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So as to demonstrate an other way of reading and writing poetically, this short essay accompanies a notebook for live coding in what is now, arguably, the most prevalent 'development environment' for programmed 'applications' on the planet, the 'stack' of coding frameworks from which the internet's world wide web is built. This is now (as of 2023) the 'web stack' consisting of HTML (version 5), CSS, and JavaScript. A number of sites on the web provide environments for developing applications on the web itself rather than *in* your local computer, but the one where my notebook exists is exemplary, to my mind, because it offers (amongst other things) a site for 'literate programming,' a manner and style of coding, pioneered by none other than Donald Knuth, in which human-readable comments and commentary are integrated with code proper.² The intention of literate programming was and is to blur the distinctions and territorial boundaries between natural language explanations of what a computational project does and the program itself, where the latter must ultimately be composed in a formal 'language' that targets 'interpreters,' 'compilers,' and, finally, the processors which execute its instructions.

Literate programming is still an 'other' of predominant coding practice and discourse and so I feel justified in introducing it here when the underlying motivation of both of my literate programming notebook and this essay itself are oriented otherwise. These motivations are, indeed, literary critical, and only marginally concerned with the technicalities of coding practices and their discourse as such. Chiefly, this essay is concerned with an other, an alternate and an uncommon poetic practice of dissemination, and also with corresponding practices of poetic composition. It is, thus, chiefly concerned with potential 'other' poetries and poetics, in the

¹ The notebook's URL is https://observablehq.com/@shadoof/stsa. My text, essentially, extends to and continues in this notebook. And it should also be understood that I am likely to keep editing and adding to the notebook.

² Donald Ervin Knuth, 'Literate Programming,' in *Literate Programming* (Stanford: Center for the Study of Language and Information, 1992).

sense – to simplify – that, predominantly, poetry has been and is currently composed 'for the page' whereas in our current moment it may also be composed 'for the screen.' This apparently simple statement belies a great deal of poetic and critical nuance and complexity. Some of this will be addressed in this essay, although far from exhaustively. Due to the context of the essay, originating in my presentation for a conference with the title 'Other_Otherness,' I will take the opportunity to highlight 'otherness's (plural, to be clear) associated or networked with my chief concern: poetry composed for and disseminated on the screen.³

An address to otherness implies that there is a situated culture that many of us share, and that we do and make within this culture, and think and feel about it, within formations that are not 'other.' These formations are proper to a provisionally singular 'us.' Our poetry is an art of language, an art that was and is not 'digital,' we might say. Thus, what I call 'digital language art' is *an other poetry*. This is one of the others that I address in this essay, arguing, for example, that as culture is increasingly integrated with a specific geopolitically located regime of computation, poetry itself becomes other than it was and the sense of otherness changes. Digitally mediated poetry seems, sometimes, no longer other. The 'digital' of 'digital language art' becomes proper to poetry itself – perhaps? and, if so, when? – and this 'other' 'digital' language art becomes, simply, 'our' poetry.

Simultaneously, it is important to bear in mind that this change or dissolution of the otherness of 'digital' poetry takes place in a regime of computation that could well have been entirely other, in *an other* (practice and discourse of) *computation*. It could for example have been built on the Sinitic (Chinese, sinographic) system of inscription rather than on our alphabetic system. Or it could, as what I say may help to show, have integrated the otherness of poetry's typographic forms, rather than enjoining us all to adapt to *our* predominant familiarity with literary, documentary prose. And here, we have cited *an other* (genre of) *writing*, poetry as an other of prose.

The computational history in question extends from the late 1980s through our current 'now' and into the future. Throughout this period

³ 'Other_Otherness,' University of Catania, Sept 22-23, 2022, organized with extraordinary generosity and acuity by Salvatore Marano, to whom I am grateful for his kind attention to the work of all the participants.

the 'air' of my title has retained its imaginary. Despite changes of 'air quality,' despite Climate Change proper, despite new, pandemic respiratory disease, we breathe now as we did in the 'then' of 1989, moving through, living in and with, the same – and not, for us, an other – air. Poet-makers – despite our book-loving attraction to the gravity of the leaf, the page, the opening, the open field – still imagine language – vocal, sounding, musical – in the spelt air of our imaginations and in the real.

But by 'spelt' I do intend to conjure up a little of the *how*, predominantly, in the period of which I speak, poetic language was, in its most valued literary milieux, read, literally, from 'the page'. The characteristic performance of poets during this time – despite self-consciously performative interventions, despite the integration of cross-disciplinary practices – has taken the form of 'readings,' and, moreover, these are often chiefly effective as promotional of more or less well-published books and of the experiences these books provide, regardless of any 'out loud' or even 'en plein air' reading. It is physical, printed books which still embody a cultural architecture within which our most significant and affective experiences of language are conceived as taking place – silently, all but airlessly – while also serving as the currency of institutional accreditation and of cultural – less so monetary – reward.

This is an odd situation, but I'm comfortable and accommodated with the undoubtedly integrated aspect of our shared imaginary, that the poetic air is 'spelt.' I have been so accommodated since a good while before 1989 – despite the fact that, recently, my understanding of what language is, ontologically, has become much clearer. It is not letters or orthographic 'spellings' which constitute language as such, not even *literary* language as such. Letters are just the traces of behavior and experience into which your reading breathes a voice, the 'voice' of their substantive ontology, the sayable, the evocalization of their becoming language. And I do not mean that you should be absorbed in hearing any author's voice. I mean that language is, simply, voice, voice shared. This defines 'reading' as a word whose usage, historically and in the behavior and experience of so many

⁴ For an account and understanding – integrated with literary criticism of the highest order – of the way in which the sound of language, its aurality, is essential to all literary language – read and written 'silently' or not – please consult at least these works of Garrett Stewart, *Reading Voices: Literature and the Phonotext*, (Berkeley: University of California Press, 1990); *Book, Text, Medium: Cross-Sectional Reading for a Digital Age*, (Cambridge: Cambridge University Press, 2021).

of us – both illiterate and poetic for millennia – long predates an admittedly predominant usage that refers to the scanning and interpretation of letters.

So much depends on the processes of 'interpretation' in that last sentence, reduced by criticism to hermeneutics, but elevated by poetic practice, I trust, to the art and science of a constitutive human faculty, elevated into our spelt air by all our wildly differing shared voices.

I trust in us to read. And so, I trust in us to spell the air.

In referring to an *other* history of poetic practice, and to the terms of my title like this, I am attempting to situate an other much more specialist and contemporary practice, one which, I have suggested, became possible in the late 1980s. In the developed world, computation became accessible and affordable for practitioners of aesthetic language art. There is a subsequent history of so-called 'electronic writing' or 'electronic literature' that I do not propose to rehearse here. If you care to know what is possible in terms of computationally enhanced support media for literary practice as a whole, I recommend Espen Aarseth's *Cybertext* and then also and especially Markku Eskelinen's *Cybertext poetics*.⁵

The latter is quite comprehensive and extremely well contextualized with respect to literary, poetic, narrative, and other pertinent theory. As Eskelinen all but exhaustively shows us, computation is able to open up vast domains in the support media for traces of language – chiefly typographic but also aural. These domains are constituted by forms of aesthetic language that have characteristics and affordances which may be familiar to us from other phenomena in our world but go far beyond those of printed typography. This is news that you have heard before and my argument is, basically, that it has stayed news but without having received the type of considered attention that leads to changes in practice.

Amongst other reasons for this circumstance, the unbounded phenomenology of reading protects you from any obligation or requirement to explore the potential of these characteristics and affordances. You may be aware, for example, that the phenomenological, secular-spiritual, poetic, communally embodied, performed understanding of 'the book' – as purveyed by Mallarmé, amongst other – is fully capable of satisfying your

⁵ Espen Aarseth, *Cybertext: Perspectives on Ergodic Literature*, (Baltimore and London: Johns Hopkins University Press, 1997); Markku Eskelinen, *Cybertext Poetics: The Critical Landscape of New Media Literary Theory*, (New York: Continuum, 2012).

deepest and most extensive aspirations for poetic practice without your ever needing to digitalize a text, or a library, let alone culture as a whole.

And yet. Culture has been digitalized for you. Every day you 'read' the web. It has not been easily possible for you to subsist comfortably in your human community without digitalization since about 2004. And now well over half of what you read every day is composed by or with the assistance of algorithms.

But I am not writing here now to ask you to 'get with the program.' I am asking why, given these historical facts, certain specific potential characteristics and affordances of typographic and aural practice which are offered to us by computation have not been widely embraced and adopted by poetic practitioners. And to suggest that they might be. The characteristics in question involve representations of spatial and temporal relations within linguistic artifacts. I will not even be discussing aurality directly: not, for example, the composition and presentation of recorded linguistic sound as the substantive, primary manifestation of some such artifacts. I will be confining my remarks here and those in my notebook to potentialities for the time-based presentation of typography and related possibilities for an extended articulation of typographic spatialization.

Typography, of course, always already actualizes spatialization for any traces of language that it embodies or represents. Recalling Henri Bergson for a moment, typography literalizes the rendition of time-as-duration into a regular, spatialized, quantifiable time-as-extent, collapsing rhythms, ambiguities and potential performances of thought and evocalization. Consciously or not, poetic practice works against this extraordinary if naturalized rendition.

We rarely take time to pause and consider what we do for the majority of the time(-as-extent) during which we read. Practices of reading have been constrained by convention and textual accumulation to a regularized encounter with particular forms of typography: prose in paragraphs with lines of more or less regular length usually 'justified' and thus rendered as having 'equal' length. This disturbs our irregular durations of reading-as-experience not at all – so we believe – because the conventions have been internalized, overcome, and rendered 'transparent.' We are able to breathe

⁶ John Cayley, 'The Advent of Aurature and the End of (Electronic) Literature,' in *The Bloomsbury Handbook of Electronic Literature*, ed. Joseph Tabbi (New York and London: Bloomsbury Academic, 2018).

an author's rhythms of composition or linguistic intention back into these paragraphs and lines. We do this, of course, by not only reading the lines and paragraphs, but by simultaneously reading sentences with their potentially elaborate and complex structures and internal punctuation. No wonder the sentence is such an important, beloved entity for so many serious poetic writers. But no amount of deep reading can entirely naturalize or familiarize the extraordinary, substantive phenomenon which occurs when we reach the 'end' of a line of conventional typography. Our eyes scan back (in the west and now globally) from right to left in a materially longer next-word instant that takes us to a 'next' word on the 'next' line as if nothing significant or affective has happened.

I suppose that these particular experiential events of reading may be further considered – approaching them phenomenologically – in a number of ways. On the one hand they may demonstrate to accomplished, enculturated readers (like ourselves) that the contingent particularities of the support media for what we read (language) *do not matter* or do not matter enough to get in the way of the significant and affective experiences of recorded language that we desire to have. On the other hand, we may begin to question the configuration of 'contingency' that that has gifted us with certain of these bizarre, more or less arbitrary conventions that we have rendered and read as 'transparent' to meaning and as more or less invisible to our art of language.

They are not entirely transparent, of course, since long-standing conventions for the scriptural and now usually typographic publication of poetry are different. The line of poetry is a measured, literally, visually delineated line. Its length is usually expressed in terms of quantities that correlate with intrinsically vocal rhythm modulated by other aural linguistic features – such as rhyme – which repeat or recur or resonate in relation to the measured lines of a poem. I am not discounting or disavowing the open field in saying this, or all the throws of typographic dice that poets have explored since Mallarmé and long before. I am focusing instead on certain conventions that have generated naturalized practices of reading, in order to suggest – to begin to make this plain – that poetic artists may challenge unconscious conventions and avail themselves of certain affordances of contemporary typography in screen- and time-based media.

So why? oh why? have poets not insisted on establishing a new poetic institution of time-based, animated typography for screens that were once 'other' and are now ours? Some answers to this question are hinted at above. I will not attempt a definitive answer of my own. (Inertia?

Prejudice?) Instead, I'll take an other approach and, as suggested at the outset, offer up an online notebook to which you may link in an extended time of this expository reading. My hope is that even those amongst my readers who do not (yet) imagine practices of code as integral with those of poetic composition will nonetheless be able to see that the *prosy* otherness of the 'web' and its 'stack' can be quite easily adapted for the composition and appreciation of temporal forms for reading and writing, within the scope of which rhythm and the essential aurality of poetic language is actualized.

Please go to https://observablehq.com/@shadoof/stsa.

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