"Define Your World": Dictionaries of Today in Struggles Over Control of Meaning

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abstract: Dictionary-related activities are an under-examined arena for studying how some people "wield," and others contest, use of language (specifically, definitions) in service of classification systems and power relations. Theoretical approaches to the nexus of language, meaning and power (White, Luhmann and Bourdieu) are referenced, as are observations on dictionaries by Bakhtin and Vygotsky. The need to update theory and concepts in light of online dictionaries (especially "user-generated" examples) is emphasized. Exploratory research reveals emerging types of user-involvement in online dictionaries with implications for (a) professional (lexicographic) vs. marketing power in the "reference information" industry, and (b) broader sociological trends contesting traditional expertise, and supporting social movement politics.

keywords: Meaning, Dictionaries, Online dictionaries, User-involvement, Control

1 Objectives and Overview

Dictionary-related activities are, as I will illustrate in this paper, a productive yet underexamined arena for sociological study of how some people "wield" language in service of classification systems and power relations, and how other people contest those uses.

To develop that argument requires several steps. Section 2 positions dictionaries as classifications. Section 3 fits dictionaries into broader sociological theory considerations of power through control over language and meaning. That section implicitly relies on the work by this issue's editors that broadly establishes the hegemonic effects of classifications; therefore I can more narrowly address how dictionaries are used in attempts to exert—and contest -- such hegemony.

Section 3 also introduces the empirical realm of interest: contemporary social processes in creating and using dictionaries. The period since approximately 1990 is strategic because sharp changes are underway stimulated by Information Technology.

Section 4 presents the method of my exploratory research about online dictionaries, and Section 5 presents the findings. My analysis focuses on the theoretically-relevant variable of user-involvement which at one extreme includes user-*generated* dictionaries. My main objective is to characterize types of user involvement that can build community and thus enhance user-control *versus* professional (lexicographic) control over content ("meaning").

Section 6 as closing discussion re-visits the theoretic framework and speculatively relates the findings to broader developments relevant to classification practices.

2 Dictionaries and Classification Systems

The case for studying dictionaries as sources of insights into sociology of classification systems can be approached from two directions: first, dictionaries as used in creating or supporting other classification systems, which necessarily rely on terminology; second, dictionaries themselves as constituting classification systems.

2.1 Dictionaries in Creating/Supporting Other Classifications

Little is known about dictionary usage patterns in general so the lack of firm evidence about their use in creating classifications is hardly surprising. However, a strong sense of intertwining between dictionaries and other classifications emerges from the World Health Organization's (WHO) website about its "family" of classifications¹. The site explicitly states the importance of maximizing "synergies" between classification and compilations of terminology. Furthermore, a search on WHO's site for "Dictionary" revealed hundreds of citations to specialized and general dictionaries for use along with WHO classifications and training protocols.

Beyond WHO, the fact that classification systems often create their own "glossaries" provides indirect evidence that dictionaries had been consulted and judged inadequate, presumably because definitions were too broad or variegated for the precise purpose of those classifications (and/or possibly because writing their own definitions extends [hegemonic] control by the authors of classifications).

2.2 Dictionaries as Classifications

Traditional dictionaries – more precisely, their creators and critics – have been guided by criteria for classifications summarized as follows by Bowker and Star (1999): Complete coverage within a specified domain; Principles of organization that are easy-to-comprehend and follow; Categories that are exhaustive and clearly separated. However, as Bowker & Star (1999) attest holds true for all classifications, those criteria are idealized. Thus, in practice, lexicographers debate and make judgment calls about the multitude of potential entries that do not neatly meet those criteria²; their decisions can prove consequential for individuals and groups in more and less significant ways.³

Classificatory decisions range from the threshold question of which words or phrases should be included at all (e.g., "Nonce" words are typically excluded, but when

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A WHO classification is the major touchstone for Bowker and Star's (1999) seminal analysis of the social nature and significance of classifications.

For example, see discussions about classification problems regarding polysemy and homonymy when determining separate dictionary entries, e.g. in Landau, 2001; Malakhovski, 1987, and Robins, 1987.

For example, from a March 23, 2009 entry on the Law Professors Blog Network: "... there is a revolution going on in the law with respect to the recognition of gay marriages. Therefore, it is not surprising that the dictionary definition of marriage has now been changed, at least according to Merriam-Webster. "Accessed August 20, 2009 at: //lawprofessors.typepad.com/adjunctprofs/2009/03/dictionary-definition-of-marriage-has-changed-.html

An example at the more trivial end comes from a British columnist and Scrabble player, "There is, however, one enormous problem with playing Scrabble with North Americans —...There are two Scrabble dictionaries, one for North Americans, one for Brits...." He complains that his word was in the British dictionary but since he was vacationing in North America, he lost because that dictionary did not contain it. Accessed August 16 at: //www.independent.co.uk/opinion/columnists/dom-joly/dom-joly-britannia-rules-at-scrabble-and-thats-my-final-word-1772855.html

does a word cease being a nonce word?); to whether varying "senses" of a word are different enough to merit separate headwords; to how differently-spelled inflections should be alphabetized (e.g., Should "brought" appear only under "bring"? If so, English language learners have difficulty finding it); to assigning potentially invidious labels, e.g., "slang", "vulgar," "obsolete" or "technical," which rub off on the status of users of those words.

Finally, addressing Bowker and Star's (1999) central point that setting standards is the "other side of the coin" of classification systems, dictionaries attempt to *standardize* many aspects of language use. That function is widely recognized regarding spelling (e.g., Landau, 2001; Sebba, 2007) and to lesser extent, grammatical usage (e.g., Landau, 2001). I would argue in this connection that categorizing dictionaries as "prescriptive" (explicitly prescribing "correct" usage) *versus* "descriptive" (reporting popular usage without evaluation according to elite preference) is not clear-cut in practice. That is, typical users turn to any dictionary for pronouncements on correctness even if that dictionary identifies itself as descriptive.

Interestingly, the most obvious function of dictionaries, i.e., providing definitions, has been least examined by theorists for its hegemonic potential through standardization. As announced in the title of this paper, and elaborated in the theoretical section below, control over "meanings" conveyed in language is what is "at stake" in constructing, critiquing and using dictionaries. "Meanings" are what generate "definitions of the situation" which, as Bowker and Star (1999) highlight, account for the power potential of classification systems. And "meanings" are what are most likely to mobilize proponents of user-generated dictionaries.

To close this section: While a fuller elaboration, with more examples, of how dictionaries fit into studying classification systems, would be worthwhile, the above must suffice as background for present purposes. The next section sketches the empirical and theoretical contexts of dictionaries that will be explored herein.

3 Empirical and Theoretical Orientation

3.1 Empirical Orientation: Dictionaries as Contemporary Cultural Products

Studying dictionaries as cultural products entails looking at distinctive social processes that have general counterparts in creating other classification systems. For dictionaries, the key interlocking processes are: the technical work of "defining" the lexical and grammatical raw materials that constitute all classification; establishing claims to "authoritative" content; and producing and disseminating massive systematized compilations of information for reference use.

Those processes are undergoing sharp changes, driven mainly by the revolution in electronic information technology. Most if not all producers have moved, partly or totally, to on-line versions of their dictionaries, currently numbering an estimated 1,000-1,300.⁴

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The *OneLookDictionary* site (www.onelook.com, accessed 3/22/09) lists 991 "dictionaries and glossaries." The Open Directory Project (www.dmoz.org/Reference/Dictionaries, accessed 3/22/09) lists nearly 1,400. Alexa, a site that monitors popularity of websites, counts 1,335 (www.alexa.com, accessed 3/22/09) All counts are problematic; issues concern operational definition of dictionaries, and what might or might not be considered "double-counting" due to sites that compile groups of dictionaries. I found no data on the number of producers.

An online publishing industry – IT Information – has emerged as dictionary producers, without roots in traditional publishing, much less in the dictionary model of university-based publishing, notably Oxford and Cambridge University Presses. As is widely and warily recognized regarding journalism, the online environment radically alters the possibilities for laypersons to engage in and otherwise influence former professional-only practice.

Other changes reflect longer-term evolutionary trends toward professionalization of dictionary-making (lexicography), including efforts to develop more and better evidence about uses and users (e.g., their socio-demographics and interests). Professionalization has expanded higher education and research opportunities for lexicographers, and promoted intra-professional communication through increasingly specialized journals and societies. That pattern heightens barriers for ordinary users to input and influence the professionals' work.

Overall, the ways that creators of dictionaries relate to users are expanding, with some contention and unknown consequences for future authority over "definition of terms." Most significant in socio-cultural terms has been the 21st century emergence of user-generated dictionaries. The conceptual framework for sociological study of dictionaries must be re-considered, especially to recognize new and competing sources of claims to expertise in defining "meanings."

In terms of linguistics, focusing study of language use on dictionaries puts the spotlight on reflexivity of language – especially, *meta-semantic reflexivity* (Silverstein, 1993), i.e., use of language to discuss and influence its relation to "meaning." Because the distinctive jurisdictional claim (Abbott, 1988) of the lexicographic profession concerns "defining" the "meanings" of words and phrases, and because "meaning" is central for sociology (Luhmann, 1990), I will foreground that topic in the theory section. But the design and use of dictionaries goes beyond semantics, into what Silverstein denotes as *meta-pragmatic* reflexivity, which is at least as important for the question of how language use in dictionaries enhances or undermines authority in applications such as classification systems.

3.2 Language and Meaning in Sociological Theory

Key sociological theorists on the nexus of language, meaning and social processes include Niklas Luhmann, Pierre Bourdieu, and Harrison White. I will refer to those, necessarily briefly, to position my focus on dictionaries. Explicit reference to how dictionary processes operate within that theoretical nexus has been rare and perfunctory, but nevertheless evocative for considering how those processes may be imposed and contested.

As underpinning, I draw on White's formulation of meaning, which he and colleagues have concatenated with Luhmann's. They (White, 2008a; Godart and White, 2009) theorize meaning as processual. It emerges through interaction, as a result of "identities" "switching" among "net-doms" (that term melds **net**work relations with their cultural **dom**ains).

Because identities who interact -- whether individual or organizational—have never had the same life-experiences, some minimum of **ambiguity** from use of language and other semiotic tools is inevitable. Ambiguity in White's framework (2008b) is the spark for meaning-making. I would apply that insight to the sub-set of communication that is devoted to creating or seeking definitions, as participants attempt to control the

profusion of possible meanings and reach sufficient common understanding for continued interaction. Dictionaries and their uses institutionalize in emblematic form the pervasive social acts of defining.

Luhmann (1990) emphasizes that "negation" is essential to the selectivity of meaning-making. I interpret that point as framing language itself as a classification system that selects from the totality of experience ("the horizon of possibilities", Luhmann, 1990: 48.) Language does so by naming some things (i.e., the lexicon) -- and thereby *not* naming others, and by assigning relations among things (i.e., the grammar) -- and thereby constraining other relations.

But Luhmann (1990) also references additional levels of classification: "Language alone is incapable of establishing meaning: this requires, in addition, systems whose particular structures define narrower conditions of possibility, i.e., define additional boundaries within the domain of the linguistically possible. (52)" That structuring is precisely where the power of classifications exerts its impact.

For present purposes, this theoretical underpinning clearly rejects the common misconception that dictionaries "make" or "reveal" meaning. Since meaning is generated only through interaction, semantic components of language -- whether observed at the level of words, utterances, discourse, or dictionaries -- are theorized here as *socially structured efforts to impose control on meaning*.

3.3 Dictionaries and Meaning

The disjuncture of dictionaries and meaning-making is explicit in theoretical contributions of Bakhtin and Vygotsky. Linguist Caryl Emerson (1983) notes that for Bakhtin, "words come not out of dictionaries but out of concrete dialogic situations," (248) and further, "Words in discourse always recall earlier contexts of usage, otherwise they could not mean at all...." (248).

She concludes that the Bakhtin circle advanced Saussure's foundational work on "the sign" by specifying the conditions for transformation of "inner speech" to "outer word" in dialogue; I will extend that point to words as they appear in dictionaries. Externalized, the sign partakes in the attribution of authority: "...the sign is external, organized socially, concretely historical, and, as the Word, inseparably linked with voice and authority. "(248)

Vygotsky amplified the point to distinguish between the "meaning" of a word [his usage refers to what I prefer to call "the attributed definition"] and its "sense."

The sense of a word...is the sum of all the psychological events aroused in our consciousness by the word.... "Meaning" is only one of the zones of sense, the most stable and precise one. A word acquires its sense from the context in which it appears; in different contexts, it changes its sense. ... The dictionary "meaning" of a word is no more than a stone in the edifice of sense, no more than a potentiality that finds diversified realization in speech. [Vygotsky, quoted in Emerson, 262-3. Emphasis and quotation marks added by me.]

3.4 Dictionaries and Power Relations

I now can re-state the framework for study of dictionaries: They represent a product of social processes that *attempt control* over a constant flux and virtually endless variation of individualized meaning-senses, by crafting definitions of words and phrases, and embedding them in formats (traditionally, books) with some continuity. Power relations

shape *who* crafts the definitions, the definitional *content*, and their *uses* to "define the terms of situations." Until recently, there was no question that dictionary-based power was a "top-down" process. How effectively any dictionary project could attain authority was limited by various structural factors (e.g., competing producers, costs of production, low literacy and other constraints on dissemination and socialization) but not by attempts at user-control over the process of defining.

Bourdieu (1991) characterized the top-down view, positioning dictionary-making in the academic-scholarly field, a source of cultural capital. He emphasized that dictionaries were deployed in service of national governmental interests, conveying the "standard [and official] language" as the "exemplary result of [the] labour of codification and normalization...by scholarly recording...of the linguistic resources..." of the "nation." (p. 48)

The "exemplary" dictionary thus is both by-product and tool of broader processes – notably, education, literary production and governance -- that maintain class domination and bureaucratic control through the symbolic power in linguistic capital. Such dictionaries convey authority, having been deemed by those in power to be authoritative arbiters of which version of language should be positively *versus* negatively valued as linguistic capital. Dictionary-creators exerted that power either by omitting the vocabulary and usage of dominated groups, or by including and labeling those entries as "vulgar" or "popular." Bourdieu recognized specialized dictionaries that consisted entirely of "slang and 'unconventional language" (p.90), but they too were compiled by lexicographers, more evidence of attempted control over linguistic capital by devaluing a class of words and usages (and their users).

Bourdieu emphasized the stabilizing function of dictionaries in "producing and reproducing" status distinctions and in political and bureaucratic control over socially-constructed "meaningful" geographic areas.⁵ (That is, "nations" as well as their "official languages" are socially-constructed).

3.5 Situating Bourdieu

The context of Bourdieu's analysis differed sharply from that of today's array of dictionaries regarding both national-culture and technology of design, production and use. Bourdieu observed 19th and early 20th c. France – a national culture known for great pride in, and unusual efforts at control over, its official language. Technologically, dictionaries then were printed products, relatively expensive to produce and own; relatively closed to change even by professionals, and never by ordinary users. (For description of similar conditions in 20th century U.S., see Sledd, 1972, and Landau, 2001). Change occurred, of course, but the forces promoting stability in dictionaries in the face of wide variation in language usage were more significant, a divide that Bourdieu vividly captured.

Today the forces promoting *change* in dictionary processes are more evident. Consider current language attitudes in the United States, a culture with no history of an

In one article, Bourdieu (1977) referred to dictionary definitions as "abstract" and "neutral" emphasizing by contrast the point that words change meanings in each social situation; uncharacteristically, he seemed to forget that the same features of linguistic symbolic value affected the dictionary definitions, and especially their uses.

Language pride is widespread but of varying degree within and across cultures. Regarding practices, L'Academie Française and its counterparts, e.g., in Spain and Italy, is the focus of control efforts, worthy of close study in the context of sociology of language and particularly dictionaries.

official language "academy." And consider computer technology as the environment for dictionary-making and use. The current context is best pictured as turmoil, both in language attitudes and in technology. Regarding attitudes, consider for example "moral panic" over incursions of netlingo into educational and business settings (Thurlow, 2002), *versus* some authoritative linguists welcoming netlingo as positive creativity (Crystal, 2008).

Turmoil also roils publishing in general, and the dictionary domain in particular. Current technology allows virtually (in both senses) unlimited potential for updating dictionaries at any time, with input by anyone who wishes. How, under these conditions, does non-standard language become standardized or, more importantly, acquire force with use in contentious public arenas, with what loosening or tightening of top-down control over linguistic capital? What is the role of dictionaries in that process?

3.6 Beyond Bourdieu

Such questions demand attention because, as noted, most traditional dictionaries have an online presence with at least partial access to a free version. At the extreme, and eliciting what the *New York Times* called "Lexicographical Longing" (Heffernan, 2008), Oxford University Press has discontinued publishing in book form the standard-setting *Oxford English Dictionary*, to be maintained henceforth only as an electronic database accessed by subscription.

And user-generated free dictionaries have leaped into wide use over the Internet (see data below.) The two major examples are *Wiktionary* and *Urban Dictionary*. *Urban Dictionary* is a "slang dictionary" (but see below *re* exceptions) and represents a sharp contrast with lexicographic tradition in its content and form; it proclaims the assertive tagline: "Define Your World."

Wiktionary is more traditional in form but includes some innovative content, e.g. netlingo terms (Kirchner, 2008). The Bourdieu model of dictionaries – professional/scholarly input within guidelines derived from centralized state bureaucracy - needs to be expanded. Toward that end, the notion of *Urban Dictionary* as a "populist" dictionary is usefully presented in a pioneering study by linguists Cotter and Damaso (2007) [also Damaso, 2005] who recognize its unusual feature of being a dictionary to which, in principle, anyone can add definitions at any time.

Cotter and Damaso zero in on analytic features that allow them to specify similarities as well as contrasts of *Urban Dictionary's* process compared to traditional lexicographic methods (e.g., "archiving contemporary usage" and "collaborative codification.") They conclude that *Urban Dictionary* is a "new type" of dictionary that represents a "rare" kind of "symbiosis between language user and lexicographer;(8)" That is, they see the user *as* lexicographer, recognizing users' authority in this process precisely because of *Urban Dictionary's* identity as a "slang dictionary" dealing with a marginalized sector of language that is "close to the end-user."

Cotter and Damaso did not study *Wiktionary*, a populist approach that does not limit its claim to a narrow language sector. Further, it is important to realize that *Urban Dictionary's* terrain in practice is not limited to "slang" words, nor as noted, does *Wiktionary* exclude "slang."

It is thus germane to compare the disparate styles with which *Urban Dictionary* versus *Wiktionary* confront professional lexicographic practice (Emigh and Herring, 2005, Kirchner, 2008). The longer-run research aim is to discern whether either approach has an

impact on user involvement in classification practices. Toward researching that core issue, basic groundwork is needed to move from the conceptual categories to observable features. Sections 4 and 5 advance in that direction through exploring the web-presence (availability and uptake) of dictionaries, and the types of user-involvement they afford.

4 Exploratory Research Method

To identify the most popular online dictionary sites, I used Alexa's (www.alexa.com) "Traffic Ranking system,7" in which "Dictionaries" is a sub-category of the top-level category of "Reference." I selected the top 10 that are: English dictionaries (some sites also had other language dictionaries); not specialized, (e.g., medical, legal, rhyming), and not solely compilations of other dictionaries. Some decisions were difficult, e.g. a site that compiled other dictionaries but offers its own dictionary-related activities (I included it.) For a comparative base, I also extracted data on Alexa's top two sites under the broader category, "Reference," (excluding two map sites).

Note that the term "global users" in the findings refers to Alexa's sample of "millions of persons" globally who have downloaded the Alexa toolbar so their internet usage is monitored. Sample representativeness cannot be assessed, but Alexa's reports are widely used by stakeholders in the Internet world.

Alexa identifies the company that owns each site, with minimal information. To classify the type of industry for those I did not know, I googled company names and read at least one description by a business publication in addition to information in the site's "About us" section.

I explored the 10 dictionary sites in depth to find all the types of activities they offer users, especially but by no means limited to submitting words and/or definitions. I also examined sites' marketing practices, including their visual style and type and placement of advertising, but did not complete that coding (explanation below).

My search and coding of the sites were less systematic than desirable due to diversity of formats across sites, complexity of some pages, deeply embedded links, and the large size of some sites. I found some relevant material almost by chance, e.g., by performing an action that I had expected would yield something different. I visited all sites multiple times, printing many pages to study closely, and note-taking while viewing others. I spent a conservatively estimated average of 3 hours/site, from 1-2 hours on some to more than 5 hours on others. I also conducted dictionary searches and other activities to discover typical users' experience. Doing so gave insight into issues such as the overlap between dictionaries on covering slang and standard terms.

Finally, my ranking of sites as "high", "moderate" or "low" on opportunities they provide for individual and community identity-building is not only qualitative but reflects my subjective summary of the number and types of activities the sites offer; more formal coding with explicit weights would allow a more objective result.

Recognizing those limitations, I view the effort as a necessary step that I hope will be useful for others beside myself in future systematic search and coding of dictionary and similar reference websites.

Broadly explained at www.alexa.com/site/help/traffic learn more

5 Findings: Patterns of Professional and User Control in Online Dictionaries

5.1 The Web Presence of Professional and User-Generated Dictionaries

Table 1 offers indicators of the "presence" of dictionaries in the Web environment: Years the site has been online; "Reach," i.e., number of "persons" who visit it (in web terms, "Unique visitors,") as a percentage of daily "global web visitors"; "Intensity" of visits (i.e., "average page views"), and Number of sites linking to the focal one. Only "page views" can be interpreted in absolute terms, the others showing relative standing of sites on those measures.

Table 1: (A) Top Two General Reference Sites, and (B) Top Ten Online English Dictionaries In Alexa "Traffic Rank" Order⁹: Indicators of Type and Uptake (as of March 2009)

Name/url (overall order ¹⁰)	Traffic Rank	Reach %	Page Views	Sites Linked In	Years Online	Industry Type	Content Control
A. General Reference							
wikipedia.org	7	8.50	4.4	364,000	8	Foundation	Prof'l
reference.com	199	0.48	3.8	2,800	14	IT Info	Prof'l
B. Dictionaries							
thefreedictionary.com (2)	333	0.28	1.9	11,000	6	IT Info	Prof'l
Merriam-Webster Online/m-w.com (4)	487	0.19	2.5	12,000	16	Language- related publ.	Prof'l
Urbandictionary.com (5)	821	0.12	2.7	14,000	8	Individual founder	User
Wiktionary.org (6)	1,074	0.10	2.0	700	7	Foundation	User
Yourdictionary.com (13)	4,352	0.03	1.8	6,300	10	IT Info	Prof'l
Cambridge Adv. Learners (15)	2,866 ¹¹	0.03	4.9	3,200	11	Educ-Publ.	Prof'l
Webopedia.com (16)	7,244	0.02	1.3	7,400	11	IT Info	Prof'l
AskOxford.com (30)	15,445	0.01	3.9	2,300	9	Educ-Publ	Prof'l
Longman Web Dict. (31)	22,910	0.00	9.2	300	5	Educ-Publ	Prof'l
Abbreviation.com(36)	28,641	0.00	2.2	400	8	IT Info	? User ¹²

All the Alexa measures used here are gathered daily and averaged over the 3 prior months.

Traffic rank uses an algorithm combining Reach and Page Views. "Reach" is the percentage of Alexa's "global visitors". Alexa statistics used here are average of 3 months as of March 2009.

Number in parentheses is rank order before dropping cases outside the study definition, e.g. bilingual dictionaries.

Presumably, rank for a larger part of the main Cambridge site has erroneously been measured.

See below where I question the site's claim.

5.1.1 Reference Sites

For comparison, I start with the two top "Reference" sites, of which *Wikipedia* dominates by far, emerging as 7th in global traffic rank (i.e., 7th in overall rank, not just within Reference), followed in the 199th position by <u>www.reference.com</u>, a compilation of well-known standard dictionaries, encyclopedias, and thesauruses, usable free.

The noteworthy point is that the *user-generated Wikipedia*, only 8 years online, leads dramatically in meeting the Web-public's demand for "look-up" type of knowledge, towering over Reference.com's equally free and easy-to-access traditional encyclopedias, available online longer (14 years). Most striking is *Wikipedia's* attraction of links from other sites – 364,000 sites compared to less than 3,000 for Reference.com. Finally, *Wikipedia* draws more intense individual attention as indicated by page views, although the spread is small – 4.4 vs. 3.8.

Wikipedia's significance for this paper goes beyond statistics, since it is both the conceptual model and operational framework for its dictionary counterpart, Wiktionary. Wikipedia has stimulated intense social science interest in its innovative social conditions and therefore unknown consequences for collaborative work (e.g., Konieczny, 2009 and references therein.) Linguists too have framed questions around Wikipedia, e.g., how "collaborative authoring" affects discourse genres. That research can inform but not satisfy the need_for research specifically on Wiktionary to pursue questions distinctive to constructing dictionary-based knowledge, e.g. debate over including new language forms (netlingo).

5.1.2 Dictionaries: Overview

Table 1's second tier shows the ranking and features of sites in Alexa's Reference subcategory, "Dictionaries" (after the exclusions noted 14). The "fully/only dilemma" applies in assessing the drop in "global" traffic ranking from the general "reference" category to "dictionaries." I choose to consider the drop fairly small (only 40% 15), especially considering that www.reference.com includes dictionaries. Combining that with finding that the next four sites each ranks close to the one above, leads me to conclude that the Web-presence of online dictionaries as a group is significant. Using the data on "Reach", I conservatively estimate that, daily, one-half to one percent of "global" users refer to one or more of the top four listed online dictionaries. That percentage is very small, but applies to a very large (unknown) base number.

"Presence" in terms of Years-online varies from 5 to 16, most sites having been available for about 10 years; online age is unrelated to usage rankings: the top two sites include the oldest and one of the youngest. The number of Sites-linked-in varies widely,

Emigh & Herring (2005) research specifically on *Wiktionary* to pursue questions distinctive to constructing *dictionary-based* knowledge, e.g., debate over including new language forms (netlingo).

The most important exclusion is www.leo.org, the top listing under dictionaries, excluded because it is a bi-lingual dictionary for translation. Onsite for 15 years, its traffic rank is 261, and reach is 0.23%. Very few sites link to it, but average page views is high -- 7.0 See below on page views.

The difference between ranks for *reference.com* and the next one down, *thefreedictionary.com*, divided by the latter's rank=40%.

There is a sharp drop after the top four, i.e. between Wiktionary and www.yourdictionary.com, and again after the next three, i.e., between www.webopedia.com and. www.AskOxford.com I calculated the size of the drop between ranks as a percentage of the lower rank to assess the relative size of drops, and used 50% as the criterion for "sharp drop."

and *is* generally related to rankings, though it varies little among the top four. ¹⁷ Regarding Page Views, two high scorers stand out: *Longman Web Dictionary* (9.2) and *Cambridge Advanced Learners*, (4.9), while almost all others are in the range 1.3 to less than 3.0¹⁸. This is related to type of usage, since the high Page View sites are "English Language Learner" (ELL) dictionaries published by educational institutions, whose sites also offer materials for teachers. Probably students, including adults, use the sites for assignments as well as for looking up words related to social situations.

5.1.3 Dictionaries with User-Generated versus Professional Content

Media attention originally made me aware of *Wiktionary* and *Urban Dictionary*, piquing my interest in them to examine theoretical questions *re* definitions and language use, whatever their relative Web presence. Table 1 shows that both are among the most popular dictionary sites and approximate each other on those measures. (Sample limitations make it unwise to interpret the small differences between them, and as compared to traditional dictionaries in the top four.)

It was surprising to find that the top four dictionary sites are comprised of two user-generated and two traditional dictionaries. That does *not*, however, indicate parity between those types in number of people searching online for definitions. I expect almost no overlap between users of *Free Dictionary* and *Merriam-Webster Online*, while users of *Urban Dictionary* and *Wiktionary* are more likely to overlap; thus, considering "reach," and "sites-linked-in," traditional sources clearly outnumber user-generated ones. (Table 1 shows www.abbreviation.com as user-generated, but as explained later, that is questionable; in any case, it is last on the top 10 list, with few sites-linked-in, and has average Page Views.) All the other sites use professionally-developed content, a feature usually left implicit (in linguistic terms, "unmarked"), but sometimes highlighted in claims to expertise and authority. (www.askoxford.com is unusual by personalizing its top editors with pictures and bios.)

Table 1's "user-generated" category is based on the sites' self-proclaimed identity. The task in the next section is to explore how the distinction between user-generated *versus* professional dictionary is implemented. The section starts with a technical note on ambiguity about the term "users," in moving from Alexa data to analyzing site content.

5.1.3.1 Technical note on "Users"

Alexa's statistics include a range of types and intensities of "using" websites, from people who reach a site accidentally, to employees working on it, even scholars visiting for research, to persons who are the intended target. I assume but can't know to what extent the intended target users overwhelmingly dominate the numbers. In that group, furthermore, many levels of involvement are possible (reviewed below), but the statistics do not allow me to specify numbers at different involvement levels. I assume that the overwhelming majority of "unique visitors" and "visits" were looking up definitions. Presumably, some non-trivial portion of users on the "user-generated" dictionary sites were involved in creating or editing entries, but they almost certainly are a minority on those sites as well.

Wiktionary's low number is a special case because links to Wikipedia serve the purpose almost as well

AskOxford.com, not an ELL dictionary, stands out with 3.9 average Page-Views.

5.2 Examining User Involvement in Dictionary Sites

5.2.1 Professional and Marketing Orientations to User Involvement

Lexicographers' first-hand knowledge of what users want or "need" from dictionaries has been minimal, especially compared to other professionals who more likely routinely interact with clients. The lexicographic literature bemoans that lack (e.g., Svensen 1993, Wiegand 1999) and has welcomed rare efforts to reduce it by user surveys. The shift to the online context affords many alternatives to surveys as ways for lexicographers to interact, albeit indirectly, with users *via* dictionary websites.

Of course, ways for users to interact *via* websites also (perhaps mainly) serve publishers' marketing needs. In general, one assumes, the more actively users engage, the more committed they become to the site, the more likely to tell others about it, and more available and inclined to respond to ads. Whether and how those marketing aims compete with, but also support, lexicographers' aims to give what their ethic sees as more informed and authoritative services to users, is an issue fundamental to varied aesthetic and scholarly fields (e.g., literature, museums) that depend economically on market factors. (for a classic treatment, cf. Bourdieu 1992). The dictionary field (similar to other cultural products based on classifying information) shares in those aspects of disparate market and professional perspectives, as well as brings in a distinct user perspective.

User "involvement" in creating and applying dictionary definitions thus can have contrasting "ideal-typical" implications for power relations between "users" and "professionals": At one extreme, user involvement can reinforce and enhance professional control. In this situation, users are "atomized" or isolated from each other. Their activities on a website are individualized and, if they take any action beyond reading, they provide information that can be channeled in various ways to professionals on the staff, and possibly more widely shared with the professional community²⁰. Professionals use such information according to their own criteria for content. This is the model I expect to find approximated by traditional dictionaries that have gone online.

At the other extreme is user control; this situation requires that users be in touch with each other, forming some type of community that sets criteria for content. While this situation requires that there be some type of intermediaries (editors) who bring "expertise" to processing widely distributed input into usable content, the intermediaries themselves are members of the user community, chosen and monitored according to community-determined criteria. This is the model I expect to find approximated by dictionaries initiated online whose identity and core value is based on user-generated definitions.

With those models in mind, I reviewed activities afforded to users according to whether they contribute to building an individualized identity as a user of the site's dictionary-resources, or whether they contribute to building a community identity. I consider activities as *individualized* identity-building if they are not visible to other site users, or are visible only without any identifiers, and as *community* identity-building if

For the present study, I had planned to include qualitative data on mode of economic support in comparing the dictionary sites, but due to space and time constraints, I deferred coding such aspects as types of solicitations to advertisers or donors, and types and pervasiveness of ads. That is a priority for future research.

For example, through presentations at conferences of the Dictionary Society of North America, or in the journal *Dictionary*.

there is the possibility of such mutual awareness and interaction. Figures 1-2 display the results of my qualitative analysis of the sites.

5.2.2 User input: "Core" versus "Marginal" Value

In Table 1, three of the 10 sites had been identified as based on user-controlled content; all others as based on professional control. However, my intensive review of those websites revealed that almost all offer some mechanism for user input; also, one site (Abbreviations.com) that claims "wiki-type" user control in fact offers weak follow-through. (It is perhaps not surprising that "wiki-ness" is a marketing feature for compiling abbreviations, which are relatively ephemeral, specialized, and pose no semantic issues.)

Thus, I further categorized the 8 sites²¹ that offer any means for user-provided content according to whether such input appears to be highly valued (a "core" value) *versus* moderately or marginally valued; Table 2 shows the results, discussed later. Figure 1 presents the indicators I used that reflect: how centrally and explicitly the site seeks user input; whether an easy-to-use form is provided to submit words; whether editors are comprised of users, and whether the user-definitions are entered into the site's main look-up source or are "segregated" into a separate dictionary.

As expected, only *Wiktionary* and *Urban Dictionary* truly fit the "Core Value" category, and almost all the others fall into the Marginal Value category, which is expressed in various ways (Figure 1). The unexpected finding was that one traditional site, Merriam-Webster, "earned" a rank higher than "Marginal" for its approach to user-input, although it clearly does not expect to modify its professional product that way. Merriam-Webster's "Open Dictionary" is easy to access for input and browsing; individual contributors are identified. A quick review suggests that most contributions are innovative "blend words", making "Open Dictionary" quite entertaining. In particular, Merriam-Webster's value placed on user-definition is evidenced by its effort to socialize school-children into writing dictionary definitions as a "fun" activity, optionally with personal credit (showing name or nickname and state). In fact, Merriam-Webster's site offers the widest variety of activities for adult and child users (see below), reflecting the cultural/historical context in which its dictionary is embedded (notably, Noah Webster as progenitor; sponsorship of the National Spelling Bee) rather than suggesting that the company is inclined toward user-control as a core value.

The indicators of placing Marginal Value on user-input for the four remaining sites reflect the fact that the sites' requests for input are difficult to find and/or to implement. At AskOxford.com, a user's hope of having a suggestion accepted is pointedly made unlikely by extensive explanation of the editorial vetting process for new words.

While my site reviews did not substantially alter the basic categorization of dictionaries regarding user or professional dominance, they add important nuance to the distinction. Further, they show operationally how online dictionary publishers are beginning to exploit the technological potential for greater user involvement.

The two ELL dictionaries (Cambridge and Longmans-Pearson), both of which are produced by Education Publishers, are therefore not in the remaining analyses.

<u>Figure 1: Indicators of Value Placed on User-Definitions by Selected Popular Online Dictionary Sites.</u>

Core value

- Home page clearly states that user input is the only or main way that words and definitions are entered and clarifies how to do that (Urban Dictionary, Wiktionary)
- Discussion of entries (Wiktionary) or "Comments" (Urban Dictionary) is encouraged and easy to enter
- Becoming an editor is encouraged and easy to do (Urban Dictionary, Wiktionary)
- Voting on entries is easy, which determines the order of definitions if more than one are submitted for a word (Urban Dictionary)

"Pseudo-Core"

 Adopts the "wiki" rhetoric and overall screen appearance, and provides a form for entering words and definitions, and for becoming an editor (offers a free T-shirt) but offers no Discussion section. It does not show which entries have been offered by users, nor are editor guidelines provided.

Moderate value

 Clearly invites, and provides easy form for user contributions for an "Open Dictionary" that is maintained separately from the main look-up source. Also offers a separate userbuilt dictionary in the "For the Kids" section. (m-w)

Marginal value

- Invites user contributions for a separate "Online Community Dictionary", and provides an easy form, but these are very difficult to find (shown as second option under a link for "Feedback.") (freedict)
- Within recently added "Forums", one topic is "Missing from Dictionary"; explains it refers to a word that user feels should be in the "licensed" traditional dictionary that is the site's main look-up source (yourdict)
- Within "About Us", notes that many suggestions for the site's ongoing updating result from suggestions by the site's users; however, this is not mentioned on the home page and no form is provided for submissions. (webopedia)
- In an article on new words, located deep into the site, asks users who have "spotted a new word" to email the word and brief explanation of what it means and "if possible, where you came across it," but no submission form is provided, and other articles make clear the rigorous editorial selection process for accepting new words. (askOxford)

Figure 2 extends the evidence about activities that sites offer in attempting to engage users, besides submitting words and definitions. These activities are of interest to the extent they may contribute to forming an identity as dictionary-user other than in a traditional "needy supplicant role" (i.e., the traditional user seeks a handout – a definition, pronunciation, or etymology -- from the professional's treasure trove of lexical knowledge.)

As noted, the key analytic distinction is whether the activities are "individualized" or "community-building." *Within* those categories, I have grouped examples according to degree of involvement based on (my estimate of) how much effort the user must exert to do the activity.

Figure 2A presents the *individualized* activities. All these sites offer one or more low-involvement options; except for *Wiktionary*, all have a "Word-of-the-Day" on the home page, or linked from it. Indeed, all the sites also offered at least one moderately involving activity. High involvement activities are rare, but offered by several sites. It is noteworthy that *Wiktionary* and *Urban Dictionary* offered almost no activities categorized as "Individualized" (*Urban Dictionary* has a Word-of-the-Day), because all their activities fit into the community-building category.

In general, if the site owners subscribe to reports on web-metrics (they could receive such information from activities with moderate or high involvement, because users take some action on the site), what they would learn from most of these activities seems more suited to marketing than professional applications. However, some activities might help inform professionals about trends in vocabulary needs and interests (e.g., building a personal word list; suggesting a Word-of-the-Day).

Figure 2B is of particular interest because it details the type of *community-building* activities offered. The common element in these examples is that when one user engages in the activity, other users can be aware of it. Minimally, that demonstrates to them that there is a virtual community involved with the site, with the potential (but it would be a big leap) for building greater identity and even for mobilization.

In the "Low Involvement" category, the presence and activity of others is known but it is one-sided and at least one party is anonymous, e.g. casting a vote up or down on a definition in *Urban Dictionary*; reading without participating in a "Forum" (a discussion board on language-related topics-- e.g. vocabulary, grammar – where more knowledgeable members, or perhaps staff, answer questions.)

For "Moderate Involvement," the user shares information about him/herself, e.g. Wordlists s/he has built, or participates in a Forum discussion infrequently.

For "High involvement", all but one of the concrete examples (frequent participation in Forums) come from *Urban Dictionary* and *Wiktionary*. In these activities, members interact with each other more or less directly, and have some knowledge of who that is (usually "nicknames"). *Urban Dictionary* offers an ongoing Chat room (my few brief visits show that discussing words and definitions is not how it is used; rather it revels in competitive patter of seemingly light-hearted and gross insults. But the potential for actual chats about language is in place.)

In *Wiktionary*, a community identity is literally possible as a "Wiktionarian," with optional picture and bio to introduce oneself. Also, a status hierarchy of titles and privileges in editing exists, based on elections by those who have titles, in a nominating and "campaigning" process that is visible to anyone interested.

Figure 2: Examples of User Activities Offered by Selected Popular Online Dictionary Sites, Toward Forming Identity (A) as an *Individualized* Dictionary User and/or (B) as a member of a *Community* of Dictionary Users

A. Individualized Activities that require:

a) Low involvement

- -- on home page, read Word of Day, recently added terms, etc. (provided by all)
- -- on home page, read an article about words or dictionaries (askOxford, m-w)

b) Moderate involvement

- -- build a personal "word list," i.e. for own vocabulary-building (several)
- -- play word game provided, e.g. crossword puzzle (several)
- -- request emailed "Word of the Day" or word games (several)
- -- use 1 or 2 links to get to any of the above(any)
- -- add a link to the dictionary on own computer home page (several)
- -- watch "live" as words/definitions are being added (Urban Dictionary)

c) High involvement

- -- send suggestion for "Word of the Day" (several)
- -- follow the dictionary on Twitter or RSS feed (several)

B. Community-building activities that require:

a) Low involvement

- -- vote anonymously (positive or negative) on word definitions (Urban Dictionary)
- -- read Forum discussions without participating

b) Moderate involvement

- -- Share (anonymously) one's own Word List and read other members' lists (yourdict.)
- -- Participate in Forum discussions infrequently (Yourdictionary labels infrequent participants as "newbies")

c) High involvement

- -- Frequent participant in Forum discussions (labeled "Senior Members" in Yourdictionary)
- -- In the *Wiktionary* community:
- -- Edit entries, with or without name (but IP address will be taken) and participate in discussions about entries;
- -- Become a "Wiktionarian," giving name (real or nickname) and bio, picture optional
- -- Apply for various levels of "Administrator" status, which will be voted on by others with that status, in a process that can be view by anyone; status achieved only after a high level of participation that meets with others' approval.
- -- In the *Urban Dictionary* community:
- -- register as editor (anyone may register, but more established editors will review edits before they are implemented)
- -- participate in chat room
- -- participate in blogging

6 Summary and Conclusions

6.1 Emerging Opportunities for User Control in Dictionary Processes

Table 2 summarizes the data, and takes a broad leap into implications. The last column suggests how the features of dictionary-sites that have been reviewed, might combine to facilitate long-range effects on the *status quo* of professional control over dictionary-definitional processes.

Table 2: Emerging Opportunities for User Control Over Online Dictionary Processes: A Qualitative Summary of Indicators of: Value Placed on User Input; Types and Amounts of User Activities Offered by Top Eight English Dictionary Sites;²² and Implications for Professional Control

Name of site	Value placed on User Input	Opportunities for Building Identity: a. Individualized	Opportunities for Building Identity: b. Community-oriented	Implications for Professional Control
Thefreedictionary.com	Marginal	Low	Low	Sustains
Merriam-Webster Online	Moderate	High	Moderate	Enhances
Urbandictionary.com	Core	Low	High	Poses "stealth threat"
Wiktionary.org	Core	Low	High	Diminishes
Yourdictionary.com	Marginal	High	Moderate	Enhances
Webopedia.com	Marginal	Low	None	Sustains
AskOxford.com	Marginal	Moderate	None	Sustains
Abbreviations.com	Pseudo-Core	Low	Low	Sustains

I will comment first on the columns that summarize, at the dictionary site level, features that were separately (and selectively) illustrated in Figures 1-2 (Value on User-input; Opportunities for Individualized and Community-Based Identity). To arrive at the impressionistic summary measures, I considered not only what activities each site offered, but whether it offered few or many of them. At best, these results must be considered tentative.

Some results in Table 2 were unexpected, notably finding that any traditional dictionary sites went beyond a minimal gesture to solicit and feature content from users. I concluded that although Merriam-Webster segregates its "Open Dictionary" from its standard product, the site gives the latter enough prominence to suggest it values user-input.

Regarding opportunities for individualized identity-building, I had no clear expectations and the results do not seem surprising. By contrast, I was surprised that sites other than *Urban Dictionary* and *Wiktionary* offered features potentially promoting a

²² Includes only those dictionaries that offer any possibility for user input into definitions.

community-based identity around involvement in dictionary processes. Again, Merriam-Webster qualifies, not only because of "Open Dictionary," but also its projects to socialize children beyond learning how to look up word-definitions to how to create them. Similarly, Yourdictionary's elaborate structure of discussion Forums, with activity records that all users can see, suggests greater opportunity to develop community-based identity than expected in a professionally controlled site.

How might these site-level patterns of features combine in the future to affect power relations between professionals and users in the institutional arena where dictionary-making occurs? The most defensible prediction (Table 2, last column) is that for most sites, entrenched professional control will be sustained (four sites) or even enhanced (two sites). The former outcome reflects the fact that even though varied user activities were identified, these sites (*freedictionary*, *webopedia*, *askoxford*, *abbreviations*) offer few activities even at the individualized level, and few or none at the community level.

The story is more complex for the two sites that may enhance professional control. For them (*Merriam-Webster* and *Yourdictionary*), I expect the high-level of individualized activities will provide their publishers with considerable information about users that they can shape for both marketing and content purposes. Both sites also offer some community-based activities with potential in the *long* long-run for users to discover shared interests and some influence over definitional issues, but until then those activities add further to the publishers' fund of user information. Rather than sharply altering power relations, providing community-based activities on these sites may more subtly reduce "social distance" between professionals and users, from both directions.

Finally, the most interesting speculations concern the user-generated dictionaries. They exemplify user-control within their own spheres, but can we envision their affecting professional control over dictionary-processes generally? It seems safe to project that *Wiktionary* will undermine professional dominance in its domain, perhaps more slowly than is occurring regarding *Wikipedia*, but drawing on the *Wikipedia* effect (Cohen, 2008).

Urban Dictionary is a more questionable matter. While Wiktionary is a distinctly adult activity, Urban Dictionary is youth-dominated but is drawing increasing attention in mainstream media (e.g., Heffernan, 2009; Smarty, 2009). Wiktionary covers standard language though it includes slang and new forms; Urban Dictionary claims only to cover slang, but in fact includes general terms.

It is intriguing to consider that the *Urban Dictionary* phenomenon – with its sloganized call to any and all to "Define Your World" – could be seen as part of a "stealth" social movement²³. Under the right conditions, its large virtual community — or a substantial sub-community within it — could recognize a common interest in definitional (and classification) issues that affect their life-chances, and could mobilize to protest the old methods and shape new alternatives.

A not-impossible example is intergenerational job competition emerging in a greatly constricted job market, where classification and labeling of labor market qualities negatively associated with youth could be contested. The stealth *weapon* that the *Urban*

A newer venture -- *Leximo* (www.leximo.org) -- is unlikely to approach *Urban Dictionary's* clout, but illustrates the social movement mentality of some user-generated dictionaries by declaring a "Manifesto" to guide its development as a "Social Dictionary", and by proclaiming on its home page: "Become a part of the Revolution! Spread the word about Leximo!"

Dictionary community could effectively wield is being continually sharpened on its definitional "raw materials" (sometimes extremely raw.)

That weapon is its "style" – which is best characterized as imaginative, humorous ridicule. Professionals (lexicographers, academics, others) are vulnerable to that weapon, being widely perceived – not only by youth -- as terminally stuffy. Indeed, that weapon has recently been used by political comedians in the U.S. and promulgated through online and other news media – and has indeed proved effective in national politics. Not unexpectedly, *Urban Dictionary's* site features a press section, and on its home page highlights its pickup in mainstream news-media.

I do not seriously expect my scenario about *Urban Dictionary* in the short-term. Rather, the scenario supports my opening suggestion that new social forms emerging in dictionary-making (viewed as efforts to control meanings) deserve serious attention by sociologists. The new forms and processes resonate with related populist trends online. Consequently, their potential is enhanced for contesting power relations that, like classification systems generally, draw sustenance from the reflexive and pragmatic as well as semantic capacities of language.

6.2 Reflections on Theory

Reflections on my earlier review of sociological theory help point the way forward. Earlier, I situated Bourdieu's analysis of dictionaries in its historical national setting, which this study has shown increasingly out of touch with conditions of online dictionaries (e.g., beyond jurisdiction of language institutes; allowing frequent updating and input by non-experts).

But Bourdieu's insights on linguistic capital remain a productive framework for doing research on dictionaries; it simply requires turning his rigid categories for describing dictionaries²⁴ into *variables*. Then, we can locate contemporary dictionaries accordingly (e.g., variable authority over dictionary content by professionals, producer/marketers, and users) to study how different types of dictionaries influence processes that generate interactional meanings (e.g., in social movements).

Regrettably, neither Bourdieu nor Luhmann is alive to tackle extending -- possibly revising -- their theories of language in the evolving digital-world context. By contrast, White, with colleagues, is actively engaged in plumbing linguistic aspects of his theoretic framework of social formations to expose underlying "meaning mechanics." They have not explicitly considered whether and how the digital context might elaborate dynamics (including language) of identities seeking control. Nor have they proposed study of dictionaries as a tool in uncovering "meaning mechanics." However, in current work (White and Fontdevila, 2009), they strongly argue for attending analytically to pragmatics of language use. Since the meta-pragmatic act of *defining* is pervasive in its informal manifestations, I conclude that dictionaries -- the formal iceberg-tip of attempts to control ambiguity and meaning – merit continuing research that informs theory.

Re-stating Bourdieu's definition: Dictionaries are repositories of word-codings (semantic and pragmatic, e.g., designating low-status usage) done by experts with authority derived from state-approved educational criteria. Dictionary coding of words and phrases, we might venture, operate like federal monetary policy does for financial capital, regulating their exchange value as linguistic capital. The expression "coining words" captures the analogy nicely.

My term.

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