gifford, Don and Robert J. Seidman. *Ulysses Annotated: Notes for James Joyce’s Ulysses*. 2nd edition (Berkeley: University of California Press, 1988), 12.1841).

^{lxxvi} U 12.365-7. “*Ta an bad ar an tir. Taim in mo shagart,*” or more correctly, “*Tá an bád ar an tír. Táim i mo shagart,*” means “The boat is on the land. I am a priest” in Irish (O Hehir, Brendan. *A Gaelic Lexicon for Finnegans Wake and Glossary for Joyce’s Other Works* (Berkeley: University of California Press, 1967), 339).

^{lxxvii} Stephen does seem to understand the structure of Irish language, which relies heavily on prepositional phrases, when he later thinks to himself, “He is in my father. I am in his son,” U 12.390. In “Telemachus,” he also understands Haines’s Irish. Although we never hear Haines’s Irish speech to the milkwoman, Stephen translates to himself, thinking, “And to the loud voice that now bids her be silent with wondering unsteady eyes...Do you understand what he says? Stephen asked her,” U 1.422-4.

^{lxxviii} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 4.

^{lxxix} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin’s Press, 1990).

^{lxxx} *Ibid.*, 1.

^{lxxxi} *Ibid.*, 2.

^{lxxxii} *Ibid.*, 2; Rabaté, Jean-Michel. “Introduction.” *Palgrave Advances in James Joyce Studies* (New York: Palgrave Macmillan, 2004), 3-4.

^{lxxxiii} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin’s Press, 1990), 2; *Ibid.*, 3.

^{lxxxiv} *Ibid.*, 4.

^{lxxxv} *Ibid.*, 11; *Ibid.*, 17.

^{lxxxvi} *Ibid.*, 13.

^{lxxxvii} *Ibid.*, 4.

^{lxxxviii} Spivak, Gayatri. “Translating in a World of Languages.” *Profession* (2010), 36.

^{lxxxix} “Sassenach, adj. and n.” OED Online. December 2019. Oxford University Press. <https://www-oed-com.ccl.idm.oclc.org/view/Entry/171140?redirectedFrom=sassenach> (accessed February 10, 2020); “Sasanach.” Teanglann: Foclóir Gaeilge-Béarla. Foras na Gaeilge 2013. <https://www.teanglann.ie/en/fgb/Sasanach> (access February 10, 2020).

^{xc} “Patois, adj. and n.” OED Online. December 2019. Oxford University Press. <https://www-oed-com.ccl.idm.oclc.org/view/Entry/171140?redirectedFrom=sassenach> (accessed February 10, 2020).

^{xci} Davidson, Donald. “James Joyce and Humpty Dumpty.” *Truth, Language and History* (Oxford: Clarendon Press, 2005), 156-7.

^{xcii} Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 14.

^{xciii} Kager, Maria. “Of Sirens Silent and Loud: The Language Wars of Joyce and Kafka.” *James Joyce Quarterly* 49:1 (Fall 2011), 41.

^{xciv} Deleuze, Gilles and Félix Guattari. “What is a Minor Literature?” Ed. Robert Brinkley. *Mississippi Review* 11:3 (Winter/Spring 1983), 16; *Ibid.*, 18; *Ibid.*, 19.

^{xcv} Nolan, Emer. *James Joyce and Nationalism* (London: Routledge, 1995), 11.

^{xcvi} Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 17.

^{xcvii} ‘Proteus’ is, again, a notable exception – whereas most of the time, fewer people equals fewer foreign words, Stephen’s solitary thoughts put the episode firmly in first place by approximately two percent.

^{xcviii} Deleuze, Gilles and Félix Guattari. “What is a Minor Literature?” Ed. Robert Brinkley. *Mississippi Review* 11:3 (Winter/Spring 1983), 13.

^{xcix} If we look only at totals, rather than ratios based on episode length, Proteus comes in fourth place, after ‘Circe,’ ‘Cyclops,’ ‘Oxen of the Sun,’ and ‘Eumaeus.’

^c Bloom speaks or thinks 268 foreign words throughout the novel, followed next by Molly, whose inner monologue and few sentences in 'Cyclops' contains only 92 wanderwords.

^{ci} Valente, Joseph. "Joyce's Politics: Race, Nation, and Transnationalism." *Palgrave Advances in James Joyce Studies*. (New York: Palgrave Macmillan, 2004), 76.

^{cii} Each of these three characters also beat Buck Mulligan's total, even though his Irish, along with the Citizen's, is some of the most notable in the text.

^{ciii} O Hehir, Brendan. *A Gaelic Lexicon for Finnegans Wake and Glossary for Joyce's Other Works* (Berkeley: University of California Press, 1967), 348.

^{civ} As transcribed in Phillip F. Herring's *Joyce's Notes and Early Drafts for Ulysses: Selections from the Buffalo Collection*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1977), 68-70, 77.

^{cv} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin's Press, 1990), 9.

^{cvi} Kain, Richard M. "James Joyce and the Game of Language." *Studies in the Literary Imagination* 3:2 (October 1970), 25.

^{cvi} Ibid.

^{cvi} Gibson, Andrew. *Reading Narrative Discourse: Studies in the Novel from Cervantes to Beckett*. (New York: St. Martin's Press, 1990), 12; Ibid., 13.

^{cix} Kager, Maria. "Of Sirens Silent and Loud: The Language Wars of Joyce and Kafka." *James Joyce Quarterly* 49:1 (Fall 2011), 45.

^{cx} Ibid., 46.

^{cx} Interestingly, 'Circe' does not take first place for number of languages by itself – 'Cyclops' ties 'Circe' for first with 15 languages, as will be addressed later on.

^{cxii} Hayman, David. *Ulysses: The Mechanics of Meaning* (Engelwood Cliffs, N.J.: Prentice-Hall, Inc., 1970), 71-3.

^{cxiii} Gibson, Andrew. *Joyce's Revenge: History, Politics, and Aesthetics in Ulysses* (Oxford: Oxford University Press, 2002), 183.

^{cxiv} Ibid., 185.

^{cxv} Such as the extreme increase in number of characters in 'Circe,' as explored by Eric Bulson in *Ulysses by Numbers*.

^{cxvi} Gibson, Andrew. *Joyce's Revenge: History, Politics, and Aesthetics in Ulysses* (Oxford: Oxford University Press, 2002), 117.

^{cxvii} Ibid.

^{cxviii} *Letters I* 139, letter to Frank Budgen dated 13 March 1920.

^{cxix} Jones, Ellen Carol. "Border Disputes." *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 153.

^{cxx} Ibid., 154.

^{cxxi} Ibid., 145.

^{cxix} Kiberd, Declan. *Ulysses and Us: The Art of Everyday Life in Joyce's Masterpiece* (New York: W. W. Norton & Co., 2009), 206.

^{cxix} Ibid., 148.

^{cxix} Rabaté, Jean-Michel. "Introduction." *Palgrave Advances in James Joyce Studies* (New York: Palgrave Macmillan, 2004), 4.

^{cxix} As transcribed and identified in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 135.

^{cxix} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 443.

^{cxix} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 91.

^{cxix} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 91.

^{cxix} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 87.

^{cxix} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 65.

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- ^{cxxx} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 310.
- ^{cxxxii} "Walpurgis Night." *Encycloædia Britannica*. 25 September 2019. <https://www.britannica.com/topic/Walpurgis-Night>. Accessed 10 February 2020. David Hayman notes the inspiration Joyce took from this holiday for 'Circe' in *Ulysses: The Mechanics of Meaning* (Engelwood Cliffs, N.J.: Prentice-Hall, Inc., 1970), 56.
- ^{cxxxiii} Ferrer, Daniel and Michael Groden. "Post-Genetic Joyce." *The Romanic Review* 86:3 (1995).
- ^{cxxxiv} As transcribed in *Joyce's Ulysses Notesheets in the British Museum*. Ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 353.
- ^{cxxxv} Milesi, Laurent. "Joyce, Language and Languages." *Palgrave Advances in James Joyce Studies*. Ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 156.
- ^{cxxxvi} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 3.
- ^{cxxxvii} Epstein, Edmund L. "James Joyce and Language." *Work in Progress: Joyce Centenary Essays*. Ed. Richard F. Peterson, Alan M. Cohn, and Edmund L. Epstein (Carbondale: Southern Illinois University Press, 1983), 64.
- ^{cxxxviii} Groden, Michael. *Ulysses in Progress* (Princeton: Princeton University Press, 1977).
- ^{cxxxix} Milesi, Laurent. *James Joyce and the Difference of Language* (Cambridge: Cambridge University Press, 2003), 6.
- ^{cxl} Ellmann, Richard. *James Joyce: New and Revised Edition*. (New York: Oxford University Press), 505.

Chapter Two: How Irish is It? Counting Irish Words in *Ulysses*

Despite assumptions of Joyce's antipathy or, at the very least, apathy towards the Irish language, Ireland's native tongue is an essential piece of the linguistic Ulyssean puzzle. There may be only 273 Irish words in *Ulysses*, but this number becomes more important when considered genetically: counting the Irish words in the novel reveals that by 1922, the Irish had increased by 45 percent in the *Little Review* episodes alone, and even more were added through the later episodes. Even 'Cyclops,' the most "Irish" episode, only became so (linguistically) in revisions. In other words, *Ulysses* actually became *more* Irish throughout the writing process. Discussions of Irish in Joyce's novel often focus on some of the more prominent moments: Haines the Gaelic scholar and the Gaelic-less milkwoman, the famously arrogant Citizen and his garbled Irish, and "Deshil Holles Eamus," the Irish and Latin hybrid opening of "Oxen of the Sun." As Joycean scholarship has made clear, linguistic preoccupation in general is a key feature of *Ulysses*. In a novel with plentiful foreign languages and invented words, Joyce highlights the hybrid nature of language itself, and his interest in language did not neglect Irish. Several scholars, including Maria Tymoczko and Brendan O Hehir, have addressed the influence of Irish language and literary history on Joyce's work, O Hehir going so far as to document all the Irish and Hiberno-English phrases found in Joyce's *oeuvre*. Questions about Joyce's "Irishness" became more important in the postcolonial debates of the 1990s and 2000s: Seamus Deane claims that Joyce "was, and knew himself to be, part of the Irish Revival," and other works, such as Enda Duffy's *The Subaltern Ulysses*, Maria Tymoczko's *The Irish Ulysses*, and Derek Attridge and Marjorie Howes's *Semicolonial Joyce*, have further redefined Joyce's relationship to Irish politics.^{cxli} Despite the prevalence of these Ireland-centric studies, even O Hehir, in his *Gaelic Lexicon*, dismisses the value of the Irish words in all Joyce's works except *Finnegans*

Wake: “the number of glosses required by all the other works combined is only about three hundred, so that the value of the glosses is that of sporadic illumination of local obscurities in the texts. For *Finnegans Wake* the glosses are vital to the elucidation of the whole work.”^{cxlii} In the case of *Ulysses*, I propose instead that the 273 Irish words of the novel are as vital to the elucidation of the work as are those in *Finnegans Wake*, and quantitative study exposes this. Without knowing the number of Irish words, readers can learn about Irish and the Citizen, the Gaelic League, and, as postcolonial studies have shown us, Joyce’s own politics. Readers may even identify interesting symbolism contained in some of the Irish words and phrases. What the numbers uncover, however, is the development (and increasing importance) of Irish language in the novel through the increase in Irish words during revisions. The numbers tell us that in *Ulysses*, Irish takes up more space than German or Greek and occurs almost as much as Italian (see Figure 11), despite Joyce’s apparent dislike of the language. Whether Joyce “liked” the Irish

language or not, it supplements the creation of the novel’s Irish atmosphere and history, as we can see more clearly through quantitative and genetic study of the language’s development during the writing process. Genetic study is so key to this quantitative approach because it allows scholars to trace where Joyce focused his attention during revision and, thus, what seemed important to the creation of *Ulysses*. In essence, numbers (and genetic study of how those

numbers changed) reveal preoccupations in the novel. If a language shows up again and again – and if it increases in number during the revision process – it is almost certainly important, even if Joyce never makes that importance completely clear. Genetic and quantitative study together help us identify the specific ways that numbers change and, thus, how the language’s symbolic potential develops. As individual units, the Irish words of the novel often supplement symbolic meaning, and as larger, countable groups of words, they allow us to look past the *assumed* “feel” of a novel’s (or a character’s) language to understand just how the novel creates that experience – and where our assumptions go wrong.

As proposed in chapter one, foreign words in *Ulysses* act as types of disunities or inconsistencies, which Andrew Gibson argues are key entry points for understanding the confounding mimesis of modernist novels. Readers must examine these disunities with the goal of understanding how they fit within the overall logic of the text and contribute meaning. In *Ulysses*, Irish language is another one of these linguistic disunities, offering meaning even as it seems to contradict what readers often expect of Joyce’s relationship to his country and its native tongue. Irish has, thus far, been included in my study of all foreign words in *Ulysses*, which some may challenge, since Irish is the native tongue of Ireland rather than a foreign one. *Ulysses* is, however, written in English, and Joyce’s personal knowledge of Irish was very limited. As defined in the introduction, this chapter will continue the study of what we might more accurately call “world,” rather than “foreign,” languages. Irish is not foreign to Ireland, but its history is defined by linguistic and cultural suppression, leaving it to survive primarily as a minor language. Due to the efforts of groups like the Gaelic League, however, and the influence of Irish on the English spoken in Ireland, Irish language has survived and adapted, providing a consistent, if quiet, presence in Irish life through the development of what Declan Kiberd calls

“the bilingual weave of Hiberno-English.”^{xliii} Irish words in *Ulysses* enact a similar function, creating consistent background noise throughout the novel. These seeming inconsistencies (in the context of an English-language novel), if studied as a whole, represent Irish linguistic and cultural reality, as the language existed as both a marginal, ancient tongue and an adaptable modern dialect.

Previous indexing of these Irish words has often focused on collecting and recording for later use, while my project, with quantitative methods, uses existing word lists to find new ways of understanding the Irish words as a larger unit. If there are 273 Irish words in *Ulysses*, and if 23.8 percent of those were added in late stages of revision (the months leading up to publication), then perhaps the words themselves are worthy of further consideration as contributions to the “Irishness” of the text. Numbers help us track, a little more clearly, the development of a text’s language(s) and themes and allow us to consider the importance of qualities often ignored or downplayed. Normally, *Ulysses* reads like an English (if cosmopolitan) text, and, normally, the Irish of the novel seems incidental or mocking in nature. Thinking about words and numbers turns readers’ attention more directly toward *all* the Irish of the novel and deepens the linguistic and cultural elements of the qualitative reading experience. Knowing the counts (in other words, knowing that Irish is more present in the novel than is often assumed) allows us to “hear” the Irish linguistic presence more clearly. Closer study of where and how these words are gathered (numerically) in the text reveals an image of Ireland as a country that has almost lost its language, and yet a country whose language has evolved and survived through interaction with others. Indexing and counting alone, however, don’t provide a complete picture of the importance of the Irish language in *Ulysses*. Given the long history of negotiating just how “Irish” Joyce and his works are, this chapter will supplement quantitative study with genetic

work to explore the ways that *Ulysses* became *more Irish* throughout the writing process. Luca Crispi emphasizes that genetic work allows us “to uncover patterns that enable a more precise understanding of the creative processes that produced *Ulysses*,” and the impact of Irish language in the novel is another element discoverable through genetic study.^{cxliv} To that end, I have counted the number of Irish words for not only the entire novel but each episode and character, as well, examining where and how Irish is used, and how those numbers changed, to understand these seeming inconsistencies in the text. In understanding these moments, readers can see the ways that the novel became both more and less Irish as Joyce simultaneously increased the Irish words and added enough words from other foreign languages to retain the novel’s cosmopolitan atmosphere. Knowing the Irish word counts and viewing them in relation to the multiculturalism and multilingualism of *Ulysses* helps us see the ways that being Irish and being cosmopolitan were intertwined for Joyce. Irish gains new life through its interactions with other languages of the novel, providing Ireland with a place on the world’s stage. *Ulysses* is not only Irish, English, or European; it is instead both Irish *and* international, complicating binary thinking about what it means to be Irish and reflecting “the extraordinary capacity of Irish society” – and Irish language – “to assimilate new elements through all its major phases.”^{cxlv}

The cosmopolitan nature of *Ulysses* and Joyce’s portrayal of the Citizen has often led readers to assume an ambivalence or antagonism on Joyce’s part towards Irish nationalism (and its emphasis on Irish language). Despite such early and long-held critical beliefs, Joyce was not entirely a-political (in fact, Bénéjam describes him as “very enthusiastic about the new Irish state”), but he did, nonetheless, give “the impression that he did not want to spend his forces either in defense or in attack of the Irish nation.”^{cxlvi} Howes and Attridge, however, rather than continuing the tradition of Joyce as either ‘nationalist’ (or ‘postcolonial’) or ‘cosmopolitan’ and

‘anti-nationalist,’ describe Joyce as ‘semicolonial.’ Joyce’s works, they say, “evinced a complex and ambivalent set of attitudes, not reducible to a simple anticolonialism but very far from expressing approval of the colonial organizations and methods under which Ireland had suffered during a long history of oppression, and continued to suffer during his lifetime.”^{cxlvii} Joyce certainly felt the primary form of Irish nationalism was a “limitative definition of Irish identity,” but as Joseph Valente argues, Joyce’s critiques of nationalism were not a complete rejection of Ireland and nationalist politics. Joyce instead, in an “Irish affirmative mode,” attacks “the more uncompromising forms of cultural nationalism *in the name of the Irish nation*, the strengths, virtues and possibilities lodged in its inveterate errancy.”^{cxlviii} Joyce’s “Irish affirmative mode” “exposes,” as Duffy indicates, “nationalism and other chauvinist ideologemes of ‘imagined community’ chiefly as inheritances of the colonist regime of power-knowledge they condemn” while also promoting a more welcoming alternative.^{cxlix} Valérie Bénéjam suggests that while Joyce “wrote to the world about the peculiarities of home,” he also opposed narrow-mindedness by revealing the “hospitality” of which Ireland could be capable, a hospitality that “obviously requires from the host that he should be confident enough in his own identity not to perceive alterity as a threat.”^{cli} Joyce’s novel continuously illustrates such hospitality, and his language similarly welcomes and embraces foreign elements. Howes and Attridge acknowledge that “Joyce’s handling of political matters is always mediated by his strong interest in, and immense skill with, language: the two domains are, finally, inseparable in his work.”^{cli} Irish language in *Ulysses*, despite its somewhat “hidden” presence, reflects Joyce’s complex attitude toward Ireland, Irish language, and nationalism. The Irish words in the novel point readers to a Joyce who is less ambivalent about Ireland and her language than we might assume, but they also reflect Joyce’s distance from Ireland and the politics surrounding independence, language, and

culture through their inclusion as another of the many world languages in *Ulysses*, rather than as *the* most important language.

While postcolonial studies have worked to recoup Joyce as an Irish writer (and, in fact, nationalist in his own way) rather than solely a cosmopolitan one, the idea of Joyce as lacking much knowledge of Irish language is still a dominant one among scholars. His knowledge of Irish may not have been substantive, but Joyce illustrates an interest in Irish history and language. Although he did reject study of Irish, Gabler points out that “the resistance was probably less against the Gaelic language than against the nationalist fervor of its propagators and the parochial insularity and isolationism into which, in his view, this led, both politically and culturally.”^{clii} Joyce may have critiqued the Gaelic Revival, nationalism, and the foibles he saw in Ireland and her people, but Ireland was nonetheless essential to his work; his novels all take place in Dublin, and each work contains some Irish, although *Ulysses* and *Finnegans Wake* contain the majority by far. Ireland and her language, then, holds enough value to be worthy of inclusion in more ways than parody or critique. Irish in the novel, in fact, supplements the representation of the political and social realities of Ireland and her people. Through its impact on the English spoken in Ireland, Irish language has already impacted and altered the tongue of its oppressors through the common effects of cultural and linguistic interaction, and *Ulysses* reflects the reality of this linguistic vitality through the inclusion of almost 300 Irish words alongside the sounds of many other tongues, embracing linguistic hospitality.

Irish has survived both as its own language and as a significant influence on the English spoken in Ireland, so some clarity of linguistic definition is necessary when discussing the counting of Irish words in *Ulysses*. In *A Gaelic Lexicon for Finnegans Wake*, O Hehir lists Irish words and phrases in all of Joyce’s works alongside the original Irish word, a phonetic

transcription, and English translations or explanatory comments.^{cliii} O Hehir's list, however, extends beyond Irish words or their Anglicized counterparts. His list includes names, translations of Irish phrases (e.g., "Silk of the kine"), and sentences exhibiting Hiberno-English structure ("Is there Gaelic on you?").^{cliv} As this chapter focuses on non-English words, however, I will focus on Irish words "in Irish," so to speak, or Anglicized Irish words (words taken from the Irish language with Anglicized spellings), rather than Hiberno-English phrases or names of Irish origin. To count the Irish words of the novel, I have used O Hehir's list as a starting point, supplementing that with Miles Hanley's *Word Index to James Joyce's Ulysses* and a few of my own finds. With these criteria, I counted 273 Irish words (not including names; the words used are often terms of endearment, exclamation, or description, but some phrases and full sentences do make their way in); this number seems counter to what we might expect, given common narratives of Joyce as primarily international and as rejecting the Irish language. O Hehir notes of his own list of Irish words: "The actual extent of the present list may occasion some surprise, but certainly not so much as it would have when the fashion still was to assume that Joyce knew little to no Irish."^{clv} More scholars have begun to propose some knowledge on Joyce's behalf, but the topic, unlike other Irish-focused topics (such as Irish nationalism in Joyce's work), does not seem to have gained much more attention. Postcolonial approaches have focused primarily on politics and history in the process of reclaiming Joyce as an Irish writer, and Joyce's Irish, due to accepted notions of his lack of knowledge, is often neglected. My work instead uses counting and genetic work, focusing on the ways Irish insinuates itself into the novel. Irish words contribute to the representation of Irish reality, while their existence alongside the rest of *Ulysses's* 25 foreign languages hints at the adaptability and cosmopolitanism that might be, perhaps, the Irish language's strength. Irish has survived through both evolution (adapting to and

infiltrating English) and diasporic efforts to save the language. With a focus on Irish language and the ways it interacts with the 2,252 other non-English words in *Ulysses*, my project focuses less directly on recuperating a clear sense of Irish nationalism in Joyce and more on the ways Irish language insinuates itself into the novel's language, representing a key element of Irish reality and hinting at the increasing cosmopolitanism of a language that, although claimed as a 'pure' tongue by the Gaelic League, is now learned by Irish and non-Irish people alike all over the world.

Despite the importance of Ireland to Joyce's work, references to Irish language in his novels often focus on Buck's mocking Irish or the Citizen's ultra-nationalistic speech in the novel, from which perspective Irish language in *Ulysses* can seem only to be used with a certain disdain or mockery of the speakers. Irish culture, language, and literary history, however, informed *Ulysses* much more than early scholars acknowledged. Maria Tymoczko asserts that

...it is plain that an awareness of the Irish literary dimension of *Ulysses* does make some of the seeming 'errors,' discordances, inconsistencies, and departures from realism more transparent: these slippages can be deconstructed to show, among other things, that the Irish discourse in *Ulysses* is one of the patterning principles Joyce has used in his design.^{clvi}

Like Gibson's approach to modernism, Tymoczko approaches *Ulysses* through its apparent inconsistencies, and the Irish dimension – such as literary or mythical allusions and language – is the discordance on which she focuses. The Irish literary dimension reveals the underlying Irish discourse in *Ulysses*: Ireland not only provides the setting for the novel but the cultural backbone of it. Tymoczko connects *Ulysses* to its *Irish* literary predecessors, highlighting the importance of Ireland and "Irishness" to the principles underlying Joyce's work. My work similarly recovers some of the "Irishness" of the novel, but it does so through quantity. The Irish discourse of *Ulysses* is shaped by the novel's language as well as its literary-historical allusions and models.

In this chapter, I focus on Irish language as a meaningful discordancy within the predominantly English text of the novel.

Given common assumptions regarding Joyce's knowledge of Irish, however, a study on the importance of Irish language to *Ulysses* should address this debate. General scholarly consensus seems to be that Joyce wouldn't have known much Irish, if at all, and this has led to his use of Irish words often being glossed over in favor of other modes of interpretation. As Gabler reasons, "Anyhow, how could he have? Whatever smatterings he may have had of it, he did not sufficiently know it to use it actively. It had not been a language of his childhood, he did not learn it in natural surroundings in his youth...and he resisted learning it in his student days."^{clvii} Despite these assumptions, Joyce, Barry McCrea tells us, replied to the 1901 census with an "aspirational self-description" as an Irish speaker.^{clviii} Youthful (and abandoned) aspirations aside, Joyce did engage with Irish-language learning more than is often assumed. O Hehir describes "revelations" of Stanislaus Joyce that reveal his brother as having

...left Ireland with a better initial knowledge of the language of his ancestors than anyone had previously supposed. The Irish lessons James Joyce submitted to, for instance, lasted sporadically for about two years rather than the single session Stephen Dedalus undertook: with Joyce's linguistic flair even a desultory attention for so long would have given him at least a modest competence in Irish.^{clix}

While any assertions about what competence Joyce *could* have had, based on this knowledge, are only assumptions, these facts do paint a picture of a man slightly more engaged, at least intellectually, with his country's home language than is often claimed. Besides, Joyce didn't need to speak Irish fluently or even passably to be able to use it meaningfully in the novel. He used many words from languages he didn't know: *Ulysses* contains words from twenty-five non-English languages, and the language count increases in *Finnegans Wake*. Joyce was a language (or at least a foreign word) collector of sorts, finding uses for foreign words both familiar and

unknown to him. Joyce also had Irish resources on hand to which he could have turned: O Hehir points out that Joyce's library in Paris included two Irish dictionaries, an abridged dictionary of Irish by Reverend Patrick S. Dineen and E. E. Fournier d'Albe's *English-Irish Dictionary*.^{clx} These two dictionaries were not Joyce's only Irish sources, though; he also owned a copy of *Second Irish Book*, an Irish workbook which was "*Published for the Society for the Preservation of the Irish Language* (1879)."^{clxi} Joyce does not seem to have pulled much from this text directly. Buck Mulligan's outburst in Scylla, "*Acushla machree!*" appears in *Second Irish Book* as "*A cuirle mo croide,*" but whether Joyce found the phrase here or heard it often while in Ireland is unclear.^{clxii} Aside from this, the front matter contains rhetoric with which Joyce would have been familiar, that of emphatic supporters of the Irish language movement. On the first page is a quote from Charles Vallancey, a British military surveyor, who describes the Irish language as "free from the anomalies, sterility, and heteroclite redundancies, which mark the dialects of barbarous nations; it is rich and melodious, it is precise and copious, and affords those elegant conversations which no other than a thinking and lettered people can use or acquire."^{clxiii} Such pro-Irish rhetoric (despite his status as a British man), especially Vallancey's description of other languages as "barbaric," sounds, perhaps, like a more elegant (and polite) forerunner to the Citizen's "To hell with the bloody brutal Sassenachs and their *patois*" (*U* 12.1190-1) and "the shoneens that can't speak their own language" (*U* 12.680-1).

We cannot definitively prove Joyce's knowledge of Irish, but critics such as O Hehir have shown that he was more knowledgeable than many have assumed. Perhaps more importantly, he made good use of the dictionaries and other resources he had on hand to find Irish words suited to his purpose. Ultimately, however, his facility (or lack thereof) with the language is not the only indicator of the impact of Irish language on the novel. Joyce may have

had only a passing interest and little skill in Irish, but when we count the Irish words in *Ulysses*, the numbers reveal more than biographical information alone. Within that count of 273 Irish words in the novel, it's interesting to note that all eighteen episodes of *Ulysses* contain at least one Irish word (see Figure 1), because while there are

2,525 foreign words in *Ulysses* from 25 different languages, only *one* of those non-English languages (Irish) appears in every episode. Although the number of Irish words is not the highest of all the languages (it is exceeded by Latin, French, and Italian; see Figure 11), it remains tenacious, showing up at least once in every episode. A single word may seem insignificant: What, after all, does “foostering,” the only (Anglicized) Irish word in ‘Lotus Eaters,’ add to the narrative during

Bloom's conversation with M'Coy? Though the small number of Irish words in eleven of the episodes (anywhere between one and five words each, 'Lotus Eaters' being the only episode with only one word) may be a thin thread, it is the only linguistic thread that appears in each episode of the novel (aside from English, of course). And in instances like the one in 'Lotus Eaters,' where it is in *Bloom's* thoughts that we hear some form of an Irish word, a one-word Irish intrusion may serve to remind readers that Bloom, despite other characters' consideration of him as a foreigner, is Irish, as well. He has grown up Irish, heard Irish and Hiberno-English words, and *is* Irish. Like Bloom, *Ulysses* may often seem, at times, 'foreign,' but it is also *Irish*. Irish language, like all the languages explored in chapter one, intrudes as a consistent ambient noise in the text. Besides representing the reality of hearing the occasional Irish word in Dublin (particularly since Hiberno-English adapted so many Irish words), Irish and the other languages of *Ulysses* also engage in mutual hospitality, existing alongside one another and representing a more modern, cosmopolitan reality. This Irish language in *Ulysses* is welcoming: it is the bombastic, bigoted Irish (nationalism) of the Citizen that is critiqued in *Ulysses*, not Irish itself, which was, to some extent or another, part of Irish daily life.

Reality, daily or otherwise, is often difficult to pin down in *Ulysses*, but as Wolfgang Iser explains, "If the novel sometimes gives the impression of unreality, this is not because it presents unreality, but simply because it swamps us with aspects of reality that overburden our limited powers of absorption."^{clxiv} Irish language, as I have claimed, contributes to the representation of Dublin and Irish linguistic and cultural reality. Around the time he was trying to get *Dubliners* published, Joyce "claim[ed] that no writer has yet 'presented Dublin to the world'"; *Ulysses* presents the Irish capital to the world in a more vibrant, if more difficult, way even than *Dubliners*, and language is a tool for this portrayal.^{clxv} In novels, McCrea explains, a "contract of

realism with the reader requires a novel to be set in a plausible linguistic community.”^{clxvi} The contract of realism in *Ulysses* isn’t always obeyed. It is a novel for a predominantly English-speaking linguistic community, but the international layers of the novel, as explored in the previous chapter, challenge the concept of novels needing to abide strictly by the contract suggested by McCrea. Most readers do not speak all or even most of the languages used in *Ulysses*, and they generally need to rely on translational tools for many of the non-English phrases. The Irish of *Ulysses*, however, despite its limitations, does provide a consistency within the novel that echoes the linguistic reality of an Ireland haunted by the echoes of words and sounds like “derevaun seraun” in “Eveline.”^{clxvii} McCrea, analyzing these possibly nonsense, possibly Irish words, asserts that “[t]he words do not stand in for any specific memory of the language, or at least not one that we can access, but are a way of registering that faded remnants of vernacular Irish must have been one of the many strands, even if a faint one, running through the collective psychology of Edwardian Dublin.”^{clxviii} While McCrea argues that the false Irish words “are a fragment of a lost language and lost world, unmotivated signs that cannot signify in the world they find themselves in...the form of Irish stripped of its content, representing a pure, radical language loss,” I would argue that this attitude towards Irish evolves by the time it shows up in *Ulysses*. Instead, the Irish language in *Ulysses* has evolved to become part of the larger cosmopolitan language of the novel. The Irish words in *Ulysses* are no longer the unintelligible words muttered in “Eveline”; the words instead reflect the ways that Irish language has survived, becoming protean and expanding beyond (and opening) the isle’s borders to mingle with the languages of the world.

The consistency of Irish language in the novel is notable not only for its own sake, but for the fact that this stability of a linguistic presence was created (or finalized) late in the writing

process. Prior to the typescripts, proofs, and placards, one of the eighteen episodes still did not contain any Irish words. Joyce added Irish in ‘Hades’ during late-stage additions: the Anglicized “grig” (*U* 6.761) was added during revisions on the 1921 typescripts.^{clxix} Prior to this addition, the paragraph which eventually contained “grig” briefly meandered through Bloom’s thoughts on the caretaker, being a caretaker’s wife, “the dead stretched about” in a graveyard, and how “touchy” women are (*U* 6.739-754). In Joyce’s expansion of this paragraph, the graveyard becomes more eerie (“Shades of night...Courting death...Will o’ the wisp. Gas of graves.”) and Bloom’s thoughts on women expand to his thoughts on sex and death (“Love among the tombstones...In the midst of death we are in life.”) (*U* 6.749-53; *U* 6.758-9). The addition of “grig,” meaning “excite desire or envy, tantalize,” here provides a repetition, or an echo, of another phrase in the same addition, “Tantalising for the poor dead” (*U* 6.760). Whether Joyce meant to add, specifically, an Irish phrase here or not, the Irish word highlights the sense of envy or desire Bloom imagines on behalf of the dead, emphasizing the theme of death with the sounds of a language considered, by some, to be dying (or dead). These late-stage additions, purposeful or not, leave a trace of Irish in ‘Hades,’ as well, joining the rest of the Irish words to enhance the Irish sounds of Joyce’s Dublin.

Irish sounds in *Ulysses* are most prominent in Joyce’s critique of the Gaelic League through the figure of the Citizen. The Gaelic League provides an ideal example of McCrea’s assertion that “[l]anguage only becomes ‘honey’ on lips of its natives once it is endangered.”^{clxx} The Gaelic League promoted Irish as the true, pure language of Ireland, a language that existed before the arrival of the Anglo-Normans in 1169. In 1904, the movement to encourage Irish men and women to learn their native tongue had already begun to gain ground, and the Gaelic League encouraged the use of Irish in daily life. This push for linguistic purity led to what Valente calls

“Gaelic exclusivism,” which “met with the young Joyce’s disapproval for subordinating all cultural standards to those promoting ethnonational identity...The anti-imperialist motive of a program could not in itself justify the abdication of critical intelligence.”^{clxxi} We see Joyce’s disdain for this type of narrow-minded view of Irish language and nationalism in his portrayal of

the Citizen, who, if we count only verbal speech, audible to other characters, uses the most Irish (26 words) of any character in *Ulysses* (see Figure 2). The Citizen speaks Irish more often than others, but compared to the other Irish speakers (or thinkers) in *Ulysses* (whose speech I will compare

shortly), his Irish is sub-par. The Citizen’s portrayal is generally accepted as Joyce “satiriz[ing] his chauvinistic, one-eyed perspective of nationalism.”^{clxxii} Most of the Irish phrases the Citizen uses are common expressions that do not require in-depth knowledge of the language, and he uses several phrases incorrectly, despite the exaggerated significance he places on speaking Irish.^{clxxiii} One of the first instances of his flawed Irish manifests in his mispronunciation of “*Bi i do thost*” as “*Bi i dho husht*” (*U* 12.265), seemingly mistaking the Irish word “thost” for the English word “hush.” The Citizen also flubs the toast, saying “*Slan leat*,” which means “goodbye” (literally, “safe with you”) instead of *Sláinte*, “to your health,” or *go raibh maith agat*, “thank you.”^{clxxiv} His commitment to nationalism is, in fact, not steadfast enough to learn to speak the language properly. Still, his language vividly conveys his political and social

worldview as a Gaelic Leaguer and, at least from his perspective, an ideal Irishman. Quantity seems to matter to the Citizen, as he peppers his speech with Irish words and argues for the use of Irish, but qualitatively, his Irish is lacking. The numbers do still matter, however, as a technique for comparison. The Citizen may make grandiose claims about the Irish language, but his Irish word count isn't impressive compared to other characters. He uses the same number of words as the first-person narrator (most of which are in the narrator's thoughts) and three fewer than in Stephen's thoughts, and his 26 words are outstripped by the 41 used by the literary (parodic) narrator of 'Cyclops.' Other characters can speak just as much (or more) Irish as the Citizen, and their speech, at least, is more correct. Comparisons such as these wouldn't be visible without word counts: quantitative research allows us to look past our qualitative assumptions about a character's speech (the Citizen, after all, *seems* to use more Irish than any other character through a normal reading experience) to see new relationships between characters' language.

The Citizen's use of Irish is an example of how the language should *not* be used: as representative of "one-eyed nationalism," the nationalism that fetishizes Irish as the "pure" language of ancient Ireland to which modern Irishmen must return. The Citizen's failed attempts to use "pure" (and correct) Irish subject him to mockery and show that he is himself guilty of the bastardization of the language that he claims to know and that supposedly ties him to "true" Irish roots. The Citizen is like the "groups of young people" Joyce describes in an early essay who "may be seen to pass speaking Irish perhaps a little more emphatically than is really necessary."^{clxxv} "[R]eserve[d] for the dog or use[d] in curses to ornament his speech," the Citizen's type of Irish is purely political "affectation," particularly in comparison to the

narrator's own use of Irish.^{clxxvi}

The first-person narrator of 'Cyclops' may speak only four Irish words out loud, but his thoughts are littered with twenty-two other Irish words, giving him, as already noted, an equal number of words to the Citizen (see Figure

3). Aside from the numbers, the narrator's thoughts also reveal his superior knowledge of Irish through inward quips at the Citizen's expense. Following the Citizen's misuse of "*Slan leat*," as Gisela Zingg points out, the narrator seems to have noticed the mistake and wishes him "good health," combining the traditional toast's reference to "health" and the "goodbye" that the Citizen mistakenly gives.^{clxxvii} The narrator's awareness here calls attention to the fact that the Citizen does not speak Irish well, despite his grandiose claims.

The still living sounds of Ireland lingering in Dublin life can be heard consistently in *Ulysses*, and with them they carry cultural memory often lost when Irish language in the novel is ignored. Like Maria Lauret's 'wanderwords' in American literature, Irish words suggest a "spectral presence" of the nation's native tongue and culture.^{clxxviii} Lauret's description recalls Adorno's argument that foreign words, acting as small acts of rebellion, carry "silence about what is already logically contained in the thought and should therefore not be repeated verbally."^{clxxix} The Irish words of *Ulysses* enact this ethnic semiosis (or signaling of cultural difference), providing background noise laden with cultural meaning and denoting something more than their translated equivalents.^{clxxx} Several phrases perform this type of meaning-making

more clearly than others. One such example is the use of the Irish word “Sassenach,” which takes on a particular tone when used by nationalists like the Citizen. While revising ‘Cyclops,’ Joyce changed the phrase “there’s a war coming for the English” to “there’s a war coming on for the Sassenachs,” replacing “English” with the more antagonistic “Sassenach.”^{clxxxi} Although this section of dialogue was later removed (pieces of it plucked for other sections of the episode), ‘Sassenach’ still appears twice in ‘Cyclops’ with the same social and political tone. Joyce’s consideration and use of this Irish word choice epitomizes intensely nationalistic attitudes of Irishmen like the Citizen, men who not only promoted the Irish language, but who commonly used the term “Sassenach” to place the English in the position of outsiders. The Irish language, in fact, for many Gaelic Leaguers, seemed to be used as a way to regain national identity by rejecting and excluding the English; as Joyce describes, at many of their festivals, concerts, and social gatherings, “the speaker of *Beurla* (that is, English) feels like a fish out of water, lost in the midst of a crowd chatting away in a harsh, guttural tongue.”^{clxxxii} If Joyce’s entire novel about Irish men and women, who would have heard at least some Irish or Hiberno-English daily, is to be “realistic,” he must use some Irish language, and use it in a way that best conveys the meanings and intentions of the characters.

The Citizen isn’t the only speaker whose words convey a specific meaning and tone simply via their use of Irish: Joyce also edits the words of the formal, parodic narrator in ‘Cyclops’ to become both more Irish and more poetic. Joyce alters a reference to Ireland itself: “In ~~green Erin of the west~~ <Inisfail the fair> there lies a land, the land of holy Michan” (*U* 12.68).^{clxxxiii} This new phrase, “Inisfail the fair,” which we can see Joyce considering alongside other phrases in the ‘Cyclops’ notesheets, is a poetic term for Ireland, “Inisfail” coming from the Irish *Inis Fáil*, meaning “Island of *Fál* (fetish stone at Tara).”^{clxxxiv} Given that this particular

narrator ends up using the most Irish of any character or narrator in the novel (41 words), beating the Citizen by 15 words and Stephen's thoughts by 12 (see Figure 4), such a change not only fits

the logic of this narrator but also helps us see the ways Joyce's revisions shaped particular speakers to reflect the more Irish sounds of Dublin. The Citizen may sound more Irish, but the numbers challenge that assumption. The changes made to the narrator, making him *more* Irish, highlight his connection to Irish literary style. Knowing this sharpens our view of characterization, illustrating just who these characters are, with what they are concerned, and how their language can reveal both.

Like the Irish which “lurks in the imaginations and memories, to one extent or another, in positive, negative, and neutral ways, conscious or unconscious or semiconscious, of most of the population, whether they speak Irish or not, whether they speak it well or badly,” Irish lingers in the language of *Ulysses*.^{clxxxv} Even the most surreal episode, ‘Circe,’ contains a surprising number of Irish words. Outside of ‘Cyclops,’ ‘Circe’ contains the highest number of Irish words: 49 to the 96 of ‘Cyclops’ (see Figure 1). The first of these occurs only thirteen words into the spoken lines of the episode (and less than twenty lines of text in): “Kithogue!”^{clxxxvi} (*U* 15.18)

Irish seems more “visible” in ‘Circe’ than in other episodes (‘Cyclops’ excluded), particularly as Bloom himself engages in an Irish interaction upon entering the scene. The Figure guarding the street entrance asks for the password for “*Sraid Mabbot*,” using the Irish, rather than the

English, word for “street,” and Bloom, recalling the Citizen, replies, “Haha. *Merçi*. Esperanto. *Slan leath*. (he mutters) Gaelic league spy, sent by that fireeater” (*U* 15.218; *U* 15.220-1).

Interestingly enough, Bloom, like the Citizen earlier, uses this phrase incorrectly: “goodbye” (*Slan leath*) seems an odd greeting in response to the Figure’s demand for a password. Whether Bloom is also unaware of this possible mistake or making fun of the Citizen’s mistake is unclear, but the prominence of this exchange is notable, forcing the reader, in a rare moment, to hear and *pay attention to* the Irish language outside of the Citizen’s bombastic speech. A more subtle use of Irish in the episode reveals just how well it becomes interwoven in the sounds and themes of the text. Five times in ‘Circe’ Joyce uses the word “crubeen(s)” (*U* 15.158, 15.256, 15.311, 15.668, and 15.672). As we know, the Odyssean correspondence for this episode recalls the story of Circe turning Odysseus’s men into swine; in a connection worthy of Joyce’s sly linguistic maneuverings, the recurring word, “crubeen,” from the Irish *crúibín*, means “hoof” or ‘pig’s or sheep’s trotter.’^{clxxxvii} In each of these moments during these first 700 lines of ‘Circe,’ Irish language itself carries the Odyssean connection, so often highly valued by scholars. Like the

refrain of the Italian “*Là ci darem la mano*” (*U* 5.227) for Bloom, which reminds both Bloom and the reader of Molly’s imminent affair, “crubeen” provides a thread of connection for this episode about transformation. An Irish word carries the symbolic meaning for the Greek correspondence in this episode, and, despite the importance of the Greek *Odyssey* to the novel, there are more Irish, Italian, French, and Latin words than Greek (see Figure 11); the Irish

language again asserts its presence in *Ulysses* through its connection with one of the major symbolic elements promoted by Joyce. The words themselves may seem invisible (or easily ignored), but the Irish meaning they carry is one of the vehicles Joyce uses to connect this episode to Odysseus’s own encounter with his Circe. One of these references to pig’s hooves also introduces the moment when Bloom himself transforms, like Odysseus’s sailors. Upon first seeing Marion (*U* 15.304), stage directions tell us that Bloom, “*in deep agitation,*” thinks of “*crubeens for [Marion’s] supper*” and “*ambles near with disgruntled hindquarters. Fiercely she slaps his haunch*” (*U* 15.310-16). In the moment before Bloom changes, a subtle Irish word hints at the upcoming transformation. Irish here is not only present but holds the power of

transformation, at least in the dreams and subconscious of the novel. If ‘Circe’ is the “unconscious” of *Ulysses* (or of Bloom), it’s notable that the episode not only contains the largest number of Irish words outside of ‘Cyclops,’ but also gives these words – the “sound” of Irish – the prominence of conveying the Odyssean correspondence.

Aside from these Irish-Odyssean correspondences, the Irish language of the novel continues to assert its position as one of the most important foreign languages of the novel through its reflection of another element of Irish reality: not only the reality of Irish “lurk[ing] in the[ir] imaginations,” but of Ireland’s arrested development. The Ireland of Joyce’s time desperately wanted to gain its rightful place in the world (or, as Joyce put it, “renew in a modern form the glories of a past civilization”), but many nationalists attempted to achieve this by insisting on the use of Irish.^{clxxxviii} A revival of “ancient” language, in this view, is just as anthropological as men like Haines, although they seek to give the language life rather than studying it as an artifact frozen in time, undeveloped since English took over as the national tongue. Haines collects Irish phrases, much like this project, perhaps; for Haines, though, the phrases are viewed through a limited perspective. Instead of seeing the varied manifestations of Irish language even within his own English in the mouths of the Irish people, Haines seeks those whose Irish language (and society, perhaps) is as yet untainted and unevolved. He speaks to the milkwoman in Irish, expecting her, the apparently “rustic” Irish woman, to understand, or perhaps allowing himself to show his own superior knowledge of the language of these “natives” (*U* 1.422). The milkwoman, in this moment, is forced to encounter the distance between her and her supposed native language; the distance of both Haines and the milkwoman highlights the paralysis of a language or culture frozen between extremes of linguistic and political perspectives. Even Stephen, an Irishman who seems to know Irish better than he claims – given

that his voice seems to be the one telling us what Haines says in Irish (*U* 1.422) – is disconnected from this element of “being Irish.” When Stephen sings “*Siúil Arún*” in ‘Ithaca’ to an “uncomprehending Bloom,” McCrea describes the scene as “hint[ing] of failed communication in their encounter.”^{clxxxix} In one of the moments where Stephen purposefully chooses to engage with Irish language, he does so with a non-Irish speaker who cannot reciprocate nor connect except by sharing his own culture’s language, Hebrew, which is, in turn, unknown by Stephen. This moment of connection simultaneously echoes the disconnection of the entire novel: characters speaking uncomprehendingly to one another.

Irish also occurs alongside Stephen’s disconnection earlier in the novel, particularly in ‘Scylla and Charybdis.’ ‘Scylla’ contains the third highest number of Irish words in the novel: 33 compared to the 96 in ‘Cyclops’ and 49 in ‘Circe’ (see Figure 1). Given Stephen’s resistance to

the oppression he feels within Ireland and his obsession with more ‘scholarly’ pursuits, this ranking seems surprising. One

might expect, rather, that a Stephen-centric episode would contain fewer Irish words. If, however, we look at Irish as at times representing the disconnection so common among these Dubliners, the use of Irish here fits; ‘Scylla’ is, in fact, an episode with a high level of disconnect for Stephen. We see in these library scenes his detachment from Irish literary circles (despite his

desire for acceptance), his disconnection from his own personal network (Buck, etc.), and a disengagement from his own theories. No matter which way he turns, Stephen cannot seem to fit in. This is particularly apparent in the moment of Stephen's observation of Mr. Best's "papers," presumably an Irish reader or other Irish papers. Stephen watches Best, who, transformed into the ancient Irish "ollav" in Stephen's mind (*U* 9.30), places these papers on the desk. All the while Stephen imagines possible words from an Irish grammar book: "*Ta an bad ar an tir. Taim in mo shagart. Put beurla on it, littlejohn*" (*U* 9.366-7).^{cxc} Just before this, Stephen evaluates Best as "smiling his defiance" (*U* 9.365-6), providing just one example (among many in this episode) of Stephen's feelings of disconnection and vulnerability in this group of scholars and writers. Stephen is, perhaps, viewing Best as his own Irish-speaking opponent, similarly to the dynamic between Bloom and the Citizen. Despite his clear desire for belonging, Stephen rejects the idea of Irish, for people like the Misses Morkan in "The Dead," as "an imaginary or symbolic solution to the problem of how we are dead to each other and to ourselves, to the problem of failed and embodied communication, the gap between words and feelings, soul and mind, the living and the dead."^{cxc} Stephen rejects this language, even though he seems to use more of it than is often assumed. Not only does he understand Haines's question to the milkwoman, he also *thinks* or speaks more Irish words than any other character or narrator aside from the parodic narrator in 'Cyclops' (Stephen speaks only five words, but his thoughts include 29 other Irish words; see Figure 5). Through the rejection of this language that has clearly made its way into his thoughts and experience, Stephen's own experience often reflects, like

“The Dead,” the “tragic limitations of language,...how it fails to connect us, as we wish, to the souls of others,...how our own souls find themselves not at home in it.”^{cxcii} Irish language in *Ulysses* highlights this disconnection, underlining and emphasizing such moments through its very sound and meaning. Even Buck, who seems to have some facility with the language, uses it primarily to mock and maintain distance from others, releasing over-dramatized cries like “*Pogue mahone! Acushla machree!* It’s destroyed we are from this day! It’s destroyed we are surely!” (*U* 9.775-6)^{cxci} If *Dubliners* illustrated the paralysis Joyce saw in Ireland, *Ulysses* carries this theme further to reveal the disconnection running rampant among his Dubliners. Irish language in the novel echoes this theme, serving as the background noise needed to highlight the distance seen between characters on the page.

Tightly interwoven with the disconnect between characters is the arrested development Joyce seems to identify in Ireland. The Gaelic League, in its turn toward a “pure” Irish language and culture, focused the bulk of its attention on reviving a culture and language long gone – not dead, perhaps, but altered. Once the English gained power and imported their language, Irish began a slow evolution.^{cxci} The language of the conquerors began to take over as the primary language of trade, politics, and, eventually, daily life, and the Irish people who worked for Anglo-Norman planters were forced to learn English, but often “without fully understanding or mastering the system of the target language” and while cut off from direct contact with Standard English.^{cxci} So although English became the dominant language, Irish, in turn, influenced the English spoken in Ireland, leading to the development of Hiberno-English, a dialect of English with heavy Irish-language influence. This impact of Irish on English “can be seen on the lexical, syntactic and phonetic levels,” as illustrated in Hiberno-English words that are derived phonetically from Irish (e.g., “gombeen” from *gaimbín*, “usury”) and from direct translations of

Irish idioms into English (e.g., “silk of the kine” from *a shíoda na mbo*).^{cxvii} Many syntactical structures of the Irish language were also transferred to Hiberno-English, such as the question posed by the Citizen when he asks the dog, Garryowen, “What’s on you, Garry?” (*U* 12.704)^{cxviii}

The Irish language became both a hybrid language and a language that continued to evolve and even to alter the language of its most recent oppressor. The fact that almost three hundred Irish words are heard alongside English and twenty-five other languages indicates some recognition of the ways Irish survived in the daily sounds of Dublin, particularly as many of the Irish words show up in their Anglicized spellings, highlighting their adaptability. They are so adaptable, in fact, that even Irishmen and women who know only English litter their own speech with presumably unrecognized Irish words (see, for instance, Figure 5, which shows us that even Bloom and Molly, our perhaps “least” Irish characters, use the occasional Irish word). The Irish language, rather than being neglected in *Ulysses*, exists in the syntax and vocabulary of both the characters and the narration.

This vitality is on particular display in ‘Oxen of the Sun,’ illustrating in miniature what all of the Irish in *Ulysses*, when counted together, represents about the adaptability of the language and its infiltration of English. This episode, despite its focus on parodying the development of English language and literature, ends on a multilingual section, including varieties of pidgin English alongside words from other languages, one of which is Irish. Irish lives and survives in this lively section while also invading the formal, predominantly English language of the bulk of the episode (alongside academic terms from French and Latin); just over

half of the eighteen Irish words in ‘Oxen of the Sun,’ in fact, occur outside of the established multilingual section (see Figure 6). The key Irish moment, however, opens this episode. One

common belief about Irish was (and, among some, still is) that it is a relic of the past – a dead or dying

language, almost as dead as Latin. Irish is, in fact, aligned with Latin in the opening line of ‘Oxen of the Sun’: “Deisiol Holles Eamus” (*U* 14.1). Several interpretations of this opening, such as those of J.S. Atherton, Stuart Gilbert, and Gifford, focus primarily on the translational meaning of the sentence: “Deisiol,” from the Irish word meaning “turning to the right, sunwise, or south” (or “may it be right”), and “Eamus,” Latin for “Let us go,” work with the street name to create an international sentence, using one dead and one supposedly dying language to say, “Let us turn south to Holles street.”^{cxcviii} Stuart Gilbert’s interpretation also reveals that these words perform the function of the incantations of the *Fratres Arvales*, while Declan Kiberd comments only to call this moment “the chaos of language at [the episode’s] opening.”^{cxcix} My interpretation focuses on the linguistic “chaos” identified by Kiberd, reading the Irish word within the context of the sentence’s multilingualism. On one hand, this sentence reflects the perspective of Irish as a dead language, as much an undeveloped piece of history as Latin, through its proximity to and combined meaning with the Latin “Eamus.” On the other hand, Joyce’s multilingual cry here creates a hybrid sentence reflecting the Irish language’s adaptive energy. Such malleability can be seen even in the genetic evolution of this sentence. In the Rosenbach manuscript, instead of “Deshil Holles Eamus,” the opening line reads “Deisiol Holles Eamus,” using nearly the correct spelling of the Irish *deisil* (or *deiseal*).^{cc} After the Rosenbach

manuscript, “Deshil” appears in its Anglicized spelling, echoing what has been done with the language in the context of everyday Irish life, as many Irish words were imported into English in their Anglicized forms. Joyce’s usage here reflects the variability of the Irish language and draws in another supposedly “dead” language to create instead new linguistic life and variability. These two languages, one dead and another in a long state of transition, here represent the mutual influences that occur on linguistic and cultural levels and the Irish linguistic and cultural reality often ignored by Gaelic Leaguers in their grasping for a pure language. Studying the sentence within the context of the Irish word count(s) of the entire novel, and examining its evolution, reveals the possibility that Joyce, while writing *Ulysses*, considered the Irish language more closely than he seems, on the surface, to have done.

The alteration of spelling in the opening of ‘Oxen of the Sun’ isn’t the only evidence of Joyce’s consideration of Irish in *Ulysses*, as the language’s presence evolved over the course of his writing process. The Irish in *Ulysses* seems to have developed in a similar process to that of *Finnegans Wake*. O Hehir writes that

A hasty spot check of this Lexicon against David Hayman’s edition of the *First-Draft Version of Finnegans Wake* leaves the impression that most of the Irish was superadded after the first draft. This presumably indicates that the Irish did not flow spontaneously to Joyce’s pen, but had to be worked up deliberately.^{cci}

In a similarly belated process of Irish additions, Joyce added a significant portion of his total Irish words in *Ulysses* through revision. Looking first at the *Little Review* version (up through mid-‘Oxen of the Sun’), this first version of episodes one through fourteen contained just under half of the Irish that ended up in *Ulysses*: 124 words in *Little Review* compared to the 273 total in 1922 (see Figure 7). This number is, granted, slightly misleading: some of the 149 words added post-*Little Review* were not necessarily added

only through revisions, but were instead added in first drafts of episodes not yet written (‘Circe,’ ‘Eumaeus,’ ‘Ithaca,’ and ‘Penelope’). However, breaking these numbers down, there is still a (comparatively) significant increase in Irish words. Looking only at *Little Review* episodes (‘Telemachus’ through the first half of ‘Oxen of the Sun’), the total number of Irish words in these chapters grew from 124 in the *Little Review* versions to 181 in the 1922 publication – in other words, Joyce increased the Irish of these episodes by 45 percent through the revision process (see Figure 8). The majority of these additions occurred in ‘Cyclops,’ as I will address

shortly, but words were added to nine of the thirteen and a half episodes (anywhere from one to four additional words per episode; see Figure 12). The numbers themselves are small, but the increases are not. Looking at all the episodes, including the post-*Little Review* ones, a similar pattern of addition emerges. Of the 273 Irish words in the entirety of the 1922 *Ulysses*, 65 were added in 1921 and 1922 through placards, typescripts, and proofs, so 23.8 percent of the total were added not only via revision, but in the final months of revision (see Figure 9). Even

‘Cyclops,’ the most “Irish” episode of them all, was not nearly so Irish at first. Of the 96 Irish words in this episode, 36 were added in 1921 and 1922 revisions (see Figure 10); that’s a

62.7 percent increase from the original 59 words. This may be the most “Irish” episode, but it only became so through late-stage additions. This deliberate quality is worth highlighting. Despite the (limited) experience Joyce had with Irish, it’s safe to assume that he would not have known Irish well enough to

speak or write it easily, or to have it already in his head as he drafted. In the revision process,

however, Joyce had more opportunity to review his notes and, possibly, any of the Irish sources in his possession. The Irish of *Ulysses*, despite many claims of Joyce's ignorance and disdain, was deliberately placed and increased throughout the writing process. The Irish noise of the text, then, is deliberate. If late-stage revisions of *Ulysses*, as Michael Groden asserts, involved primarily the building of his web of realistic details and enhancing the symbolic network of the novel, then the presence of so many Irish additions during the late stages takes on more importance than ordinarily assumed.^{ccii} Since Irish words were added during a time when we know Joyce was preoccupied with realistic details and symbols, we should consider the Irish language along terms of both realism and symbolism. Irish words add even more Irish realism (linguistically) to *Ulysses* while also contributing symbolic meaning as explored in several instances so far.

The symbolic meaning(s) of Irish words in *Ulysses* are not, however, limited to individual words and their meanings; the language must also be considered as an entire language-unit alongside the other non-English languages of the novel. Speaking of *Finnegans Wake*, Bénéjam writes that “what Joyce does with language...is exactly the same thing he does with national identity – testing its hospitality to foreignness to the limit. How much can English be strained and twisted and thus invaded, and still be understood as English?”^{cciii} She further highlights the importance of foreign words and phrases, identifying that “if any travelling gets done, it will be linguistic.”^{cciv} *Ulysses* is much the same. It may have fewer foreign words than *Finnegans Wake*, but Joyce here is at the beginning of his linguistic testing. The novel takes place in Dublin, but the language, like Odysseus, wanders. *Ulysses* provides an extreme version of Bakhtin's “heteroglossia,” illustrating his theory that “our speech...is filled with others' words, varying degrees of ‘our own-ness,’ varying degrees of awareness or detachment. These

words of others carry with them their own expression, their own evaluative tone, which we assimilate, re-work, and re-accentuate.”^{ccv} The text rings not only with the voices of the many characters, but also the voices of entirely different languages. It is perhaps this vitality, hybridity, and adaptability that leads to Irish achieving fourth place among the other 25 foreign languages for most words in the novel (see Figure 11). Consideration of foreign borrowings in English, words used so commonly that they end up in the *Oxford English Dictionary*, provides an

interesting perspective on these numbers. I did not include in my foreign word count words already included in the *OED* before 1900, as I explain in the introduction, but here I will briefly consider Joyce’s foreign words as his own ‘borrowings,’ particularly since at least some of the languages (French and Latin in particular) seem as influential in the novel as in real-life English. Looking at the *OED*’s data on which languages have been most influential upon English (specifically, from which languages English has “borrowed” the most), data from the *OED* reveals that Irish is ranked 21st: it is, at least for most English speakers, not all that influential (although these rankings would almost certainly change when we look at specific nations in which a native tongue interacted with an imported English).^{ccvi} The most influential languages

are Latin, French, and Greek. Latin and French maintain their ranking in the language of *Ulysses*, but Irish rises in prominence: of all the foreign languages in the novel, it ranks fourth for highest number of words (see Figure 11). This seems realistic, if we consider the English spoken in Ireland. It would be natural for the ear to hear more Irish in Ireland than anywhere else, as the English spoken there would be different from “standard” English in England. *Ulysses*, in this way, reflects Irish reality numerically, never more clearly than when we see the Irish numbers situated in the context of *all* the languages of the novel.

Joyce didn’t dream for a “lost language”; his dream instead “included the potential for something new created from something old – very like Joyce’s general practice of making the old new.”^{ccvii} Languages – all 26 of the ones in *Ulysses* – mingle in the novel to create a new sort of tongue, and Irish language holds a primary place in this intermingling, reflecting the history of and potential for the language as a cultural agent, surviving by adapting to and living within the language of the oppressor. The Irish words of the novel, when seen together, remind us that Irish can and would be heard among the “noise” of Dublin, situating the familiar, “native” sounds of the isle alongside the international “noise” of Europe and the world. Irish may form only .10% of the word count in *Ulysses*, and Joyce’s Irish may be incorrect in many places, but this is, as always, deliberate. The point is not to stay true to or completely reject an ancient tongue, but to create a new language, one that pushes us beyond the limitations of national boundaries, and to accept the ways our language is already, by nature, ‘impure.’ The languages of *Ulysses*, despite its difficulty and seemingly surreal qualities, is mimetic; they interact with and alter one another, and even the overlooked Irish language stakes its own claim to textual space. Joyce’s work finds a way to “link itself to Europe’s concert” via not only foreign languages, but the familiar, “native” sounds of the island and their place alongside the international “noise.”^{ccviii} Irish is not

only alive and kicking in *Ulysses* but brought out of isolation and onto the world stage to take its place among the ever-evolving languages of the world, and it is quantitative study that allows us to see this more clearly. “Hearing” these words through the normal reading process provides the reader with a momentary Irish encounter, fleeting enough to forget by the time they encounter the next. Counting, on the other hand, brings these words back into focus and highlights just how many Irish words Joyce used. Without the numbers, the increases in Irish during revision don’t seem quite so *present*; without the numbers, the Irish language doesn’t seem quite so connected to the broader multilingualism and cosmopolitanism of *Ulysses*. As the postcolonial “recovery” of Joyce illustrated and reminded readers, Ireland (and her history, culture, and politics) was central to Joyce’s art, even as Irish language in *Ulysses* has often been seen as incidental or, perhaps, as important only in a select few moments. Counting all 273 Irish words, and further quantitative work to attribute these words to episodes and characters, provides another lens for understanding Joyce’s relationship to Irish during the writing of the novel. Genetic study in particular, when combined with quantitative work, reveals that Joyce (whether or not he knew the language) was, in fact, more closely engaged with Irish than is often assumed. These discoveries reveal that, rather than acting as “sporadic illumination of local obscurities,” each Irish word added to the novel heightens the “Irishness” of it, and it is counting that highlights this Irish thread within the cosmopolitan *Ulysses*.^{ccix}

^{cxli} Deane, Seamus, “Joyce the Irishman,” *The Cambridge Companion to James Joyce*, Ed. Derek Attridge (Cambridge: Cambridge University Press, 1990), 53; Tymoczko, Maria, *The Irish Ulysses* (Berkeley: University of California Press, 1994); Duffy, Enda, *The Subaltern Ulysses* (Minneapolis: University of Minnesota Press, 1994); Attridge, Derek and Marjorie Howes, *Semicolonial Joyce* (Cambridge: Cambridge University Press, 2000).

^{cxlii} O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), xi.

^{cxliii} Kiberd, Declan, *Inventing Ireland* (Cambridge, MA: Harvard University Press, 1996), 187.

^{cxliv} Crispi, Luca, “Joyce at Work on *Ulysses*: 1917-22,” *Genetic Joyce Studies* 13 (Spring 2013).

^{cxlv} Kiberd, Declan, *Inventing Ireland* (Cambridge, MA: Harvard University Press, 1996), 1.

^{cxlvi} Bénéjam, Valérie, “Passports, Ports, and Portraits: Joyce’s Harbours of Irish Identity,” *Genetic Joyce Studies* 5 (2005).

- cxlvii Howes, Marjorie and Derek Attridge, "Introduction," *Semicolonial Joyce*, Ed. Derek Attridge and Marjorie Howes (Cambridge: Cambridge University Press, 2000), 3.
- cxlviii Bénéjam, Valérie, "Passports, Ports, and Portraits: Joyce's Harbours of Irish Identity," *Genetic Joyce Studies* 5 (2005); Valente, Joseph, "Joyce's Politics: Race, Nation, and Transnationalism," *Palgrave Advances in James Joyce Studies*, Ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 90.
- cxlix Valente, Joseph, "Joyce's Politics: Race, Nation, and Transnationalism," *Palgrave Advances in James Joyce Studies*, Ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 90; Duffy, Enda, *The Subaltern Ulysses* (Minneapolis: University of Minnesota Press, 1994), 3.
- cl Bénéjam, Valérie, "Passports, Ports, and Portraits: Joyce's Harbours of Irish Identity," *Genetic Joyce Studies* 5 (2005).
- cli Howes, Marjorie and Derek Attridge, "Introduction," *Semicolonial Joyce*, Ed. Derek Attridge and Marjorie Howes (Cambridge: Cambridge University Press, 2000), 3.
- clii Gabler, Hans Walter, "James Joyce Interpreter," *Genetic Joyce Studies* 4 (Spring 2004).
- cliii O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), xiv.
- cliv O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 337; *Ibid.*; Hiberno-English structure commonly pulls from Irish grammar and syntax, such as the common use of prepositional phrases, as in the example above.
- clv O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), vii.
- clvi Tymoczko, Maria, *The Irish Ulysses* (Berkeley: University of California Press, 1994), 6.
- clvii Gabler, Hans Walter, "James Joyce Interpreter," *Genetic Joyce Studies* 4 (Spring 2004).
- clviii McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 23.
- clix O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), vii.
- clx *Ibid.*, vii-viii.
- clxi This book, signed by Joyce, went on sale on eBay in 2010. Current owner unknown. Special thanks to Ronan Crowley for providing me with the eBay listing and images of the book.
- clxii *Second Irish Book* (Dublin: M.H. Gill and Son, 1878), 62-63. This is an approximate rendering of the Irish orthography.
- clxiii From Charles Vallancey's "Essay on the Gaelic League," as quoted in the paratext of *Second Irish Book* (Dublin: M.H. Gill and Son, 1878).
- clxiv Iser, Wolfgang, *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett* (Baltimore: Johns Hopkins University Press, 1983), 231-2.
- clxv Joyce, James, *Letters of James Joyce*, vol. II (New York: Viking Press, 1957), 122 (as quoted in Deane, Seamus, "Joyce the Irishman," *The Cambridge Companion to James Joyce*, Ed. Derek Attridge (Cambridge: Cambridge University Press, 1990), 40).
- clxvi McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 44-5.
- clxvii Joyce, James, "Eveline," *Dubliners* (New York: Dover Publications, Inc., 1991), 23.
- clxviii *Ibid.*, 21.
- clxix Joyce, James, et al. *Ulysses: A Critical and Synoptic Edition* (New York: Garland Publishing, 1984), 220, 202; "Grig" is an Anglicized spelling of Irish "griog," meaning "excite desire or envy, tantalize." (From O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 339.)
- clxx McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 9.
- clxxi Valente, Joseph, "Joyce's Politics: Race, Nation, and Transnationalism," *Palgrave Advances in James Joyce Studies*, Ed. Jean-Michel Rabaté (New York: Palgrave Macmillan, 2004), 75; *Ibid.*
- clxxii Zingg, Gisela, "Hiberno-English in Joyce's *Ulysses*," *Swiss Papers in English Language and Literature* 17 (2005), 204.
- clxxiii *Ibid.*, 201-202.
- clxxiv *Ibid.*, 202.
- clxxv Joyce, James, "Ireland: Island of Saints and Sages," *Occasional, Critical, and Political Writing*, Ed. Kevin Barry (Oxford: Oxford University Press, 2000), 109.

- clxxvi Hayman, David, "Cyclops," *James Joyce's Ulysses: Critical Essays*, Ed. Clive Hart and David Hayman (Berkeley: University of California Press, 1974), 247.
- clxxvii Ibid.
- clxxviii Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 2; Ibid., 3.
- clxxix Theodor Adorno, "Words from Abroad," *Notes to Literature II*, (New York: Columbia University Press, 1991), 197.
- clxxx Lauret, Maria. *Wanderwords: Language Migration in American Literature* (New York: Bloomsbury, 2014), 2.
- clxxxi Groden, Michael, *Ulysses in Progress* (Princeton: Princeton University Press, 1977), 145.
- clxxxii Joyce, James, "Ireland: Island of Saints and Sages," *Occasional, Critical, and Political Writing*, Ed. Kevin Barry (Oxford: Oxford University Press, 2000), 109.
- clxxxiii Groden, Michael, *Ulysses in Progress* (Princeton: Princeton University Press, 1977), 130.
- clxxxiv O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 342; Joyce's *Ulysses Notesheets in the British Museum*, ed. Phillip F. Herring (Charlottesville: University Press of Virginia, 1972), 115.
- clxxxv McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 43.
- clxxxvi From "ciotóg," "left-handed person." (O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 349.)
- clxxxvii O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 339.
- clxxxviii Joyce, James, "Ireland: Island of Saints and Sages," *Occasional, Critical, and Political Writing*, Ed. Kevin Barry (Oxford: Oxford University Press, 2000), 111.
- clxxxix McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 22.
- cxc From the Irish "Tá an bád ar an tír. Táim i mo shagart," "The boat is on the land. I am a priest." (O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 339). Beurla, in the last sentence, comes from the Irish "Béarla/Beurla," meaning "English" (O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 340).
- cxci McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 26-7.
- cxcii Ibid.
- cxciiii Translations of these parodic and excessive outbursts are as follows: "Kiss my arse! O pulse of my heart!" from the Irish "Póg mo thón! A chúisle mo chroidhe!" (O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), 340.)
- cxciiv Gisela Zingg, "Hiberno-English in Joyce's *Ulysses*." *Swiss Papers in English Language and Literature*. 17 (2005), 196.
- cxci v Ibid.
- cxci vi Ibid.
- cxci vii The structure of this sentence is based on Gaelic grammar and translates to "How are you?"
- cxci viii Atherton, J.S., "The Oxen of the Sun," *James Joyce's Ulysses: Critical Essays*, ed. Clive Hart and David Hayman (Berkeley: University of California Press, 1974), 313; Gilbert, Stuart, *James Joyce's "Ulysses"* (New York: Knopf Doubleday Publishing Group, 1952), 296; Gifford, Don and Robert J. Seidman, *Ulysses Annotated*, 2nd ed. (Berkeley: University of California Press, 1988), 408.
- cxci ix Gilbert, Stuart, *James Joyce's "Ulysses"* (New York: Knopf Doubleday Publishing Group, 1952), 296; Kiberd, Declan, *Ulysses and Us: The Art of Everyday Life in Joyce's Masterpiece* (New York: W. W. Norton & Co., Inc., 2009), 214.
- cc *Ulysses: a facsimile of the manuscript*, P366 L499-500 N383.
- cci O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), ix.
- ccii Groden, Michael, *Ulysses in Progress* (Princeton: Princeton University Press, 1977).
- cciii Bénéjam, Valérie, "Passports, Ports, and Portraits: Joyce's Harboursing of Irish Identity," *Genetic Joyce Studies* 5 (2005).
- cciv Ibid.

^{ccv} Bakhtin, Mikhail M., "The Problem of Speech Genres," *Speech Genres and Other Late Essays*, Ed. Michael Holquist (Austin: University of Texas Press, 1986), 89.

^{ccvi} Durkin, Philip, *Borrowed Words: A History of Loanwords in English* (Oxford: Oxford University Press, 2014), 25.

^{ccvii} McCrea, Barry. *Languages of the Night: Minor Languages and the Literary Imagination in Twentieth-Century Ireland and Europe* (New Haven: Yale University Press, 2015), 9.

^{ccviii} Joyce, James, "Ireland: Island of Saints and Sages," *Occasional, Critical, and Political Writing*, Ed. Kevin Barry (Oxford: Oxford University Press, 2000), 111.

^{ccix} O Hehir, Brendan, *A Gaelic Lexicon for Finnegans Wake* (Berkeley: University of California Press, 1967), xi.

Chapter Three: A Quantitative and Neurological (Re-)Turn to the Reader

To return to Leopold Bloom's words, "Numbers it is" (*U* 11.830): *Ulysses* contains 2,525 foreign words. Thus far, I have used these and other linguistic data in conjunction with critical reading and genetic study to make arguments about the meaning and impact of these words within the novel. I embarked upon this counting endeavor for two main reasons: Firstly, a curiosity to discover the extent of a trend I noticed in the novel and, secondly, because numbers are seductive for a humanist. In a world that increasingly undervalues the humanities, quantitative data can be enticing because of the "scientific" sheen they can provide. As the cult of productivity and technological innovation holds more and more sway and STEM fields receive far more attention (and thus funding), the lure of seemingly incontrovertible evidence – of making the humanities seem more scientific – is strong. For my part, the foreign languages I saw in *Ulysses* activated the part of my brain that loves puzzles, and after being introduced to the field of digital humanities and, more specifically, quantitative analysis, I held high hopes that counting the foreign words in *Ulysses* would yield something that would prove both interesting and significant, even if it couldn't definitively 'solve' the puzzle. The count I ended with (2,525) does seem high (and so potentially significant), and as previous chapters have shown, arguments can be made about the interpretive implications of this number (especially when paired with close reading and genetic research). The word count *is* significant. As I contemplated the volume of words in retrospect, however, I recalled one of my common refrains when teaching undergraduates about argumentation, one said in an attempt to underscore the importance of analysis rather than reliance on facts to speak (and argue) for themselves: "Facts may exist, but people interpret facts differently." In Joyce studies, there are a few commonly-accepted facts about *Ulysses*, such as Joyce's intentional use of Odyssean themes; evidence such as his late-

stage additions of symbolic correspondences (as identified by Michael Groden in *Ulysses in Progress*) and the schema he created for Carlo Linati outline some of these connections explicitly.^{ccx} Even when considering these Joycean ‘facts,’ however, there is still room for interpretation of the thematic correspondences and all their possible shades of meaning. If even Joyce-approved truths about *Ulysses* can be interpreted differently, then arguments relying on quantitative analysis must also maintain an awareness of the major role of *interpretation* in using data as evidence. Despite seeming more concrete than thematic correspondences and literary theory, quantitative data doesn’t solve literary puzzles in and of themselves; someone else, interpreting from a different perspective, could study the foreign word counts I have presented and use them to support their own completely different analysis. For these and other reasons, many literary scholars have criticized the use of quantitative methods for literary study.

If that’s the case, then my primary question for this project becomes: Why count? The volume of foreign words is high, and I did find that counting them became a valuable reading and interpretive process. So what is it that quantitative study can provide that, perhaps, traditional studies normally do not? Instead of using literary data primarily for interpretation of the text itself, in this chapter I will focus on what such a quantity of foreign words *does* for readers. Literary scholarship traditionally relies on intra-novelistic interpretation: I use this term here to mean that literary study tends to focus on interpretation of the novel itself, or what Nicholas Dames describes as “the author-centered novel theory of the past century.”^{ccxi} Literature, however, is not the sole property of authors or academic critics. Although *Ulysses* is called, as Sam Slote writes, “whether in admiration or contempt...a paragon of difficult and obscure literature,” it continues to capture the attention of scholars and lay readers far and wide almost 100 years after its publication.^{ccxii} If readers from various walks of life continue to return

to *Ulysses* despite its notorious difficulty, why do they do so? In other words, how does the novel affect them? Considering the exhaustion that can accompany reading this novel, *Ulysses* seems a form of mental exercise, with each technique, theme, and style serving as tools for training our minds. Foreign language is just such a tool that can ‘train’ its audience into new ways of reading.

Reading as ‘training,’ and the study of how literature affects its readers, is not a new theoretical interest, although it is a generally forgotten one. In 1979, Raymond Williams expressed a goal to explore the “physical effects of writing.”^{ccxiii} He proposed the idea that “there is a very deep material bond between language and the body, which communication theories that concentrate on the passing of messages and information typically miss.”^{ccxiv} Williams was not, however, the first to express this desire: Dames reveals in *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* that the study of the “life rhythms” of literary forms that Williams thought necessary was actually envisioned and even practiced in the Victorian era by “a loosely affiliated coterie of scientists, journalists, and intellectuals who brought the experimental study of human physiology to bear upon the facts of novel-reading, as part of an attempt to theorize the force of the novel form in culture.”^{ccxv} This interest was, for the most part, forgotten and even “excluded by legislation,” as Stanley Fish describes, by W.K. Wimsatt and Monroe C. Beardsley’s “The Affective Fallacy,” in which they argue that “confusion between the poem and its *results* (what it *is* and what it *does*),” by deriving “the standards of criticism from the psychological effects of the poem...ends in impressionism and relativism.”^{ccxvi} Critique of the subjectivity involved in studying the effects of literature on readers led, eventually, to the near-elimination of the reader from critical work. Critics like Fish, however, have intermittently worked to turn literary study back (at least partially) toward the reader. After all, as Fish writes, despite critical calls for objectivity in scholarship, “the

objectivity of the text is an illusion, and moreover, a dangerous illusion, because it is so physically convincing.”^{ccxvii} But “no one would argue that the act of reading can take place in the absence of someone who reads – how can you tell the dance from the dancer?”^{ccxviii} As both Fish and Wolfgang Iser assert, the meaning of a text is not an “object, a thing-in-itself,” but a “happening” that occurs through the participation of the reader.^{ccxix}

To this end, I will approach *Ulysses*, and its foreign words more specifically, from the perspective of *reader-effects* over traditional methods of intra-novelistic interpretation. In other words, instead of focusing on what the text is supposed to *mean*, I will focus on how foreign words in *Ulysses* affect readers and train them to read differently. Counting, then, from this perspective, acts as a tool for discovering potential reader-effects that we normally take for granted and for understanding why the book affects us the way it does. This chapter will use the quantitative results I have explored so far to refocus study of *Ulysses* and some of its constituent parts on the aesthetic “realization accomplished by the reader” that Iser identified as vital to the process of meaning-making.^{ccxx} A reader might not actively register the effects of foreign words on them while reading, but counting the words reveals that they’re too numerous *not* to impact readers. These words, along with the many other unexpected elements of *Ulysses*, force us to slow down and work harder for meaning, acting as a sort of mental linguistic stimulant and startling us out of normalcy.

Given the quantitative angle of this project, further exploration of the field of quantitative literary analysis is called for before moving on to the reader-focused portion of this chapter. More specifically, I will address here what quantitative literary analysis can and cannot do. Numbers are as tempting to humanities scholars as the ‘sirens’ Mina Kennedy and Lydia Douce are to the men in the Ormond Hotel (or as tempting as Molly is to many of the Dublin men of her

acquaintance), lending a tangible, semi-scientific quality to the more abstract field of literary studies. Many scholars, joining the ranks of digital humanists, have turned to quantitative study to lend an air of veracity to claims of significance about literature. David Hoover, for instance, asserts that when discussing elements of style and thematic content,

examples are rarely significant...unless they are either unusual or characteristic of the novel or the author – otherwise why analyze them? And the unusual and the characteristic *must be validated by counting and comparison*: the bare claim that Woolf uses a great deal of personification is without value and nearly meaningless unless it is quantified [emphasis mine].^{ccxxi}

In this conception of literary analysis, identification of trends must be supported by quantifiable evidence to be considered valid; numbers in conjunction with interpretation, then, outweigh human observation alone. Theoretically, calls for a turn to the more “valid” use of quantitative analysis make some sense, as improved accuracy and new digital tools have provided scholars with more avenues for literary discovery and, potentially, a way to combat human error when studying trends.

Even Hoover, however, in the same chapter, identifies the problems often encountered in quantitative literary analysis: “Quantitative analysis has not had much impact on traditional literary studies...all too often quantitative studies fail to address problems of real literary significance, ignore the subject-specific background, or concentrate too heavily on technology or software.”^{ccxxii} Stronger critiques of quantitative literary analysis still float through the academic world: for example, in the *Chronicle of Higher Education* piece “The Digital Humanities Debacle: Computational methods repeatedly come up short,” Nan Z. Da lambasts the quantitative literary analysis branch of digital humanities as “generat[ing] bad literary criticism” and “lack[ing] quantitative rigor,” failing to fulfill the requirements of either literary or quantitative fields for what constitutes valid scholarly work.^{ccxxiii} The findings of such studies,

Da claims, “are either banal or, if interesting, not statistically robust,” because to produce “nuanced and sophisticated literary criticism,” they must “interpret statistical analysis against its true purpose” or, conversely, to “stay true to the capacities of quantitative analysis,” practitioners “must treat literary data in vastly reductive ways, ignoring everything we know about interpretation, culture, and history.”^{ccxxiv} Turning to the results of quantitative analysis, Da argues that “there will always be patterns and trends. Even a novel composed of pure gibberish...will have naturally occurring statistically significant patterns. The promise of patterns alone is meaningless. Once you detect a pattern, you must subject it to a series of rigorous tests.”^{ccxxv} Many quantitative literary analyses, in fact, do not complete such rigorous tests; my own studies in previous chapters, for example, have not been supplemented by calculations of statistical significance, or even by comparison of my findings in *Ulysses* to the foreign word usage of a larger body of literature. Hoover emphasizes that quantitative studies should, at the very least, require “a rough comparison of [word] frequency with some kind of norm or reference point”; an example of sufficient comparison, he says, might be to find “dozens of odd inanimate subjects in *To the Lighthouse* and only a few in other modernist novels of roughly the same length.”^{ccxxvi} For my own study, I have focused primarily on attempting to discover interesting revelations about Joyce’s foreign word usage *within Ulysses* and as a lead up to the more multilingual *Finnegans Wake*, rather than in comparison to other authors, but methodological commentary and critiques of quantitative analysis such as Da’s and Hoover’s highlight an important question about my own and other quantitative literary work. Does a study like this require comparative or statistical study in order to be quantitatively or academically valid? A lack of comparative quantitative analysis is certainly a limitation of the work, but such a study would turn into a much different project, taking far more time. This project focuses less on the novel as part of a larger body of

works and more on the impact of the foreign word counts *on the novel itself*. Some valuable insights have been gained from the use and comparison of larger bodies of literary data, such as Franco Moretti's insights into the evolution of literary titles, genres, and more in *Distant Reading* or Ted Underwood's illustration in *Distant Horizons: Digital Evidence and Literary Change* that digital archives and statistical tools can help us understand historical literary development differently.^{ccxxvii} In this project, however, I have moved back towards the novel itself, focusing on what I believe such a large number of foreign words does for the novel and for readers while avoiding grand claims to Joyce's multilingualism in comparison to other modernist authors or even other literary periods. Such study may seem methodologically weak (at least when thinking of quantitative analysis specifically), but does the use of data in literary study require strict adherence to traditional methods from either quantitative or literary fields in order to reach some level of validity? Da argues that "weak or nonexistent" results in many published papers using quantitative analysis are described as "'exploratory,'" or "'still in its early stages.'"^{ccxxviii} This is indeed a strong critique of studies purporting to make methodologically sound arguments that are both quantitative *and* literary, as the shielding term "exploratory" could be used to hide a variety of methodological and interpretative sins for the sake of 'interesting arguments.' This chapter, however, aims at a different type of quantitative study, using the foreign word counts in *Ulysses* not to prove something about the significance of foreign language in the novel but rather to consider the effect that 2,525 foreign words may have on how we read.

Even beyond these critiques of quantitative analysis, my own foray into the field has left me pondering the idea of measuring literary patterns as lending additional authenticity to arguments. Quantitative work requires just as much interpretation and contextual work as any traditional literary analysis, since data is often interpreted in a variety of ways by people of

different backgrounds and perspectives. Even trained scientists come to different conclusions when observing the same exact data: In a study of just such a phenomenon, 29 scientific teams were given data regarding the frequency of soccer players receiving red cards as well as those players' skin color. Using the exact same data, some teams found the difference between red card counts for light-skinned and dark-skinned players was not significant, while others saw a trend towards more red cards for dark-skinned players.^{ccxxix} Data is not, it seems, a cure-all for displaying the validity of an argument or for determining possible interpretations. In literary studies especially, the discovery of a specific 'number' (of words, characters, etc.) requires interpretation to judge how it may or may not be significant within the context of the work. Even before quantitative literary studies, literary works have historically held the capacity for a variety of readings. If scholars have already disagreed on what, precisely, these works 'mean,' it seems inevitable that they will disagree on the interpretation of literary data.

With these seeds of quantitative doubt planted, I will turn this chapter towards considering, instead, alternative uses and benefits of quantitative analysis: in other words, what can knowing certain word counts *do* for readers? Quantity can help us identify elements of a text that we may not realize are affecting us. Readers notice the multilingualism of *Ulysses*, for example, but in a normal reading, they may not realize that there are 2,525 foreign words, ready and waiting to slow and confuse many readers. Seeing this figure allows for conceptualization of these words as recurring elements that, given their relatively high count, must impact the reader *somehow*. The impact of so many foreign words can be conceptualized not only through the knowledge that these words make up just under one percent (0.96 percent, or about one out of every 100 words) of the 264,448 word units in *Ulysses* but also by considering the average word per page: if every foreign word were to be distributed equally between the pages of the novel, the

reader would encounter approximately four per page.^{ccxxx} These words form a consistent, if relatively small, presence, repeatedly intruding upon the reader's habitual patterns of linguistic comprehension. As I will explore further, knowing the word count provides the perspective of seeing the rhythms of the novel, as experienced by readers. I will focus on reader experience when encountering unknown words or, more generally, elements of the text that could be defined as "unfamiliar" or "unexpected." Such re-focusing, using quantitative methods, will reveal possibilities for understanding the effects of these rhythms on readers.

To understand the effects of the unfamiliar, I will turn to the neuroscience behind reading. As wide-ranging as the topics covered by Joyce studies can be, it comes as no surprise that scholars have made use of neuroscience for interpretations of Joyce's works. A major source for such studies is Sylvain Belluc and Valérie Bénéjam's *Cognitive Joyce*, which includes Thomas Jackson Rice's study of "Joyce and Hypnagogia," explorations of cognition in Caroline Morillot's "Spatialized Thought: Waiting as Cognitive State in *Dubliners*" and Benoît Tadié's "The Invention of Dublin as 'Naissance de la Clinique': Cognition and Pathology in *Dubliners*," an examination of neuroaesthetics in Pierre-Louis Patoine's "Joycean Text/Empathic Reader: A Modest Contribution to Literary Neuroaesthetics," and more.^{ccxxxi} Beyond *Cognitive Joyce*, others have touched on neuroscience and its various sub-topics: Vike Martina Plock studies neuroscience and ergography in 'Eumaeus' in *Joyce, Medicine, and Modernity*, Gur Pyari Jandial uses neurotheology in relation to Joyce's concept of epiphany in "A Neurotheological Approach to Understanding James Joyce's Concept of Epiphany and Related States of Wajad and Turiya with Some Reflections on the Radhasoami Faith," and Maria Kager uses neurolinguistics to analyze Joyce's multilingualism in "Wonderful Vocables: Joyce and the Neurolinguistics of Language Talent."^{ccxxxii} These studies primarily focus on identifying neurological phenomena in

Ulysses (or in Joyce himself, as with Kager's work) and using these concepts for intra-novelistic interpretation. This chapter will extend such neurological investigation of Joyce's work into the realm of reader experience, using results from neuroscientific studies about reading to propose one of many possible ways we can understand what *Ulysses* *does* to readers, turning the focus from the text to the reader as they engage with the text.

But first, a caveat: in this study, I am not making scientific claims about the *actual*, measurable effects of *Ulysses* on the brain, because I have not conducted such a study (with all the appropriate tools and guided by the scientific method). Such a study would be better left to a scientist with a literary interest, rather than a humanist with an interest (but absolutely no training) in neuropsychology. At least one scientific study of *Ulysses* and reader-response has engaged in the "introduction of literary practice to the quite different practice of experimental observation" that Williams called for, as Paul Sopčák studied readers' identification of "strikingness" in relation to the amount of foregrounding in passages of *Ulysses*, as well as the impact of strikingness, or foregrounding, on reading speed.^{ccxxxiii} Sopčák found that more foregrounding (which readers identified as more striking) led to slower reading speeds. Rather than foregrounding, I will focus on readers' encounters with "the unfamiliar" or the unexpected: items that may startle readers while also forcing them to confront words or ideas they do not recognize. Given that researchers like Sopčák have already used scientific studies to understand reader responses to *Ulysses*, perhaps other researchers will one day explore the effect of foreign words and other startling textual elements on readers' mental processes when engaging with this novel specifically. For the purposes of this chapter, however, I will use existing neurological studies on reader response to unfamiliar words more generally to ascertain the possibilities of reader-effects in relation to foreign words.

Several such studies are of interest for an assessment of reader response to the unknown or unpredictable. Two studies that specifically measure neurological processing upon encountering unfamiliar words are of note: Juphard et al. (2011) studies neural response time when encountering unfamiliar words (and implications for sequential vs. global processing), and Ischebeck et al. (2004) observes levels of brain activity when readers encounter unfamiliar words. Juphard et al. found that neural response time increases in length when encountering unfamiliar words; specifically, “processing time increases with syllabic length” of unfamiliar words, but not with familiar words, because, as the results suggest, “grapho-phonological conversion of unfamiliar words operates sequentially syllable-by-syllable, using sub-vocal rehearsal. In contrast, the conversion of familiar words operates directly at the whole-word level, independently of their length.”^{ccxxxiv} In other words, readers process unfamiliar words by reading the individual syllables that make them up, rather than processing them as an entire word (i.e., global processing), which leads to slower neural response time. The brain, then, slows down in response to the unfamiliar, because it is attempting to process the new word for future recognition and global processing. This “slowing down” is notable in the data: the mean reaction time (mRT) for familiar words is 508.28 milliseconds, while the mRT increases by 17 percent to 601.09 milliseconds for pseudowords. Unfamiliar words slow readers by almost one-fifth of their normal reading speed on average, but that’s not all they do. The study conducted by Ischebeck et al., rather than focusing on reading speed, observes brain activity in response to pseudowords (or, more generally, unfamiliar words). The study found that pseudowords and visually unfamiliar words “caused an increase in brain activity in left inferior frontal regions, as compared to visually familiar words.”^{ccxxxv} These regions are associated with memory (and memory retrieval), indicating that familiar words are easier to process quickly due to their

previous incorporation into our lexical ‘memory banks’; unfamiliar words, however, have no referent in our memory to supplement rapid processing, forcing the brain’s neural processing to slow as readers attempt comprehension. These findings are particularly interesting when viewed in conjunction with other findings regarding activation of the inferior frontal region: Schuster et al. (2016), studying predictability of language and its correlation with neural activity, found that “increasing predictability was associated with decreasing activation within middle temporal and inferior frontal regions.”^{ccxxxvi} The opposite, then (decreasing predictability), is correlated with *increasing* activation within those regions – the same regions that also light up when encountering unfamiliar words, as Ischebeck et al. found. Similarly, Just et al. (1996) found that brain activation in the same general areas (the left laterosuperior temporal cortex and the left inferior frontal gyrus) during visual sentence comprehension increases with the linguistic complexity of the sentence.^{ccxxxvii} Considered all together, these studies indicate that for readers, since unfamiliar elements prevent the use of memory in quickly retrieving a word’s meaning, encountering such words leads to a simultaneous increase in neural activity and a slowing down of neural processing. In other words, unknown words force readers’ minds to slow down and work harder – instead of taking the words and their meanings for granted, readers must pause to do a bit of mental exercise. From the perspective of an instructor, the benefits of such reading phenomena seem clear: if linguistic heterogeneity quite literally forces readers to slow down and *consider* the words they see, perhaps such variety can lead to deeper appreciation of texts and, through such practice, greater critical thinking skills outside of such reading practice.

Foreign words in *Ulysses* may act in a similar way on readers. There are, of course, many readers who do speak one or more of the foreign languages in the novel, but this is a moment when knowing the count of both foreign words and languages becomes useful. I have already

revealed that there are 2,525 foreign words in *Ulysses*, but another notable figure from earlier chapters is that of the number of languages from which these 2,525 words are drawn. All totaled, *Ulysses* contains words from 25 languages besides English. Some languages only add one or a handful of words to the text, but they still contribute to making this a novel of 26 languages in total. Putting aside the fact that the repetition of “25” might appear tempting to those interested in numerology, that second number – 25 languages – is important to note when considering the levels of unfamiliarity embedded in the novel.^{ccxxxviii} No matter how erudite and/or multilingual a reader is, it’s highly unlikely they would know *twenty-five* different languages in addition to English. With so many languages, chances are that most, if not all, readers will at some point encounter words they do not recognize in *Ulysses*. Let’s contemplate, then, the effect that so many unfamiliar words would have on readers. We know from the neurological studies above that unfamiliar words both slow down neural processing and activate parts of the brain (namely, the temporal and frontal regions) that are not as active when reading familiar words or predictable text. Foreign words are unfamiliar: their lack of familiarity, if we use the neurological evidence provided, would lead to a slowing down of readers’ neural processing. Thinking more specifically about the *frequency* of foreign words, the occurrence of 2,525 of them, from 25 languages, repeatedly interrupts linguistic predictability in the novel. How many readers expect a novel to use *so many* foreign words from *so many* languages?

The frequency of foreign words is also important because of the consistency of their presence. With the exception of the (relatively) extraordinarily multilingual ‘Proteus,’ the percentage of foreign words per episode stays somewhat stable: each

episode’s foreign word percentage falls within a range of either one to two percent or 0.25 to

0.75 percent (whereas ‘Proteus’ is made up of over three percent foreign words; see Figure 1). The average number of words per page is again useful here to envision the effect on readers: ‘Proteus’ (12 pages long in the Gabler edition) averages 17.5 foreign words per page, while the next most foreign episodes, ‘Scylla and Charybdis’ (28 pages) and ‘Circe’ (147 pages), average 7.4 and 3.6 foreign words per page, respectively (see Figures 2a and 2b). In the most concentratedly foreign episode, readers are slowed down by a sort of neural processing speed limit as they work their way down the episode’s winding route. These words occur repeatedly and somewhat steadily throughout the reading

experience; even episodes like ‘Nestor,’ with the fewest foreign words (11) and averaging only one per page, while not overly taxing readers, retains traces of unfamiliarity through these words.

Over and over, readers are startled out of the normalcy of traditional reading (and linguistic experience) and forced to confront, momentarily, the experience of *not knowing*.

In a sense, readers of *Ulysses* experience a sort of Dunning-Kruger effect as they continue to encounter words they do not know. According to the Dunning-Kruger theory, identified by Justin Kruger and David Dunning at Cornell University, “people tend to be blissfully unaware of their incompetence.”^{ccxxxix} More specifically, their work identified that poor performers’ “lack of skill deprives them not only of the ability to produce correct responses, but also of the expertise necessary to surmise that they are not producing them...lead[ing] people to make judgments about their performance that have little to do with actual accomplishment.”^{ccxli} On the other end of the spectrum, more objectively accomplished performers also experience a “miscalibration,” but this time in the other direction: at a certain point on the Dunning-Kruger curve, a person might actually know more or perform better, but that very knowledge allows them to understand just how much they *still don’t know*.^{ccxli} As readers experience *more* by reading a novel like *Ulysses*, and as they continuously encounter words they don’t understand, they can recognize just how much they don’t know, linguistically or otherwise. The novel subtly pushes us, if we allow it, to fall towards the bottom of the Dunning-Kruger curve, where our “expertise” has technically begun to increase, but our confidence levels have dropped. Whether or not Joyce intended something specific by inserting so many foreign words into *Ulysses*, the novel *does* have 2,525 of these words (occurring at a frequency of about four words per page), and in terms of *reader-effects*, we can assume that this is a subtly disorienting (and to some extent humbling) experience.

Considering *Ulysses* as a novel that disorients and trains readers to slow down and read differently carries echoes of the Victorian physiological study of the novel that Dames

highlights. Dames' question can be applied to such study of *Ulysses*: "Can we, with nineteenth-century novel theory as an incitement, reimagine the novel as a technology?"^{ccxlii} According to physiological literary study, the nineteenth century novel "trained a reader able to consume texts at an ever faster rate, with a rhythmic alternation of heightened attention and distracted inattention locking onto ever smaller units of comprehension."^{ccxliii} In other words, novels were "a training ground for industrialized consciousness, not a refuge from it."^{ccxliv} Speed-reading, in fact, was developed in response to both physiological theory and findings by ophthalmologists like Émile Javal and James McKeen Cattell, who discovered the fact that the eye "skimmed and made inferences, rather than moving carefully across each textual unit" and, in its speed of movement, it "habitually skips text, or observes only a proportion of text in the relatively blurred 'parafoveal' zone adjacent to the point of fixation."^{ccxlv} Not only did the novel train readers to read more quickly, as they believed, but concerns over the 'inaccuracy' of natural eye movements led psychologists and physiological theorists to promote *further* training of not only the brain, but the eyes themselves through speed-reading, pushing for "a more self-aware battle against the clock."^{ccxlv} While Victorian speed-readers reached for techniques which provided "the greatest legibility to the square inch," *Ulysses* instead seems to relish the "waste and inefficiency of typical reading."^{ccxlvii} Foreign words and the variety of wordplay counteract the habits of eyes trained to move with increasing speed and accuracy. They alter the reading experience by forcing the reader to pause; the insertion of entire conversations or monologues in foreign languages, for example, pulls the reader out of their normal rhythms of reading. Single words, or even short phrases, can be ignored with little guilt by some readers, but blocks of foreign-word text force many readers into translation or ignorance. When Stephen conducts an entire conversation with Almidano Artifoni in Italian in 'Wandering Rocks,' the reader must

either pause to decipher meaning or miss out on the knowledge that Stephen has at least one mentor in his corner, so to speak, as Artifoni attempts to convince Stephen that his voice could be a source of income (“*sarebbe un cespite di rendita*,” *U* 10.346). Similarly, the block of Latin prayers in ‘Cyclops’ (*U* 12.1740-50), the foreign-language monologues of ‘Circe’ (as explored later on), and the collection of foreign words thrown into the hodge-podge ending of ‘Oxen of the Sun’ (*U* 14.1407-1591) all force such decisions. Either way, these blocks of foreign language force many readers to pause and decide on a course of action. For the receptive and interested ‘eye,’ foreign words briefly, but with fair regularity, interrupt the forward movement of the text, resisting speed and ease of legibility.

The unexpected in *Ulysses*, in the form of foreign words or otherwise, calls us to attention in these ways after allowing us to ‘drift’ along with characters’ reveries and the mundanities of their daily lives. This oscillation between mental reverie and attention through foreign word placement supplements the rhythms of the novel and creates its own rhythm through recurrence of the ‘theme’ of foreign units, to use the musical analogies Victorian physiological theorists preferred.^{ccxlviii} This is where counting becomes useful: not only does counting illustrate just how the rhythms of *Ulysses* and its foreign words teach us to switch between states of attention and inattention, but it also reveals the ways that such foreign-word rhythms supplement and mirror the novel’s rhythms of plot, character, and style. With some exceptions (notably, ‘Aeolus,’ ‘Sirens,’ and ‘Ithaca’), higher proportions of foreign words correlate with a higher degree of narrative complexity. Some of the more complex episodes, such as ‘Scylla and Charybdis,’ ‘Circe,’ ‘Wandering Rocks,’ ‘Oxen of the Sun,’ and even ‘Cyclops’ and ‘Proteus,’ fall into the higher-proportion category of episodes composed of more than one percent foreign words. Even more interesting, however, is consideration of proportions of

foreign words alongside the rhythms of the novel. As seen in Figure 1, lower foreign word proportions align with episodes in which characters are waking and beginning their day –

Stephen's 'early' episodes, 'Telemachus' and 'Nestor,' and Bloom's, 'Calypso' and 'Lotus Eaters,' are all composed of under one percent foreign words. As Bloom continues his wandering around Dublin,

the foreign word rhythm still seems to follow his lead. Although he is awake and encounters new people in 'Hades,' 'Aeolus,' and 'Lestrygonians,' the subdued, funereal 'Hades' is accompanied by a fall in foreign word proportion (down to 0.3 percent, a 63 percent drop from 'Lotus Eaters'), the loud newsroom of 'Aeolus' contains a jump to 0.76 percent, and Bloom's reveries in 'Lestrygonians' are echoed in the more subdued 0.34 percent of foreign words. The alignment continues from there, as the crowded 'Scylla and Charybdis' and 'Wandering Rocks,' the argumentative 'Cyclops,' and the rowdy and complex 'Oxen of the Sun' and 'Circe' are all composed of over one percent foreign words (a jump from previous episodes, aside from 'Proteus'), with lower proportions (and slower rhythms) in between for 'Sirens' and 'Nausicaa.' In the last three episodes there is a final decrease (down to 0.93, 0.59, and 0.38 percent, respectively) as Bloom, Stephen, and Molly slowly wind down for the evening in the last three episodes. Foreign words supplement the creation of these "life rhythms"; as the occurrence of

unfamiliar elements eases or increases, so too do the rhythms of life in the novel wax and wane, pulling the reader alongside them.^{ccxlix} Counting, then, brings into focus the rhythms of foreign word usage and highlights the ways it aligns with and supplements reader experience. Using a quantitative approach refocuses analysis on the qualitative, aesthetic experience.

Such a qualitative experience may, admittedly, be variable. Some readers do, for example, have enough familiarity with enough of the languages in *Ulysses* to offset the startling unfamiliarity of so many foreign words. Other readers alter the experience of encountering these words by becoming *re-readers*, losing the surprise of foreign words and supplementing their second (or third or fourth) reading with easy-access translations copied from dictionaries into the margins. Another type of reader may skip over these words altogether, leaving an empty space where these words occur. These readers create different varieties of what Iser calls “the work” (as opposed to the text). The text, or the physical novel itself, exists in the “artistic pole,” which interacts with the reader to create the “aesthetic pole,” or the “realization accomplished by the reader.”^{ccl} The ‘work,’ as Iser calls it, “cannot be identical with the text or with the concretization, but must be situated somewhere between the two.”^{ccli} The ‘work’ exists abstractly between author’s text and reader’s experience, and there are, in a sense, many different ‘works’ created from one text. The text offers various perspectives with which the reader “sets himself in motion.”^{cclii} Different readers, then, create different versions of *Ulysses* through their own interactions, so multilingual readers and re-readers experience the 2,525 foreign words differently from others. For most, however, some portion of these words (large or small) is mostly unfamiliar, and even with knowledge of some of the languages of *Ulysses*, most readers would still experience an alteration in their mental processing as they encounter the words. Diamond et al. (2014) reveals that for bilingual speakers, “switching between L1 and L2 is

associated with a greater executive burden and slower processing than is observed when processing a single language.”^{ccliii} Gross et al. (2019) found that bilingual children similarly “exhibited significant costs in processing speed when listening to code-switched sentences,” even if there were “no costs in a measure of offline comprehension.”^{ccliv} Language switches, then, seem to create a mental pause even for an audience more familiar with the words. For these reasons, foreign words are one of those “intersubjectively verifiable characteristics” that Iser identifies as anchoring points for analysis, despite the individual nature of meaning as created by the interaction between text and reader.^{cclv}

Even outside of foreign words, the unexpected plays a prominent role in *Ulysses*. It’s useful at this point to consider some of the other ways the novel startles and disorients readers, and how these other unexpected elements might work in conjunction with foreign word frequency. Although there are many such moments in *Ulysses*, ‘Circe’ is perhaps *the* most disorienting episode. Both the situational content (plot, characters, etc.) and the linguistic disorientation practiced in ‘Circe’ heightens the potential for readerly bafflement; the more overt nature of these elements prevents easy dismissal or glossing-over of difficult passages. Taking a look at the content of this episode first, it’s clear that ‘Circe’ requires a slower, more attentive reading similar to the type of reading and neural activation initiated by unfamiliar words. ‘Circe’ does, after all, confront the reader with many unexpected (and oftentimes highly unlikely) situations, and keeping track of the many (*many*) characters and their various incarnations often takes sustained attention (and even re-readings). As Declan Kiberd puts it, in ‘Circe’ “the book itself becomes drunk and teases the reader by lifting its skirts to reveal many secrets.”^{cclvi} Bizarre occurrences regularly keep readers on their toes: Bloom, for instance, suddenly turns into a woman and worshipfully prostrates himself before the now-male Bello (*U* 15.2834-3063); before

this female transformation, the (still male) Bloom cries, “O, I so want to be a mother” and gives birth to “eight male yellow and white children” (*U* 15.1817-32); and William Shakespeare appears in the brothel’s mirror and speaks to Bloom and Stephen (*U* 15.3821-29). These moments and more strain the bounds of daily reality, encouraging close attention in order to keep track of and differentiate between hallucinatory events and the real-life occurrences (the ‘plot’) of Bloom and Stephen’s experience in the Nighttown brothel. After all, if the reader wants to find “a surface realism he can believe,” Hugh Kenner writes, he “must pick his way very carefully, assaying every phrase with suspicion; and there will be little left when he has finished; perhaps twenty pages, out of some 170: just over 10%.”^{cclvii} If only 10 percent of the episode can be called “realistic” in a recognizable way, then the remaining 90 percent is composed of comings-and-goings unfamiliar and strange to many readers, particularly as they continuously interrupt the flow of that 10 percent of realism. The fantastical ‘Circe’ challenges readers at every turn, disorienting them and enforcing the need for careful delineation of the ‘real’ and the ‘fantastic’ (or ‘dream-like’) as well as consideration of the potential symbolic importance of each and every moment. It’s an episode that requires careful and, ideally, slow reading to interpret.

In addition to fantastic scenes, ‘Circe’ challenges readers and encourages mental gymnastics through its unique approach to characters and crowd-formation. The ‘characters’ themselves may serve as startling elements of the text, as most novel readers wouldn’t be accustomed to encountering several inanimate objects that speak, including not only the completely inanimate Bellhanger (*U* 15.1468) but also the ‘inanimate’ but partially-human Kisses (*U* 15.1271-6), who, along with other objects floating through the episode, speak to or interact with Bloom and the crowds gathering in the alternate-reality Nighttown occurring inside Bloom’s head (or inside the novel’s own subconscious). Adding to the confusion of the episode

is the sheer number of ‘characters’ who appear alongside many others in the crowds that populate ‘Circe.’ At one point the Lord Mayor of Dublin announces that Bloom’s speech will be printed at the expense of the “ratepayers,” all while “*Several wellknown burgesses, city magnates and freemen of the city shake hands with Bloom and congratulate him*” (U 15.1376-84). Shortly thereafter, a large crowd appears with a streamer bearing “*the legends Cead Mile Failte and Mah Ttob Melek Israel*,” and this crowd includes John Howard Parnell, the mayors of Limerick, Galway, Sligo, and Waterford, sirdars, grandees, and maharajahs, and many more, all in just over 50 lines of text (U 15.1398-1449). More and more characters crowd the scene intermittently, whether through their silent appearance via stage directions or through their vocal contributions; all in all, as Eric Bulson’s *Ulysses by Numbers* reveals, ‘Circe’ parades before us 445 characters (349 of which are unique to the episode, including inanimate objects).^{cclviii} These massive crowds are difficult to conceptualize in a normal reading, particularly when concentrated in one episode. While they do create a better sense of “crowdedness” in the episode, they also challenge our attention and our ability to create a character ‘community’ or map in our heads as we read – for how many readers remember who Biddy the Clap (U 15.4438), Sawhimbefore (U 15.4340), or “A Rough” (U 15.4521) are by the end of the novel? The strange and overcrowded ‘Circe’ uses the unfamiliar and unexpected to slow readers and push them to exercise their minds in new ways.

Not only is ‘Circe’ confounding because of its ‘plot’ and characters, but it also contains quite a few foreign words to increase the sense of the unknown: 510, in fact, from 13 different languages. Considering episode length alongside foreign word count, ‘Circe’ is the third most ‘foreign’ episode in *Ulysses* (1.4 percent foreign words, averaging 3.6 words per page), after ‘Proteus’ (3.8 percent, averaging 17.5 words per page) and ‘Scylla and Charybdis’ (1.72 percent,

averaging 7.4 words per page). More notable than this total word count, though, is the concentration of these foreign words. While the average number of foreign words per page in ‘Circe’ is far below that of ‘Proteus’ (and about half that of ‘Scylla and Charybdis’), many of the foreign words in ‘Circe’ (at least 276; see Figure 2a) are clustered together, occurring in longer phrases, sentences, and sometimes entire

conversations than the foreign-word phrases of much of the rest of the novel (for this count, I have included any groupings and sentences of more than three words). Professor Maginni, for example, as the dance instructor of the episode, speaks several sentences-worth of French commands (*U* 15.4045-4104). The Hobgoblin,

“jaws chattering,” cries “*Il vient! C’est moi! L’homme qui rit! L’homme primigène!...Sieurs et dames, faites vos jeux!...Les jeux sont faits!...Rien va plus!*” before “spring[ing] off into vacuum” (*U* 15.2159-64). Stephen himself utters several complete sentences in other languages (often French), such as his “*Jetez la gourme, Faut que jeunesse se passe*” (*U* 15.2094-5). As ‘Circe’ stretches the bounds of the novel and of realism, foreign language stretches to carve out a larger linguistic space with every occurrence. The concentration of words per foreign language encounter may serve as a mental ‘stop light’ as opposed to the speed bumps of earlier, shorter foreign phrases; if readers encounter more than a few foreign words at a time, it’s more difficult for them to skip or gloss over the words to get to the more familiar English text. ‘Circe’ allows foreign language users to speak for longer periods of time, making the multilingualism of the rest of *Ulysses* seem comparatively normal. Kiberd describes ‘Circe’ as “the ‘scapegoat’ episode of

Ulysses, whose monstrosity exists to make the rest of the book look more normal,” and foreign language use in the episode follows this pattern.^{cclix} One phrase even stretches the bounds of ‘recognizability’ and ‘normality’ within foreign language: “sgeul i mbarr bata coisde gan capall” is, in fact, garbled Irish – recognizable, but distorted (*U* 15.1771-2).^{cclx} This is yet another version of the exaggeration and transformation that frequents ‘Circe,’ a moment when foreign language joins the play and hints towards what Joyce will do with language in *Finnegans Wake*. ‘Unexpected’ elements of *Ulysses*, like the peculiarity of ‘Circe’ and the foreign language use, act as baffling elements, pushing readers to read differently – to pay closer attention. Whether or not Joyce intended such a thing, the novel nevertheless *does this to the reader*, training their minds into a heightened awareness while reading by virtue of the slowness and neural activation triggered by the frequency of unexpected and unfamiliar elements.

But why should we, as Joyceans and modern-day readers, recognize and invite disorientation? After all, popular culture regularly teases fans of *Ulysses* – and the book itself – for the novel’s notorious and, some lay readers argue, unnecessary, difficulty. The novel has gained an alternate life through the tweets, memes, and comics that make fun of it. Even linguistic “play,” and the use of unfamiliar words, in *any* novel or genre is made fun of by lay readers (such as in the xkcd comic graph illustrating that the higher the “made up” word count of fantasy novels, the lower the probability that the book is good).^{cclxi} And yet, *Ulysses* continues to draw readers, even outside of academia’s enclave. Academics are highly aware of how difficult this novel is – but they are, after all, the experts, elucidating various interpretations, finding new sources for Joyce’s work, and identifying how the novel reflects the values and debates of various social and political issues. All these scholarly contributions are important. Without such interpretive, supplementary materials, many readers would struggle with the novel even more than they already

do, and Joycean scholarship and debates, just as the many other literary and humanistic debates still alive in academia, encourage the discussion and exploration of works of art that mean something to us – works that have already altered the way we read books and understand our world. However, even experts sometimes need to step back and think about what they may not recognize in their objects of study and their effects on those outside the academy. After all, as Walter Slatoff asserts,

One feels a little foolish having to begin by insisting that works of literature exist, in part, at least, to be read, that we do in fact read them, and that it is worth thinking about what happens when we do...Equally obvious, perhaps, is the observation that works of literature are important and worthy of study essentially because they can be read and can engender responses in human beings.^{cclxii}

Moments of unfamiliarity in the novel (foreign words, startling moments like those in ‘Circe,’ and more) may have become familiar to scholars through each re-reading and study, but quantitative study helps us step far enough away from the novel to *re*-identify these moments and rhythms from a reader-centered perspective. Discovering that there are 2,525 foreign words and 25 non-English languages in *Ulysses* helps us take a moment to consider how we have typically viewed the novel, whether as readers or scholars. If we see evidence of so many foreign words, we can begin to question why we did or did not recognize the extent of Joyce’s multilingualism and to understand both our experience and the ways that the text can “*bring about* a standpoint from which the reader will be able to view things that would never have come into focus as long as his own habitual dispositions were determining his orientation.”^{cclxiii} This sort of “shaking up” is, after all, a commonly-accepted trend in modernist literature, which explores questions of ‘reality’ and life more generally through a multiplicity of new perspectives. Counting can assist readers in recalibrating their understanding of *Ulysses*. Most generally know that Joyce’s work is multilingual, but they may not know an accurate accounting of foreign words in his novels and the effects that

their frequency can have. Perhaps they should; recognizing the frequency of potentially disorienting words can encourage readers not only to refine their conception of Joyce's multilingualism but also to contemplate *how* we read.

The many “difficult” elements of *Ulysses* subtly train our minds to work differently post-*Ulysses*. This training can even be carried into texts more commonly considered to be ‘fun’ reading. Fantasy novels, for example, such as J.R.R. Tolkien’s *The Lord of the Rings* and the novels of the extraordinary world-building authors who followed him, regularly create either entirely new languages or, in the absence of that, a variety of new terms to flesh out a world separate from our own. The training of *Ulysses* can help readers approach *any* text differently, with a heightened awareness of how our brains work when encountering each new, unfamiliar element. Even within the more academic Joyce community, it’s clear how understanding the ways *Ulysses* teaches us to read differently can train us to appreciate all of Joyce’s work in new ways. Many Joyce scholars and lay readers alike participate in *Finnegans Wake* reading groups, where participants read aloud and pick apart every sentence, phrase, and almost every word, using the group dynamic to create interesting and collaborative interpretations. The groups create a community of readers who can identify what stands out *to them* and use that to understand not only the book itself, but also how it *affects* them. Reading *Finnegans Wake* in such groups is often about following the flow of the mind, allowing any associations, trivial or otherwise, to interact with the associations of others. It’s the very linguistic play, the unfamiliar quality of the language in *Finnegans Wake*, that allows readers to engage with it so. The extreme heterogeneity and unfamiliarity of Joyce’s language in his final novel pushes readers so far that such reading groups are a commonly accepted reading practice for new and experienced readers alike. Rather than encountering only foreign words interspersed with English, readers stumble over ‘English’

and foreign words alike that have been so altered that our minds often do not immediately recognize them. The slower and more active neural processing initiated by unfamiliar words is extended in *Finnegans Wake*, pushed to the limits of recognizability while creating space for imaginative play. *Ulysses*, more easily comprehensible, trains us to read similarly through its foreign words and Joyce's increased representation of the strange and unfamiliar, acting as impetus for allowing the brain to *work harder* and *slow down*, as it should, perhaps, do more often.

^{ccx} Linati Schema reproduced in Ellmann, Richard, *Ulysses on the Liffey* (Oxford: Oxford University Press, 1972), 187; Late-stage additions as discussed in Groden Michael, *Ulysses in Progress* (Princeton: Princeton University Press, 1977).

^{ccxi} Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 4.

^{ccxii} Slote, Sam, "Introduction," *Ulysses*, 3rd edition (Richmond, UK: Alma Classics, 2017), v.

^{ccxiii} Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 1.

^{ccxiv} Williams, Raymond, *Politics and Letters* (London: Verso, 1981), 341.

^{ccxv} Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 2.

^{ccxvi} Wimsatt, W.K. and Monroe C. Beardsley, *The Verbal Icon* (Lexington, KY: University Press of Kentucky, 1982), 21.

^{ccxvii} Fish, Stanley, "Literature in the Reader: Affective Stylistics," *New Literary History* 2, no. 1 (1970), 140.

^{ccxviii} *Ibid.*, 123.

^{ccxix} *Ibid.*, 125; Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 22.

^{ccxx} *Ibid.*, 21.

^{ccxxi} Hoover, David L., "Quantitative Analysis and Literary Studies," *A Companion to Digital Literary Studies* (Malden, MA: Blackwell Publications, 2007), 518.

^{ccxxii} Hoover, David L., "Quantitative Analysis and Literary Studies," *A Companion to Digital Literary Studies* (Malden, MA: Blackwell Publications, 2007), 531-2.

^{ccxxiii} Da, Nan Z., "The Digital Humanities Debacle: Computational methods repeatedly come up short," *The Chronicle of Higher Education*, March 27, 2019, <https://www.chronicle.com/article/the-digital-humanities-debacle/>.

^{ccxxiv} *Ibid.*

^{ccxxv} *Ibid.*

^{ccxxvi} Hoover, David L., "Quantitative Analysis and Literary Studies," *A Companion to Digital Literary Studies* (Malden, MA: Blackwell Publications, 2007), 519.

^{ccxxvii} Moretti, Franco, *Distant Reading* (London: Verso, 2013); Underwood, Ted, *Distant Horizons: Digital Evidence and Literary Change* (Chicago: The University of Chicago Press, 2019).

^{ccxxviii} Da, Nan Z., "The Digital Humanities Debacle: Computational methods repeatedly come up short," *The Chronicle of Higher Education*, March 27, 2019, <https://www.chronicle.com/article/the-digital-humanities-debacle/>.

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- ccxxxi *Cognitive Joyce*, ed. Sylvain Belluc and Valérie Bénéjam (Cham, Switzerland: Palgrave Macmillan, 2018).
- ccxxxii Plock, Vike Martina, *Joyce, Medicine, and Modernity* (Gainesville: University Press of Florida, 2010); Jandial, Gur Pyari, "A Neurotheological Approach to Understanding James Joyce's Concept of Epiphany and Related States of Wajad and Turiya with Some Reflections on the Radhasoami Faith," *Consciousness, Literature and the Arts* 15 (2): 1-13; Kager, Maria, "Wonderful Vocables: Joyce and the Neurolinguistics of Language Talent," *A Long the Krommerun: European Joyce Studies* 24, ed. Onno Rutger Kusters, Tim Conley, and Peter Jan de Voogd (Leiden, Netherlands: Brill/Rodopi, 2016), 105-18.
- ccxxxiii Williams, Raymond, *Politics and Letters* (London: Verso, 1981), 341.; Sopcak, Paul, "'Creation from nothing': a foregrounding study of James Joyce's drafts for *Ulysses*," *Language and Literature* 16, no.2 (2007).
- ccxxxiv Juphard, Alexandra, Juan R. Vidal, Marcela Perrone-Bertolotti, Lorella Minotti, Philippe Kahane, Jean-Philippe Lachaux, and Monic Baciú, "Direct Evidence for Two different Neural Mechanisms for Reading Familiar and Unfamiliar Words: An Intra-Cerebral EEG Study," *Frontiers in Human Neuroscience* 5 (2011), 1; *Ibid.*, 9.
- ccxxxv Ischebeck, Anja, Peter Indefrey, Nobuo Usui, Izuru Nose, Frauke Hellwig, Masato Taira, "Reading in a regular orthography: an fMRI study investigating the role of visual familiarity," *J Cogn Neurosci* 16, no.5 (2004).
- ccxxxvi Schuster, Sarah, Stefan Hawelka, Florian Hutzler, Martin Kronbichler, and Fabio Richlan, "Words in Context: The Effects of Length, Frequency, and Predictability on Brain Responses During Natural Reading," *Cerebral Cortex* 26, no. 10 (2016), 3889.
- ccxxxvii Just, Marcel Adam, Patricia A. Carpenter, Timothy A. Keller, William F. Eddy, and Keith R. Thulborn, "Brain Activation Modulated by Sentence Comprehension," *Science* 274, no. 5284 (1996).
- ccxxxviii Medieval Christian exegetes, for example, "tended to regard 25, the square of 5, as the perfection of the 5 senses. Alternately, they explained it as $6 \times (4+1)$, which meant: 'good works on the basis of the 4 Gospels and the faith in one God.' When presented as $3 \times 8 + 1$, it was interpreted as the sign of the hope for resurrection, which is realized through faith in the 1 God who manifests himself as the Trinity." (From Annemarie Schimmel's *The Mystery of Numbers* (Oxford: Oxford University Press, 1993), 237.) While I'm certain others could use these numbers and various historical numerological beliefs to make an interesting argument about foreign words in *Ulysses* (especially given Joyce's interest in numbers), I will admit that my interest lies elsewhere, focusing on reader-effects rather than the symbolism of numbers.
- ccxxxix Dunning, David, Kerri Johnson, Joyce Ehrlinger, and Justin Kruger, "Why People Fail to Recognize their own Incompetence," *Current Directions in Psychological Science* 12, no.3 (2003), 83.
- ccxl *Ibid.*
- ccxli Kruger, Justin and David Dunning, "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments," *Journal of Personality and Social Psychology* 77, no.6 (1999), 1121.
- ccxlii Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 30.
- ccxlili *Ibid.*, 7.
- ccxliv *Ibid.*
- ccxlv *Ibid.*, 216.
- ccxlvi *Ibid.*, 219.
- ccxlvii Edmund Sanford, as quoted in Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 217; *Ibid.*, 218.
- ccxlviii *Ibid.*, 48.
- ccxlix Williams, Raymond, *Politics and Letters* (London: Verso, 1981), 341.
- cccl Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 21.
- cccli *Ibid.*
- ccclii *Ibid.*

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- ccliii Diamond, Bruce J., Gregory M. Shreve, Alyssa Golden, and Valkiria Durán-Narucki, "Processing Speed, Switching and Cognitive Control in the Bilingual Brain," *The Development of Translation Competence: Theories and Methodologies from Psycholinguistics and Cognitive Science*, ed. John W. Schwieter and Aline Ferreira (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014).
- ccliv Gross, Megan C., Eva Lopez, Milijana Buac, and Margarita Kaushanskaya, "Processing of code-switched sentences by bilingual children: Cognitive and linguistic predictors," *Cognitive Development* 52 (2019).
- cclv *Ibid.*, 22.
- cclvi Kiberd, Declan, *Ulysses and Us: The Art of Everyday Life in Joyce's Masterpiece*, (New York: W. W. Norton & Company, 2009), 226.
- cclvii Kenner, Hugh, "Circe," *Ulysses: Critical Essays*, ed. Clive Hart and David Hayman (Berkeley: University of California Press, 1974), 347.
- cclviii These and other character counts can be found in Eric Bulson's *Ulysses by Numbers* (New York: Columbia University Press, 2020).
- cclix Kiberd, Declan, *Ulysses and Us: The Art of Everyday Life in Joyce's Masterpiece*, (New York: W. W. Norton & Company, 2009), 229.
- cclx Brendan O Hehir gives the original Irish as: "sgeul/sgéal i mbarr bata cóisde gan capall" (translation: "a pointless tale (lit., 'tale in the top of a stick') is a horseless coach") (from *A Gaelic Lexicon for Finnegans Wake and Glossary for Joyce's Other Works*, (Berkeley, University of California Press, 1967), 350).
- cclxi Munroe, Randal, "Fiction Rule of Thumb," *xkcd.com*, <https://xkcd.com/483/>.
- cclxii Slatoff, Walter, *With Respect to Readers: Dimensions of Literary Response* (Ithaca: Cornell University Press, 1970), 3.
- cclxiii Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 35.

Conclusion

2,525 is just a number; on its own, it doesn't *mean* much. 2,525 foreign words, from 25 different foreign languages, within the confines of a single novel, on the other hand, are more notable. Knowing this number – and its breakdown within episodes and by character use – reminds readers that Joyce toed the definitional line of “English-language novel” frequently enough to obscure any hope of an easy, shared code between author and reader, English-speaking or not. As I have shown, many scholars have explored Joyce's multilingualism and the meaning of his foreign language use, and such scholarship has provided many valuable insights into (and possible meanings of) Joyce's diverse language. Quantitative study, however, can encourage consideration not just of the text or the man, but of the reader, because knowing word frequency helps us visualize *impact*. Wolfgang Iser asserts that in literary interpretation, author- or text-focused analysis “would only be conclusive if the relationship were that of transmitter and receiver, for this would presuppose a common code, ensuring accurate communication.”^{cclxiv} *Ulysses* contains such a variety of codes, through both the 25 foreign languages mentioned and its range of general linguistic play, that it exaggerates the problem of that elusive ‘common code.’ Indeed, Iser asserts that for *all* literary works,

there is no common code – at best one could say that a common code may arise in the course of the process. Starting with this assumption, we must search for structures that will enable us to describe basic conditions of interaction, for only then shall we be able to gain some insight into the potential effects inherent in the work.^{cclxv}

Foreign words are one such structure, and knowing how many there are, and where they exist, reveals that the novel is just multilingual enough to prevent complete (unaided) understanding of it by any single reader; the exceptionally hybrid language of *Ulysses* can't be the mother tongue of anyone, multilingual or not. Readers experience some level of estrangement from the text, and

counting foreign words helps us see how and where this distance is created between reader and text.

This work has approached the idea of the foreign language of *Ulysses* as enacting a sort of *mimesis*, but if no reader could possibly share the playful and widely inclusive language of this novel *in totum*, then we cannot look for a daily-life sort of realism. Instead, I have used this work to look for ways that foreign words, acting as the ‘disunities’ emphasized by Andrew Gibson, can supplement the creation of *Ulysses*’s unique reality. As I explored in the first two chapters, seeing the breakdown of foreign word counts between episodes and characters challenges readers to question their assumptions about foreign language in the novel and how those expectations may or may not be supported by the data. Everyone knows *Ulysses* is multilingual – many scholars have used qualitative study to explore this linguistic hybridity. Extending such scholarly work, quantitative work reveals just how multilingual *Ulysses* is, and the proportions of foreign words per episode reveal a consistency of foreign word frequency that may otherwise be overlooked. A study of individual characters’ foreign language use also reveals the ways these words can supplement characterization or challenge our traditional views of these by-now-familiar Dubliners. Literary data can provide tools for disproving or affirming our literary assumptions, helping us to *see* the things we *sense* in the novel. We are not, in other words, looking at the numbers *for themselves*, but for what they reveal about the interaction between ourselves and the text.

Quantitative work, then, aside from analyzing the *mimesis* of the novel itself, can also help us to visualize and understand the possible reality (or realities) of reader experience. As explored in chapter three, critical attempts to define meaning in individual works have often been author-centered, focusing on what Nicholas Dames calls “epistemology over affect or

temporality...getting us to *know* something.”^{cclxvi} But if, as Iser points out, the lack of a “common code” between author and reader prevents the existence of a single, perfectly-transmitted meaning, then literary interpretation should consider the role of the reader in the creation of meaning. Stanley Fish, echoing Iser’s description of meaning as a “happening,” argues that “it is the experience of an utterance – *all* of it and not anything that could be said about it, including anything I could say – that *is* its meaning.”^{cclxvii} Reader-focused analysis cannot rely solely on subjective ideas and claims, however; it must instead use Iser’s proposed approach of searching for “structures” that “enable us to describe basic conditions of interaction.”^{cclxviii} Quantitative study can supplement such analysis. Counting the foreign words in *Ulysses* encourages a re-focusing on the experiential nature of meaning-making by highlighting structures whose effects may be missed by a focus on author-centered close reading alone. In this case, foreign words are a useful unit of analysis for their ability to show us, through their numbers (specifically, their ratios, percentages, and so forth), the process of readerly estrangement.

The experiential quality of reading can be studied by observing what Iser calls the “elements of indeterminacy” in the text that “induce [the reader] to participate both in the production and the comprehension of the work’s intention.”^{cclxix} Foreign words are one such “element of indeterminacy,” pushing readers into the discomfort of unfamiliarity over and over throughout the text. Readers participate in the production of meaning no matter how they decide to engage with these foreign words. If they know some of the foreign words already, they bring that knowledge to bear on their interpretation, adding the words’ translational meanings to the context of the novel as a whole. If another reader chooses to ignore or gloss over the words, they maintain that sense of “unknowingness” and participate in the production of a meaning that is

partially defined by its missing pieces. If they instead choose to look up the words' translational meanings, they participate by adding that contextual knowledge to the text's meaning while also adding a sense of distance through the act of turning to outside sources. Readers create meaning through their own unique combination of knowledge and its absence, or, in other words, they create meaning through the process of interaction and their own level of distance from the text. These reader-text interactions create a multitude of possible meanings; there is no singular "truth" for what the foreign words mean in *Ulysses*, just as there is no singular meaning of the novel. Modernist novels often avoid assertions of 'Truth,' approaching reality "by means of numerous subjective impressions received by various individuals," as Erich Auerbach writes of Virginia Woolf's *To the Lighthouse*.^{cclxx} If reality in such novels is dependent upon perspective and psychological experience, then any given novel contains within it a multiplicity of meanings based not only on the psychological experience of the characters, but on the perspectives and experiences of the readers interacting with those characters. Readers participate in the "performance" of reading that Iser claims texts initiate through "intersubjectively verifiable instructions for meaning-production," which "may then lead to a whole variety of different experiences and hence subjective judgments."^{cclxxi} Foreign words similarly initiate one element of the "performance" of *Ulysses* by acting as one of these triggers for meaning-production. It is their "unknowingness" that invites readers to participate in this process, whether through action or inaction.

To initiate the performance of meaning-making, literary works must present attitudes and ideas, but as Iser identifies, "the reader is not expected to accept the attitude offered him, but rather to react to it."^{cclxxii} *Ulysses* is a text that regularly provides such openness to the reader. The novel does not assert meanings for itself, whether as a whole or in its individual words. Not

much is answered conclusively in the novel; it instead provides the reader with a multiplicity of possibilities. The language play (foreign or otherwise) plays an important role in the novel's interpretive freedom, but even the narrative itself is uncertain and leaves the reader with unanswered questions by the end. Although we do receive an answer to the question of whether Molly had an affair, it takes the entire novel for readers to discover the evidence (and confession), and the question of whether Molly had committed adultery before her June 16 assination with Blazes Boylan is never definitively answered. As for the future, Bloom's hedging "Not now" and Molly's remembered "yes I will Yes" in response to Bloom's young proposal are the closest we get to an answer for whether or not they will stay together and maybe even rebuild (*U* 17.2202; *U* 18.1608-9). It's unclear whether Stephen and Bloom will continue to develop their potential symbolic father-son relationship, or even if Stephen will manage to join the ranks of Ireland's artists and scholars. Instead of providing answers, *Ulysses* creates a constant stream of narrative and linguistic stimuli to which readers can react. Readers help create the work of art through their reactions to Bloom, Molly, Stephen, and the rest of the Dubliners engrossed in their June 16 mental and geographical ramblings. Similarly, readers react to the novel's linguistic play to participate in the process of meaning-making.

The possibilities available to readers through their interactions with the text leave them with a job to do throughout their reading: choose their level of engagement and interpret the text accordingly. In doing that work, they engage in the "self-sharpening" process described by Fish.^{cclxxiii} Fish writes that the reader must "observe his own reactions during the process" of reading, and he identifies the "method" of being an "informed reader" as one which "processes its own user, who is also its only instrument. It is self-sharpening and what it sharpens is *you*. In short, it does not organize materials, but transforms minds."^{cclxxiv} Readers both participate in the

production of meaning *with* the text and are altered *by* it. It is difficult work, particularly with a novel like *Ulysses*, which is a text that, in some ways and to some readers, doesn't make sense.

Fish highlights the method of re-focusing on the reader as having an advantage in analyzing such texts, as it has the

ability to deal with sentences (and works) that don't mean anything, in the sense of not making sense. Literature, it is often remarked (either in praise or with contempt) is largely made up of such utterances...In an experiential analysis, the sharp distinction between sense and nonsense, with the attendant value judgements and the talk about truth content, is blurred, because the place where sense is made or not made is the reader's mind rather than the printed page or the space between the covers of a book.^{cclxxv}

Ulysses contains a large share of language play and multilingualism, a bare minimum of "plot," and narrative experimentation that prevents easy comprehensibility for readers. Without much plot, it seems like not much happens, but what *happens* is the experience of the characters – their interpretations and digressions as triggered by real-life experiences and outside stimuli.

Similarly, the meaning of the text is what *happens* when readers encounter the characters' experiences, their thoughts, and the particular linguistic style of any given moment. The meaning of the text, in other words, is a process that happens through the readers' own mental digressions as they engage with the text. To return to foreign words more specifically, the foreign words themselves (individually or altogether) do not contain a single meaning that can be pinned down. The meaning of these words is instead dependent upon readers' inner thoughts and emotional responses to them. Thinking about foreign words encourages consideration of the distance any given reader may experience from the text during their reading; counting helps us see the process of reader-text interaction and the creation of meaning through this interaction.

Perhaps the "meaning," then, of foreign words in *Ulysses* is less about finding one firm *truth* about what they mean and more about exploring the ways they may affect readers and

interact with reader experience to *become* one of many meanings. For literature more generally, perhaps it's time for a return to reader-engaged interpretations, as some scholars are doing in discussions of literature's importance (such as in the *Poetics Today* volume entitled *Knowledge, Understanding, Well-Being: Cognitive Literary Studies*).^{cclxxvi} There is no single "right" answer to what literary works mean. Instead, we can learn more about the possibilities inherent in a text by considering what readers learn and create from a textual experience. Modernist literature in particular lends itself to consideration of reader-experience and the many possible interpretations created through interaction with the texts themselves. After all, as Malcolm Bradbury and James McFarlane put it, modernism is

the art consequent on the dis-establishing of communal reality and conventional notions of causality, on the destruction of traditional notions of the wholeness of individual character, on the linguistic chaos that ensues when public notions of language have been discredited and when all realities have become subjective fictions.^{cclxxvii}

Modernist works challenged traditional modes of thinking and living during the chaotic interwar period, initiating what Keith Oatley, after study of reader responses to Anton Chekhov's "The Lady with the Little Dog," called a process of taking readers "out of themselves, out of their usual ways of being and thinking" and helping them "to loosen up the habitual structures of selfhood."^{cclxxviii} As ideological entrenchment continues in today's national and global cultures, perhaps it's time to revisit modernism from a readerly perspective to understand how new modes of thinking can be triggered. Foreign words are one way that modernist novels like *Ulysses* contribute to the process of disrupting ingrained mental habits. By slowing readers down and increasing brain activity (as explored in chapter three), foreign words have the capacity to change readers in as-yet unexplored ways by removing the comfort of habitual language. Instead of forcing these changes to remain hidden in the realm of private, subjective experience, reader-informed interpretation looks at the seemingly quasi-magical moment of reader-text interaction

and renews awareness of literature's – and words' – ability to impact how we perceive the world once the final pages are turned.

cclxiv Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 21.

cclxv *Ibid.*

cclxvi Dames, Nicholas, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, Oxford University Press, 2007), 37.

cclxvii Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 22; Fish, Stanley, "Literature in the Reader: Affective Stylistics," *New Literary History* 2, no. 1 (1970), 132.

cclxviii Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 21.

cclxix *Ibid.*, 24.

cclxx Auerbach, Erich, *Mimesis: The Representation of Reality in Western Literature*, tr. Willard R. Trask (Princeton: Princeton University Press, 2003), 536.

cclxxi Iser, Wolfgang, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978), 27; *Ibid.*, 25.

cclxxii *Ibid.*, 33.

cclxxiii Fish, Stanley, "Literature in the Reader: Affective Stylistics," *New Literary History* 2, no. 1 (1970), 160-1.

cclxxiv *Ibid.*

cclxxv Fish, Stanley, "Literature in the Reader: Affective Stylistics," *New Literary History* 2, no. 1 (1970), 134.

cclxxvi *Poetics Today* 40, no. 3 (September 2019).

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