

## PROJECT DESCRIPTION

### Change Mode Plus Processing/Poetry

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A pedagogical exploration and outreach project to develop workshops and code snippets promoting the incorporation of exploratory programming into HS and College English classes.

### Overview

Change Mode Plus Processing/Poetry (or chmod+P) recognizes the extraordinary code-literacy achievements of Processing within the Fine Arts education community and seeks to contribute towards a parallel opening for pedagogy within high school and college English classrooms.

The main work of chmod+P will be the development of pedagogical workshops and a pool of code-snippets. Workshops will be accessible for teachers with minimal programming background and aligned with learning goals of English curricula in American HS and university classes. As a complement to the existing introductory and intermediate resources in book, tutorial, and video formats (McCarthy, Reas, Fry, Shiffman), the workshops will allow teachers to implement exploratory lesson plans that enrich the teaching of reading and writing by enabling students to manipulate, analyze, visualize, and compose texts through the modification of code in the P5.js environment.

Chmod+P will provide a pool of adaptable Processing sketches designed to suit students who are learning close-reading, creative writing, literary theory, etc. The sketches will be openly available in a dynamic environment akin to Parrish's website ([creative-coding.decontextualize.com](http://creative-coding.decontextualize.com)) or OpenProcessing. Both the workshops and associated code snippets will be designed to respect Processing's sketching ethos and Montfort's "exploratory programming." Processing is ripe for sketching, probing, and playful inquiry in the English classroom; the development of P5.js should allow for platform-independent (including the ubiquitous Chromebook) classroom work in high schools.

### Sketches

A suggestive but provisional list of sketches for reading and writing would draw heavily on RiTa.js, and also use the p5.sound, p5.speech, and p5.gibber libraries; it might include:

1. Concordance
2. Parts of speech filter
3. Haiku generator
4. Markov text generator
5. Twitter bot
6. Speech audio visualizer
7. Speech to text composer
8. Algorithmic audio mixer

### Poetry

The proposal focuses on poetry to bring English pedagogy and creative coding together for reasons both formal and disciplinary. The attention to poetic form in literature classrooms meshes well with the analytical and generative exploration students can produce by modifying Processing sketches. In terms of the discipline, while English studies as a whole remains divided between criticism and creative work, poetry has emerged as one site where that divide is traversable, as reflected in work like Kenneth Goldsmith's

Uncreative Writing, Bernstein and Mayer's Creative Wreading, and Samuels and McGann's Deformation and Interpretation. We see this traversal taking place in poetry's multimodal contexts where readers attend to performance, audio recording, and the materiality of print texts. Students rarely write novels or perform plays in English class; yet, it is common to find reading-aloud, adaption, parody, collaborative writing, translation, performance, remix, making of audio podcasts, etc. in the teaching of poetry. In the workshops and sketches, I will also draw upon open archives such as Pennsound and Internet Archive, informed by the discourses of oral poetry studies (Oral Tradition and the Internet, Foley), distant listening (Clement and McLaughlin), media specific analysis (Hayles), visual design (Drucker), and multimodal composition (Bowen and Whithaus).

In short, the position of poetry within English studies primes the classroom for exploratory approaches to reading, writing, remixing and manipulating language with Processing.

### **Qualification**

Being situated in a mid-tier, under-funded state institution provides an important context for thinking about how to build useful outreach resources. How does the HS or college English teacher at an institution with minimal technical support, no allied Computer Science program, Digital Media program etc. enable access to this kind of work for their students?

I bring college-level teaching and curriculum experience (poetry, criticism, creative writing, digital composition, electronic literature, and digital humanities pedagogy); formal training in literary criticism and poetics (MA; PhD, SUNY Buffalo); and familiarity with outreach and project development (Reading Rebooted; Open Source Toolkit). Recently, I have also been presented work on project-based activities in teaching digital audio poetry, as well as incorporating the creation of born-digital literature in the English class, so the pedagogy of creative coding in English is a natural extension.

My modest coding skills are largely self-learned, but I have facilitated student learning with Flash, HTML, Twine, and Inform7; I regularly teach CSS and HTML in the context of Humanities classes. As a creative writer, I have explored these tools as well as PHP, and have shown works at Maryland's MITH and the Electronic Literature Organization conference. I have become increasingly enamored of Processing as a language and environment suitable to my teaching work, so guidance in this area and the opportunity grow my skills are equally welcome.

### **Outcomes**

The CHMOD + Poetry will enable the production and sharing of a half-dozen or more exploratory p5.js sketches accessible for English teachers and students; companion workshops for classroom use that will enable English teachers to integrate into the curriculum or provide to students for independent work; documentation of teaching goals and a bibliography to assist teachers in adapting lesson plans. In a subsequent phase, it would be appropriate to follow the implementation in several classrooms, assessing the student experience, although this probably exceeds the scope of the current project.

### **Processing**

Processing and P5.js are still generally lauded for graphics and visualization potential. This project should open the door to a broader range of interdisciplinary collaborations, particularly with text-based artists, teachers, and scholars.