

Global Telelanguage Resources / LexIcons: THE ART OF DEFINITION

When Samuel Taylor Coleridge introduced his oft-cited distinction between the faculties of “imagination” and “fancy,” he not only constructed a new semantic context for the former term as a cognitive facet uniquely vital to all creative endeavours, he also set an interesting precedent in literary criticism, acknowledging the importance of definition as an aesthetic practice in its own right. By differentiating two terms once considered synonymous, the poet capably established new categories of description exclusive to poetry (and art) as a mode of interpretation. Definition thus allowed Coleridge to reinvent poetics as an active method of constructing knowledge about the world. If there were systems of thought or ways of understanding exclusive to poetic practices, Coleridge was determined to isolate and define them, much like any scientist who may require their own terminologies and specialized languages to comprehend the world around them.

Following Coleridge’s “imaginative” work in semantics, many modern poets have historically come to realise how vital the art of definition is to poetic practice. Poets as dissimilar in their approaches as T.S. Eliot, Gertrude Stein, Louis Zukofsky and Jackson Mac Low owe much of their respective importance within the canon’s literary modernism to a distinctly “aesthetic” understanding of lexicography, conceiving their work as a critical opportunity to re-imagine the very capacity of language to create and communicate.

Consistent with this genealogy of poetics, Global Telelanguage Resources maintains a similar mandate to develop innovative modes of writing via new techniques and concepts of language use. Our most recent project is an independent set of writing tools for writers and language enthusiasts that allows for the literary enhancement and creative design of texts via digital technology. Tentatively named the “Global Telelanguage Resources Workbench,” this new work might best be understood as the first genuine digital studio for language. As the name might imply, the GTR “workbench” is essentially a digital

writing tool able to perform transformative, generative and analysing functions on natural language texts. Conceptually, this project is meant to explore how creative writing (or even language use in general) might take advantage of digital processing applications to create new and innovative forms of literary art, electronic or otherwise. The core construction of the tool has been completed, producing some very basic test-versions of the software and possible media devices to come. It functions currently as a smart “word processor/workbench,” in other words, a “language toolbox” able to submit any text to a number of creative, transformative algorithms in the form of specially designed filters. At the moment, these filters allow for the spontaneous generation of new words from a wide range of selected databases, complete with their own customized etymologies and definition and translation extensions. The tool will eventually make possible an unlimited number of literary and aesthetic modifications to texts, much as current graphic design software like Photoshop and audio editors like Sound Forge permit artists to create and modify image and sound files.

At a more theoretical level, “LexIcons,” investigates the construction of semantic relationships in modern culture using an ontologically driven text generation system for the construction of new domain-specific terminology. Such a tool again derives partly from the wider cultural significance of dictionaries and lexicons in the construction of modern knowledge. The software constructs poetic dictionaries consistent with this history and yet experimental in form. The software takes as input source texts, tags the words as parts of speech using parsing technology, and generates new terms via a Markov modeling process. The terms are then “defined” via a specific semantic ontology created by the same source texts used to generate the original words. The semantic relationships between the various terms follow the patterns defined by WordNet, a lexical reference system inspired by current psycholinguistic theories of human lexical memory. English nouns, verbs, adjectives and adverbs are organized into synonym sets, each representing one underlying lexical concept. Different relations link the synonym sets.

In the sample LexIcon at the start of this article, the first chapter of *Capital* by Karl Marx has been inputted as the source text. Semantic relationships between all key words in the chapter remain organised into a single ontology. Four new words were created and definitions generated via the same ontology for insertion into various formal templates – one of them containing

an illustrated figure. The words may seem nonsensical at first, given the random construction of sentences immediately engaged. Yet, the syntax and grammar is based upon the same semantic relationships informing the original text. New patterns emerge and with these new patterns, new meanings and new concepts, exemplifying the aesthetic capacity of language to function as a tool for building knowledge.