

# Poetiks: A JISC-funded Project to Enhance the Learning and Teaching of Poetic Technique

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## Abstract

The Poetiks Project ([www.poetiks.net](http://www.poetiks.net)) will produce a web-based application to support the learning, teaching and assessment of poetry, with a specific emphasis on poetic technique. Using a combination of annotation, mark-up and semi-automated functions, it will help students to avoid common errors, and guide them towards deeper responses to poetry.

Key words: poetic technique, elearning, eassessment, humanities computing

## The Problem

Poetry is a core element of English Literature in the UK from primary school to degree level. The central difficulty in teaching it is to communicate the character and significance of its *difference* as a genre from fictional prose (most students' favourite), without 'technique' becoming a repetitive and routine basis for analysis. Although a few English Literature students are passionate and knowledgeable about poetry, the majority of those straw-pollled by the lead investigator over ten years evinced fear of poetry, seeing it as a fiendish code devised by the author to disguise the real meaning of the poem. The lecturer is a proxy for the author, cruelly withholding the truth from students. Alternatively, poetic meaning is seen – equally wrongly – as wholly subjective.

Those who go on to become teachers may then teach poetry reluctantly and, in some cases, poorly, creating a cycle of anxiety, demotivation and low achievement. Poetic technique comes to be seen not as an application of experience, intelligence, a sense of tradition (accepted or rejected, but known) and talent, like other sorts of artistry, but as a checklist of arbitrary features. One student said he'd been taught to read a poem as a combine harvests a field of wheat, processing it for its crop of alliteration, imagery and so on. A key indication is that few English graduates understand rhythm and meter, which are absolutely intrinsic to poetry but not amenable to 'technique spotting'. KS4 [Key Stage 4] learning materials seldom if ever attempt to teach metrical analysis.

A recent OFSTED [UK schools inspectorate] report, 'Poetry in Schools', assessed poetry teaching as 'satisfactory' across all schools surveyed, but pointed out that it tended to be worse than other areas of

English provision, and said that 'many teachers, especially in the primary schools, did not know enough about poetry'. Only eight out of eighty-six had 'outstanding' poetry programmes. The worst teachers used 'didactic' approaches orientated towards tests and exams, while the best introduced a wide range of poems and adopted 'active' teaching approaches. A blend of creative writing and analysis was recommended for maximum benefit.

The situation in HEIs is also troubling:

- ⇒ Professor Overton (Loughborough) published the results of a survey of the teaching of versification in 'English' vol.57, no.2019 (2008), pp.266-82. He found there was 'a widely shared belief among higher education teachers that knowledge of prosody is important, and an equally widely shared perception that most students entrée higher education without it', and concluded that 'many remain functionally illiterate as readers of verse' at graduation. It is crucial both to teach the technical terminology of versification in an unintimidating fashion, and to enable students to connect the details of poetic technique with questions of meaning.
- ⇒ Professor Regan (Head of English, Durham) observed the disparity between the increasing public profile of poetry and its attenuation within a literary education, concluding that 'we have to rethink the way that poetry is currently being taught'. (ESC Newsletter 2, August 2001)
- ⇒ Dr D'Agostino (Head of English, Queen Mary's UC) argued that a poem should be 'listened to and appreciated for what it is in its own linguistic terms' rather than immediately being referred to a larger historical or theoretical issue. (ESC Newsletter 5, April 2003)
- ⇒ The English Benchmark says that students should have 'knowledge and understanding of the distinctive character of ... poetry', but as Dr Nicole King (Academic Coordinator, ESC) has pointed out on the ESC website, students are often hostile to poetry, seeing it as "difficult" or alien, and therefore uninteresting'.

The challenge is therefore to develop an exciting and sophisticated application for secondary and tertiary level, using active learning principles to teach poetic form and technique, and to enrich creative writing.

The pedagogical approach adopted for 'Poetiks' is based on the Dr Garrard's ten years of experience teaching a level five (mid-degree) poetry course. Paper or Overhead Projector (OHP) slides are inadequate to represent the complexity and density of techniques and features found in a quality poem, and of course are incapable of generating automatic feedback. Test functions built in to Virtual Learning Environments (VLEs) can provide crude feedback, but cannot be customised by learners, and provide no annotation tools. Interactive whiteboards allow for a degree of annotation, but are not accessible to learners outside the teaching room. While a downloadable application was the original plan, a web-based application would be more easily accessible in schools, where tight control is exercised over downloads.

### **Response**

Using pedagogical research funding, Poetiks has been developed at Bath Spa University, in a collaboration of English and Graphic Communication, to proof of concept stage. The application is now under development with funding from a Learning and Teaching Innovation Grant from the Joint Information Services Committee (JISC). It is an ambitious, scaleable web application that promises to transform teaching, learning and assessment of poetry at secondary and tertiary level.

Users will copy and paste any poem into the application, then analyse and annotate it through a series of translucent, functionally-independent 'layers'. While only one layer will be prominent at any one time, all the layers will be visible as a three-dimensional constellation of highlights and notes at all times, so that – in addition to the insights generated within each layer – the user will be able to see the poem as 'system of systems', in the words of poetic theorist Yuri Tynyanov: semantic, rhythmic, phonemic and other patterns in the poem will be visibly juxtaposed. At the same time, each layer will contribute its own element of functionality and pedagogical feedback: some will carry out complex operations on the poem, while others will act mainly as annotation sites. Users will be able to customise Poetiks by adding and removing layers. The instructor or learner(s) will work up the poem into a unique, richly-annotated palimpsest of readings and responses that can be presented in a lecture, discussed in a seminar, or saved for assessment. Poetiks will also be invaluable for facilitating creative writing workshops, enabling detailed feedback to be efficiently compiled and communicated to the writer.

Ultimately, the layers will be organised under five headings: Sounds, Words, Structures, Contexts, Responses. The final list of layers will be determined by the enthusiastic group of British and North American subject and IT specialists who have agreed to be consulted in the process of Poetiks's development, but the core layers are:

### **Sounds**

- ⇒ Rhythm. Since there are broadly two accepted methods of 'scanning' poetry – Greco-Roman and Modern English – Poetiks provides a functional layer for each. It identifies syllables and fixed stresses, thereby eliminating a common source of errors, and provide feedback on the user's choice of stress pattern. A 'read-back' function allows users to record and review their own performance of the poem, because the first reading of a poem is often correct.
- ⇒ Phonemes. This layer facilitates identification of patterns such as rhyme, alliteration and assonance, and guides the user in the more difficult task of ascribing significance to those they find. Words identified by the user are extracted from the poem for consideration, and a hierarchical list of options for the meaning of the pattern is provided.

### **Words**

- ⇒ Lexis. Oxford University Press has expressed an interest in developing an interface that would allow Poetiks to 'fetch' definitions and etymologies from the OED database.
- ⇒ Clozing. This layer would facilitate the engagement of learners in active consideration of diction.
- ⇒ Semantic cloud. Poetiks might incorporate existing applications that provide concordance analysis of poetic language.

Rhythm and phonemes are conceptualised as the centre of the functionality of Poetiks. Other layers could include imagery, syntax, phonolexis, voice, lineation, sequencing, stanzaic form, rhetoric, emoticons, performance, history, ekphrasis and structures. Poetiks is envisaged as a web application, but would work well on interactive whiteboards.

### **Innovation**

It is quite surprising that nothing like Poetiks exists as yet. Online resources relating to poetry come in five types:

1. Archives of spoken, scanned or plain / hypertext poems, often with substantial historical and contextual material (e.g. World War I Poetry Archive).

2. Workshops on creative writing practices, mainly secondary level (e.g. BECTA studies on podcasts and use of MovieMaker to enhance poetry teaching).
3. 'Electronic poetry' and online magazines.
4. Worksheets on scansion and other techniques posted on university sites.
5. Corpus analysis (e.g. WMatrix, WordSmith) and idea-mapping tools (e.g. Compendium).

Clearly, 1-3 are largely irrelevant to the project proposed. The worksheets cover some of the same material as Poetiks, but are either wholly static or occasionally minimally interactive, e.g. BOLSTER at the University of Virginia, that models and tests scansion with pre-selected poems. The annotation functions proposed for Poetiks are similar to mapping tools; like them, it will appeal to students with a range of learning styles, and will highlight intermediate thinking processes. Corpus analysis, moreover, is a function that should be incorporated within Poetiks: students could then more easily see the patterns of semantic prevalence and relationship in a poem. However, existing tools are quite specialised, requiring pre-marked texts (sometimes in phonetic script), while the mapping tools are merely annotative. None addresses more than a single aspect of textual meaning at once.

The only genuinely functional application related to poetic technique I have discovered online is Charles Hartman's 'Scandroid', which algorithmically determines the rhythmic pattern of any poem pasted in. Professor Hartman has agreed to act in a consultative capacity in the development of Poetiks, although the latter will work quite differently in solving only the problem of word stress in scansion; the learner will have to identify all other stresses. Rather than modelling or completing scansion exercises, Poetiks will eliminate common sources of error, provide advice and support a process of productive iteration. The phonemic pattern, lexical retrieval and automated pedagogical tool functions are all wholly original, although teachers can do clozing and sequencing exercises efficiently using electronic whiteboards.

Besides its distinctive functions, Poetiks is innovative in its use of a sophisticated, multi-dimensional interface that is designed actively to promote a complex, layered sense of poetic meaning. Furthermore, its layering system allows for a multiplicity of approaches, from identification of imagery (enhanced by tags relating to specific senses so learners can distinguish visual, olfactory and other types) to emoticon tagging that would encourage learners to record and reflect upon their emotional reactions to poems – a rare pleasure in some poetry courses. Finally, the flexibility of Poetiks – built around several core functions relating

to poetic technique but capable of being scaled up or down, or having user-defined layers added – will encourage uptake at all levels of education, and thereby ensure sustainability.

### **Challenges**

The central challenge is to design a Graphical User Interface that is appealing to digital native students, but which remains capable of communicating clearly the complex information accumulated by the application. The 'layers' approach is a proven design concept that, combined with tagging, achieves this objective.

The key challenge in terms of functionality is to ensure accurate division of polysyllabic words in their component syllables, and the correct allocation of fixed stresses. Having syllabised the words in the poem, Poetiks tags them as parts of speech (because in some cases homolexes have different stresses according to whether they are nouns or verbs), and then adds fixed stresses algorithmically. Nevertheless, the programme requires an extensive exceptions list to handle the range of spoken and historical English. Finally, the interface allows the student to modify fixed stress in cases where Poetiks makes a mistake, or else the metrical or semantic demands of the poem require departure from the usual stress pattern. Syllabification is also essential for accurate identification of phonemes.

Since the application will be web-based, it will need to be able to save poems that are being worked on by users for later retrieval. It will also need to allow privileged access to poems so that instructors can mark them. If used for assessment, Poetiks will incorporate both a marked-up rich text of the poem, and a synoptic essay saved along with the poem. The reliability of servers will therefore be a key technical requirement.

Finally, Poetiks will invite users to paste in modern poems to work on, and will then store them online. It will be crucial to protect the copyright of the authors and publishers of poems by limiting access to them to the user and instructor alone.

The JISC funded project started in November 2009 and the first functioning public release of Poetiks will be October 2010. It will have been tested by students and experts, and will contain the most important functions described above. At the time of writing (May 2010), most of the core functions have been implemented and early testing has begun, which is helping refine the solutions devised by the researchers.