Organizing Knowledge: Comparative Structures of Intersubjectivity in Nineteenth-Century
Historical Dictionaries

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Abstract

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Between 1838 and 1857 language scholars throughout Europe were inspired to create a new kind

of dictionary. Deemed historical dictionaries, their projects took an unprecedented leap in style

and scale from earlier forms of lexicography. These lexicographers each sought to compile

historical inventories of their national languages and were inspired by the new scientific

approach of comparative philology. For them, this science promised a means to illuminate

general processes of social change and variation, as well as the linguistic foundations for cultural

and national unity. This study examines two such projects: The German Dictionary, Deutsches

Worterbuch, of the Grimm Brothers, and what became the Oxford English Dictionary. Both

works utilized collaborative models of large-scale, long-term production, yet the content of the

dictionaries would differ in remarkable ways. The German dictionary would be characterized by

its lack of definitions of meaning, its eclectic treatment of entries, rich analytical prose, and self-

referential discourse; whereas the English dictionary would feature succinct, standardized, and

impersonal entries. Using primary source materials, this research investigates why the

dictionaries came to differ. This has been framed with reference to the different social structures in which the relevant philologists (and scientists in general) were embedded in each society at the time. It is argued that the German dictionary reflects romanticist notions of scientific knowledge and its attainment, and the nascent professionalization of German science. The legacy of criticism towards the work showcases how romanticist ideals were unsustainable amidst the continued expansion of the German middle class and increased academic segmentation. British philology was far less professionalized, offering fewer resources alongside fewer boundaries to participation. To smooth over differences in skill and to gain legitimacy from outside owners of resources, the production of English dictionary is characterized by a high degree of standardization and corroboration.Together the dictionaries illuminate an era facing the challenges of democratizing knowledge and its creation. They showcase the social and historical basis for different models of knowledge production, their advantages and limitations, and can provide insights for understanding contemporary trends in scientific collaborations.

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Chapter 1 – Introduction

The early nineteenth century was an era of rapid and drastic social change. The Napoleonic Wars had recently ended, revolutions in France and America were still a recent memory, and global ties were expanding while colonial outposts were acquiring degrees of independence. It was an unprecedented age of information and global connections – general education and literacy rates were higher than ever, new copyright legislation and deregulation of the printing industry allowed texts to be cheaply reproduced and sold on a mass scale, and the rapid expansion of railways facilitated quicker and more frequent travel and postal delivery.

In light of the uncertainty and unexpected outcomes these changes brought about, there was a greater demand to understand the trajectory of these changes and find a sense of continuity and community in an increasingly globalized world. Whereas earlier philosophies often sought to explain social life with reference to assumed characteristics of human nature, a more dynamic science of social life was sought, built on the empirical study of variation and historical change.

The value that the scientific study of social life posed, particularly to the extent it might prove practically useful in maintaining social order and coherence, helped to raise the prestige and institutionalization of science during this time in relation to more established classical forms of education and knowledge authority (Ben-David 1971). However, the practice and professionalization of science would be differently organized and integrated across European societies at the time, thus variably shaping the opportunities and approaches of scientific practice.

It was within this context that comparative philology emerged as a scientific approach to the study of language and predecessor to modern linguistics. It diverged from earlier forms of philology focused on classical literature in that it emphasized a wider spectrum of cultural material, including the modern languages and vernacular, and a narrower unit of analysis – the words themselves. It was thus a science of language rather than the study and appreciation of literature. It was a forerunner of many social sciences and its emphasis on models of change paralleled burgeoning thought in the natural sciences, as well. But, for comparative philologists, the understanding of language was a means, and not an end in itself. Language was thought to represent more than just the spoken or written word, but just what it represented was a topic of

debate amongst European philosophers of the eighteenth century (Aarsleff [1967] 1979). By the early nineteenth century, comparative philology represented a bridging of materialist and idealist ontology into a full-fledged theoretical and methodological paradigm for the study of language. It was primarily an inductively-driven science, emphasizing empirical evidence as a means to identify affinities between nations and among peoples. In this era of heightened nationalism and globalization, the practitioners of comparative philology hoped to illuminate the foundations for cultural unity and divergence, but also, the field held promise for strengthening national bonds and preserving cultural histories while also securing their future. With this potential and within this context, comparative philologists throughout Europe were inspired to create a new and ambitious kind of dictionary that would that would take an historical inventory of a living language.

These "historical dictionaries" took an unprecedented leap in style and scale. Their makers' sought to empirically document the actual usage of words and phrases and their meanings over time, including those long since obsolete. This style was greatly differentiated from earlier traditions in lexicography, where dictionaries, glosses, and vocabularies tended to offer either select lists of "hard words" for educating boys and ladies, or were akin to etiquette books, including only what the lexicographer considered "correct" usage or that of the "best" authors. [1] While some of these earlier forms included examples of word usage from written texts, accurate textual evidence was foundational to the historical dictionary's intent to record and showcase the processes of historical change in a language. It was from this evidence that further information pertaining to sense variation and etymological progression was to be derived.

This dissertation examines two of these dictionaries - the *Deutsche Wörterbuch* and what became the *Oxford English Dictionary*.[2] While both the German and British historical-dictionary makers were disposed towards similar goals and adherents of the same theoretical and methodological tradition in philology – and at a time when it held a certain paradigmatic coherence – as their initial volumes were published, both of the dictionaries would be markedly different in style. The German dictionary offered eclectic, though long-winded and often speculative, narratives on the progression of each word's history, whereas the English dictionary

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[1] For an overview of the history of English lexicography, see Murray (1900), in addition to several of the works compiled in Osselton (1995) – especially essays 1, 3, 11, and 12, as well as Green (1996).

[2] Others include the *Dictionnarie de la Langue française* (aka "*Le Littré*"), the *Woordenboek der Nederlandsche Taal.* All four of these works remain in some form today.

offered succinct, skeletal outlines of information and was the most consistent throughout. (See Osselton [1989] 1995, 2000 and Zgusta 1986, 1991 for comparisons of the differences).

This research seeks to understand, on the one hand, how these ambitious dictionaries were produced in the nineteenth century, but also, why the dictionaries came to differ. I take such stylistic differences to be an outcome of the different sets of actions and organization distinguishing each dictionary's production, and from this, a means for systematically assessing correlative contextual features that would have differentially influenced primary actors.

The German and British cases are both very well documented and offer considerable comparative leverage because each sustained long-term interaction among multiple participants, but are shown to showcase very different forms of organizational coordination, control, and authority. For instance, I have found the German dictionary's making to be a particularly personalized process emphasizing expert sensibility while simultaneously attempting to actively engage the reader's personal reasoning and tacit understanding. Nearly all decision making centered around the unequivocal authority and vision of its initial editor, Jacob Grimm. However, despite this overarching ownership of the project, he offered minimal oversight and would intentionally refrain from offering his contributors concrete instructions or guidance – frequently restating the trust he had in their skills and perception. This contrasts with the depersonalized, even mechanistic principles explicitly extolled in the production of the *OED*. Its making was characterized by standardization and centralized processing of materials, multiple layers of iterative fact-checking and deliberation, and an informal internal hierarchy with meritocratic boundaries.

In researching these questions I have drawn on a wide range of primary and secondary sources pertaining to the dictionaries, the relevant actors, and the different contexts of scientific and philological practice in each society. I have made use of extensive formal and informal correspondence; academic papers and speeches by the relevant lexicographers; word-excerption slips sent in from contributors; drafts, annotations, and final versions of dictionary pages and prefaces; planning materials and proposals; calls for contributors; instructions to contributors; contracts with publishers; newspaper reports and reviews, along with photographs and other miscellany. With these materials I was able to reconstruct a sequential and contextual narrative of each dictionary's making to get a sense of different actors' intentions, day-to-day operations, interpersonal interactions, conflicts, and decision-making. Such micro-level narratives bring to

life the situational enactment of stylistic difference, as derived from different interactive and contextual realities. By way of comparison, differences between the cases can be emphasized and showcase how their paths of production were differently channeled in accordance with different forms and degrees of resistance and assistance – including the subtle social repertoires that shaped the course of interactions. This method follows roughly from the logic of Biernacki's (2005) "problem solving model" in bridging the macro context to the micro level of action and organization.

Although this research deals generally with aspects of organization and authority, it has been conducted largely in dialog with historical and social studies of science. Chapter two will further emphasize why the dictionaries should be rightfully viewed as scientific undertakings, rather than purely literary or humanistic endeavors, and how they fit within the general purview of nineteenth-century science. In fact, the dictionaries illuminate an era of nascent professionalization, when scientific practice began to be organized on a large scale as a functional unit of modern society, while contending with observational and subjective disparities across diverse individuals. The projects thus straddle an historical juncture of uncertainty and contingency in the envisioning and trialing of different models for scientific knowledge production, and at a time when the status of science as a legitimate means of attaining knowledge and professing truth was less established and variable across societies. The differences across the dictionaries and their production reveal alternate models for scientific knowledge production in addition to subtle differences in knowledge making that persist under the overarching rubric of contemporary science.

Although each of these models was displaced by twentieth-century institutions of knowledge production bounded within disciplinary specialties and academic spheres, in more recent times, particularly with the new collaborative possibilities facilitated by the internet, knowledge production is taking on an increasingly diverse array of forms. We can see this in the growth of more cross-disciplinary initiatives, in conjunction with varied administrative and policy channels, in citizen science movements and public collaborations, "crowdsourcing" communities, and even the algorithms passively sorting and synthesizing abundant information. With this dissertation I aim to encourage further consideration, classification, and comparison of knowledge production in its varied forms, their strengths and limitations, and the epistemological assumptions and socio-structural forces paired with them.

In the following pages I will provide an overview of the field of comparative philology and its emergence in nineteenth century Western Europe. I will argue for understanding the field in the context of a second scientific revolution, and therefore, for understanding the dictionary projects as examples of large-scale scientific research. Unfortunately, some analyses in the history and sociology of science disregard or overlook explicitly scientific approaches to linguistic and literary study from the eighteenth and nineteenth centuries – interpreting them as indicative of cultural lag or a time when pure science was not yet disentangled from non-science (Crosland [1983] 1995). However, I would argue that such views fail to recognize the status of comparative philology and its integration within the scientific sphere of nineteenth-century Western Europe. In fact, such disregard risks overlooking the leading role the discipline played as one of the most highly developed models of scientific research at the time – as well as its standing as an early social science with an empirical view to the understanding of social life, how it captivated the public with its potential to address questions of social change, order, and diversity, and therefore, why it motivated research projects as grand in scale as the historical dictionaries.

Chapter three will offer an historical overview of the German dictionary begun under the leadership Jacob and Wilhelm Grimm. Along with some bibliographic background pertaining to the main actors involved in the project, this chapter addresses how the project came about, its initial planning and goals, how production proceeded, the style of the dictionary's entries, and its public reception and legacy. Chapter four will follow with a contextual analysis of the dictionary, paying attention to the institutions and ideas shaping scientific knowledge production at the time in Germany, particularly its degree of autonomy and professionalization and the terms of legitimacy and authority set out in this context. History and analysis on the German dictionary will pertain only to the endeavor over the course of 1838-1863, and particularly to the work of Jacob Grimm, who was the sole editor behind the volumes covering A, B, C, and E; he also wrote a lengthy preface responding to critics and explaining his decisions over the course of the project. Jacob died partway through the entries for F, and his brother Wilhelm only edited the words under D.

Chapters five and six deal with the English dictionary but mirror the previous two chapters in their presentation of history and analysis. The large number of actors involved, time

span covered, and sheer complexities of the interrelationships involved in this dictionary's making and its erratic development will bear on the heftiness of these chapters.

Chapter seven reiterates the differences and their affinities to the social contexts channeling their emergence and resisting other forms. I emphasize that such differences in knowledge production and its outcomes should not to be understood as inherently good or bad or to be avoided. There are vestiges of each of these forms in present day variations of scientific practice and I outline different strengths and limitations to be taken into account. Understanding the relationship between patterns in context, organization, and content, rather than assuming scientific practice as a singular activity or infinitely variable on localized contingencies, can help us to more actively direct knowledge production processes. This can aid in achieving a balance across particular goals – such as inclusiveness, precision, or innovation.

Chapter 2 - Science, Philology, and the Evolution of Lexicography

In his 1784 essay "What is Enlightenment," the German philosopher Immanuel Kant famously declares it as "man's emergence from his self-imposed immaturity. Immaturity is the inability to use one's understanding without guidance from another. ... *Sapere Aude*! 'Have courage to use your own understanding!' – that is the motto of enlightenment" (Kant [1784] 1983:41).

Although it was written around a time many historians associate with the close of the Enlightenment-era, following from its analogy of the shift from adolescence to adulthood, the essay is rather forward looking and reflects Kant's contemporary period at the close of the 18th century – particularly the perception that its social order was undergoing a challenging transition, was facing a crisis of authority, and was deeply ambivalent about the future. The events following the French Revolution would further highlight its relevance.

In challenging his readers to dare to know for themselves, Kant aims to shift the locus of knowledge to the individual, undermining not only traditional monarchies and the authority of organized religion, but even earlier Enlightenment-era philosophies that extended from assumptions about an absolute and universal nature. Just prior to Kant, Hume began to question: How were the philosophic assumptions being made about nature also not arbitrary? Even if absolute laws of nature existed, could absolute objective knowledge of them ever be attained or proven in light of the subjective and fallible disposition of the individual philosopher and investigator? Hume's doubts seemed to pose a deadlock: How do we know what we know or accept something as true? It is the correlate to questions of political authority and obedience. Rather than submitting to a dead-end, Kant's views in the Enlightenment essay and other works helped to articulate and give shape to a new beginning already underway.

In the mid-eighteenth century new German universities emerged that ran counter to the classical, erudite traditions and rote pedagogy of higher education in Europe, and instead emphasized the active production of original research. Among the first were Halle in Prussia, Erlangen in Bayreuth, and Göttingen in Hanover (McClelland 1980). The changes were most apparent in the philosophical faculties, which had always been peripheral to the higher status faculties of theology, law, and medicine, and they encompassed a wide range of subject areas and appealed to an expanding German middle-class (*Bürgertum*) (Ben-David 1971; Farrar 1976; McClelland 1980). For example, the philosophical faculty of mid-eighteenth century Göttingen.

offered lectures in 'empirical psychology,' the law of nature, politics, physics, natural history, pure and applied mathematics (including surveying, military and civilian architecture, etc.), history and its 'auxiliary sciences' such as geography, diplomatics, science, art, and ancient and modern languages. (McClelland 1980:42).

Furthermore, such institutes were distinguished by their attention to the modern era, their acceptance of the German vernacular in their instruction (as opposed to Latin), and establishment of the academic seminar – Göttingen's *Seminarium philologicum* being among the most imitated (Turner 1983). The seminar was particularly significant in its emphasis on training advanced students in inductive methodology and the production of original research.

These developments foreshadowed a profound shift in the university's function – from that of dispensing knowledge, to training students in the methods of knowledge production (McClelland 1980; Farrar 1976; Turner 1983). Rather than reproducing functionaries of the status quo, the university was now positioned as a catalyst of change – a source of new ideas and knowledge to steer society towards ends yet unknown. This function of the university was further advocated in popular German thought from the turn of the nineteenth-century, and its prevalence actively accelerated by thinkers like Schelling and the Humboldt brothers, who were instrumental in the founding of the University of Berlin (now Humboldt University of Berlin), founded in 1810 by the philologist Wilhelm von Humboldt, and the University of Bonn, founded in 1818 (see Ben-David & Zloczower 1965; Farrar 1976; Knight 1976; McClelland 1980; Gajdenko 1981; and Heidelberger 1981 for an overview of the linkages between German philosophy and educational reform at the turn of the nineteenth century). The traditional universities, which had been numerously interspersed throughout the fractured German regions, became less popular and saw their numbers of graduates decline – many were later closed during the French occupation. The German model would ultimately inspire similar models around the world, including the nineteenth century universities founded in British industrial cities, as well as America's earliest universities.

The new universities were instrumental in ushering in what Samuel Taylor Coleridge, and later, Thomas Kuhn (1961), deemed the "second scientific revolution." This was characterized by the expansion of scientific thought into wide and diverse areas, and in fact, the contemporary German word for science, *Wissenschaft,* came into use during this time unbound to particular subject-matter, but as a general idea that knowledge needed to be *produced* as part

of an on-going process grounded in empirical research, rather than *deduced* through a logic extending from assumed constants (Farrar 1976; Knight 1976; and McClelland 1980).

Additionally, this educational emphasis on creative discovery paralleled a metaphysical view of the natural world as involved in a continuously unfolding process and across renewed and emergent study in areas of ecology, anatomy, biology, natural history, language, literature, politics, art, architecture, and geography, particular attention was drawn to historical development and interdependencies. This presented a challenge to rigid classificatory schemes and the Newtonian view of a clockwork universe mechanically and repetitiously reproducing itself (see, for example, Mead 1936, Foucault [1966] 1970, Craig 1987). Moreover, this metaphysical shift demanded an epistemological shift: "[k]nowledge, like the world, was coming to be seen as caught in the process of development" (McClelland 1980).

Several scholars have argued that this rethinking of the natural world was in tandem with, if not preceded by, similar changes in how the social world was perceived, and it was initially humanistic investigations into law, language, and history that dominated the seminars at the new universities (Ben-David 1971; Turner 1981). In particular, a new form of *Sprachwissenschaft* (also known as comparative philology, linguistic philology, and later, linguistics) advanced rapidly in the beginning of the nineteenth-century.

The Emergence of Comparative Philology

The comparative philology of the nineteenth century set itself apart from a classical tradition in philology that emphasized broad literary scholarship, critique, and schooling in good taste. In fact, the *Oxford English Dictionary* itself tells us that the term "philology" is still more commonly used in that original sense, but in the nineteenth century another definition took prominence: [3]

> **3.** The branch of knowledge that deals with the structure, historical development, and relationships of languages or language families; the historical study of the phonology and morphology of languages; historical linguistics. See also *comparative philology* at COMPARATIVE

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[3] A footnote with this definition mentions that: "[t]his sense has never been current in the United States, and is increasingly rare in British use. *Linguistics* is now the more usual term for the study of the structure of language, and (often with qualifying adjective, as *historical*, *comparative*, etc.) has generally replaced *philology*."

Thus, this form of philology was distinguished from its literature-oriented predecessor in that it was primarily concerned with language, its component parts and dynamics, studied through historical and comparative methods.[4] This form of study can be traced to developments in the eighteenth century, became established and popularized in the nineteenth, and paved the way for modern linguistics.

What is not conveyed in the definition above is that for early comparative philologists the understanding of language was a means, and not an end in itself. Language was thought to represent more than just the spoken or written word, but just what it represented was a topic of debate amongst materialist and idealist European philosophers of the eighteenth and nineteenth centuries (Aarsleff [1967] 1979). On the one hand, Enlightenment era thinking inspired a kind of utilitarian metaphysics in which language became a primary object of analysis. In this pursuit, etymological language study supported a materialist philosophy viewing language as an expression of primeval sensations and perceptions as the basis for all human thought and the constitution of the mind. Therefore, it was believed that inquiries into the origins of language could illuminate an underlying logic structuring human thought. This philosophical approach would dominate British linguistic studies for several decades through the ideas and etymological work of John Horne Tooke – who followed roughly in the tradition of the French Enlightenment thinker Condillac, as well as John Locke and the Universal Grammarians before him (Aarsleff [1967] 1979). Tooke's approach assumed that over time the natural logic embedded in language becomes obscured by accumulated "abbreviations" of meaning – or "corruption" as Locke called it. By stripping language down to nouns and verbs, and isolating shared stems within and across languages, it was believed that the basic mental categories of human reasoning would reveal themselves, and be based in sensations that were externally generated rather than inherent to the mind itself.

Tooke's etymological approach thus brought a deconstructivist and analytical aspect to philology that concerned itself primarily with *words* as the unit of analysis, rather than the generalized literary scholarship that characterized classical philology. However, his *a priori* style

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[4] Notably, the two meanings are not entirely differentiated, and by the close of the nineteenth century the analytically-grounded methods of linguistic comparative philology came to apply to a wide range of cultural artifacts. This can be evidenced in an 1892 *Athenæum* quotation cited in the *OED* and pertaining to the first definition of philology: '[t]he fact that philology is not a mere matter of grammar, but is in the largest sense a master-science, whose duty is to present to us the whole of ancient life, and to give archæology its just place by the side of literature.'

was still criticized as considerably unsystematic, speculative, and selective (Aarsleff [1967] 1979). Nevertheless, from his 1786 publication of *Diversions of Purley*, Tooke's approach and the philosophy it represented would not be seriously challenged in Britain until the 1830s, and even then challengers would be met with strong opposition. Aarsleff ([1967] 1979) attributes Tooke's persistent influence in Britain to the success of Newtonian science and the preeminence of utilitarian philosophy there, with which "his age was eagerly trying to convert mental philosophy into a branch of natural philosophy, encouraged by the simple schemata of Hartley's association of ideas, Priestley's and Bentham's pleasure-pain principle, and etymology with its exploration of the 'causes of language'" (p. 88).

Despite Tooke's long-standing prominence in Britain, coexisting ideas challenged this tradition of language study both philosophically and epistemologically. These would feed into the emergent comparative philology, which would emphasize a new approach to language study, concerned itself with different subject matter, and while not explicitly philosophical, would be ontologically separated from strict materialism.

Some emerging challengers to a materialist perspective included the British scholars James Harris, Lord Monboddo, James Beattie, and Thomas Reid. Like Condillac and Tooke, these thinkers were faithful to the idea of a universal grammar and sought to find general relations between language and the mind, but instead of infusing this view with the quest for a material basis of reason, they were more inclined towards an idealist model – viewing thought as preceding language, along with other forms of art and culture, each as an active expression of an innate human spirit. (See Aarsleff [1967] 1979, and Rocher 1980 for a more thorough treatment of this perspective). While their claims may have been usurped by the utilitarian tradition in their native Britain, such ideas were viewed favorably on the European continent, Germany in particular, where Mondobbo's work was heralded by Johann Gottfried Herder (who wrote the introduction to the 1785 German translation of Mondobbo's *Of the Origin and Progress of Language*), and became instilled in growing nationalist and romanticist movements.

For the study of language this implied shifting focus to variation and context, rather than philosophical absolutes. It was still possible to assume a common linguistic source, but attention turned towards meaningful divergence. With this, language study moved away from addressing metaphysical questions and linguistic origins, and became more concerned with macro-level phenomena and linguistic processes. Johann Davis Michaelis and Herder in Germany, along with

Britain's Sir William Jones in India, were influential in leading this shift (Aarsleff [1967] 1979), which resonated with German university reforms towards seminar learning and field research, as well as the growing appeal of Kantian ideas and Schelling's *Naturphilosophie* towards the end of the eighteenth century.

While both materialist and idealist presumptions would still leave their trace, as it progressed, this form of linguistic study sought to divorce itself from methods grounded in philosophical deduction and those which presumed to answer the unanswerable. Thus, the emergent scholars in this tradition placed primacy on inductive reasoning derived from empirical evidence. However, this is not to say that they sought to be atheoretical, unsystematic, or adverse to the culmination and integration of their discoveries. Their view, which would be echoed in scholarship from decades onward, is summed up nicely by Michaelis in his claim that '[l]anguages, generally speaking, would deserve that philosophy should devote a particular science to them; but let not this science, by any means be reduced to a system, till experience had collected and arranged every particular of it' (as cited in Aarsleff [1967] 1979:76).

Collecting and arranging would seem to be the imperative of the early nineteenth-century scholars in this tradition. Such scholarship would be taken up by those learned in a variety of ancient and modern languages and who applied their insights towards devising systematic means for comparison, classification, and the identification of regularities. This includes Friedrich Schlegel, who in his 1808 text, *Über die Sprache und Weisheit der Indier* (On the Language and Wisdom of the Indians), would help pave methodological inroads by drawing attention to what he called 'the internal structure of languages, or comparative grammar,' which he believed 'will lead us to completely new conclusions about the genealogy of languages in the same way in which comparative anatomy has spread light over the natural history of the higher organisms' (as cited in Morpurgo-Davies 1992:68). His systematic comparative methods would further be put to practice by another German, Franz Bopp, in his 1816 text *Über das Conjugationssytem der Sanskritsprache in Vergleichung mit jenem der griechischen, lateinschen, persischen und germanischen Sprache* (On the Conjugation System of Sanskrit in comparison with that of Greek, Latin, Persian and Germanic). Bopp would find much support for his research and secure the new philology "as a respectable branch of learning" (Farrar 1976) at the newly founded University of Berlin – a school established under the reformist vision of another notable German philologist, Wilhelm von Humboldt. The field would also be primed by the work of Danish

scholar Rasmus Rask, whose researches into Anglo-Saxon, Scandinavian, and Icelandic languages took on an historical character and emphasized phonological etymology (changes in the patterns of sounds and pronunciation). The discoveries made under this data-oriented tradition seemed to signal a new epoch in linguistic study (Morpurgo-Davies 1992) and would be further advanced and coherently synthesized by yet another founding figure of comparative philology, Jacob Grimm.[5]

Grimm published the first edition of his *Deutsche Grammatik* in 1819, though the 1822 second edition had the most impact and introduced what is still regarded as "Grimm's Law" of linguistic sound shifts.[6] While it drew on many of the ideas of his predecessors, the *Grammatik* implicitly set out the most programmatic statement of the new discipline, and would set the course for its future development.

Grimm's Law primarily concerned the consonant shifts that established the Germanic branch of the Indo-European language family – demonstrating empirically what had formerly only been speculated. But furthermore, as Coetsem (1990) attests to, "Grimm's merit is to have viewed such sound equations and the changes they imply in a structured totality" (p. 43). With this, Grimm implicitly offered a general theory of quasi-cyclic processes of expansion and contraction by which language is subject to the interplay of exogenous and endogenous forces of change, material and social, and which equilibrate from within.[7] These views presented a dynamic alternative to the debate between materialist and idealist philosophy, and would undermine any prevailing assumptions of linearity that had been common to both the Utilitarians and the heavily romanticist views of Friedrich and August Schlegel.[8]

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[5] Morpurgo Davies (1992) has summarized several hagiographies of linguistic theory. She finds that while there is some variation, both contemporary and nineteenth-century texts routinely identify Bopp, Humboldt, and Grimm as founders of comparative philology. The positions of Rask and Schlegel often vary between that of "founders" or "precursors."

[6] This is sometimes referred to as "Rask's-Grimm's Rule" by scholars who cite the extent to which Rask previously formulated the idea in an 1818 study of the Icelandic language. In fact, Grimm's second edition of the *Grammatik* acknowledges that most of the additions come from Rask's recent work, which was published too late to appear in his first edition. However, Koerner (1990) cites the extent to which Grimm went much further than Rask.

[7] To this day Grimm's *Deutsche Grammatik* has never been translated into English. For further elaboration of its main concepts and its impact on linguistic study, see: Fowkes (1964), Ganz (1973), Coetsem (1990), Koerner (1990), Morpurgo-Davies (1992), Marggraf-Turley (2001), and Shippy (2003a and 2003b), as well as the first reviews of the work written for English audiences, including Rask (1830), Kemble ([1833] 1981), and Wedgwood (1833).

[8] Several scholars (O'Hara 1996, Alter 1998, Richards 2002, Shippy 2003b, and Mugglestone 2005) have noted the parallels between nineteenth-century linguistic sciences, and the evolutionary theories and methods of Charles Darwin. In fact, some forty years after the *Grammatik*, German scholars following in Grimm's tradition, August Schleicher in particular, would claim that their ideas of language descent preceded similar views espoused by

Grimm's framework offered scholars the opportunity to generate inference beyond available data and even to consider future linguistic developments. Followers in this tradition would especially be concerned with the reconstruction of dead and hypothetical languages such as proto-Indo-European (Shippy 2003a). But, while his work may have facilitated inquiry into supposed stages of linguistic history, Grimm's corresponding methodology was resistant to fixed concepts and always advocated the primacy of empirical evidence; as he would state in the *Grammatik*, 'observation…is the soul of linguistic inquiry' (as cited in Morpurgo-Davies 1992:138).

With this, Grimm was notably thorough and systematic in his observations. Consistent with his views on the unity of the past, present, and future, Grimm integrated both diachronic historical investigations with synchronic comparative analysis. His methods also advocated the use of a wide range of evidence and especially valued dialects and common speech as repositories of linguistic links ("Versteinerungen," literally meaning "fossils") in the genealogy of a language. Therefore, even at a time when the dialects of common folk were looked down upon as vulgar and improper, in Grimm's travels he would record such variations of the Germanic language, and seek out old songs and poetry featuring rhyme and alliteration so that past phonetic usage could be recovered. Altogether, these sources presented a linguistic landscape shaped by gradual semi-autonomous change (as opposed to willful design) and blurry taxonomic boundaries. As an 1827 review of Grimm's *Grammatik* noted: "[l]anguages are to be viewed as natural bodies which form according to distinct laws. An internal living principle carries through their development and gradual decay … and to ends which were not originally intended" (Bopp 1827 as cited in Delbrück 1884).

Several contemporary scholars such as Fowkes (1964) and Shippy (2003b) look back on this period and unabashedly associate Jacob Grimm's *Deutsch Grammatik* with the commencement of a new paradigm in linguistic study. Though perhaps Morpurgo-Davies (1992), Koerner (1990), and Habermas ([1998] 2001) hit a finer point in emphasizing that, before this tradition, there wasn't much unity or cumulative development across linguistic scholarship. The emergence of comparative philology was therefore a part of much more

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Darwin. Furthermore, it was Darwin's cousin/brother-in-law, Hensleigh Wedgwood, who was the first Englishman to publish a review of Grimm's *Deutsche Grammatik* in 1833. Wedgwood himself was a respected philologist in his generation – from 1859 he was even the leader of the etymology section for what became the *OED*.

sweeping trends, which, in an era leading up to the establishment of science as a leading foundation for knowledge and the professionalization of the modern scientist, mutually reinforced the field's development.

Moreover, research on language and words was among the most advanced and rapidly developing areas of study at the time, one that had influence that spread not only into the intellectual history of the nascent social sciences, but arguably underpinned evolutionary thought and natural selection in biological science. Tom Shippy (2003b) notes that "philology was, for a time ... literature, history, sociology, and anthropology at once" (p. 21). Contemporary linguist Sheldon Pollock (2009), proclaims that: "Philology in Europe was at its zenith one of the hardest sciences on offer, the centerpiece of education, the sharpest exponent if not the originator of the idea of "critical" thinking, and the paradigm of other sciences such as evolutionary biology" (p. 931). Singling out Grimm, Shippy (2003a) offers that *Deutsche Grammatik,* was "for the humanists what *Origin of Species* was for the life sciences" (p. 16). Additionally, Paul Salmon (1974) and Stephen Alter (1999) have separately suggested that the broad appeal of and public acquaintance with the new philology made the genealogical implications of comparative biology and natural selection more palatable and imaginable to the public and scientists alike.

Such views on the influence of philology have not been without controversy and disbelief. But, to recognize why the study of language held such prominence, one must understand that the study of language was seen as a means, and not an end in itself. Along with law, folklore, religion, poetry, songs, art, and architecture, language was a social artifact whose scientific study, it was hoped, could shed light on processes of social change, stability, cultural consciousness, and national identity (Aarsleff [1967] 1979). These concerns weighed heavily on the minds of Europeans in turbulent times marked by expanded access to information and education, increased global connections, expanded rail and postal service – all amidst the backdrop of colonialism, the American and French revolutions, and the Napoleonic wars. To ignore or deride the scientization of humanistic scholarship is to severely understate the immediately pressing realities that scholars of the nineteenth-century sought to address, and the cautious hopefulness attached to the scientific potential of fields like comparative philology. To quote Geoffrey Galt Harpham (2009): "[g]iven the magnitude of the questions it addressed and the commitment it demanded of the scholar, philology came to be respected, at least in Germany

and France, as the highest form of modern scholarship, the vanguard discipline of modernity itself" (p. 39-40).

The study of language was indeed a means to an end for Jacob Grimm and his brother, Wilhelm. It was representative of the shared cultural and intellectual development of a people, could reveal their unique *Volksgeist,* and foster a shared national consciousness. This, along with their views on historical change and methodology, carried over through the brothers' many other pursuits in the history of law, literature, and folklore.[9] And thus, for the promise they offered, the Grimms' researches were particularly aligned with their interest in a unified German nation.

With all the potential it was supposed language study could offer, it wasn't long before comparative philologists throughout Europe were inspired to embark on the ultimate data collection project – compiling the historical entirety of their national languages. The methods and ideas of Jacob Grimm would thereby be adapted towards making a new type of dictionary, and the first of its kind would be Grimm's own.

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[9] Today Grimm is mostly known, along with his brother Wilhelm, for their early work collecting German fairytales and legends. In 1835 Jacob Grimm would even publish the *Deutsche Mythologie,* which parallels the *Grammtik* in its theoretical and methodological model, but is applied to folklore, myth, and legend.

Chapter 3 – The German Dictionary under Jacob Grimm

Jacob and Wilhelm Grimm continue to be most widely known for the publications of folklore and fairytales compiled over their early careers. And while many of the stories they contained remain classics in popular literature, the Grimms' interest in them as indicators of cultural movement and exchange has largely been overshadowed. Nevertheless, the Grimms' enjoyed considerable global celebrity during their lifetimes and became recognized and esteemed for their wide-ranging scholarly accomplishments and political activism.

The brothers' lifelong achievements and level of prestige were especially remarkable considering their early reputation as dilettantish enthusiasts who initially, after having to forgo completion of university studies at Marburg, eked out their living as private librarians – Jacob to the eminent legal historian Karl von Savigny. It was through this exposure to legal history that forged the brothers' curiosity in folk literature and mythology, culminating in their famous folktale collections, first published in 1812. The brothers believed that stories, songs, and poetry were carriers of communal mores, the basis for formal law, and had diffused across societies. This could be evidenced by common elements and themes seen stretching across Europe and the near East. Together they also started a short-lived periodical, "*Altdeutsche Wälder*", to share their collections and analyses, all the while gaining fame throughout the German states and abroad.

Nevertheless, in this early period of their careers the brothers were looked down upon by the academic and literary luminaries of the day. August Wilhelm Schlegel in particular criticized Jacob Grimm's lack of scientific rigor, although years later he would lavish praise on Grimm's famed *Deutsche Grammatik* (Koerner 1990). The language investigations that preceded that work had initially grew out of interest in reading the old German stories, and likewise, the story collections helped the Grimms to learn about the history of the German language. Jacob's famous theory of sound shifts would have in-part been informed by the brothers' travels and transcriptions of obscure unprinted tales, through which they were exposed to a widened range of distinct regional accents and repositories of long-lost words and pronunciations.

In 1830 the brothers came to Göttingen where they would work as librarians and professors at its famed research university. Although the honor officially brought the brothers into academic life, they wished for it not to sever their relations with the German populace at

large. When Jacob gave his inaugural address – in Latin, as was then customary – he used the opportunity to argue, with intended irony, that the use of Latin in universities negatively served to distance academia from public life. He advocated the use of the German vernacular in teaching and university discourse. Despite such friction with university traditions, the brothers further cemented and embraced their scientific identities and would come to be held in high-esteem by the era's progressive and trendsetting scholars, including the much-celebrated naturalist Alexander von Humboldt and his philologist brother, Wilhelm (Ganz 1973; Wyss 1979; Kirkness 1980; Crane 2000). They also enjoyed a close friendship and correspondence with the writers Bettina von Arnim and Clemens Brentano.

Roughly on par with their scientific standing was their status, particularly Jacob's, as leading political figures (see Holly 1991 for an overview). The young Jacob Grimm attended the Congress of Vienna and served as an envoy in France to recover German books taken during the Napoleonic wars and French occupation. In 1846 and 1847 the brothers attended the first and second Germanist assemblies, in fact, Jacob presided over them. The assemblies brought together scholars of German history and language to address and assert their responsibility to the national public sphere and towards forging a national identity. Jürgen Habermas ([1998] 2001) offers an overview of the assemblies, the Grimms' roles within it, and their historical significance as a hybrid political/academic organization. Furthermore, in 1848 Jacob was a member of the Paulskirche Parliament in Frankfurt am Main (historically dubbed "the professors' parliament"), which aimed to draft a constitution for a united Germany.

The brothers' steep, fortuitous ascent gave Jacob Grimm reason to believe their studies were their true calling, through which they were to serve God and their country, regardless of interference from any King (Grimm, J. 1838). It was, in fact, interference from a King that led the Grimms to create the dictionary, the first preface of which begins: "[e]ven scientific endeavors in which it is necessary to strike deep roots and reach widely, depend on external circumstances" (Grimm, J. 1854:I). With this, Jacob Grimm is referring to events in Göttingen in 1837.

It was in November of that year that Ernst Augustus, the recently installed King of Hanover, of which Göttingen was a part, abrogated a state constitution put into effect by his predecessor, William IV, in 1833. The former Constitution provided for greater transparency in government operations and the allocation of public funds; it furthermore strengthened the power

and visibility of an elected council. Dismayed by the King's actions on grounds that it broke an earlier oath to which all citizens had sworn and should thus be rendered invalid, on November 18th seven professors at the University of Göttingen wrote and signed a protest letter charging the King with an illegal act and refusing their allegiance. Jacob Grimm and his brother Wilhelm were among the seven professors, all of whom were soon removed from their posts at the university.[10] For additionally having printed and distributed the protest letter, the 52-year-old Jacob was further singled out for immediate exile from Hanover.

The significance of the actions by the Göttingen Seven was deeply felt at the time and enlisted public sympathy in droves. Other notable professors quit the university in a show of solidarity, including the famed astronomer and mathematician Karl Friedrich Gauss. Student riots ensued and the state military retaliated against them, causing many deaths and the temporary closure of the university. Other German states would come to formally censure Ernst Augustus, while expressing support for the professors' actions by privately offering them refuge and money. The Grimms didn't want to undermine the gravity of their actions or appear "parteipolitisch" by accepting – although they did quietly accept some funds from Hamburg (Kirkness 1980).

The acts also made news throughout Europe. In his documentation of the event in England, John Mitchell Kemble called it the "Hanoverian Coup d'Etat," and noted the significance that these seven were scholars and scientists, and not politicians, passing a judgment against a king (Kemble 1838). Kemble conveys the events as a direct confrontation between a knowledge institution and a political institution, even likening the King's acts to the burning of the library at Alexandria. In another recount of the incident Kemble (1840) would further state:

> It is a fortunate circumstance for Germany and for the civilized world, that, as soon as a prince appeared bold enough to undertake the task of public persecutor of men of science, the first burst of his rage should fall upon men of such irreproachable character as the seven who signed the Göttingen remonstrance[11] (P. 41).

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[10] The other professors were: the legal expert and historian F.C. Dahlmann, the literary historian G.G. Gervinus, the orientalist G.H.A. Ewald, the jurist W.E. Albrecht, and the physicist W.E. Weber.

[11] Kemble goes on to state: "If, however, one name shines pre-eminent amongst the number for brilliancy of genius, and almost incredible extent of learning, united with mildness and simplicity of manners, the unerring of a pure and unsophisticated heart, it is that of JACOB GRIMM. The labours of this highly estimable man as a grammarian, and as the historian of German law and mythology, have secured him the highest place in the estimation of his fellow-countrymen in three distinct branches of science" (Kemble 1840:42)

The event would color the motivations for the dictionary project and be a testament to the Grimms' increasingly outspoken views on the roles and responsibilities of the scientific researcher in modern society.[12] It was with the desire to put their views into practice, as well as their new-found leisure and loss of income, that the brothers were compelled to take on the historical-dictionary project.

On March 3rd of 1838 the project was proposed to them by Karl Reimer, owner of the Weidmannsche bookshop, and on behalf his brother-in-law, the Leipzig publisher Salomon Hirzel – with an accompanying appeal and offer of assistance from the eminent philologist Moritz Haupt. The men were all known to each other and Reimer had made a similar appeal to Jacob Grimm in 1830, for which he was turned down. Reimer and Hirzel had months earlier also initiated the "Göttinger Verein" association of private businessmen in Leipzig in order to collect donations to support the Göttingen Seven until each of the professors found new posts.

Reimer and Haupt first wrote collectively to Wilhelm Grimm on the new dictionary proposal. The rough plan was for a collaborative work (Gemeinschaftsarbeit) "to apply the findings of historical language research to the living language," in which scholars throughout the German-speaking regions would share in the task under the oversight and arrangement of the Grimms (Haupt to W. Grimm, 3 March 1838, as cited in Kirkness 1980:54). Haupt pledged his assistance and asserted his belief that the project could not succeed without the Grimms at the helm:

> [i]t had always been hoped to see you and your brother leading the work. I feel that I have neither enough good sense to lay out the plans, nor sufficient knowledge for the final editing alone, nor would the necessary number of suitable collaborators be attained without your names (Haupt to W. Grimm, 3 March 1838, as cited in Kirkness 1980:54).

The terms allowed the Grimms considerable discretion to do the work as they saw fit, and it was promised that the project should not interfere with their other research. Haupt further specified to the brothers that they

> will not be implicated in the mechanical work of collecting materials; for this there are others to apply lesser skill, who would easily be gained if you were to decide to undertake the highest leadership of the work, and start by devising the procedures for the preparatory-work"; he himself swore to them to "spare neither time nor energy to relieve

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[12] Jacob Grimm's defense of their protest in his 1838 pamphlet "Über meine Entlassung" (On My Dismissal) would be positively commented on by a young Friedrich Engels, that it "is extraordinarily good and is written with a rare power" (Engels to Friedrich and Wilhelm Graeber, 1 September 1838).

you of all unworthy labor (Haupt to W. Grimm, 3 March 1838, as cited in Kirkness 1980:54).

Reimer also sought to assure the Grimms that he and Hirzel would put their resources and support behind the project and

> would endeavor to do what is in our power to make the project worthwhile and to ease your work. …We don't deny that before the printing begins, long preparation will be necessary, but we will gladly expend the necessary costs towards it and wait until the work is ripe enough to thrive (Reimer to W. Grimm, 3 March 1838, as cited in Kirkness 1980:53).

Jacob was hesitant at first, but with Wilhelm's coaxing, became downright enthusiastic about the prospects of the dictionary. By the end of the year he exclaimed it would be "the fruit of our banishment which we lay upon the altar of the Fatherland" (J. Grimm to J.M. Kemble, 1 December 1838, as translated by and cited in Wiley 1971:169).

Aside from the assurance of assistance supposed by having the Grimms lead the project, securing the brothers for an innovative philological dictionary had the potential to be highly lucrative for any publisher; therefore, the optimistic and obliging tone of the proposal letter would seem justified. It wasn't just Reimer who had previously approached the Grimms with this idea, and counter-offers were made known following the 1838 proposal. But, still no dictionary of this kind for a modern, living language yet existed, and no one but the Grimms seemed suitable for overseeing the task and setting out its vision.[13] The Grimms were highly reputable figures at the time, and Jacob in particular was the leading authority on the German language, if not German history and philology overall. The more business-minded Wilhelm was keenly aware of their name-recognition, particularly Jacob's, when he tells him "your name will bestow certain success on the project" and optimistically urges him ensure the gains of the work is tied to their income and future royalties for the family (W. Grimm to J. Grimm, 6 April 1838, as cited in Kirkness 1980:56).

The Grimms were undoubtedly academic and political luminaries who commanded respect and adoration from scholars and laypeople alike, and their Göttingen protest only helped to vindicate and solidify that status. Some twenty years later they would clearly express regret for having committed themselves to the dictionary at that moment, which the Briton John Mitchell Kemble suggested was beneath them and not worthy of their time (Kemble to J. Grimm,

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[13] The closest exemplar would be the Greek dictionary by Franz Passow from 1819.

December 1838, in Wiley 1971). As a political refugee in Kassel when the project was proposed, Jacob was clearly charged by the Göttingen events with fervor for creating a dictionary that could culturally unify Germany in a way that German politics of the day, with its competing interests and egos, had hindered (Mellor 1972; Kirkness 1980). Since at least the late eighteenth-century – notably in the thought of Johann Gottfried Herder – it had been supposed that if German unification could not be achieved politically that inroads could at least be made culturally through its more-or-less shared language and literature. What made the Grimms' take on this unique was how they thought scientific methods could approach the task – while producing an innovative dictionary that would be distinguished from the legacy of prescriptive or normative dictionaries that preceded it. And so while the dictionary was intended to be of value to comparative philologists around the globe, it was also to be a scientific work for the German people – and the Grimms saw these aims as being fully reconcilable.

Goals and Planning

Given their prestige and long-sought-after acceptance of the project, the Grimms were given considerable discretion in formulating the works' plans, goals, and organization. From the start it seemed evident that the project would be a collective endeavor fostered by private means. Jacob was happy to proceed in such a way, in part because the brothers were already in their 50s and knew they would not be able to complete a dictionary without substantial collaboration, and they saw it as a chance to demonstrate that scientific enterprise could ensue untethered from the state-derived German university system.

The Grimms were eager to commence work, but hard-nosed in ensuring they would receive fair compensation for their efforts and lending their names to the project. By the end of April, less than two months after the proposal, they had confirmed their readiness to take on the dictionary, but only for a larger share of money than was originally suggested by the publishers. In a letter to Reimer, Jacob Grimm optimistically states that he and Wilhelm "view it as a project of timely necessity whose success is not uncertain" and even foresee the possibility that the success of the work "could be extraordinary;" he thus wishes to ensure some compensation in proportion to profits (J. Grimm to Reimer, 26 April 1838, as cited in Kirkness 1980:64). Jacob furthermore argues that a greater share of the budget should be allocated towards the editorial work of the brothers, and away from the collaborators providing extracts, which "could for the

most part be collected through mere diligence, without deeper insight and exertion" (J. Grimm to Reimer, 26 April 1838, as cited in Kirkness 1980:64). With nothing quite settled by the end of July, Jacob nonetheless writes to Wilhelm that "work on the dictionary ought to begin immediately," with the exact terms set later (J. Grimm to W. Grimm, 25 July 1838, as cited in Kirkness 1980:66). Reimer's bookshop had by then already made public an announcement about the planned work.

At these early stages all parties seemed highly optimistic about the project, its potential success, and the time necessary to complete it. Wilhelm supposed it could be completed with only two hours per day devoted to it, and Jacob wrote to Bettina von Arnim of his expectation that "if we survive to the completion of the difficult work (after 6, 8, 10 years), it will thus bring us more fame and gain than if we sought to teach once again at a Prussian university" (J. Grimm to von Arnim, 11 August 1838, as cited in Kirkness 1980:67). It was then supposed the entire dictionary would consist of six to seven volumes. In August, the plans for the production of the work would more readily take shape.

Along with Haupt, the famed historian Karl Lachmann would also come to pledge his assistance with the reading and excerption program, and the Grimms hoped these two would help in the later editorial stages of the work as well. Haupt also secured a scholar-friend by the name of Julius Klee to scour the abundant writings of Goethe for quotations of word usage. Other scholars were recruited into the project largely by the Grimms themselves, and represented many of their philologist friends and former students; a few others offered assistance without solicitation. Each of the contributors worked remotely on texts or authors that were specially assigned to them or requested by them and approved by the Grimms. They were to be paid, and were asked to submit their materials directly to the publisher's offices in Leipzig. It was originally expected that it might take until the end of 1839 (roughly a year and a half after the excerption program began) for a thorough reading of the relevant German texts following this collaborative scheme, but the time-span would be revised many times over. Through the early 1840s the brothers were still occupied with recruiting and orienting collaborators, and chasing down those who never delivered on their early promises. In 1847, the work of alphabetizing and assembling the materials submitted to-date finally began. In 1852, additional collaborators came forward after a publicized appeal for further readers to fill out gaps that still remained.

All the while, Wilhelm Grimm and his family would move to Kassel to be with Jacob, and in 1841, the brothers, on recommendations from Bettina von Arnim, Karl von Savigny, and Alexander von Humboldt, would take up fellowships in Berlin as members of the Prussian Academy of Sciences and lecturers at the University of Berlin.

Defining the German Language

Before the actual writing of the dictionary even began it was a topic of discussion at the 1846 Germanist Assembly, where Wilhelm Grimm devoted a lecture to the aims of the dictionary, which he refers to as a "natural history of individual words" and emphasizes its potential scientific usefulness to the unification of German peoples. This vision was reiterated in Jacob's preface of 1854 in which he aims to recast the concept or idea of a dictionary, particularly a *Wörterbuch* (literally meaning word-book), entirely in line with the innovative systematic and scientific model he put forth. It would be distinguished by orderliness, comprehensive collection and integration, etymological data, and arrangement of "significant and permeating contrasts between the old and the new time" (Grimm, J. 1854:IX). With regard to comprehensiveness, Grimm would eloquently state:

> [w]ith this new philology all tongues of the earth stand equal and none may be scorned, just as all words belong and are entitled within the dictionary. To strive for comprehensive accumulation and treatment is thus the first requirement for a dictionary (Grimm, J. 1854:X).

Along with this Grimm argued that a dictionary "suppresses no unpleasant little word," nor aims to conceal them or attach greater weight to nobler words, as was done by Adelung's German dictionary, which held the most prominence at the time. He asserts that a *Wörterbuch* is not supposed to be a "moral-book (sittenbuch), but a scientific one – a fair undertaking for all purposes" (Grimm, J. 1854:XXXIV). Nonetheless, Grimm did express pride that Adelung's dictionary was one of a long-line of German dictionaries that emerged outside of official public impetus, and he believed the constraining nature of France's *Dictionnaire de l'académie* "stood foreign to the true idea of a dictionary" (Grimm, J. 1854:VIII).

But despite these proclamations of comprehensiveness, the dictionary was a setting through which the Grimms, like enlightened gardeners tending to the nourishment, invigoration, and development of the living German language, would make several decisions about the words and phrases they deemed most rooted, most complementary, and least intrusive to the linguistic

whole. They thus circumscribed multifaceted bounds of admittance, which would be justified in the preface alongside their proclamations of comprehensiveness.

For instance, from the outset the project notably only took up the German literary terrain ranging from Luther to Goethe, or roughly the sixteenth to the end of the eighteenth centuries, a period Jacob Grimm linguistically defined as the era of "New High German." Part of the reason for this relatively narrow range was that Jacob Grimm placed a socio-linguistic relevance on the new period, believing that with Luther's Reformation and the printing press, the German language achieved a uniformity and basis for unity across various regions like never before, which also ushered in a period of linguistic expansion and creative expression. The first preface would assert that an aim of the dictionary was to "exhaust the extent of the entire NHD period as much as possible, and through this, not only to get at an understanding of particular expressions, but also to rekindle love for the forgotten writers of this time" (Grimm, J. 1854: XVIII). But, furthermore, the Grimms were aware of colleagues already at work on dictionaries of the Middle and Old High German that preceded the new era, and believed that adequate dictionaries and references for the other German dialects already existed. The brothers also felt that the restriction would make completion of the work more feasible within their lifetimes. In actual practice, however, their specification proved to be more of a guideline than a strict boundary. The authors of this period who were most sought after were: Keiserberg, Luther, Hans Sachs, Fischart, and Goethe.

The dictionary would also be selective in its inclusion of foreign words. Jacob Grimm believed that "all languages, so long as they are healthy, have a natural proclivity to keep out the foreign…or at least to balance them with the domestic elements" (Grimm, J. 1854: XXVI). The brothers' rationale was first and foremost to suggest that users opt for words rooted in the German language wherever possible, even if this meant rehashing old and lesser-used German synonyms for foreign words in popular currency (a practice Jacob also often brought into his writings and everyday correspondence). The reasoning seems to hearken back to the linguistic ideas put forth in the first volume of Jacob's *Grammatik,* in which he imagines a garden of words growing together, but the potential that some foreign words might "with stepmotherly preference encourage certain plants and neglect others" (Grimm, J. 1818, as cited in Kirkness 1980:42-43).

But Grimm was against a complete overhaul or any re-writing of the German language and took a very firm stance against artificial neologisms – such as those invented by other

nineteenth-century German lexicographers like Campe, Radloff, and Wolke, who attempted to rid the language of all foreign words, or rationalize it according to an imposed grammar. In his first preface Jacob would often speak out against this trend, once stating: "without feeling true joy at the beauty and abundance of our language itself, this irritating purism strives to hostilely pursue and exterminate the foreign, where it is even aware of it, and it forges its inept weapons with crude blows" (Grimm, J. 1854: XXVIII). Grimm would further the industrial analogy in contrast to his natural one by speaking of the purists' tendency to "weld" (schweißen) together artificial compounds. In his other works, he went so far as to equate these lexicographical trends with the Reign of Terror in France. This was consistent with Grimms' ecological view that while change is natural and can be affected, sustainable change cannot be affected by force.

Grimm felt that the right way to curtail the retention and spread of the foreign was gradual, and lay in increasing pride in the domestic language. He was nonetheless aware that some words of foreign origin ought to be rightly permitted within the dictionary, stating:

> [i]t would be impossible to exclude all of which have long-ago set roots in the soil of the language, and out of which new sprouts have sprung; they have grown together through frequent derivation and compounding with the German speech such that we could not do without them (Grimm, J. 1854: XXVII).

The dictionary was thus to include foreign-derived words that had long ago entered the language without, as Grimm saw it, tarnishing the German sound. Such examples included *Abenteuer, Armbrust,* and *Eichhorn*. Others, particularly religious imports, were adapted to German sounds (*Taufe, Sünde, Hölle, Ostern*), and others considerably smoothed over. It was also to include the names of foreign animals and plants, seeing no need to Germanize a word like "Rose" with the name "Roseblumen." Similarly to be included were words with no German equivalent that had been around thousands of years – it being argued that if they had a distant German term, it would sound even more foreign by now (e.g.: *Fenster, Kammer, Schule, Kaiser*). Words that had developed Germanized derivatives, such as *appetitlich* (appetizing – from the French for appetite), were also to be included, as well as the whole range of French loan verbs ending in – *ieren*.

On less intuitive grounds, the Grimms don't emphasize the language of doctors and engineers, and they additionally slight many artisanal and industry professions. Reimer would confront Wilhelm about this at the beginning of 1847 when the reading and extraction scheme was coming to a close and it became clear that what the Grimms had deemed "comprehensive,"

differed from what Reimer had expected of the work. With careful deference, Reimer asks them to consider the business-side of the endeavor, stating:

> [i]n cities and abodes of commerce one knows nothing of agriculture; in the countryside it is unknown what lays everyday before the eyes of those on the sea or great rivers. … Pardon me for daring to speak with full ignorance against your argument. It is based upon my ignorance that I believe many lay people, myself included, would wish to survey the entire treasure of the written German language within the Wörterbuch (Reimer to W. Grimm, 30 January 1847, as cited in Kirkness 1980:118).

Wilhelm, however, stuck firm to his position, claiming "no outside advantage would convince me to abandon it"; and that while the dictionary was not meant to be limited to only the "noble writers" of the German language, "the terminologies of science, art, and industry could only find a place in so far as they were taken up in the general (allgemein) language" (W. Grimm to Reimer, 28 January 1847, as cited in Kirkness 1980:117). The issue was not brought up again but shows that the Grimms' focus was on a German language that was common across all regions. The trade languages that are emphasized in the dictionary are those of the shepherds, hunters, birders, fishers and others said to represent "the oldest classes of people" who "would offer the most abundant yield for the history of the language and customs" and "draw on a freshness and naturalness … that likewise reaches back into high antiquity … and requires the most attentive consideration" (Grimm, J. 1854:XXX).

It was also notable that, in emphasizing the period "from Luther to Goethe," much of the most-recent literature of the nineteenth century was ignored. Upon criticism, Jacob Grimm would concede to underemphasizing his contemporary era, but with justification. The Grimms would frequently state that they found many of their contemporaries to be too "pedantic," or as he opines to a dictionary contributor: "[e]ven famous new poets have not been very potent in our language and get by with a limited vocabulary" (J. Grimm to Goedeke, 16 September 1838, as cited in Kirkness 1980:77). Kirkness (1980) would specify that:

> writers like Schiller, Jean Paul, Herder, Voß, Tieck, and the Schlegels among others, despite their greatness, and Jacob and Wilhelm's full recognition of their literary quality and significance for the development of a national German literature, were, according to the shared opinion of the brothers', relatively fruitless for the purposes of the *Deutsche Wörterbuch* (P. 14).

The Grimms felt such writers were too self-conscious and too dependent on the use of learned concepts that were detached from the material world and the sensory experience of it. This was

contrasted against those who used the German language in "more natural, lively, unreflective, pure, and folk-like (*volksmäßige*)" ways (Kirkness 1980, 14). Among the more recent German authors, Jeremias Gotthelf, Gotthold Ephraim Lessing, and above all, Johann Wolfgang von Goethe, were the most revered by the Grimms for their linguistic creativity and willingness to tap into the historical depths of the German language.

The brothers' reverence for the past is not to mean that they wished to turn back from modernizing and globalizing trends, and along with it, the growth of mass education. They would repeatedly emphasize that they were not revolutionaries; in fact they were deeply opposed to violence, suspicious of Prussian military hegemony, and were not associated with any democratic or communist movements. But, they also didn't associate with the conservative strain of thought that marked many of the early historical cultural researchers – their former mentor Karl von Savigny among the most well-known. The Grimms often presented themselves as citizens of the world involved in a global scientific endeavor. They spoke several languages, pursued studies on cultures other than the Germanic (Serbian was a specialty of Jacob's), corresponded with and hosted many international scholars, and wished for their dictionary to make an impact in academic circles outside of Germany – just as they likewise pinned many hopes on its national use. They believed that language study might ultimately reveal more similarity than difference across peoples, noting in the first preface that "[t]he German language hangs in a chain that is connected with most European languages, then still leads back to Asia and directly up to Sanskrit, which itself reaches Zend and Persian" and that

> the further etymology advances, the number of roots would not expand, but rather be inclined to diminish; it will narrow and find ways in which to illuminate the passage from a particular root to another, and would be able to build up the broken bridges in-between each community. In each language individual roots thus need to be greatly acquired in scope and richness (Grimm, J. 1854:XLVII).

As will be discussed in a later section, the Grimms' intentions to make the dictionary internationally-accessible would be clearly evident in the presentation of its contents.

What the Grimms feared was that Germany was not culturally-united enough to resist being increasingly affected by international influence, and that broad educational standards could inadvertently hinder linguistic development. Far from being snooty grammarians and vigorously opposed to a French-style of fixing the language, the Grimms were not adverse to the kind of linguistic innovation that language purists and more conservative scholar, such as Adelung,

might deem crude or grammatically incorrect. They heralded the playfulness of poets, whom they saw as providing expression to common and new experiences, and as agents of social change. This fits with Jacob Grimm's language theories, which supposed a largely cyclic view of language expansion and contraction involving the interplay of the external material word, internal forces (such as the extant grammatical and phonetic structures), and social forces. The current era of the mid-nineteenth century thus represented one of linguistic contraction and educational standardization – as Wilhelm would explain to Karl von Savigny: "[w]ith the new writers the language contracted in a tight circle of convention" (W. Grimm to Savigny, 2 April 1839, as cited in Kirkness 1980:94). This was coupled with unprecedented international exposure and influence, and a weak German presence in the international arena. The confluence of these factors would have been seen by the Grimms as potentially damaging or perilous to the survival of the German language, and with it, German culture and the identity of a people.[14] But the Grimms saw a turn of fate in the promise provided by the new German philology and the new-found love Germans expressed for their mother tongue.[15] Thus, the Grimms' remedy, delivered by way of the dictionary, was to expand the German language from within, with reference to its own history, and emphasizing the connections between the ideas the words conveyed, and their material roots. They imagined it being a place where poets in particular would find inspiration for their expression, thereby recovering and disseminating long-lost words or creating new appropriations.

Aside from poets and academics, the dictionary was also envisioned to have a primary place in the home of every German family. In the first preface Jacob foresees how it "could become a household necessity and would eagerly be read, often with reverence." He goes on to ask:

> [w]hy should the father not pull up a couple words and, together with the boys, go through them in evenings while testing their language skills and refreshing his own? The

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[14] Jacob Grimm saw English as a "universal language" owing to its mediation between German and Roman roots. He praised its resultant "power and strength," proclaimed Shakespeare the "greatest and most superior poet in modern times," and given the imperialistic expanse of the British Empire, Grimm felt that, "[l]ike the people themselves the English language seems chosen in the future to hold sway in a still higher degree at all ends of the earth….none of the presently living languages can stand beside it, not even our German, which is as torn to pieces as we Germans are fragmented" (Grimm [1851] 1984:22). Though British scholars who did not understand Grimm's philological theory were suspicious of German forays into historical language studies – knowing that it was bound to reveal the language's "impurities," greater distance from Latin, and indebtedness to German and French – Grimm flipped this logic on its head, suggesting that these were the very strengths of the English language.
[15] In the preface to the first edition of the *Wörterbuch,* Jacob refers to these factors as "two signs in unison" (Grimm, J. 1854:III).

mother would happily listen. Women, with their innate motherly wit and in the interest of maintaining good maxims, often have a genuine desire to practice their natural feeling for language (sprachgefühl) (Grimm, J. 1854: XIII).

This starkly evokes imagery of Protestant bible-study, and, therefore, sounds a bit absurd when applied to a dictionary – and a highly technical one at that. But, this further emphasizes the aims that were imparted within the work and the idea of the kind of knowledge that would be assembled in its making. In their vision of the dictionary it was never intended to be a quick reference tool, but rather one in which the reader's reasoning is fully engaged. The work was to display the German language as used by prominent writers and historical figures. For the Grimms, language was too fluid and changing to suggest fixed meanings. It would provide the kind of technical information and analysis of use to philological scholars, but for those without technical training or interest, Jacob Grimm believed it would still be possible for those users, through repeated reading, to attain a sense or feeling (Gefühl) of the German language, and with it, feel connected to the dynamic cultural spirit (Volksgeist) of the German people.

Organization and Production

The ambitious aims of the dictionary, the plans pertaining to the choice of words to be admitted, and the texts' intended usage, were the sole vision of the Grimms themselves and extended from their linguistic theories and broader thoughts on history, place, and culture. Deemed exclusively fit for the task, the brothers were expected to retain sole visionary leadership for the project and direct its implementation. When the accumulated excerption materials were collected and ordered, they were then to write the final copy and integrate the evidence. They had originally planned to take up alternating alphabetical volumes, but it would later be decided that Jacob would write up the first three letters, Wilhelm the next three, and so on. Ultimately, however, Wilhelm would only write the volume for the letter D – finishing shortly before his death in 1859 – and Jacob's work would end upon his death in 1863, while within the letter F.

The main excerption program began as soon as 1838 and ran until 1848. Just over a hundred contributors helped to submit slips of word usage culled from German texts. Eighty-three are thanked in the preface to the first volume of the dictionary, five others mentioned in the

second volume, and Kirkness (1980) identifies still 15 more in the correspondence records. Together they covered the entire German-speaking regions.

The initial contributors were recruited into the project in a variety of ways. Some were scouted out by the likes of Reimer, Hirzel, Haupt, and Lachmann, others wrote in to offer their services, particularly where they felt they already had valuable materials or a specialty interest that would be of use. But for the most part, the Grimms themselves solicited the assistance of several acquaintances and former students. The majority of the contributors were already on board before 1842. By 1852, as there were clearly some gaps that remained across the authors and texts sought to be covered, the brothers published an appeal to the general public for assistance.

In most cases the excerptors were assigned or offered assistance for reading authors or books within their research specialties or given a set of uncovered authors to choose from. They were asked to provide each of their excerpted words on a small slip of paper with the word underlined. They would submit their extractions to Hirzel's press in Leipzig, where they would be accumulated over several years and later alphabetized by a couple of teenaged assistants, before being sent on to the Grimms' home in Berlin for their processing. In the first preface of the dictionary in 1856, Jacob Grimm would state that "among the 83 named are a dozen professors, a couple preachers, all the rest are philologists" (Grimm, J. 1854: LXVI). Most all were men, although a Hedwig and Elenore Wallot were acknowledged in the second preface.

Among those whose assistance was not directly solicited were the writer Gustav Freytag, who was soon to achieve fame with his first novel; Christian Friedrich Wurm, whose later claim to fame would be, ironically, as a chief critic of the *Wörterbuch* and author of his own; and Karl Wiegand, who would become one of the Grimms' successors. Several already-well-established philologists and writers of the day were pursued for the project and enthusiastically offered their services (though not always going so far as providing them). This included: Wilhelm Wackernagel, Adelbert von Keller, Rudolf von Raumer, Ludwig Uhland, Johann Andreas Schmeller, and Hans Ferdinand Maßmann.

This model of utilizing a community of workers informally pledging their assistance and supported by private funds was certainly novel. It distinguished the project from the Royal Academies that tended to hold jurisdiction over linguistic and scientific pursuits elsewhere. Several problems did ensue, however. First of all, the Grimms became frustrated and

disappointed to find that many contributors failed to make good on their promise to contribute or fully follow through with the work they had begun. Particularly the most prestigious excerptors often failed to produce anything, and many friends the Grimms expected would offer their services, simply did not. Haupt and Lachmann, whose promises to assist helped to secure the Grimms' interest in taking up the dictionary, and who they even assumed might help with the editing, had to be uncomfortably confronted by Jacob about their lack of effort, which seems to have compelled Haupt into finally making some progress on his promise to excerpt from the texts of Hans Sachs. Lachman would ultimately delegate his responsibilities to others, whereas Maßmann, Schmeller, and Wackernagel would never make a significant contribution.

The materials were also often of variable quality across the contributors and this led to problems in negotiating whether to reimburse contributors differently. Furthermore, the overall costs of paying the contributors began to eat into the general budget – in which it was originally assumed the excerption costs should only account for a marginal percentage relative to the brothers' own compensation. The early correspondence was also time-consuming for the Grimms, through which they were largely coordinating access to pertinent materials scattered in libraries throughout the German-speaking regions, and for which there was no central inventory.

Some of the problems, particularly the variable quality across the materials, can be at least in part attributed to the nature of the brothers' lacking and unclear instructions to the volunteers. Kirkness (1980) remarks on the brevity of orientation that Jacob offered the contributors; Wilhelm, while more extensive and precise than his brother, still likewise avoided setting hard and fast rules. There was a set of loose, basic, and largely administrative guidelines that were repeatedly communicated through informal correspondence; however, several follow-up inquiries from contributors show the vagueness and inadequacy of instruction.

In one instance, when his former student Goedeke requests clearer instruction, Jacob responds that:

> the main rule is to excerpt rather more than less, since they will be sorted out through editing… it's less about the new poetic developments as the authentic (echt) words and expressions. …The excerpt needs to be clear enough that I don't need to look up the position again to get the usage (J. Grimm to Goedeke, 16 September 1838, as cited in Kirkness 1980:77).

With advice such as this to seek out the more "authentic" words, the Grimms' attempts to clarify their instructions still left areas considerably open to interpretation, even among the most skilled

philologists of the day. Confusion would especially abound on what foreign words were appropriate for excerption. Goedeke would later abandon the project before accomplishing his workload. Another former student, Frommann, while heeding the Grimms' advice to submit more rather than less, would also courteously express his confusion and desire for greater specificity:

> I certainly don't hope that someday you would need to route many of my little slips directly into the waste basket. Therefore, I would be very pleased if you would be willing to give me something of an ode, or versus of the messiah, to work with as a standard of accuracy for your purposes. …I very much wish that among them [the contributors] none are imagined as hired servants, but loyal workers in your vineyards (Frommann to J. Grimm, 28 December 1838, as cited in Kirkness 1980:87).

The Grimms would be surprised and clearly bothered by the extent of correspondence they would need to devote to instruction. They would nonetheless abstain from specifying precise and thorough guidelines and preferred the contributors apply their own judgments. For instance, to a new contributor named Bach, Jacob would express his deep confidence in his abilities and belief that the work should be easy for him given his familiarity with the old and new language. After a couple lines of instruction on how to fill out the forms, that more is better than less, and vague guidelines to give regard to words of lexical and grammatical significance and those most potent or forceful (gewaltig) in the language, Grimm adds "but with you I can spare myself all such instruction" (J. Grimm to Bach, 29 August 1838, as cited in Kirkness 1980: 90-91). Wilhelm showed similar proclivities, a fairly standard orientation letter of his ended with "the tact to search out what's important is essential, of which you cannot be lacking, since you have already and of your own pleasure been devoting yourself to the German language" (W. Grimm to Schulze, 5 December 1838, as cited in Kirkness 1980:92).

To the extent that deficient instructions adversely affected the project's production and content, it wasn't helped by the fact that the brothers often replied very positively on incoming slips that came in for their review, but later would occasionally lament their poor quality. Jacob often complained of spending considerable time doing "nachexcerption" to fact-check the evidence printed on the word slips and reread texts for missed words.

Despite complaints that most everything came to rely on him, when he was at work on his volumes, Jacob Grimm supremely reigned over the project and there was little in the way of intermediary assistance between him and the ranks of excerptors. There was, however,

administrative assistance largely provided by Reimer and Hirzel, or taken up as needed by the Haupt, Lachmann, and Wilhelm Grimm – who was far more business-minded and plain-spoken than his often eccentric and idealistic brother. But, when it came to the actual work of research, writing, and editing the entries, Jacob proceeded largely on his own when tackling his volumes, though he did come to attain primary editorial and philological assistance from Rudolf Hildebrand, who was recruited for the task by Hirzel, and whom Jacob came to value highly and appoint as one of two successors for the project. Hirzel was also sometimes consulted by Jacob on philological and formatting matters and is highly commended in the first preface, though Hirzel would often retort that he felt unqualified to give a worthy opinion. Hirzel's press-operator, Hirschfeld, can also be said to be within this circle of consultation, owing largely to the innovative formatting and spelling reforms Jacob Grimm wished to enact within the dictionary.[16]

Ultimately, after a long and heated debate, Jacob would be forced to compromise with the press on his rather progressive spelling reforms, but it was one of very few instances where a conflict with Jacob's views came to a head. Normally the Grimms held sway with a remarkable degree of discretion and were subject to deferential treatment from all of those around them. Even the printers – Hirzel, and Reimer acting on his behalf – who one would think might wish to see more control over the way their money and resources were being used, made suggestions with deferential caution and easily and apologetically backed-off if their advice was not taken up. Reimer's cautious and self-effacing plea for the inclusion of more professional terms (quoted above), is a preeminent example.

Although much of the administrative work fell to the Leipzig publishers where the materials were being collected over the years, there seems to have been no clear-set roles, and more of a post-hoc tendency to administrative action alongside a general aim to relieve the Grimms from disruptions arising from the business-side of the endeavor. This is consistent with the Grimms' nonchalant approach to organization. Despite the scale of the project and the number of contributors, the brothers were adamant from the outset that the organization of the

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[16] German at the time lacked a standard form of spelling and its alphabet included many superfluous letters with uncertain rules as to which to be used. Jacob hoped the dictionary could help rectify this, and like his intentions with the range of vocabulary, this was not to be a forced or artificial standard, but one he felt reflected historical precedents and overall grammatical coherence. He hoped to ground distinct rules on when the Szet (ß) should be used, and wished to rid German of the tendency to capitalize nouns – a characteristic still in use today, but originally derived from the printing industry, which produced plates of commonly used nouns.

dictionary's production wasn't to be rigidly pre-determined in order to allow for learning and adaptation as they went along. Early on Wilhelm would explain:

> it's deliberate that there is still no fixed plan; the rules ought to emerge themselves in the work, and we don't want to tie our hands from the outset. To do the best, natural tact is needed, and we must comfort ourselves with the hope that we can succeed in spiritually enlivening the vast mass [of words] (W. Grimm to Savigny, 2 April 1839, as cited in Kirkness 1980:94).

However, the brothers' lack of thorough foresight and the disjointed decision-making that ensued can be held accountable for some unfortunate stumbles in the pace of the production process, for instance, when there appeared to be no good record of the volumes the excerptors used in citing their quotations, and in how they underestimated the scale of the project and the time that would need to be devoted to it.

But for all the learning and refining of procedure that must have transpired under Jacob's considerable oversight through the first three volumes, it is remarkable that Wilhelm would step into the fourth volume of the project with his own unique approach and take full discretion. Because the brothers kept adjacent, but separate, studies in the same home, it's hard to gauge the extent of their mutual consultation throughout the dictionary project; however, scholars of their lives note that, despite their lifelong association with each other, the brothers were not collaborators so much as they merely worked alongside each other (Wyss 1979; Kirkness 1980). In one telling instance, Wilhelm was working towards the end of his slowly-progressing D volume and Jacob was being pressured to begin the preliminary work for getting the E volume into print, but Jacob would refuse, citing Wilhelm's different work style and the disruptions that would occur, claiming

> [a]lmost all of the books are arranged on the walls of my study and Wilhelm has the greatest tendency to carry them to his study where he places them on tables such that it is difficult to find them again. Even if he were to carry them back to their original position, there would be such an unceasing opening and slamming of doors, which would disturb us both. This is just an external drawback that would come from our collaboration; the internal are far worse (J. Grimm to Dahlmann, 14 April 1858, as cited in Kirkness 1980:231).

It is also fairly clear that Wilhelm did not ask Jacob for much assistance during his work on the D volume, and Jacob did not feel justified intervening in Wilhelm's work, despite the desire to maintain consistency throughout the dictionary. Consistency would not be attained, and Jacob would express thorough dissatisfaction with Wilhelm's work and attribute it to his brother's less

refined skill in linguistics. (See Henne 1990; Bahr 1991; Püschel 1991 for commentary on the differences). Hirzel would accept and reiterate Jacob's views, though Gustav Freytag would express a preference and acclaim for Wilhelm's sections, claiming "Wilhelm's work is so disproportionately more practical and sensible that I've become justly angry with Jacob's stubbornness" (Freytag to Hirzel, 25 June 1855, as cited in Kirkness 1980:224).

        In all, the organizational processes and the narrative of the dictionary's production point to the elevated value of learning-by-doing and the personalized creative rendering of one's accumulated intellectual sensibilities. This shows in the overarching visionary guidance accorded to Jacob Grimm, the faith placed in the excerptors own acquired skills rather than formal edict, the informal working-out of organizational practice, and the distinct disjuncture in process and presentation between Jacob and Wilhelm's sections.

Presentation Style

        As outlined by Zgusta (1986), when the *Wörterbuch* came to be published – with its first installment (A-Allverein) in May of 1852 – each entry would include the headword, its grammatical category and gender, followed by a sparse indication of meaning – which was most often just its Latin equivalent. This was sometimes followed by cognates, (usually in Dutch, but sometimes in older Germanic or other Indo-European languages such as French), and this would be followed by illustrative quotations in order from the oldest to the most recent. The entry would conclude with a lengthy section on etymology and explanation, though notably, the dictionary did not offer explicit definitions. The work would also be typographically distinguished by its use of the lower-case for German nouns, and it would refrain from using the old blackletter font that was then common.

        However, it is still difficult to comment holistically on the presentation style of the Grimms' portions of the dictionary or present a typical example entry. For not only are there inconsistencies between the brothers' work, but one of the distinct traits of the text is its inconsistent treatment of entries throughout. As Osselton (2000) notes of Jacob's volumes: the amount of material per entry seems to expand over time, but in general there also seem to be arbitrary differences in how the entries are treated. For example, the dates of quotations are not always given, or sometimes not precisely, chronological sequence is not always adhered to, and there seems to be no rule indicating when or why pronunciation, synonyms, compounds, or

variant spellings are given. This inconsistency also carried over into the etymological discussion. As Osselton (2000) states, "[f]or each of these words Grimm thus battens on that single point in historical development which he judges to be the most interesting – in one case, morphology, in the other, syllable stress" (p. 63).

The dictionary is notably progressive in its culling of quotations from a variety of sources, including many non-literary ones such as newspapers. However, quotes are found to be over-selected most frequently from the likes of Luther, Hans Sachs, and Goethe. Zgusta (1986) points to instances when Grimm seems to rely on Goethe even when the context does not force the meaning of the term.

Furthermore, given the vague guiding framework concerning the choice of words for inclusion, there were considerable grey areas and terms that were easily open to varied interpretation. How does one decide, for instance, if a word is too "pedantic" or if a coinage is not strongly rooted to a material notion to sustain its long-term survival? Or if a technical term had achieved literary currency; or if a foreign term was complementary or threatening to the lexicon? The life-blood of the German language was thus interpreted according to the Grimms' many decades of sustained research and sensitivity to its nuances, and they were seen as being preeminently qualified to offer an informed interpretation. But, this would assume judgments needed to occur on a case-by-case, or rather, word-by-word basis; there was no simple rule that could be clearly specified, and this is why analysts of the dictionary, then and now, would view its included inventory as haphazard or biased.

Finally, aside from its multi-faceted inconsistency of format, the etymological and explanatory sections perhaps most distinctly illuminate the Grimms take on the kind of information they were providing and how it was to be used. With his etymological analyses, Jacob Grimm engages the reader with lengthy, complex, philological explanations tracing the sense development of a word or phrase from its historical roots, entwining semantic and genetic progression – though occasionally veering into outright, and sometimes absurd, speculation (Bahr 1991; Zgusta 1991; Osselton 2000). For instance, he ponders whether the German noun "Arm," meaning an anatomical arm, is in some way related to the German adjective "arm," meaning poor, stating: 'how sensitive would that language appear to be in which the poor person [der arme] is the one whom compassionately, lovingly receives and embraces in one's arms [die

arme]' (Grimm J. 1854, as cited and translated in Zgusta 1991). He likewise offers reaching views on the relation between "Bauer," farmer or peasant, and "Baum," tree.

Jacob Grimm also tends to make use of tentative and vague modifiers, ("it could be," "perhaps," "probably," "it appears"), often speaks in the first person, and openly reveals his self-conscious uncertainties (Püschel 1991). In fact, one reviewer notes that, what Grimm terms "explanation of meaning" (Bedeutungserklärung), should rightly be thought of as "discussions" (Erörterung), through which his voice never strikes an authoritative or prescriptive tone, but a discursive one, and is expressly personal while implicitly assuming the reader as a participant (Püschel 1991). Moreover, and consistent with the domestic scene laid out in his preface, Jacob Grimm "talks to his readers" and "his verse is set out as verse" with a readable flow with transitional words like "therefore" and "furthermore" connecting his thoughts (Osselton 2000:64). This style is distinctly distinguished from the skeletal outlines of descriptive and depersonalized information we have come to expect from a dictionary, and along with his lengthy quotation excerpts, Grimm defended his etymological and explanatory material as compensating for the dictionary's lack of explicit German definitions (Osselton [1989] 1995).

Reception

By all indications and advice of their colleagues, the Grimms believed the time was right for applying the insights of philological scholarship to German lexicography. Pride in the work enveloped Jacob and the publishers as the copy for the first installment went to press in 1852, and praise began to pour in from the onset of its release. Kirkness (1980) would characterize the initial media reception as "lively and overwhelmingly positive, even somewhat gushing" (p. 139). Reviewers clamored to outdo each other in expressing their acclaim for the work with exaggerated platitudes for the general goals of the dictionary, the aims of philological research, and the heights of German science and the Grimms' contribution to it. For instance, one reviewer would find in it that:

> every word of our language, each utterance of our dictionary, are in a sense raised to an independent, individual entity, full of its own life, with a distinct development of its uniqueness, and at the same time shown as the product of countless historical influences and connections! (Prutz 1852, as cited in Kirkness 1980:171).

Another would enthuse of the dictionary that "nowhere does it seek a rigid exclusionary formalism, a schematic constriction and oppression, but rather an animated view into the

working of the all-constituting, never-ceasing spirit of the language (Sprachgeist)" (M. H. 1852, as cited in Kirkness 1980:176). Others would emphasize the national character of the work and its testament to German scholarship, even French reviews would herald the patriotic character of the dictionary (see Kirkness 1980:211).

In more private correspondence, Hirzel would exclaim that the work was "the greatest literary undertaking of the century," and an astonished Reimer would expressed to Jacob that "the work that comes out of your hands alone would be a challenge for an entire academy" (Hirzel to J. Grimm, 18 May 1852, as cited in Kirkness 1980:139; Reimer to J. & W. Grimm, 5 July 1852, as cited in Kirkness 1980:150). Hirzel saw the dictionary as the brothers' most important work and a testament to their name, but he therefore worried what would happen should it not be completed within their lifetimes.

Amidst the overwhelming praise, Jacob still didn't feel quite vindicated and would express regret that the acclaims felt superficial, were not concerned with the details of the work – in fact none seem to make reference to the details of individual entries – and that reviewers didn't weigh in on the positives and negatives of the dictionary, or at least this style of dictionary in contrast to other precedents. A more balanced critique might have indeed prevented or buffered an impending backlash of wholesale rebuke.

Of the critical opinions that would appear, some of the most minor centered on the work's lack of expected comprehensiveness, whether a work that had taken so long thus-far would ever be completed (and therefore, whether it was worthwhile to pay for a subscription), and its use of abbreviations for cited sources in lieu of a bibliography that had yet to appear. The more serious condemnations leveled at the work – and emphasized in particularly scathing and personal attacks from Daniel Sanders and Christian Wurm – called out against content that appeared too Protestant, too scholarly, too inconsistent, and too revolutionary in its spelling and typeface. The critiques accumulated all the while over the course of two years in which Jacob had yet to publish a formal preface to any of the initial installments. During this time he also refused, as he saw it, to stoop to the level of his critics by responding directly to their attacks. When he did finally publish a preface on the completion of the first full volume in 1854, several sections are clearly dedicated to responding to the critiques and explaining the rationale behind the work, which he thought was largely misunderstood by its critics.

Within the preface, Jacob would emphasize that one of the aims of a dictionary is to make a clear boundary around the German language "even if its borders are blurred every now and then" (Grimm, J. 1854:XXVII). With this he doesn't give in to the claims of lacking comprehensiveness, and instead, like his correspondence and other works have shown, stresses finding what is common to the language across regions, and definitive of its unique sound and structure, as well as the land, ideas, and customs it expresses. He recognizes that the boundary he draws doesn't naturally exist in itself, but that philological research could best identify the language's most distinct essence. In the first preface he even imagines the dictionary functioning like a clock for the whole of Germany, (a significant analogy at a period when train time would have standardized the time across entire regions); he further emphasizes that scientific grounding offers the most precision for this purpose. Where he concedes that the dictionary is lacking, he attributes it to the nature of the organizational process, which required distributed work, and with it: mixed results owing to variation in skills of the excerptors, the difficulty of accessing good editions of the relevant texts, and high-minded ambitions that couldn't possibly capture everything that was wished for. These are, however, drawbacks that the Grimms viewed as correctable over time and engrained into the method of the work.

German Catholics were the most outspoken about what they saw as Protestant bias within the work, which excessively cited from Luther. They further took offense to commentary offered with the word *Ablaß,* or religious indulgence, which stated: "chiefly it connotes the churchly forgiveness of sins through money, which the reformation triumphantly fought against" (Grimm, J. 1852, as cited in Kühn 1991:115). To these critics, Jacob's preface forcefully states:

> all the evidence, as it is almost unnecessary to mention, expresses through its content merely the opinion of the writer from which they stem. They are, especially in matters of faith – which a great many out of the reformation era touch on – not presented dogmatically, but only for historical illustration. That the protestant tint thereby prevails is owing to the predominance of protestant poetry and literacy; there indeed would be no omission of Catholic works so far one is able to get hold them and to show all the gains which they offer (Grimm, J. 1854:XXXVIII).

Of the evidence offered for *Abläß*, Grimm would maintain that they related to the utterances of Luther concerning abuses of the indulgence, and which the Catholic Church itself had conceded to and condemned.

Some of the most scathing remarks against the dictionary, extending to the Grimms and academic philology generally, arose from what was seen as the highly technical and scholarly

traits of the work. Particularly under attack was the lack of discrete definitions, or rather, the Latin and foreign translations often misunderstood to stand in for a definition. Alongside this, the inconsistent format of the entries and the technical details of Jacob's explanation and etymology sections were further viewed as alienating to the lay reader, as was the obscure lettering used when gothic word lineages were depicted. Jacob's explanations could also certainly veer into technical and speculative evaluations that could be hard for the lay person to understand, and further lent the work much of its inconsistent quality.

Sanders and Wurm were especially pressing along these lines and their involvement in fueling popular debate steered attention to the competing lexicographical works they would undertake. Sanders would exclaim: "is it really necessary for one to know Latin in order to understand German? And thus is there really no other education (Bildung) than the so-called scholarly (gelehrt)?" (Sanders 1852, as cited in Kirkness 1980:187). Later, in the first preface to Wurm's dictionary, he refused to let up on his criticism of the Grimms' work, claiming it is "ultimately not a dictionary for the German people (Volk), it's hardly for the educated part of them" (Wurm 1858, as cited in Kirkness 1980:247).

Though he refused to directly respond the their criticisms, Jacob's personal correspondence shows he was especially irked by Sanders and Wurm, felt they had no qualifications for accurately accessing the work, and that they clung to the past and dictionaries like Adelung's and thereby didn't recognize the gains of the *Wörterbuch*. He expressed to Hirzel that "it would be good if a knowledgeable, specialized man would confront these lampoons a bit" (J. Grimm to Hirzel, 19 August 1853, as cited in Kirkness 1980:199). Hirzel would arrange for Karl Simrock to respond to the criticisms in December of 1853. Simrock elaborated on points put forward by Jacob himself, and further proposed that German publications punish Sanders and Wurm by instituting a ban on their comments for three weeks (Kirkness 1980, see 201-2).

When Jacob's preface finally appeared in 1854 he would have much to say about its perceived scholarly attributes, while reiterating his intention that, while the dictionary conveys information that is of use to even the most scholarly, it is also for all levels. He believed each reader brought a little bit of skill to the text, and through one's natural inclination and pleasure, "[c]ompetency with the dictionary would increase through use itself" (Grimm, J 1854:XLI). Grimm further stresses that "it cannot be the intent of a scientific work, which also pursues higher goals, to guide them [the readers] through all steps"; with which he is defending the

dictionary's lack of explicit definitions (Grimm, J. 1854:XLI). Grimm would also make a case for finding the definitions offered by the lexicographical works of Adelung and other predecessors and contemporaries as unnecessarily long-winded, prone to confusion (for instance, in defining a table, *Tisch,* as a four-legged thing, or a raised surface); delimiting boundaries of meaning was also seen as potentially constraining on the future whims of the language. He even finds strict definitions to be an indication of the dictionary-maker's own arrogance and unappointed judgment; feeling that the scientific research philologist could occupy the pages with better things. Grimm makes it clear, however, that the Latin and other foreign translations he offers are not meant as a substitute for definitions, which he assumed could best be inferred from the quotation evidence, but rather as a means to point to similarly-corresponding concepts dating back to an earlier time. He specifies that they are not meant to exactly correspond, nor are they to be seen as exhaustive of a word's definitive essence or its ultimate (material) point of origin (Reichman 1991). They can at most only reveal "the first crop from the field of the language, where the stalk would be cut at the soil, linguistic research must still more deeply penetrate and extract the roots as well" (Grimm, J. 1854:XLVI). Thus, the Latin is there to complement the multifaceted information presented in each entry, and especially to ensure that foreign scholars could make use of the work. He asks, "[w]hat would it achieve by refusing an aid that is offered by the most familiar and fixed languages?" (Grimm, J. 1854:XL). Grimm argues that no user unlearned in Latin needs to be disturbed by its inclusion – saying that men should merely do what women do everyday when they come across words from the legal, military, and political realms of which they are unfamiliar. Grimm also takes to appealing to an international audience when deviating from the capitalization of German nouns, the antiquated black-letter typeface, and likewise streamlining the German alphabet. He claimed clinging to such traditions made German appear ugly and barbaric to outsiders and made the language difficult for foreigners to access.

Legacy

Before the first installment was even issued, an optimistic Reimer suggested making a printers' stereotype of the dictionary, supposing that the initial print run of 5,000 might quickly sell out and therefore to facilitate the quick pressing of more copies (see Kirkness 1980).

Ultimately, however, sales and subscriptions would be lower than anyone had fathomed, and future print runs of the Grimms' installments would be reduced to 2,000.

Wilhelm died in 1859, shortly after completing his D volume, but without writing his own preface for it, which Jacob supposed would be necessary. Jacob died in 1863 as he took to the *Frucht* entry. It had been prearranged for the continuation of the work to fall into the hands of Hildebrand, who had proficiently served Jacob as a copyeditor and occasional consultant, as well as Karl Wiegand, who was among the brothers' most loyal and skilled contributors and a staunch defender of the dictionary.

Wiegand and Hildebrand quietly commenced work on separate sections of the dictionary, each imparting touches of their own more muted personal style, meanwhile, the public attention and debate drawn to the project began to dwindle. The bulky, slowly proceeding first edition would continue to be passed along a line of several generations of editorial leadership, each leaving their own personal stamp on the project (see Bahr 1991 for an overview). The post-World War II separation of Germany would lead to the shared and more streamlined coordination of separate centers working jointly in Berlin and Göttingen towards wrapping up the first full edition of the dictionary in 1961, (roughly 123 years since it began), and then commencing with re-editing the work. It was one of very few collaborations that went on between East and West Germany.

By the time work on a revised second edition was set to begin (closely after the completion of the first edition), the new editors would recommend the immediate and complete overhaul of the volumes A-F (i.e. those done by the Grimms). Completion of all revision work ceased in 2012, when the F words were reached. No further revision or new editions of the *Deutsche Wörterbuch* are in the works, but rather the information compiled by the dictionary has been integrated into *Das Digitale Wörterbuch der deutschen Sprache* (The Digital Dictionary of the German Langauge), a web-based project.

Chapter 4 – Contextual Analysis of the Grimms' Dictionary in the Romantic Era

The Grimms' reputation has suffered some blows over the years, and the dictionary was a centerpiece of criticism directed at their scholarship. Even their own students and Jacob's biographer, William Scherer, would attempt to distance themselves from the brothers after their deaths. In an ironic twist given how harshly the dictionary was initially attacked for its scholarly style, Scherer quickly painted the Grimms as dilettantes, making it difficult for future generations to take their scholarship seriously and recognize the breadth of their contributions. The fairy tales would become their namesake, though the context of their collection would be lost. Jacob would remain central to the history of linguistics, though his contributions downgraded, for instance in the renaming of "Grimm's Law" (a name Jacob would have never conferred to it anyhow) to the "Rask-Grimm Rule." The field itself would further move away from the minutia of grammar, spelling, phonetics, diversity, and dynamics, toward socio-linguistic symbolic practices and critical language theories.

After World War II, the field of Germanics would find itself in a particularly ambivalent position with uncertain feelings towards its founders – first-and-foremost, the patriotically-spirited Grimm brothers. In the East, the brothers held onto a certain esteem owing to the favorable light in which they elevated those age-old working-class trades whose language was privileged in the *Wörterbuch*, and because the brothers were looked upon highly by the young Marx and Engels – who came to the University of Berlin as students around the same time the Grimms moved there as professors. Though as Kirkness (1980) notes, such honor seemed not to extend beyond these loose associations to an appreciative appraisal of the Grimms' work. In the West, things took a fiercely critical turn, particularly with a series of attacks by journalist Walter Boehlich beginning in 1952. Boehlich painted the Grimms' philosophy as deeply nationalist, whose legacy directly fed into the damaging ideologies held by the Third Reich. He found the *Wörterbuch* to above all showcase their thought and intentions, with bias set out to privilege certain political, religious, and cultural ideas at the expense of others.

Boehlich's outspoken views made it difficult to publicly take any different perspective on the Grimms. However, in 1980, with the aim to test Boehlich's assertions, Alan Kirkness would compile and present the scattered and unexamined documentation pertaining to the making of the Grimms' dictionary. He would conclude that there was no such subversive agenda to the dictionary and that the Grimms proceeded largely in accordance with the theoretical frameworks

they had developed over the course of their careers. Boehlich's critiques were shown to be superficial and biased themselves, revealing little acquaintance with the actual content of the dictionary.

But even if the dictionary could be said to fall within the arc of the Grimms' research and reasoning throughout their careers, more even-tempered contemporary critiques of the work take issue with the dictionary as a fundamentally flawed piece of scholarship, deemed too normative, lacking objectivity, and smothered by its attempts to achieve multiple competing aims and appeal to too many audiences (see Mellor 1972; Kühn 1991, Horlitz 1991). But while it can be acknowledged that the Grimms' work was by no means a success, it wasn't because they failed to abide by an absolute standard of objectivity, or that their attempt to address multiple audiences was inherently untenable.

This chapter will situate the Grimms' practice and reasoning beyond the immediate context of the brothers' lives to show that the work is not merely an artifact of what one rather positive biographer, Wyss (1979), deemed Jacob's "wilde Philologie," but reflects the wider intellectual climate and socio-structural context of mid-nineteenth-century Germany. In particular, the Grimms' vision and actions proceeded fairly in line with an epistemological reasoning that is consistent with their era and the influence of romanticism. Their failure, as I see it, was a byproduct of an apparently flawed assumption of this epistemology, and secondly, due to changing socio-structural arrangements –which formerly reinforced romanticist reasoning during the time of the Grimms' ascendance to scholarly prominence, but which under changing conditions would give way to new standards for knowledge authority. This chapter will situate the Grimms' careers and the making of the dictionary within the intellectual and social-structural climate of Germany during the tumultuous period from roughly the end of the eighteenth century through to the middle of the nineteenth.

Structural Changes and a New Cultural Movement

Prior to the nineteenth century, the courts of German aristocracy largely revered the French ideal of the cultivated civilized man, and modeled their behavior as such. French was the language of their courts, while German was looked down upon as crude tongue of the common folk (Elias([1939] 2000) However, as elsewhere in Western Europe, as new fortunes were being generated through expanded business and trade, and as printed material became more widely

available, a new educated class emerged, embodying a distinct cultural identity antagonistic to that of the nobility.

Such antagonisms didn't manifest in revolutionary bloodlust in Germany as they had elsewhere, although tensions did run high, but they expressed themselves through aesthetic influence on the sphere of ideas. The new universities mentioned in chapter two were a central channel for extending middle-class interest and values throughout German society and their advanced graduate training programs took precedence from the prominent German guild system – thereby adapting the tradition of artisanal apprenticeship in the production of material goods to the production of knowledge. Moreover, German governance was willing to sponsor such reforms, but unlike the practical materialist considerations motivating state support for science in other countries (most notably France), according to Ben-David (1971), the German states' interest in science was towards promoting a unified secular world-view and the "idea of a nationalistic philosophical, literary, and historical culture that was believed to be superior to everything else in the world" (p. 116).

Although the state offered substantial financial backing and expected the universities to be instrumental in training teachers and administrators for German society, state presence was relatively unobtrusive, leaving the universities to govern themselves and giving academics substantial freedoms. This was in many ways a continuation of the liberal autonomy characterizing the traditional universities, which bred an unchallenged 'Gelehrtenstand' in Germany – a class of academic cultural and administrative elites (McClelland 1980; Turner 1983). Nevertheless, the nature of the new research-orientated academic sphere, combined with measures to make German universities accountable to their students (which introduced mobility into the academic experience), advanced some changes that would distinguish the nineteenth-century 'Reich der Wissenschaft' (Empire of Science) from the earlier 'Gelehrtenwelt' (Republic of Letters). Most importantly, it led to more linkages across universities and alliances along disciplinary lines (Ben-David 1971; Farrar 1976; McClelland 1980; Turner 1983). That is, increased mobility had the effect of dismantling scholarly allegiances tied to university or region, and uniting scholars across the German states towards the formation of academic as well as political ties. McClelland (1980) even claims that these changes helped encourage the movement for German unification, and that

[t]he universities played a significant role in the shaping of a specifically 'German' society, because they were among the first institutions in Germany to foster a sense of national community. … National reviews and journals, national professional congresses, and outright agitation for national union were all primarily based in German universities beginning in the early nineteenth century (P. 9).

Romantic Science

Paralleling the new German university's emphasis on scientific knowledge creation was the German-led romanticist movement and its privileging of artistic creation (the term romanticism derives from the German noun for a novel – *Roman*). In fact, there was no real distinction between scientific and artistic forms of creation as far as many Romantic thinkers were concerned. Even the English word "scientist" – a nineteenth-century coinage – was prompted by a suggestion to combine the words science and artist (Ross 1962). Nevertheless, the romantic conception of science, while it has left a considerable imprint on the trajectory of modern philosophy of science, it has some elements that clash with contemporary practice and understandings of science. A key to understanding the characteristics and production of the Grimms' German dictionary lies in recognizing the extent of their influence by romanticist notions of knowledge and its attainment.

It must be noted that romanticism, particularly in its German birthing ground in the years straddling the beginning of the nineteenth-century, did not constitute a self-contained and coherent movement. Several scholars find it inaccurate and imprudent to suggest as such (e.g Knight 1990, Richards 2002, Zajonic 1998, Craig 1987). In many ways a shared spirit of critique and self-development limited the extent of coherence across the thinkers, tinkerers, and artists commonly identified with the era, among them: Herder, Goethe, the Humboldts, the Schlegels, Fichte, and Schelling. Kant's later writings, in particular his Critique of Pure Judgement, are also sometimes credited with fueling aspects of romantic thought. But however dissimilar its individual minds may be, historically the era presents a combination of ideas and ideals that do not exist in either the former era of Enlightenment reasoning and Newtonian science, or the positivist and pragmatist views fomenting towards the latter part of the nineteenth-century. Edward Craig (1987) sees the romanticists straddling "a bridge, in which the chief characteristics of the flanking epochs were for a time closely united" (p. 10). However, for the sake of operational traction, this analysis will identify romanticist science as characterized by its

metaphysical emphasis on organic unity and historical process, a purposive inclination to (pro)creative action, and an epistemological privileging of subjective perception coupled with a deeply-held faith in intersubjective congruence. My characterization is largely derived from the scholarship of Mead (1936), Craig (1987), Nicolson (1987), Richards (2002), Holland (2009), and Tresch (2010; 2012), along with edited collections by Cunningham and Jardine (1990) and Seamon and Zajonc (1998).

Organicism presumes deep-rooted interdependency – that parts cannot be understood apart from the whole, and that changes in one element are bound up with the trajectories of all others such that explanations could not be stated in simple terms of cause and effect. As Herder once put it and Goethe reiterated: "things found together might be there *for* one another, not *because* of one another" (Goethe 1820, 29). This organic framework is evident in Grimm's frequent borrowing of ecological and horticultural analogies – such as rootedness, mutual development, and complementarity – in his understanding and explanation of language formation and adaptation, and likewise, in his disdain for the seemingly artificial shaping of language by purists and pedants. But, this type of concern with organic unity and fear of interference does not imply that the Romantic scientist sought to abstain from action that might alter social or natural environments. In fact, whereas Enlightenment thinkers sought all-governing laws, the romantics viewed a self-organizing world in constant motion, of autonomous but interdependent agents – including humans – continuously acting and being acted upon. This supposed the opportunity for human creation and alteration of the environment, but was coupled with cautious recognition that actions can have unforeseen consequences (Knight 1986; Tresch 2012). It is in this sense that Grimm's language science and disdain for prescriptive lexicography can be reconciled with the "language planning" Ganz (1973) and Zgusta (1986, 87) have found apparent in his dictionary volumes. It is likely that Grimm honestly believed that his dictionary selections, while not perfect, were not truly arbitrary, rather, that they followed from his perceived organic unity of the language. But, fearing the loss of such unity, organicism also implied that the language scientist might act as a diagnostician who could discern the health of the organism and provide treatment – in this case, offering the dictionary as a means to revitalize the language by reviving the historical roots of words and meanings.

These were not hard and fast characteristics, but required attunement to an unseen and indescribable animating "spirit." Grimm used the term *Bildungstrieb* to describe this shaping

force in linguistic development, a term then associated with the physiological studies of Johann Friedrich Blumenbach (Grimm, J. 1854). To perceive such an enigmatic essence required repeated experience, shifting perspective, adaptation, and imagination – akin to an artist or artisan's practiced intuition, tacit mastery, and moments of epiphany or aperçu (Nicolson 1987; Jardine 1996; Schaffer 1990; Zajonic 1998; Holland 2009). Running counter to the Enlightenment emphasis on systematic and externally-directed reason, in the Romantic world of organic interconnections, the object of study could not be understood apart from the examining subject. Understanding was thus a product of communion between the self and the phenomenon – or more precisely, a reunification – through a process Goethe deemed "participatory consciousness" (Mead 1936; Knight 1990; Morgan 1990; Cottrell 1998). It is in this sense that the "genius" commonly heralded in the Romantic era was "understood not as a peculiar capacity possessed by a creative artist, but as the power which possessed him" (Schaffer 1990:83). The imaginative *Wissenschaftler* possessed by this power was deemed to have "a special communicative capacity and function," destined to teach others by guiding the learner through their "same train of experience" (Shaffer 1990:42).

This epistemological framework falls under Allan Megill's (1994) classification of "dialectical" objectivity, "which holds that objects are constituted as objects in the course of an interplay between subject and object; thus …the dialectical sense leaves room for the subjectivity of the knower" (p. 1).This logic is repeatedly evident in the making and defenses of the dictionary. For instance, in one letter towards the end of his life, Jacob Grimm says of the dictionary: "It has been my work, and my idiosyncrasies, with their virtues and errors, are imprinted within it" (J. Grimm to Hirzel, 18 February 1863, as cited in Kirkness 1980, 261). But despite any shortcomings, Jacob appeals to readers to recognize his selfless passion and the unmatched extent of his expertise and experience as an indicator of his qualifications to lead the task. His first preface closes with the remarks:

> [r]elentlessly, following from each of the capacities that resided within me, I wanted to arrive at a perception (*Erkenntnis*) of the German language and visualize it from many sides before my eyes; my views became more and more illuminated and are still unclouded (Grimm, J. 1854:LXVIII).

This logic is also upheld by at least one dictionary reviewer, who gushes:

> each page within it is evidence of sharp scholarly sense, of extraordinary knowledge of the sources, of artistic tact, of seasoned contemplation, of tirelessness and bravery.

…Like two temple priests they lead an incoming pilgrim up to the place of offering (Rochholz 1861, as cited in Kirkness 1980, 252).

Appropriate to this logic, it doesn't apply only to Grimm as an author-editor, but is embedded in the overarching vision of the dictionary and the brothers' understanding of how it would develop. As illustrated in chapter three, the importance of cultivated sensibility and tact was emphasized throughout the word-extraction program. Moreover, the peculiar vision for the work and its discursive style of presentation – as something that would be revered and read through, rather than simply consulted – further conveys this logic of individual engagement. In this case, the dictionary's readers, whether formally trained academics or not, were encouraged to use the work as a sensitizing device to develop their own intuitive knowledge and national consciousness. As his defenses above indicate, Jacob Grimm didn't see how what the text lacked in definitions of meaning, or supplemented with Latin terms and philological theory, should detract from its intended general use. This mirrors Goethe's view that "scientific work needs to be *done* to be understood" (Amrine 1998:42). In fact, Goethe's 1810 *Theory of Color* appears to be a similarly-styled text, which, according to Douglas Miller (1995), "constantly reminds us that the reader himself must supply the imaginative power to penetrate the phenomena Goethe has arranged and described" (p. xv).

In this view the individual's mind, body, and labor are necessary for processing observation into knowledge. Nevertheless, the processing power of a single mind and body could only go so far in a lifetime and was likely to be tainted by the physiological or psychological limitations and predispositions of each individual – a claim argued in Kant's *Critique of Judgment*. Therefore, and in contrast to Kant's idealism, to more closely approach a complete awareness of a true objective reality Romantic-era scientists concerned themselves with consensus building and collaboration in order to counteract variation, biases and error, to expand on data, and to reach new and more nuanced understanding. We see this in the spirit of collection, cooperation, and synthesis marking the era – in Alexander von Humboldt's network of observers measuring geographic phenomena (see Dettelbach 1996; Tresch 2010), in Karl Friedrich Gauss's method of least squares to mathematically balance diverse astronomical observations, and in the vision for the dictionary as a collaborative and on-going project beyond the life of any single individual (also see Holmes 2009 for examples in British Romantic

science). This spirit is expressed by Hans Ferdinand Maßmann, who, upon accepting a role in the dictionary project, enthused to Jacob that the work could become

> a wonderful – and indeed, presently necessary – collective structure (*Gesammtbau*), of which everyone – master, journeyman, and apprentice – lends a hand, and you lay the capstone. All this without envy and contention (Maßmann to J. Grimm, 1 October 1838, as cited in Kirkness 1980, 75).

This romanticist model of intersubjective knowledge production rests on an assumption that multiple minds will tend towards convergence and that knowledge could accumulate in a linear progression towards transcendent Truth. As Craig (1987) argues, the romanticists thus sought the final re-convergence of mind and world since the fall; and it was believed that only through "ever-broadening consciousness, ever-increasing knowledge" that the "effects of having eaten of the tree of knowledge" could be corrected and "true grace can be found again" (p. 143). It is a logic that carries forth the hopes of the Enlightenment and belief in what Megill (1994) calls the philosophical sense of "absolute objectivity." It is evident in Kant's notion of the "thing-in-itself," Goethe's "*Urphänomen,*" and for Grimm, the notion of a primordial concept *"Urbegriff"* underlying the development of words (the Latin references in the *Wörterbuch* were to give the reader a sense of their underlying *Urbegriff*, see Reichman 1991).

However, in contrast to most Enlightenment philosophy, congruence of minds and world was understood in Romantic thought as the product of a synthesizing process, both within and among individuals. In the course of this process communication difficulties may remain a barrier to convergence, which was a theme, and fear, heavily dwelt upon by Goethe (Holland 2009). In later years pragmatist philosophy would come to terms with the uncertain possibility of absolute truth and its attainment, but not without noting that the romanticist ideals offered "the expression of a certain hope: that there was such a thing as the 'final opinion' in this sense, and that the scientific method was the road that would lead to it" (Craig 1987:257).

This reasoning appears to underscore the hopes Grimm attached to the German Dictionary. At least this optimism seems palpable in the early planning and promotion of the work, but in the course of its making and assembly – through the materials submitted by the roughly one hundred contributors, and recognition of their various idiosyncratic views and approaches – it's as if Jacob Grimm comes to realize that consistency of vision and practice are exceedingly difficult, if not impossible, to attain. The brothers express surprise when their excerptors request more explicit instruction, and Jacob was frustrated to find the results of the

excerption program below his expectations and requiring considerable re-excerption (*Nachexcerption*) on his part.

But, even the brothers, who had shared their lives together, couldn't obtain consistency between the different dictionary volumes they each wrote. If Jacob Grimm did take these romanticist assumptions to heart, its unraveling could have simultaneously dashed his hopes for a German nation unified around a shared *Volksgeist*, weaken his faith in the promise of empirical scientific methods, and make him unable to trust his own hard-won knowledge. Shortly after Wilhelm's "D" volume went to press Jacob expressed having lost all enthusiasm and hopefulness for the project, only carrying on out of contractual obligation.

To the extent that Jacob Grimm's volumes fulfilled his romanticist vision for the dictionary one can't say the work was a failure; but, perhaps romanticism failed Grimm. The assumption of mental convergence would increasingly seem untenable or unattainable. On top of this, German university reforms and the growth of the middle-class, both of which corresponded with the ascendance of Romantic thought and science, would continue to press forward in ways that would soon lead to increased competition, segmentation, and standardization of disciplinary tracks (Bontempelli [2001] 2004). These developments undermined the romanticist ideals of dialog and engagement, as well as the genius status and credibility of the individual virtuoso scholar (see Cunningham and Jardine 1990, Shaffer 1990).

The romanticist epistemological interplay between the individual mind and public knowledge – being transferred by experience rather than edict – nicely captures the vision underlying the production of the Grimm's dictionary. It is evident in the faith placed in the excerptors' own acquired skills rather than instruction, the informal working-out of organizational practice, the distinct disjuncture in process and presentation between Jacob and Wilhelm's independently-produced sections, and even down to the assumption that the readers' role was to engage with the work rather than merely refer (and thus, defer) to it.

In this vein of reasoning the dictionary is a reference book like no other in that it is a sensitization device. The knowledge it intended to impart was an experiential feeling for the German language, and, further consistent with romanticist science, it sought to "excite the imagination" (Knight 1986:5). This, it was hoped, would culminate in a greater scholarly sort of understanding, but also a more general cultural consciousness among Germans, aiding in their

social and political unification, and maintaining it through linguistic developments in line with the spirit of the language.

With this, the dictionary showcases an alternative vision of how intersubjective knowledge production might proceed; one which, rather than trying to deny the personal and subjective, or attempting to obstruct them through sophisticated standardized processes or equipment, instead put these elements at the forefront. And rather than retreating from the public into ever more specialized disciplines and layers of training in an autonomous and insulated academic sphere, the Grimms strongly felt that the general public should be engaged in the knowledge production process themselves. It's particularly ironic, and indicative of the growing professionalization and autonomy of the scientific sphere in their lifetimes, that upon its release, the dictionary would be forcefully criticized and cast as a work of scholarly elitism and alienating to the lay German. Adding to this irony, it was only in the next generation of scholarship that the work would be viewed as a biased collection of dilettantish speculation – a legacy begun in a posthumous biography of Jacob Grimm by his former student, the positivist philologist Wilhelm Scherer (Wyss 1979).

Most recently, and in widened circles, the virtues of the Grimms' and their work are being revived, greater understanding sought, and their reputation revised. Bontempelli ([2001] 2004) rediscovers Jacob Grimm's arguments (generally with Karl Lachmann) against rigid disciplinary bounding and in favor of the flow of free creative thought. In 2009, Berlin's Humboldt Universität, formerly the University of Berlin, named its new central library after the brothers. A year later, Nobel Prize winning author Günter Grass released his last biographical work, which he dedicated to the dictionary. Entitled "Grimm's Words: A Declaration of Love," Grass imagines himself a contemporary contributor to the dictionary as it is tirelessly worked on by an immortal Jacob Grimm through all the changes Germany and the modern world would see since his death in 1863.

Chapter 5 – "A New English Dictionary on Historical-Principles," or "The Oxford English Dictionary"

What was to become the *Oxford English Dictionary* (originally titled "*A New English Dictionary on Historical Principles"),* began somewhat inadvertently in 1857 at the suggestion of three members of a London-based Philological Society to form an "Unregistered Words Committee." The aim was to collect an inventory of all English words not previously registered by leading dictionaries of the day – particularly the works of Samuel Johnson and Charles Richardson. Society members and the general public were called upon to voluntarily write-up the quotation and publication reference in which a relevant word or expression was used. Within a few months 76 volunteers were submitting slips. Following a lecture and 70-page report by committee member Rev. Richard Chenevix Trench entitled *On Some Deficiencies in our English Dictionaries*, the Society voted in January 1858 to launch the project as a new English dictionary.

Trench, along with Frederick Furnivall and Herbert Coleridge, maintained oversight for the expanded endeavor – which some believed they had always intended to turn into a new dictionary project. The *On Some Deficiencies* text instituted a preliminary vision for the work that was clear to stress how their dictionary was to be, in style and scope, unlike any English dictionary that ever existed at the time. It would not be like the prescriptive works of lone scholars that came before, but rather, it would embody what Trench declared was the "true *idea* of a Dictionary," in which the dictionary-maker is "an historian, not a critic" (Trench [1857] 1860:4-5). Trench would explicitly cite inspiration from three recent innovative lexicographical endeavors, including Franz Passow's 1811 Greek historical dictionary (later translated into a popular version for English audiences by Scott and Liddell), and the historical-dictionaries of national languages then being assembled and written in Germany and France; at the time only the Grimms' German dictionary had volumes in print.

The essay would passionately argue for the British nation to make the kind of scientific, lexicographical progress embodied in those works. It was believed that such a dictionary would excite national spirit and preserve a unifying feeling across all English-speaking regions around the globe – the philological theories of Henry Sweet supposed that in less than 100 years' time, British and American English-speakers would be incomprehensible to each other (E.B. Nicolson

to Murray, 7 March 1880, MP4). Additionally, the dictionary was also to be a means for British philological scholars to make headway and assert their jurisdiction in the study of the English language. At the time, Philological Society members often lamented how far behind and unsophisticated their researches were compared to the continental scholars, particularly the Germans, who were then considered the foremost authorities on the history of the English language. Members of the Philological Society thus saw it in the public interest to launch such a dictionary, which, analogous to the German dictionary, they believed should be by English-speakers for English-speakers, and compiled in the spirit of "common action" modeled in the work by Jacob Grimm and his brother (Trench [1857] 1860:69).

Interest and enthusiasm for the project continued to grow over the subsequent years, which would be occupied with extensive planning and continued collection of word submissions. In 1859, an official *Proposal* for the project was published and would be widely distributed throughout the course of the next year in Britain, and then America. With it, more volunteers were sought to supply words from selected texts and time periods and to contribute to etymological research. Detailed instructions for volunteers and examples for documenting and submitting evidence were included. New pressings of Trench's *On Some Deficiencies…* essay would also be published, including updates on the project's favorable progress, which served to further and maintain excitement for the project.

Trench, Furnivall, and Coleridge came to assume oversight for administering what was deemed the "literary and historical" portion of the project's early development, which included administering the collection, synthesis, and editing of content from the slips. Fellow Philological Society member, Hensleigh Wedgwood, was named responsible for the etymology work which was set to begin further down the line. Together, these four men symbolized varied but intertwined cross-sections of nineteenth-century intellectual life. The youngest of the men, Herbert Coleridge, was only 27 when the project was launched, but was already a promising and prolific gentleman-scholar and the grandson of the romanticist poet and polymath Samuel Taylor Coleridge. Trench was already an acclaimed lecturer and writer of what might be called "pop-philology" texts on the English language: 1851's *On the Study of Words,* and 1855's *English Past and Present*. While some of his scholarly assertions were suspect, the two works were strong in their pronouncements of the promise of philological pursuits, with particular reference and reverence to the precedents set by Jacob Grimm. For instance, Trench exuberantly declares:

Here then is the explanation of the fact that language should be thus instructive for us, that it should yield us so much, when we come to analyse and probe it; and the more, the more deeply and accurately we do so. It is full of instruction, because it is the embodiment, the incarnation, if I may so speak, of the feelings and thoughts and experiences of a nation (Trench 1851:22).

To this effect he notes that the word "club," in the sense of a voluntary association, is unique to England, as opposed to other European nations like Germany and France, and indicative of differences in social and political life.

And no wonder; for these voluntary associations of men for the furthering of such social or political ends as are near to the hearts of the associates could have only had their rise under such favorable circumstances as ours …freedom with moderation and self-restraint … It was comparatively easy to adopt the word; but ill success of the 'club' itself everywhere save here where it is native, has shown that it was not so easy to transplant the thing (Trench 1851:43).

As Dean of Westminster, Trench was also one of the foremost religious figures in the nation, and soon to be appointed the Archbishop of Dublin. Religion and this new science of language were complimentary in Trench's mind, as he wrote:

all recent investigations plainly announce that a yet stronger evidence, and a moral argument more convincing still, for the unity of mankind will be found in the proofs which are daily accumulating of the tendency of all languages, however widely they may differ now, to refer themselves to a common stock and single fountain head. Of course *we* need not these proofs, who believe the fact, because it is written; yet we can only rejoice at each new homage which Science pays to revealed Truth, being sure that at the last she will stand in her service altogether (Trench 1851:45).

With such emphatic and optimistic convictions, it's no wonder an army of volunteers stood eager to heed to the Society's calls for assistance. Of Trench's work Aarsleff ([1967] 1979) has claimed "[b]oth books did more than any previous publication to make language study popular, and without that popularity it seems unlikely that the *New English Dictionary* [as the *OED* was first known] would have been able both to get the readers it needed and to arouse the general interest which sustained it" (p. 235).

But while Trench's views on language could still be rather conservative, deeming some words as "base" and certain texts as "unworthy," the barrister Frederick Furnivall was far more egalitarian in his linguistic and socio-political, views. Furnivall was an outspoken social progressive and was among the founders of the Christian Socialist movement, the British co-op movement, and London's Working Men's College. On top of this he became active in several

literary associations and was installed as a permanent secretary for the Philological Society. He also promoted athleticism and founded a women's sculling club. He was a staunch vegetarian, teetotaler, non-smoker, and a promoter of women's rights, education, and suffrage. After a falling out with his fellow Christian Socialists, he would also become a professed agnostic – after his friend, the Darwin-defender Thomas Henry Huxley, (who also contributed to the dictionary), coined the term in 1869. In a dedication to his life's work it was said: "[i]n sculling, as in social work, education, Shakspere [sic], Chaucer, and Early English study, Furnivall initiated, or helped to initiate, a new era" (Munro 1911:xvi).

With his many memberships and pursuits, and given his own generally well-off upbringing and egalitarian views, Furnivall was something of a "go-between" across all walks of social life (Benzie 1983:21). But, Furnivall could undoubtedly also be seen as something of a meddler, and his lack of social tact scored him many enemies – though he was often oblivious to these faults, or didn't see them as such. For instance, a future *OED* editor, Henry Bradley, noted: "[h]e would sometimes freely criticize my work, as he did that of most of his friends. His unusual frankness in this respect led to many lasting estrangements, of which he sometimes spoke with a degree of surprise that was rather amusing" (Bradley 1911:6). Furnivall's strong unyielding convictions, sense of his own rightness, and often paranoid distrust of perceived enemies undoubtedly made him difficult to work with. Nonetheless, his position and connections made him a catalyst for real change in Victorian England. For instance, it's been claimed that the eminent art historian John Ruskin's "decision to accept Furnivall's pressing invitation to teach at the Working Men's College marked one of the most significant turning points in the whole range of nineteenth-century cultural history" (Benzie 1983:50).

Unlike the three initial founders, whose voices are most heard and on the public record in the early history of the dictionary, Hensleigh Wedgwood's chief duties on the etymological side of the work had not yet begun, and his presence can only be felt behind the scenes in the early planning processes. Nonetheless, his identity further rounds out the intellectual intrigue attaching to the dictionary's history. Wedgwood was a very wealthy gentleman of a prominent British family known for their porcelain business. In 1833, Wedgwood was the first Englishman to publish a review of Grimm's famous *Grammatik*. Wedgwood himself was working on a large-scale English etymological text when the dictionary was launched, while his cousin/brother-in-

law, Charles Darwin, would soon catapult to notoriety with his 1859 publication of *The Origin of Species*.

Unlike their continental counterparts, none of these men could really claim to be, or be thought of, as professional philologists, or professional scholars of any form to any degree. They were born into wealth or earned their living largely from other means, and like most scientific practice in general in Britain at the time, their philological endeavors and training were pursuits of passion, fostered through informal networks and voluntary associations – and, for those who could afford it, sojourns to Germany.

Planning and Deliberation

The details of Trench's *On Some Deficiencies* essay laid out the initial foundations guiding the work. Namely, it was asserted that existing dictionaries 1) did not completely register obsolete words, 2) did not give complete or consistent coverage to families or groups of words, 3) did not record the earliest evidenced usage, 4) did not give the full range of historical meaning, 5) did not distinguish between synonymous meanings and usage, 6) do not make use of good literary passages to display meaning and etymology, and 7) added too much redundant or unnecessary information. This is not to say that previous dictionaries failed themselves on these points, but that their makers did not envision the "idea" of a dictionary along the same lines as Trench and his philological circle.

But beyond these generally accepted evaluations, the details that would define the dictionary's content, as well as the organization and goals of the project, sometimes appeared to be shifting or inconsistent across the project leaders and society members. Through the first few years contrasting visions can be gleaned across the writings of different individuals, outright debate is shown in the minutes of the Philological Society's *Transactions*, and is additionally evident in written commentary on the circulated drafts of the main planning documents.

How far back and how far forward to circumscribe what constituted "English" was one matter of debate, and likewise, how and whether to identify distinct eras of linguistic significance – like Jacob Grimm had done with his categorization of Old, Middle, and New forms of High German. The initial idea of the unregistered words committee was to incorporate words from as far back as the thirteenth-century writings of Robert of Gloucester (around the end of the reign of Henry III), and up to the end of the seventeenth century. A draft of the initial proposal states the

belief that the language "ceased to undergo any further important modification" after the seventeenth century, though exceptions were made for the works of "Wordsworth, Coleridge, Shelley, Byron, Walter Scott, Southy, and the leading writers of the Victorian era (except Sir A. Alison)" (Philological Society, *Initial Proposal,* 1857, OED/B/1/1/1). The seventeenth-century cut-off was derived from assumptions about the prevalence of mass printing, and an expectation that the proliferation of the first English bible would have effectively standardized the language. Such assumptions didn't hold, however, and in another draft a three-period model is proposed, with the first period of importance from the thirteenth century to 1526, when the first English translation of the New Testament appeared. It is then supposed that a second distinct era of the English language commenced from 1526 until sometime between the mid-seventeenth and mid-eighteenth centuries (a series of cross-outs show the debate as to whether the works of Milton, Dryden, or Burke made the best cut-off point). A third era follows leading up to the present day. A five-era breakdown appears to have also been proposed, but abandoned.

It was also debated whether all words and sources would be considered worthy for inclusion and whether prescriptive remarks should be given. Though the dictionary would ultimately pave the way for an inclusive and descriptive style of lexicography, the original plans of the Unregistered Words Committee assumed the need for a process whereby authors would be "admitted to the rank of a Dictionary authority" (Philological Society, *Initial Proposal,* 1857, OED/B/1/1/1). Furthermore, Trench's *On Some Deficiencies* seems to suggest a prescriptive intent, claiming:

> A Dictionary is an historical monument, the history of a nation contemplated from one point of view, and the wrong ways into which a language has wandered, or attempted to wander, may be nearly as instructive as the right ones in which it has travelled: as much may be learned, or nearly as much, from its failures as its successes, from its follies as from its wisdom (Trench [1857] 1860:6).

The text also supposes that past dictionaries devoted too much space to "intruders and interlopers" of a less-than-English quality, though Trench provides no indication of how a line would be drawn against foreign terms (Trench [1857] 1860:57).

A different tone is drafted into an untitled and undated "Report" by Coleridge, which seems to suppose that any judgment of assumed rightness or wrongness should not be offered, or at least cannot be objectively levied:

we are prepared on the one hand to maintain, that no word for which authority can be cited (we shall define our sense of 'authority' – hereafter) should be refused admission into the Dictionary, and on the other, to deny that the functions of the Lexicographer and the Critic are in any way compatible with each other (Coleridge, "Report," c.1858, OED/B/1/1/2).

A scribbling on the back of this report shows his introspection on the matter, including a line that would later appear in the final *Proposal:* that when a lexicographer takes authority as to what "ought to be" it "necessarily comes to pass that there are as many English languages as there are Dictionaries" (Coleridge, "Report," c.1858, OED/B/1/1/2). Coleridge would also layout, from an apparent earlier consensus, a fairly liberal definition of the "authority" for sources, but with the caveat

that we do not in any way violate the substance of our theory, when we claim a certain discretion for the Lexicographer in this respect, a discretion to be jealously watched in its exercise, but still sufficiently unfettered to allow him to reject books, which are affected in his judgment by any special or glaring disadvantages (Coleridge, "Report," c.1858, OED/B/1/1/2).

The sources deemed more disadvantageous included other dictionaries, glossaries, and linguistic works, along with scientific and technical treatises which, "necessarily require and presuppose an artificial terminology" (Coleridge, "Report," c.1858, OED/B/1/1/2). On this latter point, it is perhaps surprising that the originators of the new dictionary were in agreement over its exclusion of scientific and technical terminology. Trench's *On Some Deficiencies* essay, claims that scientific and technical words are not "words at all, but signs; having been deliberately invented as the no-menclature, and, so to speak, the algebraic notation of some special art or science, and having never passed the threshold of this, nor mingled with the general family of words," he adds that a dictionary "must everywhere preserve the line firm and distinct between itself and an encyclopedia" (Trench [1857] 1860:57).

When it came to dialect and provincial terms, which were traditionally overlooked in many English dictionaries, mixed feelings again abounded – along with practical recognition that written examples of them would be lacking. *On Some Deficiencies* offers an indeterminate stance which most likely follows closely from the Grimms' interest in points of linguistic connection rather than difference. Of such provincialisms, Trench argues:

We do not complain of their omission. …in their avowed character of provincial words; when indeed, as such, they have no right to a place in a Dictionary of the English tongue. I have placed an emphasis on 'as such' for while this is so, it must never be forgotten that

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a word may be local or provincial now, which was once current over the whole land (Trench [1857] 1860:14-15).

Though it is unclear how one would know the difference between provincialisms reared in isolation versus artifacts of the nation's history, in Coleridge's report he suggests all written work be considered truly "national" and worthy of inclusion in the dictionary (Coleridge, "Report," c.1858, OED/B/1/1/2).

With regard to the organization of the dictionary's production, the inspiration of the Grimms' and the application of a division of labor is cited throughout multiple planning materials, with a claim "that it is only by such combined action, by such a joining of hand in hand on the part of as many as are willing to take their share in this toil, that we can hope the innumerable words which have escaped us hitherto will ever be brought within our net" (Trench [1857] 1860:70). Still, edits and commentary on the draft proposal show some wavering on the extent of this scheme, as well as doubts about the contributors' abilities. Coleridge writes that "[v]ery few persons can analyze words with skill and correctness, but there are hundreds who can read an old author accurately, and write his remarkable words phrases and idioms with intelligence and fidelity" (Coleridge, "Report," c.1858, OED/B/1/1/2). He does not wish to extend the volunteer program to the etymological ambitions of the work, feeling that doing so "would be to draw down upon our heads a flood of etymological trifling, nine-tenths of which would be totally useless, and to divert the attentions of Collectors from the other often more important objects" (Coleridge, "Report," c.1858, OED/B/1/1/2). Although some contributors already had, willingly and without solicitation, on occasion supplied their own etymological suggestions, Coleridge specifies that: "[o]ur notion always has been, the etymological part of the work should be done by ourselves" (Coleridge, "Report," c.1858, OED/B/1/1/2). Doubt and distrust is also directed towards the project leaders themselves, as Coleridge continues:

> that in all cases of difficulty – lists of words should be prepared by the [etymological] Committee, and proposed for discussion at the Society's meetings. In this way the assistance of those most capable of dealing with questions of verbal analysis would be brought to bear upon the task, while the open discussion – to which each word would be thus subjected would effectively obviate the mischiefs arising from the etymological bias of a single mind being allowed to run rampant through the Dictionary, and would lend to the decisions arrived at a higher authority, than would attach to the Incubrations of any single individual (Coleridge, "Report," c.1858, OED/B/1/1/2).

I bring up these points of deliberation because, although the dictionary's original leaders vowed that their dictionary would not instate "a self-made dictator, or 40" at the helm of the English language (the "40" being a reference to the committee of for-life appointees overseeing the content of France's *Dictionnaire de l'Académie française*), their task was still not a self-evident one (Trench [1857] 1860:5). Even plainly stating the aim, as the final *Proposal* would, to "contain every word occurring in the literature of the language it professes to illustrate," brings with it a slew of decisions to contend with (Philological Society 1859:3). For instance, what constitutes the English language? What is a word? What gives a word currency worthy of its recording – length of time in use?, who uses it? What constitutes the "literature" from which the evidence will be culled? Additionally, what constitutes worthy and substantial enough evidence? Although they railed against the so-called arbitrary delineations of their forebears, they too would have to draw a subjective line somewhere and uphold it amongst a diverse body of contributors.

Ultimately, two documents, the final *Proposal* and a *Canones Lexicographici* were to encapsulate the results of the early planning deliberations. The final *Proposal* would be issued to the public in 1859 and reiterated the aim to produce "a new and more Scientific Dictionary than any at present existing" (Philological Society 1859:1). The document would solicit the assistance of more volunteers, and set out "a system of rules as will direct them to the principal points to be attended to in perusing and analysing the books they may undertake, and also ensure general uniformity in the results arrived at" (Philological Society 1859:2).

With the *Proposal*, compromise seems to be shown in refusing as textual authorities all works of scientific, technical, or linguistic purpose (including other dictionaries) printed after the Reformation, but to consider a broader range of illustrative works from before that time, while again permitting room for some editorial discretion. The document maintained the mid-thirteenth century as the approximate starting point for the commencement of a linguistic shift away from Saxon influence, which would mark a distinct era up to 1526. It was finally decided that the end of second period would be bracketed by Burke's death in 1674, followed by the third period leading up to the present. These delineations became important because it was initially supposed that the dictionary would provide only one illustrative quotation from each of the eras in which a word was in currency. Furthermore, it structured the readers' assignments; in order to avoid too many duplicate entries, readers were to consult "basis of comparison" guidelines in deciding

whether a word should be excerpted. For instance, for the first demarcated era, Herbert Coleridge, who specialized in that period, would furnish periodically updated lists based on word usage and sources he had already collected or reviewed; for the second era, readers were not to send words already existent in the concordances of the Bible or the collected works of Shakespeare. The volunteers were expected to choose their readings from published lists of suggested sources or authors – and against updated lists of works already being read – and to write in their selection, or get approval for a proposed text.

The final *Proposal* also shows considerable openness to accepting the readers' own philological views and suggestions. It is here that volunteers are first invited to take part in the etymological task of the dictionary, though it is still recognized that etymological work can be far less cut-and-dry than that of submitting quotations as evidence of a word's usage. It was therefore proposed that etymological disputes would proceed to the review of a committee and the assistance of nine named specialist scholars, and "in cases where there is room for a fair difference of opinion, although they may not themselves adopt the views therein propounded, will in all cases be distinguished by the initials of the contributors" (Philological Society 1859:5). The *Proposal* then also adds that "further we shall gladly receive, 1st, any well-considered definitions of words; and 2nd, any well-considered distinctions of words from the synonyms with which they are likely to be confounded" (Philological Society 1859:7).

The document then goes on to outline a lengthy series of rules guiding readers to the most useful material for exception, and the practical matters of submitting words and their quotation, always with "the full reference on a separate half-sheet of note-paper, lengthwise, and on one side of the paper only;" emphasizing that "[i]t is most earnestly requested that this rule may be strictly and undeviatingly followed, its object being to enable the Editors to sort the various contributions at once into alphabetical groups, and so to prevent the accumulations of matter from becoming unmanageable" (Philological Society 1859:10). Notes for contributors to the etymological program are also provided. Sample slips for the extraction work are provided at the end of the document.

A year later, in 1860, a final version of a *Canones Lexicographici* would also appear and set out the guidelines for editors to follow in the course of compiling and writing material for the dictionary. In addition to Trench, Furnivall, Coleridge, and Wedgwood, four other Society members participated in overseeing the construction of that document, which set out terms for

dealing with slang, Americanisms, colonialisms, and provincialisms. Contrary to the views stated earlier by Trench and Coleridge, provincialisms were now expressly acknowledged as being of highest importance, to such an extent that they could be admitted "whether furnished or not with the otherwise indispensible passport of a quotation" (Philological Society, 1860, *Canones Lexicographici.* 1860, OUP OEDB.1.3.1). There were also provisions for handling different spellings, compounds, outlining what was to be included in each entry and its order, and also how to present etymological uncertainty or contending views. It further settled that technical and scientific words could be admitted to the main work only if they passed into general usage and literature. But most significantly, the *Canones* spelled out plans for a second separate volume, or set of volumes, appended to the overall work, which would be a dedicated vocabulary for technical and scientific terms and proper names – including surnames and geographical names. The etymological work was also to be given its own separate section.

With these plans, even with a printer secured, and 54 "pigeon-holes" constructed in Coleridge's home for sorting the thousands of word-slips to be sent in by volunteers, the real editorial work of the dictionary was set to begin. In a report to Trench in May of 1860, Coleridge reported generally good progress on behalf of the reading program, as well as the Society's de-facto appointment of him (against his own perceived inadequacy) as editor of the literary and historical portion of the work. He would divulge statistics on the increased number of contributors, and comment on the unanticipated amount of interest stemming from America, "where our Proposal appears to have created some little sensation" (Coleridge 1860:72). Coleridge appointed G.P. Marsh of Vermont as secretary over the American efforts – a role that Marsh volunteered himself for. Not yet counting the Americans, Coleridge positively calculates that out of an original number of 147, 43 readers had completed their tasks and sought no further work, and 89 were currently operative. Of those 89 he ranked 30 as first-rate in all regards, 15 as slightly inferior, and the remaining 44 being too new to judge. All of this activity, he mentions, "will bear favorable comparison with that of the Grimms," who Coleridge notes only found six of 83 contributors to be satisfactory, and only one ideal, "and those contributors, be it remarked, Germans" (Coleridge 1860:74). Coleridge would conclude the report with his expectation that the dictionary would be able to begin publication in two years' time, perhaps even earlier.

Coleridge's assessment would not some to pass, and he himself would die from tuberculosis within a year. The barrister Fredrick Furnivall then took over editorial reigns for the

project, and soon after was left with sole oversight when Trench left London for his new role as the Archbishop of Dublin.

Furnivall and the Early Production Process

Furnivall certainly maintained the spirit of optimism that coursed through the project's early years, however, in his reign as editor from roughly 1862-1876, many problems inherent with the organizational scheme would come to the fore. Combined with Furnivall's own apparent failings as a leader, the project would dwindle to the point of coming to a standstill. But, as future editor James Murray (1911) would later acknowledge: "Furnivall realized much more fully the immensity of the work, and the necessity for a more extensive collection of material; the need, also, of dividing and distributing constructive and editorial work" (p. 129).

In this regard, Furnivall saw that the dictionary could not be fully inclusive if there was no access to the rarest English books, so, in 1864, he founded the Early English Text Society to cheaply reproduce the most inaccessible texts from England's medieval era. This was followed by his creation of similar societies to publish the works of Chaucer, Shakespeare, Wyclif, Browning, and Shelley – all of which utilized cooperative voluntary production among amateur editors. These societies would furnish a widened range of material for the dictionary to draw upon. Furthermore, under Furnivall's leadership the project took on new dimensions of modularity. He introduced the sub-editor role, as well as a plan to construct and publish a "Concise English Dictionary" as a useable, but preliminary and incomplete model for the main project. He expected the concise dictionary to be ready as soon as 1865.

Furnivall's sub-editors would receive the incoming, usually pre-alphabetized materials for a particular letter or portion of the alphabet, and were responsible for bringing their materials up to a state from which proofs for the concise dictionary could be published. This included ordering the materials by different senses of meaning for each word, writing definitions and choosing the most illustrative quotations, ordering the senses of meaning according to their supposed chronological development, deciding and designating categorizations such as "obsolete," "poetic," or "rare," applying appropriate symbols so that the printer would know the correct font styles to use for different sections of each entry, providing etymological and pronunciation information (apparently deviating from the *Canones* plans to research and publish etymologies separately), and seeking out quotations for known words or meanings missing from

the information thus far collected (Furnivall "Letter to Sub-editors…", 15 September 1862, OED/B/1/3/1). He offered reference texts, or referred the sub-editors to sources to aid in their etymological inquiries. He further asked them for updates on the words and senses for which they were lacking so that he could issue regularly printed lists to the army of readers, who might then be successful in seeking out the missing word senses.

If all went smoothly, the layered divisions of labor between reading and sub-editing would facilitate a work of grandiose proportions coming together by voluntary, geographically dispersed contributors, and with little oversight. Things did not quite go as hoped. Of more minor significance, some books that were loaned to volunteers would be stolen, rare books were cut to pieces for their quotation evidence, and sometimes reading assignments and extractions were just poorly chosen by volunteers who were too ill-informed to realize what would be of relevant linguistic merit. For instance, hundreds of carefully constructed slips culled from a book on ancient Egypt offered nothing more than exotic Arabic words that had never achieved currency in the English language. Likewise, the extractor of a source on plant biology submitted merely the Latin scientific names of plant species, which could not be said to offer insight into the history and dynamics of the English language.

Furnivall, however, shied away from a tendency to correct or steer his contributors. He levels harsh criticism at times in his characteristic brash candor, but does not provide very constructive feedback. More generally he assumes great faith in his contributors and appreciated every little bit of assistance provided. He continually asserts that no minimum level of skill or performance was necessary to be a volunteer reader or sub-editor. This was characteristic of his personality and it is often repeated among the many eulogies to Furnivall compiled by John Munro (1911) that in his many endeavors, with his infectious enthusiasm and idealism, Furnivall actively encouraged people from all walks of Victorian life to voluntarily take up tasks they would have never thought themselves capable, and whose assistance he readily accepted. A.W. Pollard (1911) recalled that "Furnivall was always putting men and women on their mettle in this way, … and spurring them to put the best work they could into tasks which without his encouragement they would never have dared to attempt" (p. 148). But, sometimes these men and women weren't always fully capable of the endeavors Furnivall inspired them to pursue. As attested to in a personal account by Dowden (1911), many eager dictionary contributors would quickly become discouraged and intimidated by the extent of the work Furnivall expected, which

was outlined in the lengthy, jargon-rich, technical instructions offered to readers and sub-editors who often possessed only a hobbyist's interest, skill, and spare time. By the mid-1860s most of Furnivall's updates to the Philological Society and national journals included appeals for new sub-editors to take over where others had given up.

With so many people and materials to keep track of, compounded by a poor retention rate and materials received in various states of completion, it didn't help matters that Furnivall showed no real knack for keeping organized. Numerous tiny tattered notebooks from Furnivall's records remain scattered throughout the archival repositories in Oxford. They are filled with thin, cheap paper, and the tiny handwriting in watered-down ink within them (he expressed frugality as a virtue), is even more illegible than his full-size characteristic scribble. Notebooks gone missing is a recurring theme marking Furnivall's tenure, as is the displacement of sacks of word slips he left lying about his London home. Regardless of whether such disarray was natural to him, it is also clear that Furnivall's many commitments would leave him stretched too thin to give adequate attention to the dictionary. In addition to his duties with the Philological Society, the EETS, and the various other literature societies spun off from his dictionary work, during this time he was still involved in the operations of the Working Men's College, while battling enemies in the editorial columns of the local newspapers and magazines.

In my survey of original sources I've tried to come to an understanding of how Furnivall ultimately saw the dictionary coming together and what kind of vision of the work he had in mind, but I'm still left with some uncertainties. On the one hand, it could be that he was either indifferent to the details or too strained to consider them. Or, it might be that he was simply naïve in expecting an automatic synthesis of materials and a consistency of results to take place as if by some invisible hand. Someone like Furnivall was probably more familiar with the division of labor as an idea than in application, and there were certainly few precedents for its application in knowledge production. As previously noted, similar assumptions seem evident in the Grimms' work on their dictionary, and decades later, the same expectations are apparent among delegates of the Oxford University Press.

It's also possible Furnivall was more innovative in his vision than he led on. One indication of this is a single unlabeled printed sheet of words in the letter A. On it, definitions and quotations for words are given where available, and a system of symbols is used to designate where supporting material is still needed, where the evidence is uncertain, and where better

material is needed. It is not clear if the work might be intended to be part of a series to guide the ranks of active volunteers, or if it is a specimen of what he actually had in mind as a "concise dictionary" – therefore imagining something similar to contemporary "crowdsourced" content in the making, such as Wikipedia. It's possible that this is the case, seeing as the dictionary's future editor, James Murray, would later (tartly) comment that a specimen "A" page was Furnivall's only real philological work for the dictionary, and this would also be consistent with Murray's view to abandon the concise dictionary project for fear it would not be understood and difficult to sell (Murray 1911).

Nonetheless, whether it was because Furnivall lacked a clear vision or because his vision could not be easily conveyed or imagined, those who stayed on to devote significant amounts of time and skill to the project became increasingly frustrated. They were confused about the distinction between the concise work on which they labored and the main work that was still envisioned for the future, (Furnivall avoided making explicit demarcations in his desire not to turn away any material). Contributors further saw many inconsistencies accruing and expressed doubts about Furnivall's level of commitment and expertise. Walter Skeat, one of the few prominent Philological Society members to volunteer his time for the dictionary, feared the potential range of variation across the sub-editors' work and the unmanageable (and unsalable) scale the project may be taking if work were to continue unchecked. In a November 1865 letter to Furnivall, Skeat writes "I write to call your attention to a few facts with respect to the C.D. [Concise Dictionary] which I think you can hardly have fully considered: and wish to know if we are really going the right way to work;" he pleads with him to "take exact stock of the amount actually done, and examine if the sub-editors have up to this point done their work in a way which is worth their while to pursue" (Skeat to Furnivall, 17 November 1865, MP1). Skeat imagines that "[t]he result can be nothing but unmixed food" and he vows to cease his own efforts

> till work has been inspected, and all existing mistakes of subeditors (of the character, I mean, which pervade their whole work) have been pointed out. I think we have a right to expect that our work should be tested up to the present point, before we go on…. I am sure every subeditor would be only too glad to have his work tested, for his own satisfaction, and mistakes might be thus nipped in the bud. My idea is – you would thus have one or two unpleasant surprises – but better now than hereafter. (Skeat to Furnivall, 17 November 1865, MP1).

A few years later C. Mansfield Ingleby wrote an angry editorial in a May 1868 edition of *The Athenæum* that implied Furnivall's weaknesses as a leader and demanded "a full report of the actual state and prospects of the Dictionary, with specimen pages of the 'concise Dictionary,' and a definite statement as to the time within which the work will be at press" (p. 698). And in March of 1875, the sub-editor G. Wheelwright even independently published an unsolicited appeal to resurrect the project and seek new volunteers, while also urging Furnivall to make up his mind on the future of the project and thus end "the intolerable suspense under which we now groan" (Wheelright "Appeal…", 5 March 1875, OED/B/1/2/1). He included an eight-page specimen of his own work on the letter F, and estimated that "nearly half (say four tenths) of the whole work has been completed by the various sub-editors" (Wheelright "Appeal…", 5 March 1875, OED/B/1/2/1). Another sub-editor would characterize this period of uncertainty as one "which paralyses effort and makes one feel as if trying to make paper out of sand" (W Anderson to Furnivall, 25 January 1877, MP3).

In 1874, already several years after Ingleby's angry editorial already proclaimed, "the general belief is, that the project will not be carried out," Alexander Ellis – then the standing President of the Philological Society – would publically state that "[s]everal things, indeed, make me inclined to think that a Society is less fitted to compile a dictionary than to get the materials collected" (Ingleby 1868:698; Ellis 1874:354). Certainly such doubts reflected the inherent challenges faced when organizing an entirely willing and eager, yet heterogeneous and dispersed mass of volunteer contributors. But Furnivall was unable to recognize or deal with these challenges, and moreover, his notorious eccentricities, rudeness, volatility, progressive views and public scandals likely unnerved many Victorian-era contributors, or potential contributors, who had to trust that their efforts would not go to waste. As one critic remarked 'fortunately his bellicose and tempestuous personality was never concerned with the actual editing' (as cited in Murray 1943:48). It didn't help matters that Furnivall didn't have much of a reputation as a skilled philologist, either.

But, one cannot deny Furnivall's role in promoting general education and the study of English language and literature that altogether made a project like the dictionary possible. At the time of the projects emergence, Britain's most prestigious institutions still taught in Latin and didn't take the study of English seriously; Oxford did not have a department of English until 1893, Cambridge until 1911. In a book memorializing Furnivall after his death, Walter Skeat

wrote, "There was a time when German editors looked upon English scholarship as being a thing which they alone could understand or worthily maintain, a thing in which England had no particular share. But they do not say so now" (Skeat 1911:178). However, Furnivall wasn't interested in English philology for the love of language, but for its humanistic findings. In remarking on his own career, he is quoted as saying that: 'I never cared a bit for philology; my chief aim has been throughout to illustrate the social condition of the English people in the past' (Dyboski 1911:43). This view animated his dedication to the dictionary, despite its floundering under his administration; as Benzie (1983) claims: "Furnivall's chief interest in the project was really a sociological one. He saw the dictionary as a means of providing his contemporaries with a sort of 'autobiography' of the English nation, a history of England in terms of its language" (p. 22). Furnivall even took a large loss out of his own pocket when his optimistic hopes for the project got the better of him and he couldn't deliver on a publishing contract he had made with an independent London press. His Early English Text Society remains in existence today, and his belief in voluntary collaboration and his wish to exclude no one from the process of knowledge and information construction remains as visionary as ever. Furnivall himself would go on to hold the record as the contributor with the most quotations used in the dictionary, owing in large part to the submissions he clipped from his daily newspapers (Murray 1977).

James Murray and the Re-launch of Production

While Furnivall himself came from relatively well-off upbringings (his education spanned the major institutes of London, Cambridge, and Berlin, and he boasted that his father was doctor to the Shelleys), James Murray's background embodied that of those whom Furnivall sought to empower, and in whom he saw promising intellectual vitality. Murray grew up in the Scottish borderlands as the son of a tailor. From the end of his formal schooling at the age of 14, he continued to educate himself and spent most of his early working life as a teacher and schoolmaster in the southern regions of Scotland. From very early on in his life he took interest in the natural and cultural sciences that were then flourishing in the mid 1800's, particularly geography, geology, anatomy, archeology, and the study of languages. At nineteen he helped to found the Hawick Archæology Society in Scotland.

His precocious scientific identity and views, as well as the spirit of the era, was demonstrated in a moving speech he delivered to the society around the same time the

Philological Society's dictionary was getting underway in London. In it, he seeks to distance archeological study from conservative reverence for a bygone era, its artifacts, and the desire to resurrect its customs.[17] Rather, he finds that true respect for the past must deny the "stand-still community" and assume that:

> A knowledge of the past in all its movings, will enable us more fittingly to use the present, more securely to anticipate the future. 'And thus' as I have elsewhere had occasion to say 'is the true Archaeology, not the barren preservation and restoration of things and systems of the past, which had they been suited to the capacities and wants of the present would not have become <u>past</u>, but the investigation of these as they swiftly fade into the night of the forgotten to draw from their yet trickling stream, before its springs are quenched forever, whatever it has to give for the warning, encouragement and guidance of the present' (Murray c.1857-63, *Archæology Its Aims and Results,* MP27).

The speech further asserts that archeological findings show the unity of mankind from a common origin, and thus argues that the natural history of humans cannot condone the enslavement of one race by another. Murray's reasoning clearly shows the influence of the Grimms, and a firm belief in the inherently scientific aspect of his endeavor:

> Jack of the Beanstalk, and Cinderella of the Magic Slipper, and the Adventures of Red Riding Hood which form the infant lore of all the European nations are but distorted fragments of old world tales which formed the folklore of our fathers before they left their pristine seats in the tableland of Asia. When therefore we seek for the traces of the earlier races of men, we must look for them on the sterile coast, the inaccessible mountain, or the outlying barren island – for there they retire, for a while to hold their own, and maintain a precarious existence after younger races have deprived them of their fertile plains, and rich and pleasant valleys. Thus the divisions of the ethnologist are like those of the Geologist; both, in their representation of the earth's surface present to our view isolated 'shreds and patches' of systems once universal which the attack of destructive agencies has dismembered and swept away, and the accession of newer formations covered up and buried till but a few distant fragments project to tell what was once a far-extending and continuous whole…. the methods of the Geologist and the Archaeologist are the same, both build their structures by the arguments designated by Buckland <u>Palæontological</u>: that is from remaining results to discover causes which open to our gaze an earlier order of things (Murray c.1857-63, *Archæology Its Aims and Results,* MP27).

Roughly fifty years later his view was still unshaken; he would proclaim "the science of language is one of the branches of the great science of Anthropology. .. Moreover the methods of the science of language are exactly those of Palaeontology" (Murray n.d. [c.1910] – Lecture to the Ashmolean Natural History Society, MP26).

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[17] For this reason he had also insisted on naming the club an archæological society, rather than an antiquities society.

In 1857 Murray enrolled in a summer course at the University of Edinburgh taught by Alexander Melville Bell,[18] a Professor of Elocution and Vocal Physiology. Professor Bell invented what was called "Visible Speech" – an alphabet of symbols to record the pronunciation of every sound used in human speech. The course was appealing to Murray who wished to apply the tool to the systematic and comparative study of language. By 1864 Murray would find himself living as a bank clerk in London, (a move taken for the health of his first wife), and his only scholarly tie being with Professor Bell, who had since taken a position at the University of London. This connection proved invaluable in introducing Murray to the likes of Henry Sweet and Alexander Ellis.

Both Sweet and Ellis were considered prominent, and among the first, phoneticians in Britain at the time and both were members of the Philological Society. Sweet was trained in comparative philology in Heidelberg and was a reader at Oxford,[19] while Ellis was independently researching the history of English pronunciation. Murray himself was researching Scottish dialects in his spare time and became quick friends with Ellis, whom he collaborated with for ten years in projects recording variations of English speech.

Scotland proved to be a fruitful birthplace for the budding philologist. Following the insights of the Continental scholars, Murray attuned his researches to the diverse geographical features of the country – its highlands, borderlands, and islands (he spent time doing field research in the secluded Orkney Islands) – and how they shaped its linguistic landscape. He became especially lauded for his detailed linguistic maps, which were not unlike those produced

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[18] Professor Bell's son was Alexander Graham Bell, (and also the best man at Murray's second wedding). According to Murray's own auto-biographical papers, (referenced by Winchester 2003), he once built a battery for the young Bell who wished to learn about electricity. Bell would later refer to Murray as the "grandfather of the telephone." If this is true, Bell would in a way return the favor, as the first telephone to be installed in Oxford's Bodleian Library would be for the use of Murray's research staff (Gell to Murray, 7 [or 4th] December 1892, MP10)

[19] In the preface to a 1913 edition of *Pygmalion*, George Bernard Shaw cites Sweet as an inspiration for his contemptuous character Henry Higgins. The preface goes on to take account of Shaw's real-life interactions with Sweet. It is a portrayal illuminating the tensions between the traditional scholarship of Oxford, and the new European historical sciences – with an understandably hostile Sweet stuck in the middle. Shaw describes Sweet as "a sort of walking repudiation of Oxford and all its traditions" who "impressed himself professionally on Europe to an extent that made his comparative personal obscurity, and the failure of Oxford to do justice to his eminence, a puzzle to foreign specialists in his subject" (Shaw [1912] 2003, electronic text). This impression is certainly validated in Murray's periodic correspondences with Sweet, in which he offers Murray his wildly paranoid views of the intentions of the delegates of the Oxford University Press. A philological acquaintance of Murray once wrote to him complaining of Sweet's "mixing only or most with vulgar people … he does not mix much with good society which as you say he thinks all show an artificiality" (Storm [SP] to Murray, 12 April 1888, MP8).

by geological, ecological, and botanical surveys of the time. In 1868, backed by a proposal from Ellis, Murray became a member of the Philological Society.

Despite not having a degree, throughout the 1870s Murray would solidify his position as a prominent scholar of the English language. His 1873 text, *The Dialect of the Southern Counties of Scotland: Its Pronunciation, Grammar, and Historical Relations*, was very well-received in Britain and abroad. A student of Jacob Grimm, Dr. Pauli of Göttingen, wrote to Murray, "[y]ou have settled, indeed, in a masterly way more than one important questions, so that both the linguist and the historian must be henceforth indebted to a scholar who is so thoroughly competent to deal scientifically with these rather complicated researches" (Dr. Pauli to Murray, 9 August 1873, MP2). In 1874 Murray would be awarded an honorary Doctorate from the University of Edinburgh; references from Alexander Ellis, Prince Louis Lucian Bonaparte, Furnivall, as well as the letter from Dr. Pauli, helped to secure the award (see MP2, 1873-74). From that point forward further honors and recognition accumulated. In 1875 he would be invited by the editors of the *Encyclopaedia Britannica* to write the encyclopedia's article on the history of the English language.

Murray's first involvement with the dictionary would not come directly through the Philological Society. In 1876 he was contacted by the Macmillan publishing house, who in partnership with Harper publishers in America were seeking a suitable editor for an English dictionary to take on the market dominated by Webster (at the time, Webster's 1864 unabridged edition was his most successful dictionary yet). Murray was intrigued by the proposal, but only if it would allow him to create a dictionary in line with the historical principles of comparative philology and to make use of the materials already collected by the Philological Society. Murray corresponded with Furnivall, who was pleased to see Murray resurrect the dictionary project. Although, in his characteristic way, Furnivall would also sour relations, charging Alexander Macmillan with self-interest and attempting to take advantage of the society (Benzie 1983). Macmillan would respond to Murray: "[i]t is a pity that his [Furnivall's] pretty playful ways should ever be intruded into serious business;" but even despite Furnivall's meddling, the Harper Press was ultimately unwilling to meet Murray's requests regarding the proposed size of the dictionary and the costs it would incur. This wasn't necessarily a surprising turn of events, as it was assumed that Harper/Macmillan didn't "want to get out a philological dictionary at all, but merely an enlarged mixture of Webster and Johnson" (Goodchild to unnamed [assume Murray],

24 October 1876, MP3). Throughout the negotiations Furnivall and Henry Sweet also sought offers from other major publishers interested in the dictionary materials, and (without his knowledge or consent)[20] stated Murray as the confirmed editor of the project. With Cambridge refusing to negotiate with its contentious alumnus, Furnivall, Oxford University Press (OUP) was then the most suitably deep-pocketed source for a publishing contract.

Oxford and the Press

For a dictionary that now carries the Oxford name in its title, the contract that would be made with the Press marked an unlikely alliance at the time. While in Germany the empirically-oriented reformed universities had overtaken the position once held by the more classical education institutions, and while the pre-and post-revolution French government oversaw institutes and academies for scientific research, a major impediment to the installation of a British scientific infrastructure lay in the existing domain of knowledge leadership emanating from the classical, elitist colleges at Oxford and Cambridge. The traditions of scholarship and education at these schools tended to be maintained by the upper-class and oriented towards instilling subsequent generations of British intellectual elite with a literary education attuned to proper habits of taste and appreciation. These classes maintained a relatively unchallenged knowledge authority in Britain, which was further instilled in relation to their class dominance.

Certainly, however, Britain did have a rich history of scientific and technological accomplishment and trailblazing. Ben-David (1971) deems Britain the first region in Europe where modern science was effectively "institutionalized," but notes that it still lacked an element of formal organization (p. 75). The infrastructure for scientific practice in Britain was not integrated into state, economic,[21] or even educational spheres. Scientific studies largely remained out of the purview of the dominant English universities, that is, Oxford and Cambridge, and British science remained generally unprofessionalized all the way through to the twentieth century (Ben-David 1971; Berman 1975). So while a formal and exclusive role of the scientist was being developed in relation to the French state or German educational system throughout the

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[20] "Certainly Mr. Furnivall did rather mislead me: he seemed to think you would be quite prepared to undertake the matter" (Skeat to Murray, 23 March 1877, MP24).

[21] Though, regarding the economy, this is not to say that the opportunities offered by the British market did not correlate with pragmatically-minded scientific innovation. In fact, the two are tightly entwined in Baconian tradition (Merton 1938; Ben-David 1971). Nevertheless, a commercially employed "scientist" would have been a rare find during this era.

eighteenth and nineteenth centuries respectively, in Britain there wasn't even a word to indicate such a function (Cannon 1978). Therefore, those who studied and practiced science in Britain generally worked independently, in their spare time and at their own expense; and thus the domain of science was an amateur pursuit with "no structures of authority and subordination, no limitations of function, no professional associations," and tended to be monopolized by wealthy men of leisure, particularly among the growing Protestant middle classes (Merton 1938; Cardwell 1965: 37; Ben-David, 1971).

While lacking formal organization, Britain did have informal channels for scientific development and the sharing of research in the form of its many friendly societies and numerous scholarly journals. This tradition began with the founding of the Royal Society in 1660, which enjoyed steady increases in membership and was open to men from a variety of opinions, backgrounds, and interests – many of who would not be recognized as "scientists" in the contemporary sense (Hume [1853] 1966; Ben-David 1971; Crosland [1983] 1995). Within the nineteenth century there was considerably rapid growth in the numbers of independent societies and their members (Hume [1853] 1966).[22] Following from the models of scientific practice codified by the early Royal Society, the landscape of these British scientific societies strongly emphasized empirical bases of knowing and wished to avoid commitment to *a priori* philosophical systems (Hall 1976). But additionally, influenced by the philosophy and educational reforms of Germany, in the nineteenth century British academics began to take up empirical science that was aimed towards creating more systematic ways of knowing, which deviated from Britain's more pragmatic and materialist strands of scientific practice, and which began to infringe on the subject matter of the classical scholars, while challenging their status as knowledge authorities. Cannon (1978) has characterized this period by its "disintegration of the truth-complex," in which the image of the scholar as a possessor and professor of absolute truths was challenged by the image of the scientist as an explorer or pioneer (p. 3).

Some ideological and infrastructural inroads for this brand of scientific endeavor were facilitated by a subset of students at Cambridge University, particularly Trinity College, who

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[22] Abraham Hume ([1853] 1966) provides a detailed survey of such society foundings in Britain through to the mid nineteenth century and an overview of their various forms of organization. His commentary also offers an intriguing nineteenth century perspective on the place of these societies within the wider British culture, as well as his thoughts on the appropriate boundaries of scientific activity. Hume was especially opposed to the continental influence driving the "scientization" of everything, as reflected in the founding of the Philological Society, in which "literature will not be permitted to remain unquestioned, as it is now called the *science* of philology" (p. 48).

were strongly influenced by the poet/polymaths William Wordsworth and Samuel Taylor Coleridge – both being Cambridge alumni who had taken sojourns to Germany in the late eighteenth century, (Coleridge even taking up study at the University of Göttingen). Though undistinguished during their days at Cambridge, Wordsworth and Coleridge became important links in the transfer of German romanticism, idealism, and scientific practice. The promotion of these ideas within a Christian context became the objective of the Cambridge "Apostles" – a group of 12 undergraduates once called a 'band of Platonico-Wordsworthian-Coleridgian-anti-Utilitarians' concerned 'to fight the dragon of materialism' according to one its original members, Richard Chenevix Trench, who, as we know, went on to initiate the *OED* project (cited in Cannon 1978:49). Other notable original members of the group, which formed in 1820, included the poets John Sterling and Alfred Tennyson, Erasmus Alvey Darwin (brother of Charles Darwin), and the historian John Mitchell Kemble – who studied directly under Jacob Grimm in Germany. By the 1830's Cambridge was also home to a small Etymological Society and short-lived journal, the *Philological Museum* (Cannon 1978). Though their ideas and interests would remain at the periphery of Cambridge scholarship for some time, many individuals caught up in this circulation of Germanic thought would have a profound effect on the transformation of British science in the nineteenth century. They would take over the editorial reigns of the popular scholarly journal the *Athenæum*, they would be active in the development and staffing of several new universities in Britain's industrial cities,[23] they would become original members of London's Philological Society when it formed in 1842, and they would participate in, and help to found, the British Association for the Advancement of Science (BAAS) in the 1830s. The BAAS was especially important in helping to unite the various interests and methods among British scientists and their societies, and in making science visible to the general public – thus advancing it as a popular movement and challenger to the traditional forms of knowledge and education carried on among the "Oxbridge" elite (see "Gentlemen of Science" by Morrell & Thackray 1981 for an overview of the linkages between Trinity College, Germanic science, and the formation of the BAAS).

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[23] However, of the schools integrating and embracing scientific training, there was a divide between those emphasizing more practical, utilitarian approaches (particularly University College London and the University of London), versus the idealist socio-historical approaches influenced by German academics (Ben-David & Zloczower 1965).

And while Cambridge, still steeped in classical traditions, was able to offer favorable grounds for the transfusion of Germanic romanticism, idealism, and science; Oxford was another matter. Oxford culture and curriculum was still very much centered on classical literature, moral philosophy, and theology (Morrell & Thackray 1981). While some peripheral scholars at Oxford took interest in the developments in natural history, modern languages, and cultural studies emerging out of France and Germany, such topics were not part of the required curriculum at Oxford – and were not even a voluntary option for students of the classics (Cannon 1978). In fact, Cannon (1978) claims that the real enemy of science in Britain was not the religious structure of the old universities, but the enemy of both science and religion was the Greek and Roman classics.[24] Henry Sweet, who was a reader at Oxford and highly critical of its culture,[25] quipped that "'[t]hey are hardly aware of the existence of Shakspeare & Chaucer yet'" (Sweet to Murray, 4 April 1970, as cited in Murray, 1977:247).

Representing a scientific approach to the study of language and literature, the new comparative philology thus stirred up the kind of anxieties that were telling of its infringement on the authority of traditional knowledge structures. Even advocates of the amateur societies and scientific movement, such as Abraham Hume ([1853] 1966), felt that science had overstepped appropriate boundaries in its approaches towards literature, where the goal of "discovery" had displaced the humanizing and moralizing aspect of literary enjoyment for its own sake (p. 49). In the 1830s Oxford scholars sparred with John Mitchell Kemble, one of the Cambridge Apostles and an original member of the Philological Society, across the editorial pages of popular magazines in what would be called the "Anglo-Saxon Controversy" (see Wiley 1990). Kemble originally abandoned his studies at Cambridge to study with Jacob Grimm, and wrote the first scholarly edition of *Beowulf* in Britain (which he dedicated to Grimm). His brashness and

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[24] Challenges to the classically-oriented, top-down English scholarship that impeded British scientific development are reflected in George Eliot's novel Middlemarch (1871-2) – a story set in 1830s Britain. In one of the storylines, Will Ladislaw disparages his Oxford-educated cousin's attempts to develop "A Key to all Mythologies." Ladislaw claims, "the Germans have taken the lead in historical inquiries, and they laugh at results which are got by groping about in woods with a pocket-compass while they have made good roads" (Eliot 1871-2). Shippy (2003) has made the case that, contrary to earlier interpretations of the novel, the "Germans" referred to here probably represent the Grimm brothers and the research traditions they inspired.

[25] Educated at Heidelberg, Henry Sweet was a reader in comparative philology at Oxford; George Bernard Shaw cited him as an inspiration for his contemptuous character Henry Higgins. Shaw describes Sweet as 'a sort of walking repudiation of Oxford and all its traditions' who 'impressed himself professionally on Europe to an extent that made his comparative personal obscurity, and the failure of Oxford to do justice to his eminence, a puzzle to foreign specialists in his subject' (Shaw [1912] 2003, electronic text).

propensity for confrontation pitted him against Oxford and its traditions, which he wished to see put "upon the same footing at home as it occupies abroad. Its foundations are neither wide nor deep" (Kemble 1834 as cited in Wiley 1990:38). A stream of commentary proceeded, initially attacking Kemble, his supporters, as well as the German philologists themselves in a telling indication of the divergent bases of knowledge:

> The fine-spun theories of a few German Literati, who in divinity, philosophy and even philology have winged their flight so far into the higher, or rather lower regions, as not only to enter into palpable darkness themselves, but by their mysticism have decoyed a few inexperienced followers. We have no longer Anglo-Saxon, but German-Saxon. Some of our half-educated countrymen, after spending a few months on the Continent, return supercharged not only with gloomy ideas on divinity, but even upon philology (Wright 1834 as cited in Wiley 1990:37).

Resistance to the sciences would prove futile and the BAAS was a particularly potent force for solidifying public, and then government, support. As Morrell & Thackray (1981) articulate, "science … came to be seen as the intellectual progenitor of technology, the guarantor of God's order and rule, the proper way of gaining knowledge, and the key to national prosperity and international harmony" (p. 96). Oxford would eventually be forced to make considerable reforms in line with the Royal Commission of 1850, which aimed to lessen the influence of the Church of England throughout Oxford and Cambridge, while orienting their curriculum to the needs of the rising professional classes (Soares 1999). One sign of reform was evident in Oxford's appointment of Max Müller. Müller was a German-born student of Leipzig philologist Franz Bopp. He originally came to Britain to study collections of the East India Company, but after several years holding popular lectures, in 1860 Müller competed for Oxford's Boden Professorship of Sanskrit. The election was hotly contested, but Müller ultimately lost to Monier Williams, who considered knowledge of Sanskrit to be only of practical value, not the theoretical value such knowledge held for the continental scholars. Nevertheless, in 1868 Müller was made Oxford's first chair of comparative philology, which was the first chair funded exclusively by the University itself. In Müller's inauguration statement it was clear that he sought to bring change to the University and publicly ridiculed its disdain for science and tradition of scholarship removed from the contemporary world (see Murray 1977:247). Furthermore, the Royal Commission reforms required the OUP delegates to abandon their policy of lifetime appointment, which allowed for Max Müller and H.G. Liddell, who were likely the only Oxford professors at the time to be familiar with the idea of an historical dictionary, to be serving terms

as OUP delegates precisely when the Philological Society began negotiations with the Press. The Press effectively deferred to the opinions of Müller and Liddell in their decision to take up the dictionary project.

Despite these fortunate developments, resistance to the reforms and reactionary pulls towards conservatism were evident. In 1864, 11,000 clergymen signed the Oxford Declaration insisting on strict interpretation of the Bible. The building of the natural history museum was also a subject of bitter contention, especially considering that it had been funded by allocations from the Oxford University Press, which profited mainly from its sale of bibles (Mugglestone 2005). It didn't help matters that one of the first events held at the museum, the 1860 annual meeting of the BAAS, was also the backdrop for the infamous exchange between the Darwinist Thomas Henry Huxley and the Oxford Bishop, Samuel Wilberforce. (Huxley was a close friend of Furnivall, a dictionary contributor, and coined the term "agnostic").

On account of this background, tensions between the Philological Society and the Oxford University Press were evident from the start and can be seen in the Philological Society's cautious and disingenuous behavior over the two years during which a contract was being negotiated. For instance, Henry Sweet, who was heavily critical of the Oxford culture, would write to Murray that:

> They made a variety of other criticisms, some of which it would of course be impracticable to carry out. It is, however, very important that we should show every deference to their suggestions and consider them fully. When we have once got over their chief objections they will leave the Editor entirely to himself. They naturally like to make as many criticisms as possible in order to show their sharpness and wideawakeness [sic] (Sweet to Murray, 29 June 1877, MP3).

A point was also made to avoid stressing the scientific and scholarly aims of the project to the delegates, instead passing it off as exceptionally and easily lucrative. For instance, Henry Sweet's initial appeal to the Press began:

> It must be borne in mind that in asking the Delegates of the Clarendon Press to undertake the publication of the English dictionary of the Philological Society, we (the Society) are not asking them to subsidize an unremunerative undertaking, but are rather offering them a share in what promises to be a very safe and remunerative one (Sweet to Price, 20 April 1877, OUP OEDB.3.1.1).

It's uncertain whether Sweet actually believed this to be the case, as there were several reasons to doubt the profitability of the project. He would point to the success of Émile Littré's recently-

completed French historical dictionary, but neglect to mention the Grimms' German dictionary, which had only sold half its initial print run, was not gaining subscribers, and was far from completion despite being nearly four decades along. The rejection of the project by Harper/Macmillan should have provided further doubt of the work's profit-potential, as Alexander Macmillan himself would later advise the Press: "[t]he terms may be such as the delegates in the interests of scientific philology might accept but they certainly are not business terms" (Macmillan to Price, 1 May 1877, OUP OEDB.3.1.1).

The completeness of the materials under the previous sub-editors was also overstated, as was the ease of assembling them and the quality and consistency of the work. Sample specimens of the existing materials came largely from those submitted and sub-edited by Walter Skeat and presented as if indicative of the general quality of the materials. Skeat, (who himself had earlier expressed his fear to Furnivall that the materials would lack consistency and quality), was among the foremost etymologists in Britain at the time and far from being the "typical" dictionary contributor. Sweet further claims that most of the reading and sub-editing work was done by "a large number of members of the Socy [sic]" when in fact he would have known – since it was frequently lamented in the Society's meetings and journal – that very few members actually contributed to the project; most of the volunteers were unknown to the editors (Sweet to Price, 20 April 1877, OUP OEDB.3.1.1).

Sweet's disingenuous behavior was no doubt driven by some paranoid distrust of the Press. He puts his feelings rather bluntly in a letter to Murray:

> I must say that the conduct of Price [Secretary of the Delegates] has made an unfavorable impression on me, and I think it would be very improvident to trust him or the Delegates too implicitly. I think you, especially, ought to be very cautious in putting yourself so entirely into their hands as you will do when the agreement in its present form is signed. At present it is their interest to make things as pleasant as possible, till they have effected their main object, viz. of depriving the Society of all control of the material and the way in which it is worked up. You must be prepared for a good deal of vexations interference and dictation hereafter, liable to be enforced at any moment by summary dismissal. You will then see your materials and the assistants trained by you utilized by some Oxford swell, who will draw a good salary for doing nothing. I know something of Oxford, and of its low state of morality as regards jobbery and personal interest (Sweet to Murray, 7 July 1878, MP3)

This vilification and distrust of Oxford would even be extended to Murray, resulting in a botched attempt by members of the Philological Society to sabotage the dictionary project. As

Murray became increasingly closer with the delegates of the Press over the course of negotiations, it was feared he was in cahoots with Oxford to make an inferior product with the Society's materials while attaining a greater share of any profits for himself. Shortly before the contract was to be signed, as the Society was getting set to put the matter to a general vote, a subversive last-ditch effort was made to block it and cast suspicions on Murray. Henry Sweet's uncle, George Sweet, drafted a harshly negative picture of the project and of Murray's reputation and laurels; the note was sent out to all voting members of the Society as part of the normal record of meeting minutes. Because no such discussion had occurred or was given the authority to go in the public record, a retraction was quickly issued. Voting proceeded nearly unanimously in favor of signing the contract and Murray's reputation appeared to remain relatively unscathed. The underhanded scheme, however, was backed and facilitated by none other than the Society's secretary, Furnivall, who was also one of three members voting against finalizing the contract with the Press. When privately explaining the incident to the Secretary of the Press, a vexed Murray would exclaim that "hostility to Oxford has become a species of monomania" within the Society (Murray to Price, 25 January 1879, OUP OEDB.3.1.3).

But, Murray, too, shown some leeriness about working with the Press; he would later reflect on the negotiation discussions that:

> many of the Delegates had no great sympathy with the work, and did not see why they should go out of their way and incur risk to take it up, especially with an Editor who was not one of themselves or under their control … it was only the intense earnestness of a few of their number who had a deeper insight into the grandeur of the work (Murray to [unnamed journalist, this seems to be an unfinished draft], May 1881, MP4).

Similarly, Murray would share with Henry Hucks Gibbs (who was very much an Oxford insider and became a kind of liaison between Murray and the Press) that: "many of the Delegates cared nothing about it, and rather grumbled at the funds of the press being diverted, as they think, from their legitimate purposes, to so large an 'outside' object. I am also an 'outsider' of them" (Murray to Gibbs, 25 February 1882, MP5).

But just as the Murray and members of the Philological Society (particularly Sweet and Furnivall) distrusted Oxford and the delegates of its Press, the delegates suspected that the Philological Society was untrustworthy. The Press originally contracted for a work of 7,000 pages, with the agreement that, after expenses were recouped, the Society had the right to extend the dictionary to a much larger work. Shortly after the contract, an extension to 8,400 pages was

approved, and then a further extension to 10,000 was sought (the actual page number would ultimately be 15,490). In 1882, Gibbs wrote to Furnivall that the Delegates feared that the dictionary was becoming too close to the big 20,000 page dictionary the Society originally wanted, and that if extensions continued, the Society would then need little additional effort to have something new and more comprehensive ready before the OUP could recoup its outlay (see Gibbs to Furnivall, 2 May 1882, MP5). The making of the dictionary was therefore set within a battleground on which the purveyors of scientific approaches to knowledge sought to make gains against the champions of academic tradition – but, they couldn't do so without the resources held by the traditional institutions.

A publishing contract between Murray, the Society, and the Press was finally finalized in March of 1879. However, this would begin a strained relationship that would threaten the continuation of the dictionary project for the next seventeen years.

The re-launch and Murray's modifications

Immediately following the signing of the contract, Murray would effectively re-launch the dictionary project. He would issue new appeals for volunteers, collect batches of work uncompleted during Furnivall's editorship, develop and issue new procedures, hire an in-house staff, even install a house (rather, an iron shed), where he and his staff would oversee and edit the piecemeal assembly of the dictionary. He would also alter the plans to new specifications, most notably in expanding the range of words to be included in the dictionary (including technical and scientific words), and do away with the three-era breakdown that had guided the earlier collection of material.

Although some two and a half million quotations were already prepared and somewhat arranged when Murray took over the project (Murray 1888), collecting and sorting the materials produced over the prior 20 years would prove to be the first underestimated challenge he encountered, and would further attest to the poor coordination under Furnivall's reign. Skeat had already warned Murray that "the papers of the Phil. Socy are, some of them, but not all, in a sad jumble" (Skeat to Murray, 6 April 1876, MP24). Ultimately however, it seems the original materials did not live up to even diminished expectations. Some came back moldy or housing mice (both living and long dead) and considerable time and effort had to be devoted to tracking the slips down – partly because Furnivall had lost a note-book containing the sub-editors'

addresses, and because several contributors had long-since moved or passed away. Murray was also dismayed to find that the sub-editors often had reported their progress to Furnivall to be in a far more advanced state than it actually was (Murray 1879). Furthermore, when Furnivall gave license to the volunteers to contribute by whatever means they were able, (for instance, some texts were read and excerpted only words beginning with a particular letter of the alphabet), it led to many idiosyncratic deviations from the instructions. This made it difficult for Murray to get a handle on what work was already done, and when confronted on the matter, Furnivall simply responded that '[b]eggars can't be choosers, & no one beggar has a right to blame another for the poor case he's in' (Furnivall 1892 as cited in Murray 1977:169).

On account of the poor quality and disorderly state of the raw materials, Murray would soon recognize that the completion of the dictionary would take well beyond the ten years stipulated in his contract with the Press. He would later reflect that the inherited materials were 'an incubus of rubbish and error' and could rarely be trusted (Murray 1899 as cited in Murray 1977:169). In his appeals for new readers Murray took some liberties in altering the earlier instructions, hoping to remedy some of the problems with the original materials. In contrast to the long, technical directions issued when Coleridge was still at the helm, Murray offered one page with twelve simply-stated rules, followed by three specimens. He did away with the "basis for comparison" guidelines, which he felt were "detrimental to the work which they were designed to serve," and instead simply instructed readers to "[m]ake a quotation for every word that strikes you are rare, obsolete, old-fashioned, new, peculiar, or used in a peculiar way," and also to "[m]ake as many quotations as you can for ordinary words, especially when they are used significantly, and tend by the context to explain or suggest their own meaning" (Murray "*Eighth Annual Address…*" p.11, 16 May 1879, OED/B/3/1/4; Murray "Directions to Readers" c.1879, OED/B/4/1/1). He hoped this instruction would alleviate the tendency for readers to over-submit exotic-sounding words (which in many cases were simply printing errors or foreign words that never achieved currency in English), while ignoring the more common words, which were of more linguistic interest. He maintained the instructions to submit quotes on a half-sheet of the standard note paper, though slightly altered how citations should be aligned. A Pennsylvanian, Francis March, volunteered to help coordinate the ranks of American volunteers, who were asked to focus on eighteenth century literature and American authors. Murray would also issue special requests to members of the various scientific societies of Britain to submit usage

quotations from their specialist vocabularies, especially from their initial instance of coinage. For instance, one appeal in the journal of the Linnean Society from March 1880 reads:

> For the investigation of the history of scientific words (as to which Dr. Johnson was avowedly incurious, but to which the new Dictionary will do full justice) special help is asked from the Fellows and Members of the various Scientific Societies, who are most likely both to have personal knowledge of such points, and to have access to the best sources of information (Murray, "Linnean Society," March 1880, OEDB.4.2.2).

The renewed project captured the attention of journalists, who indirectly aided in recruiting new volunteers. This was especially true in America, where the *Athenaeum* journal noted: "articles on the subject are reprinted in the new york press and local papers all over the Union" (Athenaeum, "*The New English Dictionary…,*" 13 September 1879). By the middle of May in 1879 Murray already had a total of 165 readers, 400 by September, and a year later 754 readers, 1,568 books read or being read, and already 361,670 slips (Mugglestone 2005). By 1882, a total of one million additional slips had been produced since Murray took up leadership (Murray 1888).

The planned reading program was to last three years, for which Murray sought at least 1,000 volunteers to make it possible. Everyone was welcome and his own pupils at the boys school in Mill Hill (just north of London) where he lived, taught, and was a headmaster, (albeit, part time once his dictionary duties began), were even put to the task. In December of 1879, Murray would publish his first "desiderata" list of known words, or alleged words, still needing a quotation or more quotation evidence. Such lists would be periodically issued throughout the dictionary's publication, often appearing in publications like *Notes & Queries*. Between 1881 and 1882 the general reading program was winding down, though reading for scientific and technical terms was to continue on. At this point fresh sub-editors and re-sub-editors were sought as the project moved on to the assembly stage of its production.

From just before the signing of the contract with the Press, Murray and an assistant by the name of Heritage had already begun to install an iron shed on the property of the Mill Hill school. The shed, deemed the "Scriptorium," was fitted with 1100 pigeon holes for sorting out and storing what would be millions of word slips. These lined much of the structure: "higher than the arm can reach; going down so low there is need to stoop" and were in addition to shelves for reference books and for filing correspondence (in contrast, Herbert Coleridge had fitted his study with just 54 pigeon holes).

Below its skylights, the Scriptorium housed Murray, high- and lower-level paid assistants (he ranked them in three tiers), clerical staff, and occasionally some of Murray's own young children – who would help with minor tasks. Murray referred to it as his "lexicographical laboratory," where the slips would first be alphabetized, cross-checked against their sources, and assembled with existing slips for each word ('Three Great Dictionaries',1882: 245). These tasks were undertaken by low-level assistants, female clerical staff and sometimes one of Murray's eleven children. A mid-level assistant would then order the slips for each word into different parts of speech and senses, and arrange the quotations chronologically. A packet of these ordered slips for a particular section of the alphabet would then go out to a sub-editor or more skilled assistant, who would divide each sense of a word into the different shades of meaning, attempt preliminary definitions, highlight the quotations which seem to best exemplify each meaning, and arrange the senses in the perceived order of their historical development. This work might then be sent to a re-sub-editor who would comment on the previous work and incorporate newly acquired quotations before passing the bundled materials back to the Scriptorium for further processing. This physical centerpiece of operations was designed as a wholly unique structure to direct the flow of production, where materials were passed in ever-cumulative degrees of synthesis. Upon visiting the site, one journalist described it as

> A Word Factory …where the philological raw material, spread abundantly and heterogeneously, could be ground out by division and sub-division, mechanically, and afterwards with reason; where there could be operatives and overseers parceled, appropriated … a special structure that shall be individual to his own dimensions, his [Murray's] own convenience, appropriated to the Dictionary and to nothing more. …Entering the slight door of it, there is entrance upon plain deal. There is an aspect of unvarying, unincident-giving, sawn and planed white-wood … Utilitarianism it shows again, pure and simple (Humphreys 1882:452:445-7).

It was built to perfectly reflect the outward directions to the volunteers, with its pigeon holes constructed to match the dimensions of the paper-size on which they were instructed to write out their extracts. As Murray would explain to Humphreys:

> 'These [the slips] are all – see – on uniform sheets of paper, of note-paper size, and they are now being reduced to a uniform plan… And do not think any one detail is unnecessary … all the work is simplified by everyone acting under the code of instructions I have drawn up. Did each man pursue his own method ----' There would be chaos, manifestly. There would be none of this absolutely cashier-like neatness and precision that make the contents of centuries of books available as if they were beads strung on a string (Humphreys 1882:447-48).

Nevertheless, the Scriptorium as a tangible place of research was still only one node in the full operation – a kind of 'counting-house', as Humphreys (1882: 445) described it. When Murray moved his family to Oxford in order to work on the dictionary full-time, the Scriptorium would be reconstructed there –with a red pillar post box specially installed out front as one indication of the loose network structuring the dictionary's global operations. Even Murray's later co-editors would work remotely. To further facilitate the constant exchange of correspondence and materials, Murray appealed to the British and American postal services to ensure that the slips could be sent at the cheaper book-parcel rates; he would further boast '[i]nspectors of the district have been here to see if they can help; and the result is that if any slip-packets burst their covers, getting strewn about the bags, I get them, after a little delay, just the same' (Humphreys [interviewing Murray] 1882:453). Simply the label "Dr. Murray, Oxford" was all it took for packages and correspondence to reach their correct destination. Furthermore, all the correspondence coming into the Scriptorium was numbered and recorded, the slips were fact-checked, and the skill and habits of the dictionary volunteers were evaluated and noted in massive binders filled with nearly 5,000 letters by 1882, which had come in at a rate of thirty to forty a day (Humphreys 1882).

In contrast to Furnivall's opaque, technical instructions to sub-editors, Murray's instructions followed a succinct and precise checklist-style containing up to 13 points (in various editions the same instructions are instead broken down into 8 or 12 points). He followed up with standardized surveys, and, unlike Furnivall, did not require the sub-editor to bring his or her materials directly up to a publishable state. The word-slip packets they received were also already pre-arranged alphabetically, by sense, and chronologically, (Furnivall's sub-editors were lucky if theirs were already pre-alphabetized). Sub-editors were then required to divide each sense of a word into different shades of meaning, highlight the quotations best exemplifying that meaning, and arrange the meanings in the perceived order of their logical-historical development. A volunteer re-sub-editor, who also received a brief instruction list, might then review their work and comment on it.

Thus, Murray more fully divided and distributed the work, added several layers between the readers' contributions, sub-editing, and final publication, and with the Scriptorium, provided clear channels for processing and synthesis. Through these means fact-checking and

corroboration became ritualistically engrained into the processes of production. The need for it is apparent from Murray's opinion of the untrustworthy materials generated by the largely unsupervised processes of the prior years, and again proclaimed in a 1928 announcement of the dictionary's completion:

> Wonderful, indeed, and amusing are the misunderstandings or inaccuracies often revealed when a quotation is confronted with the book from which it was copied. Reliable though they are as far as they go, very few quotations furnished by volunteers can be safely printed without investigation of some kind or other ("The Completion of…" 1928:16).

Even earlier dictionaries, which were used as references and for culling additional quotations, endured the same scrutiny and suspicion. As Murray proclaims: "[i]t is marvelous, and to the inexperienced incredible, how Dictionaries and Encylopedias simply copy each other, without an attempt either to verify quotations or facts" (Murray 1880:127).

But beyond the more objective matter of whether the quotation evidence was correctly copied and sourced, the raw materials were also scrutinized by a network of specialists, as Murray would clarify:

> [n]or has the principle of co-operation been confined to the collection of the raw material. The Editor, though the minutest details of the work have passed under his eye, has freely availed himself of the services of students of English, and of other branches of knowledge bearing thereon, in all parts of the world (Murray c.1883, *Proof of Notice of Publication…*, MP29).

Thus, iterative corroborative processes were pervasive at all levels of the project's production. Mugglestone (2005) has called the making of the dictionary a "densely accretive process" (p. 38) and former editor William Craigie speaks of 'how the long stretches of raw material on the shelves have gradually passed through the various hands, until they reached the stage of printer's copy, proofs, revises, and finished sheets' creating altogether a 'mass of patient, honest, careful work' (Craigie 1928 as cited in Gilliver 2004:63). The serious effort put into tracing definitive information on a single word or source sometimes involved months of research and extensive correspondence, occasionally to the original authors of a quote in question – including Tennyson, Whittier, Robert Louis Stevenson, George Eliot, and Thomas Henry Huxley. It was an exasperating task Murray admits, all just "to find out the facts for an article which occupies not more than five or six lines; or even to be able to write the words 'Derivation unknown', as the net outcome of hours of research and of testing the statements put forth without hesitation in other works" (Murray 1888:xi).

The printed proof sheets would be circulated among all the editors and a small contingent of the most trusted volunteers, assistants, and philological specialists. At this final stage of the process it could still be a considerable amount of time, often months, before a page reaches its final publishable state – and this is despite the three to six hours per day that Murray himself devoted to the proofs (Mugglestone 2005). Peter Sutcliffe of the OUP would conjecture that the proofs are "possibly the most heavily corrected proofs ever known" (Sutcliffe 1978:61). And in various works, Mugglestone (2000; 2005) has examined the proofs for what they reveal about "the controversies and conflicts, the quibbles over labels, citations, canonicity, and legitimacy as they took place" (Mugglestone 2005:xix).

The various personalities privy to reading the proofs constituted an informal core team for the project. While it was slightly changing in its membership over time, I would estimate less than twenty people at any time to have been involved in the task and to have done so without pay (with the exception of a few high ranking assistants) but at the request of Murray or another editor. This group included a small cadre of academic acquaintances (who generally had no interest in the tedious work of culling quotations or sub-editing). Among them were Alexander Ellis, Henry Sweet, Henry Nicols, Walter Skeat, and Louis Lucian Bonaparte – men who, along with Murray, constituted the most serious and skilled philological specialists in Britain at the time. To this list, Murray's subsequent co-editors: Henry Bradley, William Craigie, and Charles Onions, would also take part. Prominent foreign specialists such as Eduard Sievers at Halle and M. Paul Meyer of the French Institut also assisted in editing the proofs. Others were culled from the ranks of readers, sub-editors, former assistants, and Murray's friends, including: Henry Hucks Gibbs (later Lord Aldenham), Fitzedward Hall, James B. Johnston, Alfred Erlebach, Edith Thompson, Jemina Brown, William Sykes, Fred Elworthy, John Yeats, and Russell Martineau. Others who might be said to be part of the core team, but whose involvement in editing the proofs is uncertain, were assigned specialized tasks or sought after for particular information – such as John J. Thompson and Benjamin Dawson for special reading assignments, Thomas Hallam for phonetic field work, and Francis March, who offered his services to help coordinate the reading program in America. In addition to their philological expertise, Hucks Gibbs and Ellis were of special importance in acting as informal mediators between Murray, the Delegates of the Oxford University Press, and the Philological Society. Several specialists in scientific and technical fields were also consulted and thanked in the prefaces. Furnivall, once deemed an

"ignorant enthusiast" by Henry Sweet, could also be considered part of this inner circle, though he was kept in the loop with some reluctance and at a distance (Sweet to Murray, April 3, 1882, MP5). Furnivall remained an ardent contributor of word slips prepared from his daily newspaper – to such an extent that his switch to a different daily can be evidenced in the dictionary pages. He would ultimately become the reader with the most submissions used in the dictionary; he also dutifully assisted Henry Bradley's researches at the British Library, and carried out administrative tasks when Bradley was ill. (See Gilliver 2000 and 2010 for listings of and biographical information pertaining to several of the project's contributors).

Murray lavished abundant praises on his inner circle, both in his regular interactions with them, and in the prefaces of the dictionary. He also went out of his way to appreciably acknowledge all contributions to the project, no matter how small. The Scriptorium staff carefully recorded the word submissions of each of the thousands of contributors who would become involved in the project and whose names were printed in the prefaces of the dictionary's volumes. The significance of these acknowledgements to the volunteers is expressed in a letter to Murray of 1888 in which F. Armour [SP] writes "I notice that you have included my name among some of your contributors. I am proud to see myself in such good company, but I feel rather ashamed to have done so little for the good cause" (F. Amour [SP] to Murray, 18 June 1888, MP8). Ultimately, Armour was compelled to offer more assistance for the dictionary.

From early on, the project attracted contributors of considerable enthusiasm and efficiency, some quite obsessive. There was Canon J. T. Fowler, who spent eight hours a day for twenty years reading and compiling word-slips for the project. There were the Thompson sisters of Liverpool, who collectively contributed over 15,000 quotations and were especially helpful in supplying words from Old English and regional dialect. John Randall would get up early and stay up late to write up word slips. The American expatriate Fitzedward Hall, who spent four hours a day for over twenty years working on the dictionary, shown such tremendous expertise that he was often directly consulted by Murray and brought into the proof-reading process. Murray even exclaimed that he had such faith in Hall's work that he did not subject his slips to the usual cross-checking process – despite no one of the dictionary staff having ever met Hall, who was a recluse on account of being accused of murder, though he confided his innocence to Murray. Another American in Britain, this one a convicted murderer, William Chester Minor, (made infamous in Simon Winchester's 1998 novel *The Madman and the Professor*), devoted

countless hours to the dictionary project – all from his cell at the Broadmoor Asylum for the Criminally Insane.

The collaborative nature of the work was often celebrated as its highest virtue, and a trait distinguishing it from earlier dictionaries that were the product of individual pronouncements or, in France and Italy for example, an arm of the state. For instance, an 1889 reviewer asserts: "despite the failure of the French Academy, experience has now shewn that by the intelligent co-operation of many workers a much nearer approach to an ideal dictionary can be made than is possible to the single handed scholar (R. McLinktock, 29 April 1889, MP34). An 1891 a clipping from the *Scottish Leader* would further assert:

> each new installment of the Great Dictionary (as it ought to be called) gives more and more magnificent proof of what is possible to voluntary (and for the most part unsalaried) co-operation in literary affairs. This noble work proves in lexicography what a finally successful republic does in politics, that co-operation is itself a thing to be learned. …Johnson could beat the forty French Academicians; but not forty Johnsons, with a Grimm and a Littre to guide them, could do what is here being achieved by the help of hundreds of volunteers throughout a generation (Anonymous, 17 September 1891, MP9).

However, among the volunteer readers, as Murray's biographer-granddaughter candidly puts it: "[t]he class of readers who predominated were those who showed more enthusiasm than ability and failed to grasp the object of the exercise" (Murray 1977:182). With this, she documents how Murray spent a great deal of time singling out the lesser skilled and idiosyncratic workers, to whom he dedicated many hours of personal correspondence offering corrective instruction and supervision:[26]

> In the early years, when readers were working in large numbers, James found that the task of organizing and instructing them took almost all his time. He had to dispatch books and slips and acknowledge their return, chase the tardy, answer queries about their work, and

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[26] The aforementioned William Chester Minor, who worked from his cell in the Broodmoor Asylum for the Criminally Insane, was one such idiosyncratic worker. Minor had created a hand-written index of words and quotations from his rare book collection and was thus invaluable to the editors in seeking desiderata and older sources. But, as Murray lamented, 'he requires a great deal of nursing, encouraging and coaxing and I have had to go from time to time to see him … it has been no light part of my unknown and unrecognized duties to keep him interested' (Murray 1901 as cited in Murray 1977:306-307). Thus, contrary to the friendly relationship set out in Winchester's book, Murray's acquaintance with Minor was at least partially motivated by material collection and quality control. Murray was especially eager to get hold of Minor's rare books, and when Minor ceased his dictionary contributions, Murray writes that Minor's 'growing weakness has however done what my persuasions failed to do, and he has sent up to date some 35 books' (Murray to J.J. Thompson as cited in Knowles 1990:35). Furthermore, once receiving the books, Murray relays them to volunteer reader John J. Thompson, instructing him to ignore the work Minor had done and to just re-read and extract from the books himself (Knowles 2000).

deal courteously with irritatingly stupid questions from volunteers upon whose goodwill he depended...[But he] could not resist teaching: rather than throw a stupid letter in the waste-paper basket, he must show the writer why it was foolish (Murray 1977:181).

For instance, in a draft and copy of a response to an unnamed female correspondent, (the draft is only addressed "Dear Madam"), Murray expresses dismay over her misguided attempt to identify what was "new" in Shakespeare and Bacon. The volunteer instead provided many examples of Shakespeare and Bacon's usage of older English and French terms, and also quoted English translations of Bacon's original Latin treatises as if they were his own words. He writes:

> I wish to say, with all kindness, that I seem to see on every page evidence of a want of that preliminary study of the language which was surely necessary to enable any one to grapple with a delicate linguistic problem. … Surely it would have been worth your while to acquire the preliminary knowledge before dealing with a subject that required it!" (Murray to "Madam," December 1880, MP4).

He follows with a lengthy write-up on the history of the language, refers her to references, and concludes "I shall always be glad to help you on any special point, so far as time and means permit" (Murray to "Madam," December 1880, MP4). The letter was five full-size pages (approx. 8x11") in length, and in comparison to an incomplete draft that preceded it, this still-rather-candid final version was somewhat nicer. (Murray had a tendency to express unrestrained emotion in his drafts, while his final versions would be far more even-tempered and tactful).

Murray himself calculated that at the height of the reading program "I had nearly 2000 Readers actually at work, writing letters to me at the rate of 40 or 50 in a day" (Murray "Dictionary Evening", 1910, MP33). By 1882 some 5000 letters across 13 quarto volumes of Murray's letters in minute handwriting had been accumulated (Humphreys 1882). Murray's experience as a school-teacher may have led him to place this importance on corrective instruction, though he often complained about the amount of time he needed to devote to correspondence for general inquiries and the administration of the work, and in bringing volunteers in line and on track. Two years into his re-launch of the project, Murray would confess: "I have quite a struggle at present to bear my normal load, and letter-writing has become a loathing to me" (Murray to J.B. Rundell, 15 March 1881, MP4). Nonetheless, he preferred the personal touch of letter-writing and refused to delegate some letters to anyone else – even any of the additional editors when they came into the project. In 1892 he would proclaim: "[t]he answering of letters is a very serious part of my duty; after delegating as much of it as possible to

assistants, that which I absolutely must do in by own handwriting, takes always one, more usually two, sometimes three hours of the freshest part of my working day" (Murray 1892).

Some of the letters show him to be quite engaged in the volunteers' personal lives and sympathetic to their aspirations and anguish. Murray reciprocally aided their philological pursuits,[27] was intimately confided in (most notably by the hermit accused of murder, Fitzedward Hall),[28] and on at least two occasions, offered paid assistant posts or clerical work to volunteers falling on hard times,[29] or their widows.[30] Feeling unqualified to accept such a generous offer, one contributor responded:

> How is it that your fund of sympathy is so inexhaustible? A mere volunteer like myself receives three closely written pages from you simply because he bothers you with his private affairs! I am quite sure that my patience would soon give out were I in your place and bothered thus by one who is practically a stranger. Many thanks, then, for your kindness. … Your Dictionary won't progress if you convert it into an Almshouse for Decayed Volunteers!" (John Dormer to Murray, 19 November 1896, MP12)

At the very least, Murray's much more relatable background, engaged skill, reserved and stable outward demeanor, in contrast to Furnivall's disposition, would have been better received by his contributors, and likely made them more receptive to his instruction. As proclaimed by Murray's eventual co-editor, Henry Bradley, (who, like Murray, was a self-taught scholar of humble beginnings): "the large amount of outside help which adds so much to the value of the dictionary would never have been forthcoming but for the editor's energy and personal influence, and for the confidence inspired by his ability" (Bradley to Gell, Nov. 8, 1887, OED/B/3/1/8). This is further validated in a letter from a contributor praising Murray for embodying "the true spirit of the Christian worker. That Dictionary is not only a monument of your acquired

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[27] For instance, he appealed for academic honors on the behalf of Francis March, who voluntarily administered the reading program in America (see Murray to "President," 13 May 1896). Murray also wrote a recommendation letter for a Dutch philology student, Otto Jesperson. Jesperson had been a dictionary volunteer, and though unknown to Murray beyond that, Murray's letter apparently helped him secure his first faculty appointment. Jesperson would go on to be one of the leading names in twentieth-century linguistics (see Otto Jesperson to Murray, 3 December 1892, MP10).

[28] In one correspondence Hall writes, "pardon a little private history. In May, 1879, my domestic life was wrecked by a villainous clergyman, [unclear name], who has since died of delirium. …From that time, my acquaintance being scoffed by all about me, I have lived the life of an outcast and hermit. For more than thirteen years I have not so much as taken a cup of tea at any table but my own. Having a clear conscious, however, I am far from unhappy" (Hall to Murray, 18 November 1892, MP10).

[29] For instance, Miss L. M. Scott, who, as a woman of 40, appealed to Murray to recognize the difficulty for a woman of her age to find work, and offered her handwriting as an indication of skill (Miss L. M. Scott to Murray, 30 July 1882, MP5).

[30] For instance, Francis Martineau, who turned down the offer (see Martineau to Murray, 12 December 1898, MP12).

knowledge, your intellectual powers; but also of your physical strength, and above all your moral courage" (Arleer to Murray, 29 November 1896, MP12).

But while well-warranted dues is given to Murray's personality and personable qualities in reviving the project, and particularly the dedication that it took to carry out long days of work with little time off, what's remarkable about Murray's reign is the depth of impersonalization then characterizing the production processes. Far more than Furnivall, the day-to-day production of the project under Murray would be distinguished by distributed and differentiated roles, as well as systematic and multi-layered process of fact-checking and proofreading, in which no single person had full authority over a single measure.

Interference of the Press

Into this balancing act among differently skilled and interested contributors, the Oxford University Press was a powerful actor who would seek a large share of influence over the production of the dictionary. It certainly cannot go without saying that, personalities aside, a major difference between the era of Furnivall and following from Murray is the resources that were gained as a result of the contract with the OUP. Murray himself received a salary and stood to gain in royalties. He also had a budget allocated to pay assistants, build the scriptorium, and purchase reference material as well as general office supplies among other expenses. Granted, the sums Murray and his staff received from the OUP were meager (largely on account of his own underestimates, which he admitted were to make the project seem more favorable), nonetheless, the Press's stream of resources gave the project a different character of commitment than its earlier more ad hoc form.

But while conferring resources, the Press was also a competing figure for control over the project and wished to exercise a say in how its resources were used. This was particularly the case as the work began to exceed its expected time frame and budget, but resistance to and misunderstandings of the project were apparent from the beginning and underlie several attempts by the Press to alter the form and direction of the dictionary. For instance, in a communication on behalf of the Delegates, Bartholomew Price expresses that:

> there is a strong adverse feeling among the Delegates to the Phonetic part of the Dictionary. They think that the principles and rules of Phonetics are not as yet sufficiently established and recognized, and as there may be considerable change in the

matter it is not expedient to commit a Dictionary of a permanent form and value to what may be a shifting theory (Price to Murray, 14 May 1878, MP3).

To which, Murray responds:

> I am at a loss to understand what the Delegates mean by the principles and rules of phonetics to which they fear to see the Dictionary committed. …The statement that "one" is now "wun" is no "shifting theory," but a solid fact which everybody admits – and a fact of great importance in the history of a word. …[the symbols chosen] to represent that pronunciation is also not theory, but a practical expedient, permanently intelligible, by the key which will be given. I do think some of the Delegates must be conjuring up a ghost and then trembling at it (Murray to Price, 16 May 1878, MP3).

In 1882 the classicist Benjamin Jowett took office as Oxford's Vice-Chancellor and *ex-officio* Delegate of the Press. As a critic of the earlier Oxford reforms, it was a position he used in the fight to maintain the status of classical studies over scientific pursuits (Cannon 1978). Not long after Jowett's appointment, Murray started receiving complaints from the Delegates (via their appointed Secretary, Price), regarding the dictionary's use of quotations from newspapers. The issue had come up during negotiations and Murray vowed to avoid newspaper sources where other authorities existed. Nevertheless, the request compelled him to layout the practicality of using them, as well as their philological significance.

> I never use newspaper quotations, in preference to those from other sources – or when I have or can get others….I believe I am doing what every true English scholar will approve. …And surely it is better to show that the <u>Daily News</u> or <u>Pall Mall Gazette</u> uses words in such trash senses, than merely to state on my authority, that such is the current modern usage….To the philologist and historian of language – newspaper quotations are the <u>most valuable</u> of current instances – they show how the language grows – they make visible to us the actual steps which for earlier stages we must reconstruct by inference. …I shall be glad to know <u>who</u> really objects to these, and on what grounds; and to fight him on the general question; and I am bold to say that I shall have all the English scholarship of the world on my side (Murray to Price [possibly a draft], 9 June 1882, MP5).[31]

A year later the issue came up again, along with several other requests by the Delegates, in a memo entitled "Suggestions for guidance in preparing copy for the Press."

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[31] Although the letter is addressed to Price, it is unclear whether this statement was part of a draft or Murray's official response to the Delegates. Such firmness is rare in his official dealings with the Press and, as will be noted in the next chapter, Murray also tended to avoid mention of any underlying philological reasoning when explaining himself to the Delegates.

Murray was clearly offended and rattled by the document, which, on a copy of the "Suggestions," Alexander Ellis has written "This is a misnomer. It is <u>directions for editing</u>." Across the top, Ellis scribbled "The writers of this did not at all understand the dictionary," alongside several of the eleven "suggestions" given, he remarks that they are "impossible" or "not always possible." Responding to the requests was a drain on Murray's time, energy, and enthusiasm for the project. In what appears to be a draft response to the Delegates (seeing as it is in Murray's private papers, while a somewhat different, more subdued response is in the archived holdings of the OUP), Murray writes that he rejects the first request that etymologies into Greek and Latin go no further beyond the Greek and Latin, and that "Suggestions 4, 7, 8, 9, 10, have always been part of our working rules, and interfered with only where other principles crossed them." As to suggestions 7 and 8, which re-emphasizes the desire for "famous" quotations and those from "great authors," Murray sarcastically retorts "Give us the quotations from great writers: "O how [sp?] happy we shall be!…Much of our time is actually spent trying to get famous quotations instead of those we have" (Murray [draft to Delegates], August 1883, MP5). He is especially emphatic in his rejection of the sixth suggestion that "The number of passages shewing the use of a common word not to be too large: especially in words found in common use, it would be enough to give one or two examples of their *earliest* occurrence, and then say This usage continues to the present day" (Delegates of the OUP, 1883). Recognizing that this practice would undermine the intent of the dictionary, Murray exclaims: "Absurd! No friend of the Dictionary would tolerate it. Why show usage at all!.. it is suicidal: to our enormous number of men the 'modern instances' are the favourite feature, as I know from the visitors who have inspected the proofs" (Murray [draft to Delegates], August 1883, MP5).

It was only a couple months later that Murray was preparing copy for the first fascicle when Benjamin Jowett would attempt to entirely overrule Murray's editorial authority. Murray received correspondence from Jowett including a proof featuring Murray's title-page, prospectus, and preface "subjected to serious alterations," which, Jowett claimed, 'some of the Delegates think must be made' (Murray to Price [likely a draft], 23 October 1883, MP5). It was unclear to Murray whether this was officially and fully sanctioned by the Delegates (it was not), and the correspondence did not include a printed proof of the materials as Murray had submitted them, or their originals. Jowett's underhanded revisions depicted the dictionary in a manner far removed from what it actually could, or ever intended to, be. As Murray emphasizes in a draft response,

We do not, and <u>cannot</u>, show in a Dictionary the History of the Language – only that of those <u>words</u> which are treated therein. The Language in its origin, character, and grammar, is largely outside the Dictionary, the Vocabulary being only one part of the Language. And we do not tell the history of the Vocabulary '<u>from the Earliest Times</u>'… the whole clause is absurd in the extreme (Murray to Price [very likely a draft], 23 October 1883, MP5).

A more tempered response was issued privately to Price a few days later, and before submitting an official response to the Delegates, word was out that Murray desired to resign from the project. In a letter beginning with a phonetically spelled out groan, Ellis proclaims "what business have the delegates as such to edit the Dictionary? This is what it amounts to. Edited by Jowett! No!;" he agrees that Murray should resign, assuming that the Press could only appoint a new editor if one were approved by the Society. (Ellis to Murray, 8 November 1883, MP5). Murrays friend John Yeats suggests to him that "the Trade-Unionists might be induced to take up a national work, which one of our Universities failed to carry through!" adding "nor would you have to contend; in their case, - with that 'depreciatory meddling of ignorant men,' of which you speak feelingly" (John Yeats to Murray, 5 November 1883, MP5). Gibbs, however, pleaded with Murray not to resign and apologized for Jowett's rudeness, who Gibbs claims "feels his power and great ability" and tends to act hastily in matters where he lacks experience (Gibbs to Murray, 12 November 1883, MP5).

In drafting his formal response on November 17th, Murray writes of the prospectus revisions that: "It is a most unfit document to send out to the public, and in some places quite inaccurate. …Section IV now makes the astounding statement that we have <u>read all printed books</u> … <u>pro-di-gi-ous</u>!" (Murray to Price [very likely a draft], 17 November 1883, MP5). Changes in the title-page were also denounced as preposterous: "Scholars and practical men whom I have consulted are simply amazed at the omission of the words 'On a historical basis' from the title-page. One of them says 'It is the most literal instance of cutting off the nose to spite the face I have ever heard of'" (Murray to Price [very likely a draft], 17 November 1883, MP5). Changes to the preface considerably alarmed Murray, for they obscured the fact that the dictionary was new and distinct from the works of Johnson and Webster and instead made it sound as if his work was an imitation or extension of those dictionaries. To this, his November 17th draft states: "What Littré took a couple of pages to say, the Delegates need not grudge 7 lines for, inasmuch as it is in our case also the <u>raison d'être</u> for all our labour" (Murray to Price

[very likely a draft], 17 November 1883, MP5). In his official, more tactful response, this defense reads:

> I should be glad if those who do not know Littré's preface, would read it, and see how he emphasizes and amplifies points which the Delegates have thought it presumptive for us even to mention or hint at. I should like to see these 6 lines expanded into 3 times so many, emphasizing the distinctive character of the Dictionary, saying that this distinctive character is the sole reason why its editor, contributors, and publisher have thought it worth while to expend their efforts in producing it; which is both <u>true</u> and <u>telling</u> (Murray to Price, 19 November 1883, MP5).

It would not be the last indication of the Press's misunderstandings, resistance, and interference. In 1893, already almost a decade into printing, then-Secretary of the Delegates Philip Lyttelton Gell issued nearly similar "suggestions" as those of 1883. They were first brushed off, but in 1896 Gell would again attempt to restrict the size and style of the dictionary by scaling it to a fixed ratio of pages relative to Webster's dictionary (the Delegates originally proposed six pages to every one of Webster). But, this showed the Press's lack of understanding of how Webster's dictionary differed from a historical-dictionary, as the latter would exhibit more variation in the size of the entries over the course of different parts of the alphabet. Upon first word of this restriction, Bradley writes to Murray

> As you will imagine, the letter I received this morning containing the resolutions of the Delegates has caused me great perplexity.…I entirely agree in the view expressed in your letter to me, that the proposed change would involve the abandonment of nearly all that constitutes the distinctive value of the Dictionary....It is unfortunate for us that the English alphabet begins with A. As you point out on p vii of your Preface, the words under that letter include an enormous proportion of Latin derivatives. These admit of comparative brief treatment according to our plan (Bradley to Murray, 26 February 1896, MP12).

Murray responded to these restrictions with firm intention to discontinue the project, "rather than see the Dictionary deprived of the characters which constitutes its only justification, …in the hope that some future age, under happier conditions may be able to resume it" (Murray to the Secretary and Delegates, March 5, 1896, MP12), but this would only be met with a more forceful resolution from the Press and nearly similar "suggestions" as those of 1883, again calling for a focus on dignified language and citations from more authoritative texts.

That the dictionary work was able to continue with lessened interference from the OUP seems highly dependent on factors that made the Press accountable to broader and higher authorities. For instance, the near deadlock of 1896 was overcome when an anonymous article in

The Saturday Review, (which some think may have been written by Murray), cast the dispute and any decision to halt production as "a national calamity and an indelible disgrace to the University" ("The English Dictionary…" 1896:393). The article argued that the university's role in society should be to support projects that would benefit the public, and particularly national, good. Furthermore, in 1897, Murray proposed dedicating the work to Queen Victoria, whose acceptance of the honor implicitly bound the OUP to overseeing the completion of the project.

All the while and even beyond their 20 years of attempting, and largely failing, to steer the dictionary's content, the Press also was involved in affecting how the dictionary would be made. They were stingy in providing Murray with poorly paid and inappropriately trained assistants. The Delegates also sought to the bypass – or in Gell's words "alleviate" Murray – from what they saw as his broad oversight and bottleneck effect on the project (Gell to Murray, 30 November 1887, MP7). A former dictionary assistant, Erlebach, was suspicious of their motives and its efficacy, telling Murray, "let the Press accept the bottle-neck as it is, with his determined purpose to be as flexible a gullet as possible" (Erlebach to Murray, 25 June 1886, MP7). Though the idea to install independent editors had been made five years prior by Gibbs, in 1887 the Delegates promoted Henry Bradley to the role of joint-editor. While Bradley was initially one of two potential co-editors proposed by Murray himself and was being primed for that position prior to the formal promotion, Murray still wasn't entirely confident in Bradley's work and expressed the intention to retire from the project should Bradley be incapable of producing quality work which could cohere with Murray's own volumes (see Murray to Gell, 16 November 1887, MP7). Gell sought to console him, communicating Furnivall's insistence that independent editors were needed – which, for Murray, likely offered no reassurance (Gell to Murray, 6 November 1887, MP7). Nevertheless, Bradley, for his part, had no intention of wanting to work fully independently and without Murray's advice; he told the Press he wished to see Murray recognized as the chief editor whose "admirable general plan of the work is the fruit of his industry and foresight" (Bradley to Gell, Nov. 8, 1887, OED/B/3/1/8). It would be a decade later that Murray would be recognized as "editor-in-chief," and even retroactively compensated for the additional work he had to put into training and supervising Bradley. Still, even as late as 1901, in another attempt to diminish Murray's authority and speed up the project, the Delegates appointed an unknown outsider, William Craigie, to train to become editor – all

completely without Murray's knowledge and against his wishes to promote from among his assistants.

Publication, Presentation, and Reception

It was initially expected that a first part of the dictionary would be printed by 1882. That year passed with the Press becoming ever more inflexible and impatient, despite Murray's pleas for their recognition of the unexpected obstacles that had ensued, and the diligence he dedicated to the work. Covering words from A to Ant, the first fascicle would be published in 1884. At the time, it was already five years after the commencement of the contract – which initially supposed the entire dictionary would be completed by 1892, and was now estimated to take until 1896. Nonetheless, Murray hoped that upon this first published offering the Press might finally realize the grandeur of the work, thus impelling them to loosen the purse strings to ensure its completion – either that or they might put a halt to the project in its entirety. As Murray privately expresses to Gibbs:

> In the interests of the Dictionary I have desired not to raise the question of time or any other, till we get the work fairly launched, believing that then, when its value is realized, and it is seen that I am doing as much as a mortal man can do, the Delegates would be satisfied, and if anxious that the work should be expedited, would offer me more skilled assistance. And I have feared that if they realized that the work was really to take so long a time, the majority (who are nothing specially for English, and do not realize á priori the grandeur of the work) might put up their backs and say, we won't stand this, we will rather stop it (Murray to Gibbs, 12 February 1882, MP5).

Instead, the Press took a more ambivalent course, prompting their decision to remove Murray from his headmaster duties at Mill Hill and move him and the dictionary operations to a full-time residence in Oxford. Prior to the move, Murray reported that he devoted 58 hours per week to the dictionary, and 19 to his school duties (see Murray to the Delegates [likely a draft], 1883 June, MP5).

The Delegates, like many reviewers of the first fascicle, were by no means overjoyed by the content of the work. It was the subject of mixed reviews, or, more specifically, "many philologists on the Continent and in the United States gave it enthusiastic reviews. In England there were few scholars qualified to appreciate the work" (Murray 1977:234). One instance prompted C.E. Doble to advise Murray: "Would it not be well that you should demolish very briefly the 'reviewer' in the <u>Morning Post</u> of Saturday? The article is dreadful; but it might be

worth while to point out that the writer suffers from 'quotation-blindness' as well as from ignorance of the primary rules of philology" (C.E. Doble to Murray, 29 January 1883, MP10). Edith Thompson offered that "It is a great satisfaction to see that your work is at any rate thoroughly appreciated in Germany, where they do understand thorough work" (Edith Thompson to Murray, 9 January 1896, MP12). The British media seemed preoccupied with incidental details or outright rejected the descriptive approach and lambasted its use of "non-authoritative" sources (see Murray 1977; Osselton [1989] 1995; Winchester 2003; and Mugglestone 2005 for an overview of some of these criticisms; as well as Bivens 1980-81 for an annotated bibliography covering nineteenth century reactions to the dictionary). For instance, one reviewer claims:

> The truth is that the editors have been extremely lax in their choice of authorities. Some of the best are omitted, some of the worst are adopted. …the most recent examples are taken from ephemeral publications, newspapers, magazines, and trashy novels. …quotations are made from the most worthless, careless, and ignorant publications of the day. …M. Littré [creator of the first French historical-dictionary] is far more judicious, instructive, and complete than the Oxford lexicographers (Reeve, 1889:346-7).

Another complains:

> If the Editor goes on upon this plan of tabulating every case, giving all the dates and all the spellings and every minute fact that can be rummaged up, whether it is worth anything or nothing … I (who am an old man) shall certainly never live to see it. …The Editors of the Philological Society's Dictionary seem to be Legion, and no central authority to control them (Henry Norton to [unclear, perhaps to Henry Frowde of the Philological Society], 30 January 1884, MP6)

Although an early prospectus for the work proclaimed it to be "a new and more complete English Dictionary, which, in fullness of detail, and for critical accuracy, might bear a comparison with the *Wörterbuch* of JACOB and WILHEM GRIMM," and regardless of favorable or unfavorable comparisons to the works of the Grimms and Littré, the presentation style of the new English dictionary was entirely different from all predecessors' or contemporaries,' and would remain so throughout the several decades until the first edition's completion (Murray, n.d. [c.1883], *Notice of Publication of a New English Dictionary on a Historical Basis* [final draft], MP29). Among the most distinguishing features of the work is its consistency. For all of the 54 years of its development since Murray, and the involvement of thousands of contributors and stakeholders, the dictionary is remarkably consistent in form from

A to Z. According to Osselton (2000), one would find "wasp and bee, yellow and brown, brother and sister," each treated in the same manner (p. 73). As outlined by Zgusta (1986), each entry begins with the headword and a chronology of its various forms and spellings, followed by modern pronunciation, grammatical information, and etymological information. This is followed by each sense of meaning with its definition – arranged in logical order as it was assumed they might have chronologically developed. Each definition is then followed by chronologically listed quotations illustrating its usage. Throughout the text there is also consistent use of a comprehensive array of typographic distinctions and symbols – a characteristic that made the dictionary visually more manageable than the French or German historical dictionaries and led one reviewer to proclaim "what a contrast to the long featureless paragraphs of uniform type and the jumbling together of explanations, remarks, and quotations of Littré and Grimm!" (R. McLinktock, 29 April 1889, MP34; see also Bradley 1884). Furthermore, the English dictionary maintained brevity in its quotations, rather than the lengthy passages that were common to both the German and French dictionaries.

Of the three dictionaries, the English would also be the most inclusive, least biased, and least prescriptive. It would seek to collect all English words that have ever been in usage from 1150 onwards. Words which were obsolete before this time period were not included, but quotations could be drawn as far back as 700 AD (Bradley 1884). The English dictionary was also the most accommodating to foreign loan-words, which were given typographical distinctions as "denizens," "aliens," and "casuals." Technical words also featured prominently, and as Osselton (2000) notes, the English dictionary was the "most receptive of nonce-words, ghost words, and other ephemera" (p. 72). Moreover, the dictionary was also quite distinct in the variety of sources from which it gathered quotations. It was not averse to using non-literary materials, including newspapers, essays, and technical papers.

What Trench deemed in 1857 the "constant confusion in men's minds" (p. 5) surrounding the idea of a historical dictionary, gradually gave way towards acceptance, even fervent praise, for the dictionary, which helped to see the project through to its completion. In an 1890 letter to Murray, speaking with sarcastic surprise regarding a review in the Guardian, Elworthy remarks: "I have not seen any notice since the work began which shows more clearly that the writer understands his subject and is no mere faddest or hack" (Elworthy to Murray, 19 January 1890, MP9). Over a year later, Murray's Press clippings show that the "minutia" the work had been

previously criticized for, now was a basis for praise. An October 2, 1891 review in the *Scotsman* proclaimed "the work continues to be as minutely done as ever" along with the remark "[t]he great merit of the work, of course, is in its unrivalled wealth of material – though scarcely less value is to be attached to the method of its arrangement and display; an October 14 clipping from the *Liverpool Mercury* stated that the quotations were "not only copious but interesting" (MP9).

Before the first edition was fully complete, it was already being relied upon by the British Parliament as the foremost authority for the language (see Murray 1900). In a draft of an 1889 lecture, Murray claims that German scholars

> already anticipate the time when Grimm's Dictionary shall be out of the way, so that it will be possible for them to do the work over again on the plan of the New English Dictionary. …In many other countries, even as far as India and Ceylon, proposals have been made to compile historical dictionaries of their languages on the model of our Dictionary." (Murray, *1889 Lecture on Dictionaries to "National Ho[m?]e Reading Union. Blackpool"* [draft], MP26).

Murray and the dictionary staff would accumulate multiple high honors – including knighthoods and membership in multiple international academies. Throughout the term of his editorship, Murray himself would gain eight honorary doctoral degrees – the last of which would be given by Oxford. But this praise did not coincide with increased understanding of the paradigmatic motivations behind the project and the principles which guided its production. Despite his many honorary Doctorates of Literature, on one public occasion Murray would assert that:

> I am not a literary man … I do not write novels, nor essays, nor poems, nor history, I am not specially interested in Arthur & his knights, nor in the development of the modern newspaper, I am a man of science, and I am interested in that branch of Anthropology which deals with the history of human speech. (Murray n.d. [c.1910] – Lecture to the Ashmolean Natural History Society, MP26). 292).

The OUP would release an additional four volume supplement to the dictionary in 1972, and a complete second edition appeared in 1989 (by then on CD-ROM). The third edition of the *Oxford English Dictionary* is currently underway.

Chapter 6 – The OED in Context

       To better appreciate the historical significance of the *New English Dictionary* and why it provoked such initial dissatisfaction and hostility, consider the prior standard-bearer in British lexicography, Samuel Johnson. First published in 1755, Johnson's dictionary was a work that was progressive in its meticulousness, comprehensiveness, and the inclusion of word evidences from print. But, as one twentieth-century critic put it, Johnson

> made many mistakes; he put into his work expressions of his own likes and hates, epigrammatic and mordant flashes from his own mind, such as – 'Patriotism. – Love of country; the last refuge of a scoundrel. Oats. – A grain which in England is generally given to horses, but in Scotland supports the people. Pension – In England generally understood to mean pay given to a state hireling for treason to his country' (Renwick, 1913).

Moreover, as Murray himself noted, Johnson's word evidences were not there to guide an inductive extraction of word meanings by the lexicographer, were not cited sufficiently to be cross-checked, and they were not clearly or consistently matched to corresponding information on each sense of meaning (Murray, *Lecture to Ladies' Institute,* 9 November 1910, MP26). Rather, they were supplemental to the overall body of the work, in which Johnson proceeded to impress his opinions, wit, and literary prowess upon the reader. Murray claims Johnson's work to be that of an author rather than an editor, showcasing "the prescientific age" of philology, when "*a priori* reasoning was applied to problems which could only be solved by patient induction" (Murray, n.d. [c.1883], *Notice of Publication of a New English Dictionary on a Historical Basis* [early draft], MP29; see also Murray n.d. [c.1900], 'Editor or Author,' MP32).

       This uncritical tradition of *ipse dixit* ("he said it himself") prescriptive pronouncements was in the nineteenth century being continued in the lexicographical work, first published in 1828, of Noah Webster, who in his dictionary sought to reflect and call forth distinct American values. However, unlike Johnson's citation of word usage "from the best writers," Webster wrote the occasionally-offered illustrative sentences in his dictionary himself. Despite the increasingly popularity throughout its subsequent second and third editions, it was fiercely derided by philologists; Trench would state: "[e]ven if Webster's Dictionary were in other respects a better book, the almost total absence of illustrative quotations would deprive it of all value in my eyes," and Skeat dramatically exclaimed: "The plan in Webster of not giving exact references, is the

most ridiculous one ever adopted by a rational human being" (Trench [1857] 1860:7; Skeat to Murray, 6 April 1876, MP24)

From the inception of the project in the 1850s, it was clearly never the intention of the *OED*'s founders to follow in the tradition of Johnson of Webster. The Philological Society's approach sought to work from the ground up, with the raw information of word usages being the foundations on which a holistic knowledge of the English language could be built. As one reviewer put it:

> Earlier dictionary makers seem either to have despised illustration altogether or to have simply angled in the waters of literature for illustrations suitable to a preconceived set of meanings; but the modern dictionary-maker sweeps the whole of those waters with a drag-net, and then proceeds to classify and catalogue his spoil with the minute completeness of a naturalist (R. McLinktock, 29 April 1889, MP34).

The highly descriptive and unassuming nature of the English dictionary extends from the highly impersonal nature of its production processes. While the results of this method were clearly appalling to some, the production of the dictionary was (and increasingly came to be seen as) an intriguing, if not exciting, development in knowledge production. The operation seemed to exploit all the recent advancements in travel, communication, and printing, thus showcasing the potential of the new global information age. Even other collaborative knowledge projects to that point, for instance, the King James Bible, Diderot's Encyclopédie, and the Encyclopedia Britannica, were developed by closed groups, invited contributors, or made little mention of lesser-status assistants (see e.g. Kafker, 1996; Nicolson, 2003; Kafker and Loveland, 2009; Blair, 2010). Extending an open invitation to strangers was a fairly remarkable approach. Recall that even the Grimms' recruitment of contributors, while still bold, was largely achieved through personal and academic connections – their only public appeal was issued when some gaps were shown to remain after the initial reading program. It's also noteworthy that, while the Grimms' entrusted the real philological task of synthesis and analysis to no one but themselves – though Jacob grew fond of Hildebrand's insights – volunteers of no known repute (except that which they acquired on the basis of their work with the *OED*) were enlisted at all levels of the *OED's* production. With this, the makers of the dictionary offered a model for a more inclusive form of public knowledge. Not only was this distinguished from the exclusivity upheld by Oxford and Cambridge, but it was also untethered from the gentlemanly norms that operated as an implicit

basis for membership and credibility within Britain's informal networks of scientific practice, including the British Association for the Advancement of Science (Morrell and Thackray, 1981).

Following from this intrigue, Murray's Scriptorium became a novelty attracting considerable attention from scholars, journalists, and other visitors from around the world who wished to gawk at the machinery of modern knowledge manufacture in action. It is said that "[a] German professor visiting the Scriptorium proclaimed: 'It is so English; when a German is going to write a big book he sits down in his garret, with his wife and his tobacco, but the first thing an Englishman does is to build a house to write it in!'" (*Hawick Advertiser*, 25 December 1903, MP32). One journalist colorfully proclaimed: "Sir James Murray has, indeed, almost become one of the 'sights' of the country. American tourists come by the score to shake him by the hand. From Germany squadrons of professors appear in single file" (Renwick, 1913). Even those who were critical of the outcome showed some fascination with the method. For instance, despite Reeve's (1889) negative appraisal of the dictionary's sources (excerpted above), he shows some approval of the new era of encyclopedia and dictionary-making, in which "[t]here may be no genius, there may be no originality, but there is an amount of industry and scholarship employed in storing and reproducing the knowledge of the world which has never been surpassed" (p. 330). Echoing this industrial sentiment, in 1906, another proclaimed that "[t]he dictionary …must now be the largest single engine of research working anywhere in the world" (Cannan 1906, as cited in Mugglestone 2005: 188).

The necessity and strategy of impersonal procedure

However fascinating the dictionary's collaborative plan of production was, from the outset there were doubts about these scheme. For instance, a reviewer of the Philological Society's initial project proposal expressed that:

> Their design is a magnificent one, but they will have difficulties of corresponding magnitude to contend with in carrying it out. … [B]eyond the collecting and arrangement of materials their prospect is at present, rather hazy. … – where is the wise master-builder? … There must somewhere lie a power of arbitration. From the moment that the building begins, the republic must give place to a dictator (Marsden, 1859: 386).

Likewise, even one of their own Society members – who was also the uncle of first editor, Herbert Coleridge – voiced his concern that a leader with "cultivated instinct" would be needed

to adjudicate on various decisions "under the guidance of his own observation, or more commonly of that life-long, unconscious induction, which amounts in a highly-cultivated native speaker" (Coleridge, 1860: 155). Even though production picked up steam under Murray, the processes he laid out were not necessarily self-evident or derived from precedence, were not guided by market considerations, and involved extensive networks across collaborators; the networks were not one-way channels in a hierarchical structure but instead included circuits of corroboration and deliberation that effectively doubled work and impeded resolve. One can thus reasonably wonder why the dictionary was made this way.

It must be recalled that the British comparative philologists, like most British scientists at the time, were not as professionalized as their forebears on the European continent, particularly in Germany. As late as the 1890s Murray remarked on the necessity for English philologists to be proficient in German, "for there are more works, even on the subject of English etymology, written in that tongue than there are in the English language itself" (interview with Murray, Balgarnie, 20 July [year uncertain, either 1893 or 1898], MP32). The British philologists shared no common education and standards, and no generally accepted measures for assessment of their skills. As Sweet articulated:

> [m]ost of us – indeed, nearly all of us – are by force of circumstance compelled to work in a dilettante style; we cannot expect much from a philologist whose whole working day consists, perhaps, of an hour snatched from other labors. Where, again, are we to get our training? We are left to pick it up at random (Sweet, 1877, as cited in Murray, 1977:72).

Even within the Philological Society – whose members had to be elected in on the basis of philological accomplishment and an internal recommendation – those members self-identifying as its most skilled practitioners (i.e. Murray, Sweet, Ellis, and Henry Nicol), had a difficult time constructing and enforcing boundaries between their scholarship and that of their more dilettantish colleagues. Consider the remarks by Nicol upon the release of a work on Old French etymology by Walter Skeat, who Nicol feels "has posed as an authority on the subject, patronizingly 'correcting' those who really know something about it" (Nicol to Murray, 25 December 1879, MP4). Nicol, however, finds himself in a difficult predicament as he wishes to censure the work, (which it seems had been published by the Society without first being endorsed by its members), while not sounding spiteful or arrogant. He confides to Murray "I consider it my duty, as a philologist, to give the public some notion of the real value of W.

Skeat's speculations and pretensions in the field of Old French etymology….whereas I fear no one in England is competent to judge whether Skeat or I am right" (Nicol to Murray, 25 December 1879, MP4). Murray himself deemed Skeat's work to be "discreditable to the Society" and felt "compromised by the Society printing it" (Murray to unclear [presumably Ellis or Furnivall], 17 May 1882, MP24). In a later instance, when none of this informal top-tier of philologists were willing or eligible to take up a term as President of the Society, Sweet suggests to Murray that he leave the seat vacant rather than allow "more popular, but dilettantish philologists (Sayce, Issac, Taylor, &c.)" to take the seat – it did, indeed, remain vacant (Sweet to Murray, 31 April 1884, MP6). These conditions also made it difficult for British philologists to assert their expertise against that of their continental peers. Commenting on a German reviewer's contempt for the *OED*'s first fascicle, Furnivall writes to Murray: "it is very difficult for a German to believe that an Englishman knows his own mother tongue as well as a German philologist knows it" (Furnivall to Murray, 9 July 1884, MP6).

But, in light of this, in contrast to the Grimms' initial contingent of 83 dictionary collaborators – "a dozen professors, a couple preachers, all the rest are philologists" – the *OED* contributors came from all walks of life and from all over the world. Perusing Murray's correspondence records, Humphreys (1882) reports:

> here are correspondents brought together in it from such distant spots as Florida, Llandudno, Copenhagen, Illinois, Wrexham, Dublin, Biarritz, Halle, Fife, Japan; from Tours, Iowa, Ceylon, Machynlleth, Taunton, Birmingham, Llandaff, Mauritius, Indianapolis, the Temple, the Universities, Lincoln's Inn. Here are correspondents who are professors, filling various chairs; who are poets, historians, critics, musicians, inventors; who are canons, archdeacons, army-men, navy-men, ladies, peers; who have attained the distinctions of D.D., M.A., F.R.S, C.E., F.R.I.B.A, F.S.A, M.D. (P. 452)

The diverse composition of this pool of contributors thus, as indicated in the previous chapter, exhibited wide-ranging, and often poorly assessed, levels of skill. It was likewise highly heterogeneous with regard to their motivations for contribution and understandings of the project. For instance, Murray was frequently commended for finally "fixing" the embarrassingly unwieldy English language. For instance, in 1879, an American publication, *The Practical Teacher*, while passing along the Philological Society's renewed call for volunteer readers for the dictionary, printed a conjoining article proclaiming:

> the plan of the new dictionary is essentially that of Littré's large French dictionary. …Like our own Webster, he [Littré] not only states the prevailing uses of a word, but

also gives opinion of what it ought to be….to preserve the purity of the language, he gives as correct, a pronunciation which would not be heard at present in Paris….It is a source of sincere congratulation that the task of doing for the English language what Littré has done for the French, has fallen into such hands that there is hardly a possibility of its failing to accomplishment (Dawson 1879, clipping from *Practical Teacher,* MP4).

A similar misappraisal is shown in a letter to Murray:

I learn with great pleasure that you are appointed to take the lead upon the question of "An English Dictionary," which has induced me to take the liberty of suggesting that the said Dictionary should emanate from "An English Academy," so that we may have some reliable authority for the spelling, but more particularly the pronunciation of words, which during the last few years have become less and less euphonious, at the instigation of some upstarts probably, say a man Milliner, who fashionably alters the euphonistic forms of a word and substitutes a harsh and offending one, which is taken up by the unreflecting many, simply because it is fashionable to do so. …I think we should stabilise our words … and thus ape the French … I hope soon to hear of an English Academy, as an authority, and do not much care whether wrong or right, so long as we have one to swear by (Dr. Ancell [sp?] Ball to Murray, 11 April 1878, MP3).

These misunderstandings and attempts to advise the staff were apparent even after the first published preface of the OED pronounced '[t]he first aim of the dictionary is to exhibit the actual variety of usage' (as cited in Mugglestone 2005:143). Volunteers and correspondents still seemed to assume Murray to be, as Mugglestone (2005) put it, "a public linguistic oracle," and wrote in ridiculous requests for information and inquiries regarding "correctness." Murray seemed to revel in offering frank responses to such requests. For instance, to one unnamed inquirer [which may indicate that this was a draft], he states:

As to what you are to say to your worthy parishioners, you may say what I say to my pupils (I have not copyrighted it) when they ask me which is right and which wrong of two pronunciations. I first point out the impropriety of applying right and wrong to mere matters of current usage, i.e. fashion; and then say that though there is no right and no wrong in pronunciation, to be unfashionable, or not to know good usage, is often as injurious to a man as to be wrong (Murray to unnamed, 28 March 1884, MP6).

In another case he tells a dictionary reader:

It is however quite impossible for me to comply with your request to oblige you with the names of the first uses of the words, this you will comprehend when I say that the quotations I have for the New Dictionary number about 2,500,000 and that they are still after two years' labour only partially brought into alphabetical order, and scarcely at all into chronological order under each word (Murray to "Madam" [unnamed], 1880 December, MP4).

Such misunderstandings and variation of vision did not only characterize relations with the mass of readers and advocates, but even at final stages of production and amongst the upper-most circle of trusted editors and experts, it is clear that internal schism pervaded the dictionary's making and obstructed its progress just as much as its external dependencies. Mugglestone (2000) portrays the inner-circle of proof-readers as divided between those favoring "quantitative" versus "qualitative" norms of usage and inclusion. The former accepted as valid any linguistic development with a certain number of users, while the latter found more significance in who was doing the using. Walter Skeat expressed a preference for the qualitative norm on the basis of marketability, maintaining: "we need not record the dream of every driveller. ...If we impose on purchasers our theories and crotchets, they can effectively retort by buying some other Dictionary" (Skeat to Murray, 30 November 1878, MP24). Henry Hucks Gibbs (later to be Baron Aldenham) was also an outspoken proponent of qualitative norms, particularly when it came to quotations of modern usage, often taken from newspapers. He argued, "[t]hat there are many indefensible words used in all periods, but more in this because of the rapidity with which men can now write and print and of the omnivorous greed which makes readers swallow everything" (Gibbs to Murray, 30 July 1882, MP5). Furnivall, who clipped word-usages from his daily newspapers, obviously took quite another position, and even advocated giving special preference to quotes from female writers (see Gibbs to Murray, 3 May 1883, MP5).

With difficulties compounded by the inability to identify good volunteers from the outset, it was of no help that members of the Philological Society themselves, as well as scholars engaged in relevant subject matter at the British universities, while warmly recruited, were not forthcoming in their contributions to the project. Given the wide-ranging heterogeneity that ensued, there was a two-way channel of doubt between the leading editors and the volunteer collaborators, in which expertise and objectives were uncertain from the outset.

Under these conditions, it would likewise be difficult to self-assess or trust one's own judgment – or in the least, to make authoritative claims regarding one's knowledge and judgment. Though Murray was the salaried editorial leader of the project, there are several instances where he had difficulty arbitrating between competing views. He would repeatedly

seek consolation and support from his friends and colleagues for his decisions. In one instance, Gibbs would feel compelled to remind Murray of his leadership position, advising:

> [t]here is a great deal in what you say about it not being the business of the Editor to sit in judgment on words. …But you bear two things in mind. 1. you have appointed a committee [figuratively speaking], of whom I am one, and who happily have no authority, but who I daresay speak their minds as plainly as I do, for you to take or reject what we say. … 2. You do necessarily sit in judgment to some extent, and do and must reject some rubbish which passes for words (Gibbs to Murray, 30 July 1882, MP5).

On another matter Henry Bradley would reassure Murray that "[i]t is unlikely that there is anyone else, …who has worked out the *whole* question as you have, and it seems to me that this is one of the few matters in which a dictionary-maker, if properly qualified, may claim to make law instead of merely recording usage" (Bradley to Murray, 12 December 1890, MP9).

Aside from his own self-doubt, Murray also faced several challenges to his authority. Strangers wrote to him trying to press their influence or trump his expertise on dictionary matters. Furnivall made roundabout complaints about him to the Delegates and the Society. The Oxford Vice-Chancellor Benjamin Jowett expressed several reservations about Murray's decisions and, in the incidents discussed above, even took it upon himself to alter Murray's materials.

Another challenger to contend with was the aforementioned Max Müller, a Delegate and Oxford's first chair of comparative philology, who in all other respects was a fortunate ally for the project. Müller would peer over Murray's shoulder from time to time and offer firmly-stated suggestions, which Gibbs chalked up to jealousy ("I have curiously fancied for some time a little jealousy on his [Müller's] part") (Murray, 15 November 1884, MP6). But nonetheless, as Sutcliffe (1978) notes, "the idea of Max Müller advising the dictionary editors on etymologies, as he proceeded to do, was hair-raising even then: his own etymologies tended to justify his mythological theories and, despite his reputation, did not conform to the scientific principles of the new philology" (Sutcliffe, 1978: 55). Although both Müller and Murray were representative of the new philology, these incidents depict a noteworthy confrontation between professional authority and highly-skilled amateur.

Heterogeneity and impersonality

Star and Griesemer (1989) argue that knowledge work among heterogeneous actors can proceed without consensus or personal trust. Instead, it can be facilitated by means of standardized methods and boundary objects, both of which are clearly evident within the *OED* case. For instance, consider the uniform rules Murray issued to participant readers and sub-editors. These were brief, largely sequential, and were written in non-technical everyday language. Their focus on "how, and not what or why" is consistent with the character of standardized methods emphasized by Star and Griesemer (p. 407). Boundary objects also serve to restrict the extent of participation while still allowing for a diverse body of contributors. These are defined as objects which "are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites" (Star and Griesemer, 1989: 393). As a type of standardized form, the $6\frac{5}{8}$ x $4\frac{1}{4}$ slips played this role in the production of the dictionary. Their significance was variously defined throughout the workflow of operations and depending on one's location in the production process.

The significance of the slips was particularly acute given the diverse material and stylistic means of communication across individuals. As Humphreys (1882) observes of Murray's correspondences with contributors:

> Here are letters in a clear smooth hand; in a weak scrawl; in a double-up thick knottiness, like an attacking fist; …on one sheet, and on three or four, and brimming over on to every margin; and written sideways, and written longways, and written on the inner leaves, and on the outer leaves; and in lilac ink and black ink and blue ink; and on every-conceivable kind of stationery. (P. 452)

This posed particular problems, as Murray explains: "'[t]he original method differed a little from mine, in the position of the catch-words, book-titles, and other details; and now the time has come when differences must no longer be. For if we do not know where to find quotations, is there any use in the quotations being here?'" (Humphreys [interviewing Murray] 1882: 447-48, MP34)

These expectations not only aided the transfer and synthesis of information contained on the slips, but also communicated important information about the contributors themselves. Murray explains that, despite the codified instructions,

> [s]lips come, proving to be not English at all, but Arabic ('aya-el-khan,' and so forth); stray examples come, with catchwords only, and all else omitted; other stray examples show quotations right enough, but book, chapter, and verse forgotten…. Nothing shows

us better how character will make its mark … And character has broad space for the marking among our good ranks of readers (Humphreys [interviewing Murray] 1882: 451 MP34).

And marked they were, as Humphreys (1882) revealed. Murray maintained files on each contributor annotated with updates on their involvement and commentary on their skills and habits, such as: "'[t]hrown up; slips lost;' and 'Gone; no address left;' and 'Promised by end of year;' and 'Will send miscellaneous jottings;' … and, more often than it should be, 'No good,' 'No good,' 'No good,'" (Humphreys, 1882: 452-3 MP34). Schaffer (1988) has observed a similar association between standardization and evaluation among the growing network of astronomers in the nineteenth century, in which "[t]he observatory became a factory if not a 'panopticon'" (p. 119).

Standardized procedures and their related infrastructural objects thus facilitated communication between project contributors, as well as the commensurability of the knowledge and information they each supplied. These methods allow for some autonomy, which makes it possible to recruit and retain a heterogeneous contingent of contributors who can attach their own interests, values, and meaning to the work and uphold their own motivations for participation. But they also strip away or correct individual idiosyncrasy and restrict the range of action. Even those who were more known to the editors, personally trusted, and able to offer richer information and insights at the final stages of the dictionary's production, were still limited in how they could make their case. As Gibbs remarks: "when I speak my mind on the margin of a proof, space demands that my remarks be short and sharp, and not as gentle as they would be if I had more room on which to smooth them out" (Gibbs to Murray, 30 July 1882, MP5).

The originators and leaders of the *OED* had few other options but to make use of a large and diverse array of language enthusiasts; Star and Griesemer help explain how this set-up could work despite inherent challenges. The relationship between impersonal procedure and heterogeneity, particularly in combination with uncertainty (including weak or contested authority), has been noted across Star's wealth of research. Her original study with Griesemer focused on the 1907-39 creation of Berkeley's Museum of Vertebrae Zoology and its cooperative processes between a professional biologist, amateur specimen collectors, bureaucrats, and patrons. But heterogeneity in knowledge production, along with similar

tendencies towards impersonal procedure (and the limitations that come along with it), has been explored in other forms as well. For instance, Vaughan's (1999a; 1999b) studies into the Challenger space shuttle disaster investigated the nature of contemporary scientific work and the presentation of technical knowledge *within* formal organizations with specialized modular units. Additionally, Galison (1997) has examined the "trading zones" in which scientists working within different paradigms collaborate and exchange information.

Heterogeneity can also be seen as historically variable. It is implicated in the work of Porter (1994, 1995) and Daston (1992) as underlying significant shifts in scientific thought and practice during the nineteenth century. This included the very commencement of "objectivity" as a scientific ideal – particularly a sense of objectivity emphasizing impersonal processing and presentation of information. Before the nineteenth century "[f]ar from embracing the ideal of the interchangeable observer, seventeenth- and eighteenth-century scientists carefully weighted observation reports by the skill and integrity of the observer" (Daston 1992:610). And as many studies of early modern science have shown, (among them, Dear, 1985; Shapin and Schaffer, 1985; Shapin, 1994; Secord, 2000), these assessments generally followed from established cultural biases and status hierarchies.

Therefore, it is not surprising, as Porter (1995) notes, that overarching social trends towards democratization proceeded in step with new appeals to objectivity. He sees this manifest in the sudden proliferation of quantitative forms of social measurement and statistical analysis during the nineteenth century. Daston (1991; 1992) rather emphasizes the internationalization of knowledge exchange as a source of scientific expansion leading into the nineteenth-century; but she likewise notes the communication problems this entailed, bringing about an "aperspectival" imperative to standardize observational inputs, while "narrowing the range of genuine knowledge to coincide with that of public knowledge"(Daston 1992:600).

The *OED* case offers an empirical parallel to the statistical tools noted by Porter and the standardized techniques and mechanized apparatuses of nineteenth-century science studied by Daston – including her work with Galison (1992; 2007). I find it advantageous to use Megill's (1994) "procedural" sense of objectivity as a categorical concept encompassing these forms. Under this rubric the *OED* case reflects an "organizational" model in which collaborators are configured or portrayed as interchangeable cogs in a rationally arranged division of labor. Inputs are standardized, discretion is neutralized, and outputs are assumed to be the product of

deliberation and eventual consensus. More contemporary instantiations, including "regulatory" forms of objectivity (see Cambrosio et al., 2009) also fit within the scope of procedural objectivity. These highlight the potential for ahistorical research considering the instances in which different forms of objectivity are appealed to, and also their different effects on the organization of knowledge production and the knowledge produced.

Rhetorical elevation of impersonality

There is something of a postscript to the making of the *OED,* one that places the dictionary as part of a wider legacy of social demographic change, scientific norms, and moral ideology. While the case proves consistent with existing explanations of the practical basis for impersonal procedure, these explanations – as well as the psychological motivations perpetuating the ethic of self-control manifest in "mechanical objectivity" according to Daston and Galison (1992; 1997) – do not sufficiently capture the whole of the *OED* narrative. The impersonalized processes of production also appear to be rhetorically leveraged. Slogans of objectivity and impersonality were particularly touted when the dictionary staff was dealing with the Press, the general public, and reviewers. For instance, Murray's draft of a public announcement for the dictionary stated: "[t]he Editor has sought to give such results only as are beyond dispute, avoiding rash speculation and all dogmatism on doubtful points. His object has been to allow each word, as far as possible, to tell its own story" (*Proof of Notice of Publication…*shorter leaflet, MP 29). And to an American journalist seeking biographical information about him, Murray would state:

> [f]or myself I have nothing to reveal, and nothing, (luckily), to conceal; people will do me the greatest favour by forgetting me in my work, and treating my quite impersonally …I have persistently refused to answer the whole buzzing swarm of biographers, saying simply 'I am nobody – if you have anything to say about the Dictionary, there it is at your will – but treat me as a solar myth, or an echo, or an irrational quantity, or ignore me altogether.' It was unfortunately not practicable to edit the dictionary anonymously, else I should certainly have done so" (Murray to unnamed American journalist, 20 April 1886, MP7)

Emphasis on the impersonal aspects of abstract organizational processes also seemed to be a strategy for neutralizing interference from the Press. From the outset, some Delegates expressed doubts about Murray's "literary taste", worried about his potential "provincial bias", and in reviewing his specimens, sought some "reason why particular authors are regarded as

authoritative" (Liddell to Price, 10 May 1877, OED/B/3/1/1; Shalb to Price 11 June 1877, OED/B/3/1/1). By emphasizing the impersonal and methodological processes in their endeavor, and by deferring to the data on hand, the philologists could evade a direct confrontation on the grounds of "taste" and avoid debates becoming a matter of one's word against another.

In fact, surprisingly little effort was made to have the Delegates understand the underlying philology and scientific method guiding the work. Instead, it was common of Murray's counter-arguments to humor the Press's concerns and reasoning, while inverting their logic or arguing that honoring their preferences would undermine the speed or sale of the project. In one instance, among the many where Murray was instructed to avoid the use of newspapers for quotation evidence, Furnivall wrote directly to the Secretary of the Delegates that it had always been the intention to include newspapers as a source. While this was true and there was a valid philological reason for using newspapers as sources, Murray was nonetheless compelled to apologize to the Delegates for "the imprudence and meddlesomeness of Mr. Furnivall" while claiming that the inclusion of newspaper citations "was to me really a most important practical one – for if I was to leave out newspaper quotations as your letter directed, when I had nothing to substitute for them, what was I to do?" (Murray to Price, 15 June 1882, OED/B/3/1/5). Efficiency and the avoidance of subjective judgment are also put forward when Murray explains why he could not simply, as the Press preferred, omit scientific and technical words unless they had attained a literary sense. Murray explains: "omission is not always too often a shorter process than admission … I confess inability to say what is literature, and utter inability to say whether a given 'scientific' word has or has not been used in literature" (Murray – apparent draft of a response to the Delegates' *Suggestions*, August, 1883, MP5).

As the project went well over its expected time-frame and budget and the Delegates became firmer in their demands, again and again Murray would reiterate the claim that their attempts to constrain the work were only holding up its production. In October of 1883, he wrote to the Secretary of the Delegates "if I must discard these and search for others from better writers, the building will stand still while the builder go searching for stones" (Murray to Price, 18 October 1883, OED/B/2/2/1). Similar reasoning was employed nearly thirteen years later, when Murray wrote to the Delegates that: "[t]he experience of the last two months in trying to apply the Delegates' instructions has shown that they increase my labours and retard my progress very notably" (Murray to Gell, 23 July 1896, OED/B/2/2/1).

I claim that these appeals to impersonal processes and organizational efficiency were rhetorically leveraged because the dictionary was not, and couldn't realistically be, a thoroughly impersonal and data-driven word factory. And yet, this image was played up even though it was at times problematic for Murray and his collaborators. For instance, it is somewhat ironic that Murray said he wished he could have edited the dictionary anonymously (quoted above), for he would once threaten to quit the project when his name was neglected in an advertisement for the work (Murray to Gell, 29 October 1897, OED/B/3/1/11). Despite early inhibitions, he would come to recognize the role he played and the necessity for some degree of adjudication, and this becomes a point of tension in his relations with his collaborators, the Press, and the general public.

In Murray's preface he articulates the kind of personal discretion he had to employ, comparing himself to the natural scientist who must of necessity define forms and kinds where no such natural boundary exists, Murray's explains:

> [i]n its constitution it [the English language] may be compared to one of those natural groups of the zoologist or the botanist, wherein typical species, forming the characteristic nucleus of the orders, are linked on every side to other species, in which the typical character is less and less distinctly apparent, … The lexicographer, like the naturalist, must "draw the line somewhere." (Murray 1888, as cited in Reeve 1889).

Murray and his collaborators were also involved in the delicate intellectual matter of ordering the senses of words by their perceived logical-chronological development – regardless of whether those chronologies synced up with the dates of their respective evidence on an entry. Murray, being re-quoted by an assistant, claimed that "working out into the chain of ideas in the senses, with the aid of a by-no-means-complete chronological series of examples", was "the greatest and most difficult of all the processes" (Hallam to Murray, 17 November 1882, MP5). The task required sharply attuned skill and imagination in conceiving how and why one sense of meaning might have given way to another. Related to this process, highly experienced judgment needed to be levied in determining how many unique senses of meaning existed for a word, and in deciding whether additional research was needed to capture known usages absent from the existing materials.

Murray's character and reputation were also important in building relationships and strengthening ties with the many unseen volunteers. His co-editor, Henry Bradley, recognized that "the large amount of outside help which adds so much to the value of the dictionary would

never have been forthcoming but for the editor's energy and personal influence, and for the confidence inspired by his ability" (Bradley to Gell, Nov. 8, 1887, OED/B/3/1/8). Furthermore, Murray's extensive personal letter writing to volunteers kept them engaged and on track. But although the project uncovered and made use of some otherwise untapped talent and hard work, Murray quickly recognized the limitations of the volunteers and wished to keep most of them limited to the more menial tasks. For instance, he writes to a correspondent:

> I will send you some specimens: but I should be loath to have 100 printed to distribute. My experience is that the suggestion of friends give much trouble and no help, as necessarily no one does or can consider every point with the patience and in the many lights that I must do (Murray to Pitman, 7 October 1882, MP5).

And in a speech for one of the Society's intermittent dictionary evenings in 1910, Murray wrote:

> On the whole, the volunteer sub-editing, tho' done with the greatest good-will, and immense diligence, has not been a great help. … I have come to the conclusion that practically the only valuable work that can be done by the average amateur, and out of the Scriptorium, is that of reading books and extracting quotations (Murray,Dictionary Evening, 1910, MP33).

Because maintaining an aura of impersonalized process was integral to sustaining the trust of collaborators and neutralizing outside interference, the Press lacked an accurate depiction of how skill, experience, discretion, and trial and error actually figured into the dictionary's making. They thus felt justified in simply adding more assistants and editors in their hopes to speed up production, once complaining to Murray: "the fact that perplexes the Delegates is that it is taking almost the same time to produce Part III as it took to produce Part II, and that there is no adequate result apparent for the £1250 placed at your disposal for assistants" (Gell to Murray, 16 November 1886, MP7). And while turnover was high among Murray's assistants, the Press was not forthcoming with any means to raise salaries, despite Murray's insistence that "[s]o much has to be carried in the head, that some amount of permanency in my staff is a necessity" (Murray to Price, 18 June 1884, MP6).

Murray thus found himself in the difficult position of needing to outwardly idealize and reinforce the impersonal nature of the processes underlying the dictionary's production, while at the same time, for practical and, one presumes, psychological reasons, wishing the Delegates of the Press would recognize the extent of cultivated intellectual expertise that he and each individual brought to the work. When Benjamin Jowett took it upon himself to significantly alter Murray's preface, advertising prospectus, and title page, in an emotionally-charged first draft of

his response, Murray exclaims that he found the changes to be an "intentional slap to remind me that I am only a poor casual Editor, whose work is due not to himself, but to his time" (Murray to Price [likely a draft], 23 October 1883, MP5). In the final draft of the letter, Murray mentions that Gibbs had wished to see the dictionary titled as being 'by' Murray, but that he is content with simply being named as its editor, so long as the Delegates "remember that my work is something very different from editing or 'compiling' in the ordinary sense of those words, and that so long as I continue as 'Editor', I expect them to recognize what that work is"[32] (Murray to Price, 27 October 1883, MP5). The revisions to the title page even slighted the great amount of volunteer assistance given to the task, to which Murray declared: "I have a strong personal desire, that the two lines acknowledging assistance should appear on the Title-Page; it is both due and expedient" (Murray to Price, 27 October 1883, MP5).

Even as Murray began accumulating numerous personal honors, he would still continually need to fight for the Delegates' recognition of the knowledge, skill, and tactful management that he brought to project. In 1897 he was informed that the Delegates had, without his knowledge, appointed the little-known etymologist William Craigie to become an editor on the project. Murray was understandably furious not to have been consulted on the matter, exclaiming: "[t]his want of confidence, is either an intentional slight put upon me or it is a failure to recognize my original and factual relation to the work, to which I cannot submit" (Murray to Gell [possibly a first draft], 15 June 1897, MP12).

Opportunity and invisibility

While procedural objectivity may have roots in practical considerations in response to communication challenges, Murray's tactical two-sidedness suggests it served a rhetorical purpose beyond the practical. Therefore, its historical idealization as an epistemological ethic may have been driven by the opportunistic pursuit of legitimacy. This explanation differs from Daston and Galison's (2007) claim that practical considerations gave way to internalized psychological pressures to fear and deny the self – though it may suggest an intermediary stage

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[32] In a c.1900 talk to the Author's club on the history of dictionaries, Murray claimed to be a bit of both editor and author, while earlier dictionary makers could be thought of more as authors (Murray, n.d. [c.1900] "Editor or author," MP32). On the historical meaning and practice of authorship in relation to original knowledge, see Secord (2000), and the edited collection by Biagioli and Galison (2003). On historical traditions of compilation, see Blair (2010).

in this process. Those who lacked social standing or propriety had reasonable motivation to insist on other grounds for their legitimacy and participation in knowledge production. Appeals to impersonal procedure thus presented a path to legitimacy and control on the only terms attainable to the dictionary's motley assortment of amateurs lacking resources, concordance, and power. It was also a path to legitimacy that, at the time, did not have to compete with a well-established and bounded professional realm of British philology. Murray's granddaughter comments that "[i]n an age when paper qualification, however useful, were not yet the essential passport to advancement which they have now become, perhaps in some ways the opportunities were greater than today" (Murray, 1977: 339-40).

But it wasn't as if social characteristics suddenly didn't matter, and circumventing such character assessments required touting the impersonal aspects of production beyond the actual extent of its application – even as this idealization, as indicated above, leaves Murray in a bind and unable to gain private recognition for the personal talent and sacrifice he and others contributed to the work. A parallel can be found in Oreskes's (1996) research on the invisibility of women in science, who "have been characteristically employed not in jobs that required a high degree of emotional involvement or contextual judgment, but precisely the opposite" (p. 89).

It is a bittersweet consolation to imagine that the idealization of procedural objectivity may have provided a means for traditionally less visible and less empowered groups to play a role in knowledge production, even as it would obscure their contributions. But in this sense, *freedom for* participation can be reconciled with the ideal of *freedom from* authorial dictate. The former is emphasized in Tresch's (2010) notion of "multi-perspectival" objectivity as a value articulated by Alexander von Humboldt, who organized several large-scale collaborative research projects around the turn of the nineteenth century. The latter is expressed by Daston and Galison (1992) when they speak of mechanical objectivity as "shifting the interpretive eye to the reader" (p. 107). It is also stated quite precisely by a 1911 reviewer of the dictionary, who enthused "in no other book I know of is such freedom from mental oppression to be found: here there is no author's arbitrary handling of the material of life to irk the reader" (cited in Brewer, 2007: 97). Such praise was a significant change from the early critics who admonished the dictionary's descriptive approach and wealth of minutia. Porter, too, (1995, 2004) is cognizant of the paradoxical entanglement of freedom and egalitarianism with oppressively rigid standardization.

Upon Murray's death in 1915, Bradley proclaimed that: "The great English dictionary will always be known chiefly by his name, with far stronger reason than the great German dictionary bears the name of Grimm" (Bradley 1915: 7). Nevertheless, any degree of recognition of the unique personal qualities and skills of Murray, as well as the rest of the dictionary staff and collaborators, would fall into abeyance over time. The Press would stop printing Murray's preface after the completion of the first volume in 1928, and a new dust jacket of the work would proclaim it as the *Oxford English Dictionary*, rather than the words originally covering its title page: "*A New English Dictionary on Historical Principles; Founded Mainly on the Materials Collected by the Philological Society. Edited by James A. H. Murray, L.L.D, with the assistance of many scholars and men of science*."

Chapter 7

Throughout this dissertation I have framed each of the dictionary projects as cases of large-scale scientific research and have maintained an integrated institutional and organizational perspective towards interpreting the practices of each of the "lexicographical laboratories" and their reflection in the content and style of each of dictionaries. And while the main scientific actors might not have been wearing white coats and goggles, operating in sterilized buildings, using specialized expensive equipment and cutting edge technologies, I hope the contextual historical data adequately justifies my reasoning, while at the same time highlighting the ambiguous, variable, and shifting boundaries defining scientific activity and its close relation to other forms of cultural production.

Nowadays, as science has become an international phenomenon organized similarly around the world with reference to similar infrastructural supports, shared norms, and qualifications, it's harder to imagine considerable deviation across scientific activities. In spite of this narrower demarcation, for nearly a century social studies of science have drawn attention to variation and social contingencies, and I hope my research may further the field's recognition of variation in scientific practice. But, I also find that science studies have tended to adhere to an overly stylized view of science – limited largely to the physical sciences – of professional scholars within the context of formal, modern, university systems and within societies where science is widely valued as a highly legitimate means to fundamental truths. Within this scope variation has also tended to be interpreted in limited ways, as either evidence of dysfunctional deviations within an otherwise well-calibrated institution for knowledge production, or as inevitable and limitless as the multitude of localized contexts in which knowledge is produced. The former is derived out of and in reaction to early studies in the sociology of science from Robert Merton,[33] the latter is associated with more modern day studies in micro-interaction among scientific actors (and material things)[34] and the social construction of scientific claims[35]

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[33] Including Merton (1937), Parsons ([1942] 1954), and Michael Polanyi (1964), who were concerned with how certain political regimes enhance or undermine the optimal functioning of the scientific community. The Marxist variant of this approach, most associated with Hessen (1931), primarily considers the economic factors shaping the direction of scientific inquiry.

[34] Detailed ethnographic research such as the "laboratory studies" by the likes of Bruno Latour and colleagues (Latour & Woolgar 1979; Latour 1987) exemplify this type of research.

[35] I associate this approach with the so-called "Strong Program" emerging in the 1970s and 80s in Britain and associated with the likes of Bloor ([1976] 1991) and Harry Collins (1985). This tradition began with an emphasis on systematic comparative study and causal relationships, but its broad relativism has driven it more towards general philosophical statements on the epistemology of science rather than a sociological account of the different ways

Instead of identifying a singular "nature" of scientific activity, or merely denying that such a nature could exist, comparative studies in science offer potential for identifying broadly recognizable patterns of change and variation in knowledge production. Representatives of comparative science studies include Randall Collins (1975), Whitley (1984), and Fuchs (1992), who see some fields, or historical eras, as more systematically rationalized or ad-hoc according to their degree of autonomy, which differently influences the internal dynamics of reputation building, as well as the collaborative and/or cumulative potential knowledge production in that field. Historical work by Ben-David (1971) and studies of objectivities from the likes of Daston and Galison (1992; 2007) Megill (1994), and Porter (1994) offer useful classification frameworks derived from the relationship between social structures and action in historically distinct eras. Additionally, work by Knorr-Cetina (1999) takes the micro-interactionist approach in a new direction by exploring different cultural logics, or "epistemic cultures," of knowledge production at the micro-level across different scientific laboratories (high-energy physics versus micro-biology for instance). Though high level features differentially shaping these epistemic cultures is not considered, it too provides a method and framework for thinking about broad classifications of scientific activity.

Although they don't represent a united body of research, these comparative studies of science demand a more complex consideration of the multi-dimensional breadth of variation contexualizing both internal and external dimensions of knowledge production. The distinctions they identify may provide fruitful avenues for addressing similar classes of phenomena and understanding science as a particular form of knowledge or cultural production, subject to interpersonal and interstructural coordination processes and bases for authority, and embedded in broad and shifting facets of social organization.

In the spirit of comparative science studies, the findings of my research have focused largely on the effects of professionalization and autonomy in conditioning different forms of knowledge production and content. Although the *OED* has since become the standard of historical lexicography, one cannot say this is so because its makers were best able to realize the scientific vision of comparative philology. As the previous chapters attest to, there was

knowledge is produced within a context (see Fuchs 1992 and Shapin 1995 for an overview of some of these criticisms).

considerable internal disagreement over vision and method across even the originators and leaders, and they faced far more obstacles than the Grimms, who had more resources at their disposal and more direct control over their work. It is clear that the shared philological and scientific intentions across these innovative projects was open to multiple interpretations at the time, further evidenced by Émile Littré's French dictionary. Briefly speaking, Littré's dictionary, which he completed on his own between 1841 and 1873 (publication began in 1863), did not much expand on the official French lexicon as fixed by the *Académie Française,* which he became a member of in 1871. The first section of each entry cited usages from 'nos classiques' of seventeenth and eighteenth century French literature and offered a "Remarques" section guiding the user to proper usage and pronunciation (Osselton 2000). A second section on etymology and pre-17th century usage was given a more strictly descriptive treatment. For Littré, such prescription was not exclusively removed from the premises of comparative philology, and was in fact entirely compatible. Echoing similar sentiments by *OED* co-founder Richard Chenevix Trench, in Littré's preface he proclaims 'a dictionary that by using the element of history inherent in every language, shows what the foundations and conditions of present usage are and thereby renders it possible to judge, rectify, and ensure it' (Littré 1873 as cited in Zgusta 1991:613). However, as Osselton (2000) has noted, Littré's historical evidence seemed to be an awkward appendage on his entries, showing variants of usage at odds with Littré's definitions.

Each of these approaches present different solutions to the problem of knowledge authority, particularly in asserting scientific credibility at a time when science's role in society was growing but its potential was uncertain. The latter concern was especially salient as science began to be applied to understanding social phenomena and thus implied possibilities for catalyzing social change. The channels for credibility and the possibilities for the dictionary projects were, however, shaped by prior conditions. Even the case of the German dictionary under Jacob Grimm, which, in its defense against modern critics, Ulrich Wyss (1977) argues merely showcases Jacob Grimm's personal idiosyncrasy and whimsy. I have argued Grimm's personal freedom and discretion is indicative of the epistemological expectations of romanticism and his status as a knowledge authority within this context. The Romantic privileging of the academic genius as someone specially possessed by visions of an ultimate truth likely circumvented the production of such a dictionary by any other men or means, or would have at least hampered its prospects of success. Indeed, as was mentioned in chapter three, Reimer had

originally sought Jacob Grimm for this kind of project nearly a decade before the 1838 offer (and one would think if they felt any others were fit for the job they would have found him or them in the meantime). Other publishers had also approached Jacob Grimm to take on such a work (Kirkness 1980). Moreover, the dictionary's fiercest early critics, Sanders and Wurm, while each able to secure publishing contracts to try their own hand at historical lexicography, produced works that barely registered among the public and which had no lasting significance.

These circumstances and the extreme deference shown to the decisions of either Grimm allowed for the more theoretical, speculative, political and prescriptive elements of the dictionary's philological impetus to shine through in ways that were impossible in other contexts. Even as iconoclastic a figure as Littré – an outspoken atheist, positivist, and journalist (see Aquarone 1958) – who took on every aspect of producing the first French historical dictionary on his own, shown considerable conformity with French academic and cultural traditions. Murray was in no position, even if wanted to, without great risk of failure, to take the liberties of Grimm or suppose the position of an English analog to the *Académie Français,* as some had hoped he would be. As a member of the English Spelling Reform Association[36], Murray even once sought to use the dictionary as a means to introduce a new phonetically-based system of English spelling, though he could find not decide on an appropriate system and eventually abolished the plan.[37] These differences highlight how remarkable it was that, despite the later backlash against Grimm's work, it was initially met with great praise even as it radically deviated from lexicographic tradition and proposed extensive changes to the traditions of German printing.

The liberties taken by Jacob Grimm, (and likewise accorded to his brother's editorship), are indicative of a form of knowledge authority analogous to Max Weber's charismatic form of authority. And characteristic of that form, Grimm's fame and deference coincide with a period of rapid social change. Roughly a century before, perhaps even just a generation before the

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[36] In a humorous display of Victorian eccentricity, Ellis and other members of this group would even correspond with Murray using their phonetic spelling systems, such as "Ei send eu a kopi ov … Trooli eurs;" or "Thair iz, however, no reezn whei eni number ov mor independent peepl, …shud not agree tu mudl up the present steil in eni wau thai leik" (Ellis to Murray, 1866-70, MP1; J.B. Rundell to Murray, 31 January 1880, MP4).

[37] The phonetic key used in the Dictionary is not intended for Spelling Reform in any way whatever. I tried for 2 years to use something which might suit both purposes; and then gave it up, devoting myself to perfecting a plan for my own needs….It is not perfect as a scientific instrument; no system with Roman letters can be (Murray to [unclear, seems like an Eirak Pitman of Bath], 7 October 1882, MP5).

Grimms' dictionary began in 1838, persons of their middle-class background were less likely to have many opportunities for upward mobility, let alone the chance to become a conduit for affecting social change. The brothers' fortuitous-seeming path to prestige and influence, which in Jacob Grimm's 1838 "Über meine Entlassung" he understandably attributed to being in the good graces of God, rather reflected their position at the crest of surging middle-class growth and gains in education, material assets, and aesthetic influence on German culture, particularly with regard to the romanticist movement. The Grimms benefitted from these mutually reinforcing structural and ideational elements of German society, which allowed opportunities for individual ascent and acclaim under new rubrics of knowledge discovery and romanticist flattery towards personal genius and artisanal tact.

Nevertheless, charismatic authority is also fleeting and as the field grew and attracted more serious students, philological study would also become routinized in ways that Jacob Grimm was already witnessing and criticized in his day (see Bontepelli [2001] 2004). Its growth would also undermine the paradigmatic authority of Grimm's philological theories and speculation, which would soon face challengers and mockery even among his own students (see Wyss 1977 – especially on Grimm's student Scherer). And even through Grimm clearly saw his contributions as part of a communal and cumulative scientific process of systematic knowledge production, he showed little self-criticism, would not compromise with his publishers, harangued his critics, and when faced with the different approaches of his dictionary collaborators and his own brother, chalked it up to their lesser skill. However, much of the criticism of Grimm and his dictionary work – in his own time as now – is grounded in misunderstandings of Grimm's intent and rationale. This, too, is a byproduct of his charismatic authority and the extent of discretion and deference – and, therefore, isolation – that went along with it. This deeply distanced him from the great many peoples he hoped to unite, not to mention his fellow philologists.

This is not to suggest that charismatic knowledge authority is devoid of benefit, for instance, Ludwig Fleck ([1935] 1979) notes that the virtuoso's autonomy can also prompt innovation – even if it is, like the inventions of Leonardo DaVinci were, incomprehensible to contemporaries. The German Romantic era's privileging of charismatic genius, coupled with the relative autonomy, community, and legitimacy of Germany's institutes of higher education, made innovative scholarly projects like the dictionary profitable for publishers to willingly invest in. While France likewise had academies and institutes for specialized scientific study and

professionalized practice, they were more tied to the interests of the French state. This conferred resources and legitimacy that put France at the forefront of scientific innovation in the early nineteenth-century, but ultimately hampered innovation and camaraderie within a few decades (Ben David 1971; Hahn 1976).

Although scientific practice has largely and globally come to be legitimated by norms of academic professions and procedures to minimize subjectivity, as a thesis by Clark (2006) asserts, vestiges of the Romantic preoccupation with charisma remain. While Clark notes the charisma's awkward tension with rationalized means of objectivity, others have noted the potential benefits of academic charisma in otherwise highly rationalized settings requiring difficult decisions, cutting edge science, and a need for large scale organizational trust and cooperation – as seen in the case of Robert Oppenheimer's leadership in the Manhattan project (Thorpe and Shapin 2000). Moreover, to nourish and leverage the potential benefits of individual intellectual autonomy, Germany's Max Planck Institutes have been historically organized around the "Harnack Principle," that "'The director ist [sic] the principal figure to such an extent, that one could also say: The Society chooses a director and builds an institute around him.' (Vierhaus 1996 as cited and translated in Rauchhaupt n.d.:2). Rauchhaupt further explains "The essence of the Harnack Principle is that research in the MPG is personalized. This still applies today, but before the 1964 revision of the MPG-statutes it basically meant that the director was the sovereign in his institute" (Rauchhaupt n.d.:2).

Britain lacked any single individual philologist who was admired and respected as highly as Grimm had been, though had it not been for the precedent set by Grimm, the English dictionary might not have been attempted. But whereas German philology was well advanced to the point of alienating its more dilettantish enthusiasts, Britain was not the least bit lacking in zealous dictionary contributors who felt their assistance could be needed and appreciated. Managing the scale and diversity of individuals involved would demand the degree of standardization and impersonalization outlined above and would be apparent in the content of knowledge being produced. Nevertheless, collaborative production models similar to that of the *OED* seem to be instrumental in generating abundant, aggregate information that can be used for varied purposes over generations. This is apparent in varied contemporary 'crowdsourced' models of knowledge production, such as Wikipedia, Project Gutenberg, Galaxy Zoo, and the Encyclopedia of Life. The Internet has built in or easily developed infrastructure that mirrors the

kinds of standardization, boundary objects, and evaluation processes set up by Murray. Therefore, nowadays it is easier to utilize the knowledge of diverse contributors and the benefits that come from multiple sets of eyes. The *OED* itself is again jumping aboard on this trend (see http://public.oed.com/appeals/).

But, while this kind and amount of information is valuable, it is also 'thin,' as noted by Porter (2009). Skills may thus get overshadowed and devalued; underlying narratives, theory, and purpose can get lost. This was, in fact, evident in the case study underlying the work by Star and Greisemer (1989). Therefore, while such approaches may facilitate being heard and being a part of the program, they are intolerant of speculation, lofty analysis, or the identification of problems and paths to their solutions. As Peter Sutcliffe (1978) says of the *OED* editors: 'Murray and his successors did not dwell on the romantic aspects of lexicography, on the mysteries of language and the beckoning enticements of etymology that lured them on. Lexicography had mostly to do with slips of paper measuring, preferably, six inches by four' (p. 57).

This is a predicament familiar nowadays in citizen science collaborations between scientific professionals and public volunteers. Citizens wishing to express their local knowledge, experiences, and concerns often find that their participation requires adherence to procedures that effectively erase their unique perspective and restrict their role in decision-making (e.g., Ellis and Waterton, 2005; Ottinger, 2009; Cornwell & Campbell, 2012). However, similar tendencies are also seen among today's professional scientists. Restivo (1988) criticizes the ways in which scientific knowledge work has become routinized and stylized in ways alienating it from its producers. Porter (2009) and Epstein (1995) have also noted that scientific work can be alienating to potential consumers, contributing to mutual distrust and misunderstanding between scientists and the public.

At the same time, personal influence and judgment cannot be fully expelled from scientific process, and supposing that there is no subjective component to knowledge production can undermine the responsible use of scientific claims. In her studies on the Challenger disaster, Vaughan (1999a) found that expertise and insight does not transfer well outside of local contexts and can leave dangerous gaps in understanding, which are further exacerbated by the tendency of procedural protocols to effectively make uncertainty invisible. In a similar vein, Frickel and Vincent (2007) found that conventional measures of environmental contamination and risk assessment minimize the relevance of distinct contextual features, leading to a kind of persistent

'organized ignorance'. Furthermore, feminist scholars such as Keller (1985) note that obscurantist practices of and contemporary appeals to objectivity can conceal prejudicial tendencies and biases in scientific practice.

In more recent times, scholars have been examining the extent to which the *OED* falls short of its aim as an unbiased, complete, and accurate historical record of the English lexicon and its usage (e.g. Schäfer, 1980; Willinsky, 1994; Brewer, 2005, 2012; throughout Mugglestone (ed) 2000; Mugglestone, 2005). They offer important critical assessments and corrective responses to claims about the objectivity of the dictionary; I would entirely agree that the makers and methods of the first edition of the *OED* were unable to evade systematic or incidental bias. In fact, this likelihood is implicated in the narrative I have offered. However, the problems and questions to which these researchers are responding are motivated by contemporary epistemic values and expectations. Some of these critiques appear to simultaneously discount the possibility of producing a completely unbiased text, while still upholding impersonality as ideal. In contrast, this research has examined *why* the dictionary was made in a manner that, at the time, was historically unprecedented, not self-evident, and certainly not smooth-sailing.

I have argued that the organizational model and features of production were partly responses to communication, coordination, and control problems within the heterogeneous context of amateur philology in Britain. This supports existing work in STS and provides an example outside the realm of the natural sciences and professional institutions. As contemporary knowledge production increasingly crosses boundaries – for instance, across disciplines, in conjunction with varied administrative and policy channels, and in citizen science movements and public collaborations – it is important to understand why varied organizational forms take shape and their advantages and limitations.

But the case also sheds light on an entire era, one that was shaped by uncertainty, but in which individuals did not necessarily succumb to fear of themselves (as Daston and Galison 2007 suggest). Instead, by contributing to public knowledge projects it was possible for individuals in this age to become a part of something larger than themselves. This is not without its gains and losses. I am reminded of Hannah Arendt's (1998 [1958]) remarks on the transformation of humans from workers (as in craft work) to laborers: the latter engaged in what 'would appear not as activities of any kind but as processes, so that, as a scientist recently put it, modern motorization would appear like a process of biological mutation in which human bodies

gradually begin to be covered by shells of steel' (p. 322-3). In light of my research I've come to imagine the shell of steel, (which is a more literal translation of Max Weber's 'stahlhartes *Gehäuse'* than Talcott Parson's 'iron cage'), as a coat of armor encasing the individual – it offers strength and protection that is impenetrable to outsiders, but also limits one's range of motion, obscures the human within, and yet, being steel, is entirely man made.

Such appeals to more impersonal methods and disciplinary standards have been imprinted into the legacy of the *Wörterbuch* after the Grimms. Its bulky, slowly-proceeding first edition was passed along a line of several generations of editors and collaborative centers between East and West Germany, eventually to its completion in 1961 (roughly 123 years since it began). This was then followed by a re-editing of the work, in which the new editors recommended the immediate and complete overhaul of the volumes A-F (i.e. those done by the Grimms). In a review of the first revised volume of the dictionary, George Metcalf (1967) notes that the "differences between the two versions are striking," with the new edition including expanded coverage, inclusion of foreign terms, streamlined and standardized presentation utilizing typographical distinctions, and use of a much expanded range of sources. (p. 387). But he also maintains that: "[a]nyone comparing the two editions is likely to fall victim to a certain romantic nostalgia as he notes the erasure of the personalized stamp of the lone compiler (Jakob Grimm) by the bureaucratic efficiency of the team of dictionary workers" (Metcalf 1967, 387-88). Completion of all revision work for the volumes A-F is set to cease in 2016. The website for the Berlin-Brandenburg Academy of Sciences justifies this demarcation with the following:

> In particular, the sections A-F edited by the Grimms themselves, after nearly 150 years, no longer fully comply with modern standards. The material basis for many articles is weak; the Grimms frequently make do with their own scholarly testament of the sense of the language. The structure of the articles is inconsistent, quite often unsystematic, Jacob Grimm especially tends to a rather subjective presentation style, and shows a tendency for normative, cultivating (*sprachpflegerisch*) judgment; foreign words are only reluctantly included (Berlin Brandenburg Academy of Science).

The German dictionary of the Grimms illuminates an epistemology lost to a transitional period between Enlightenment perspectives on universalism, to more evolutionary understandings of a natural and social world that is forever under construction. The dictionary is unique, and perhaps off-putting, in that it puts at its surface the mental and social messiness of knowledge – it reveals the raw, unseen dimensions of knowledge-making often brought forth in

contemporary research on science in action and localized contexts. As one commenter says of Jacob's volumes, they "reveal a full-blooded scientist, for whom the dictionary is a *place* of linguistic research." (Püschel 1991, 99; italics added). And notably, it's a place of research which not only includes Grimm, but also seeks to engage his readers in the research process.

The dictionary projects compel consideration of multiple dimensions and classifications of knowledge types, the contexts of their creation, and their advantages and limitations. They also prompt awareness of underlying epistemologies and ideologies of knowledge creation, and how those ideologies may obscure the true nature and difficulties of intersubjectively determined knowledge. While today the practice of science and academic knowledge production is often taken for granted as a singular phenomenon with marginal degrees of differentiation, it should not be treated and studied as if it were a fully autonomous, concretely definable, and static institution. In investigating variety there's an implication of change, and turning to history and comparison can offer a means towards understanding and evaluating some of the changes, challenges, and potential of our contemporary era. Just as individuals in nineteenth-century Western Europe would have found themselves in an unprecedented and overwhelming age of information and global connections (e.g. general education and literacy rates were higher than ever, new copyright legislation and deregulation of the printing industry allowed texts to be cheaply reproduced and sold on a mass scale, and the rapid expansion of railways facilitated quicker and more frequent travel and postal delivery), I find there are many parallels to the contemporary era of personal computers and the internet. Once again newly empowered groups are seeking to integrate, organize, and evaluate widely accessible and growing streams of information, and thus, varied methods are emerging for producing knowledge goods and information.

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