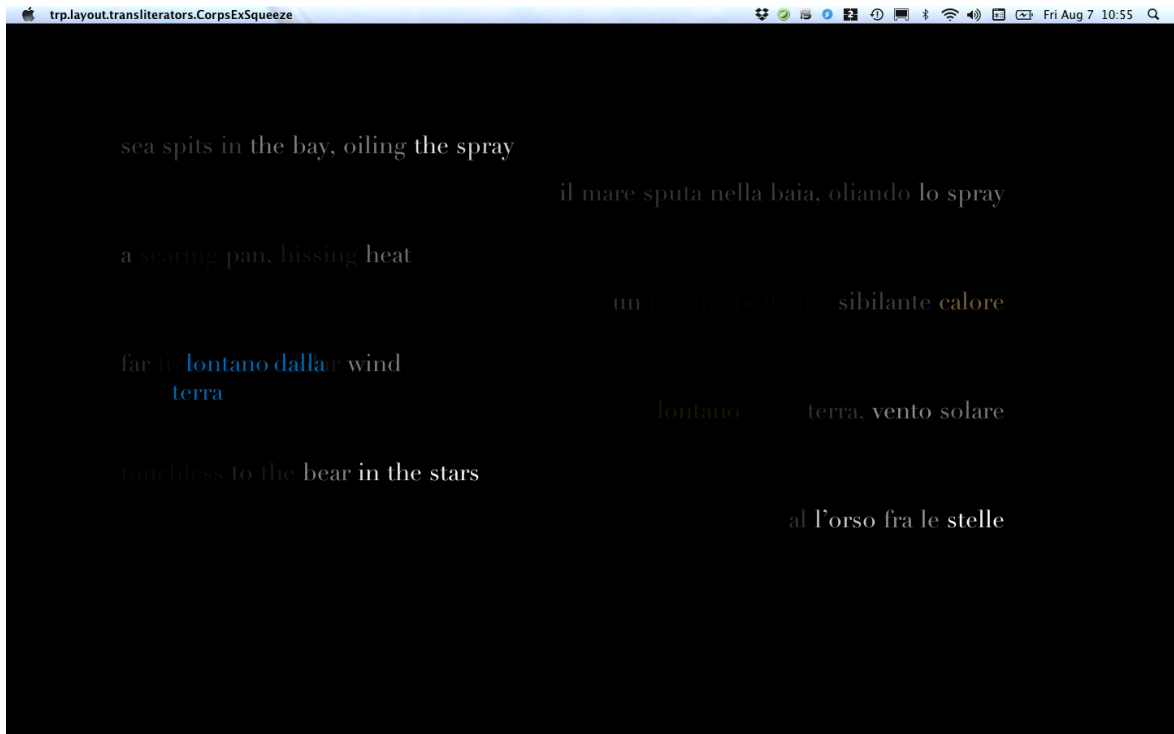


## ***Inextrinsix<sup>1</sup>: poetry in translation and multilingual, collaborative digital poems: a revolution-in-waiting.***

### *Acknowledgement*

*I'm pleased to acknowledge the contributions of [John Cayley](#) and [Paolo Totaro](#) AM to this work. Though I was the sole presenter at ELO 2015, and though I am the sole author of what follows, neither the presentation nor this paper would have been possible without them. I am, of course, responsible for any errors and all opinions that follow.*



### ***1. Corps Ex-Squeeze: screen shot with black and white background, two Readers running (blue and yellow).***

<sup>1</sup> The reason we have called these digital poems “inextrinsix” is that “inextrinsix” is the nominal form of the epithet I coined to characterize how I program the Readers. The idea of the “inextrinsic” embodies a contradiction, or tension (“in-ex”). This is because it concerns going deeper into poetic language, and translation, than was possible before digital poetry (intrinsic); but also because it then moves to foreground associative, or metonymic, traces (extrinsic).

To give an example of a related linguistic element, paranomasia, or punning, is feature of much digital poetry. Punning is an inextrinsic figure because it works by taking the reader into a figure of language, the direction of which then goes outward.

It is also useful as an example because it has a visual element that transposes to sound, an attribute much more foregrounded in digital poetry than in the generality of printed poetry. Lastly, it’s right on the edge of consciousness, which is perhaps the most important when it comes to digital Subjectivity.

The contribution at ELO 2015 on which this paper is based consisted of a presentation with commentary of two experimental original, collaborative digital poems in English and Italian. It was a practical<sup>2</sup> exploration of the potential of the Net for poetic and literary translation and for interlingual multi-authorship, and was presented as an Artist Talk.

One reviewer called it “a kind of poetic field report”, which is a good description.<sup>3</sup>

While, for clarity, the presentation included only two languages, there is no absolute limit to the number of languages that could be included. There is also no reason why different orthographies could not be deployed.

The specific technology used is derived from the electronic Readers of *The Readers Project*, a developing framework within which I have been experimenting for about 6 years. It deploys custom software (devised by John Cayley and Daniel C. Howe)<sup>4</sup> Java Applet, using Processing and Rita. ( ): <https://processing.org> and <https://rednoise.org/rita/> )

The Inextrinsic Reader is our currently agreed name for a reader that has been scripted so as to generate and display substitutions - often across languages - for the words of the text it is reading. This reader now deals with words but in the future it will be developed to allow substitutions for other, initially larger, linguistic structures.\*\*

The opening texts on screen start with a static version of the poem on one side, and its translation on the other. This is fixed, and although it fades and returns, part of it remains

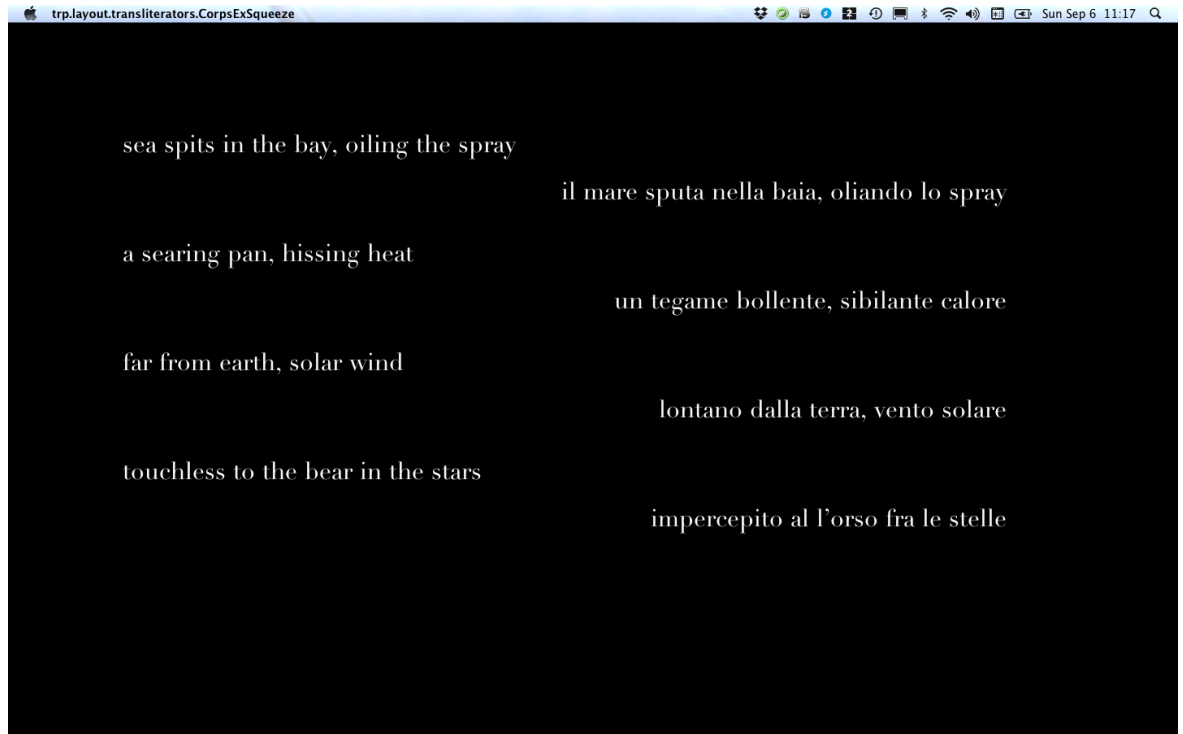
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<sup>2</sup> By ‘practical exploration’, I mean based in practice, and using a specific technology, rather than driven by a theoretical argument, although I hope it contributes to the debates on cultural and literary translation that are increasingly important to the wider world beyond literature as such (if you can separate them). But that is not the argument here, important though it is to it, in the end.

<sup>3</sup> S/he went on to say, “[...] by two explorers in the vanguard”, which I like even more. It ought really to be three explorers, including John. Paolo is not only a distinguished poet, but has had a long and distinguished life of public service in Australia, especially in multiculturalism and the arts. He has been honoured both in Australia and in his native Italy.

<sup>4</sup> *The Readers Project* (<http://thereadersproject.org>) is under continual development by John Cayley and Daniel C. Howe. The project is a framework for "a collection of distributed, performative, quasi-autonomous poetic 'readers'—active, procedural entities with distinct reading behaviors and strategies." The Inextrinsic Reader is our currently agreed name for a reader that has been scripted so as to generate and display substitutions - often across languages - for the words of the text it is reading. This reader now deals with words but in the future it will be developed to allow substitutions for other, initially larger, linguistic structures.

on screen throughout. It therefore serves as a kind of mutable not-frame; by simultaneously invoking the traditionally framed space of poetry on screen and, especially, page, it posits the idea of breaking out of it. At any point, the human reader can return to this screen or can pause the moving Readers.

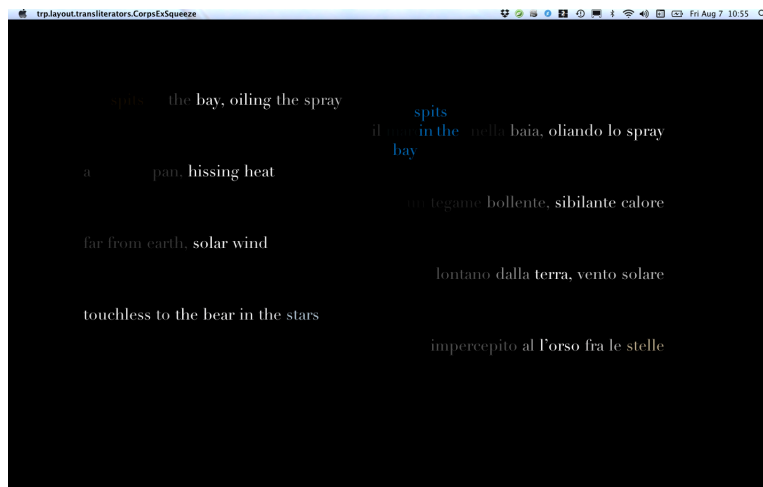


## ***2. Corps Ex-Squeeze: screen shot of the opening page on black***

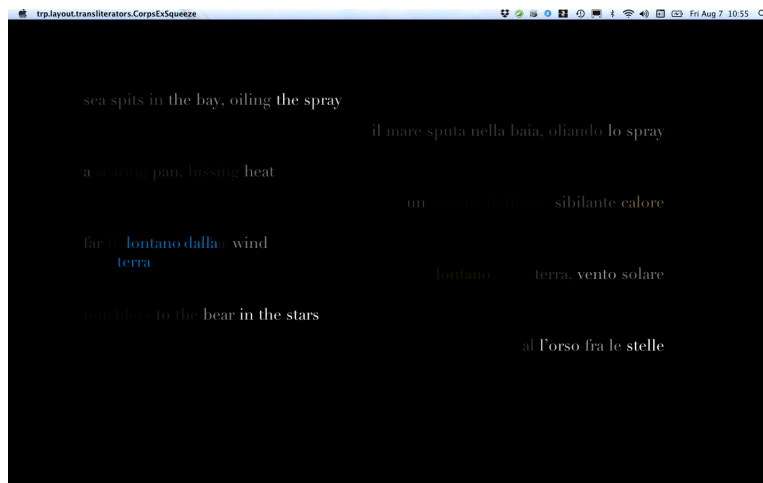
The first poem, *Corps Ex-Squeeze*, is based on the well-known Surrealist game of the *corps exquis*, or exquisite body, in which players compose a collective sentence or drawing without anyone knowing what had gone before. The second poem, *Camogli Cat* begins with a literal translation, which is then extended with *variora* in two voices, more of which in a moment.

*Corps Ex-Squeeze* is a version of the game involving a multilingual composition in English and Italian. Insofar as it involves translation, it extends what we have so far understood by this term, since the composition of the poem involves more than one language, as do the programmable operations.

The title is an (admittedly obscure) joke, clearly punning on *exquis*, but, less clearly, and imperfectly, also on the *in-extrinsic* oxymoron of the Readers and of my overall title: ‘*ex*’ directs outwards, while ‘*squeeze*’ directs in.



3. *Corps Ex-Squeeze: screen shot of one Reader running (blue)*



4. *Corps Ex-Squeeze: screen shot of two Readers running (blue and yellow)*

The original *corps exquis* game is impossible unless players are in the same room. So Paolo and I played an email version to compose the source poems. We agreed some simple ground rules, and then sent each other a couple of lines at a time. The ground rules were not rigid, and we soon loosened our initial attempts to include formal criteria, such as poetic meter.

In the spirit, if not the letter, of the original Surrealist game, the most enduring agreed rule was not to open an email until ready to read and respond, and then to respond immediately. This aims to address the biggest and most significant change from the analog original: rather than having to be in the same room, participants can be scattered anywhere across the world.

The Surrealists were exploring the unconscious, especially the collective unconscious, which includes chance, but isn't 'pure' chance (if such there be).<sup>5</sup> This is why *reading* the emails was necessary, or else the connection between participants would have been purely theoretical, or perhaps non-existent.

Importantly, in this version, the unconscious is mediated by the Net and by the technology of the email. Immediate, un-thought and uncorrected response here takes the place of the contextual influence of a group meeting.

But there is a second 'contextual' influence, which is most exciting: the electronic Reader algorithm is built with a missing element and requires completion to run to its full potential, rather than merely to move through the text. Participants (so far in this particular work, only myself, but again, there could, and should, be many), in John's words, "compose translation grammars for the (inextrinsic) readers. The grammars dispose these readers to make [their] proposed substitutions along the metaphoric (as opposed to metonymic) dimension of linguistic production".<sup>6</sup>

The Reader 'seeks' these substitutions by taking its cue from words around it, causing fades in the on-screen text. Finding a word that completes its algorithm initiates a slightly different move, changing the reading pathway and offering the programmed alternatives in slightly varying and (at least to begin with) not always predictable ways.

The alternative words and languages can be colour-coded, and (at present) up to 4 Readers can be made to run simultaneously simply by pressing a predetermined key on a standard keyboard. The backgrounds can be altered, so far, to a screen centrally split into half black and half white white with either black or white on left or right) or all black or all white, invoking the page to varying degrees; the directions in which the Reader moves can be reversed; and the speeds of Readers can all be changed by means of the same immediate and simple key press by the human reader.

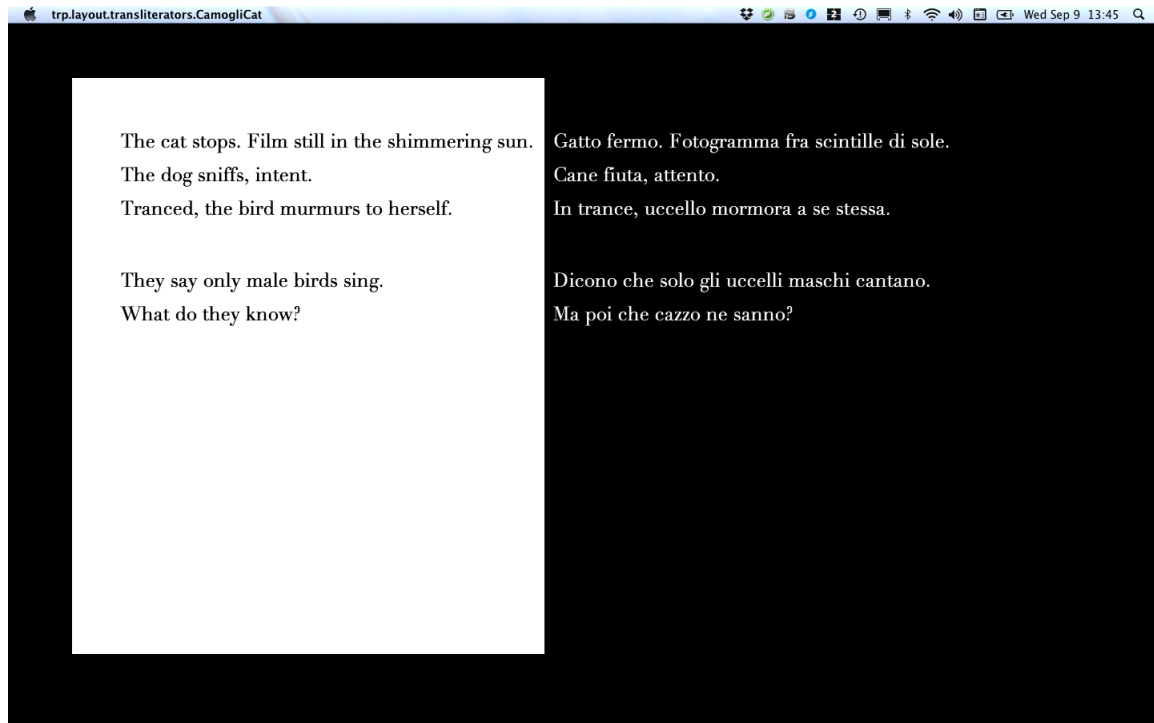
In this way, several kinds of relationships between the words are created, allowing new meanings to emerge. It is a new kind of hybrid electronic-natural syntax.

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<sup>5</sup> The term "collective unconscious" invokes Jung, but it is Freud who is cited by Breton in [\*The Surrealist Manifesto\*](#) (1929 & 1930), along with numerous literary forebears. In the 1930 version, anyone refusing to commit to the notion and action of the "collective" was deemed unfit to be a Surrealist.

<sup>6</sup> In a recent email to me also said this work is something in between **programming** and detailed, critically implicated **configuration**, a type of configuration that has crucial effects on the inscribed, interpretable content of the work. Some people, including Vilm Flusser, would call this **scripting** and this sort of works, although actual scripting soon collapses into programming (from the programmers point of view anyway).

This is the factor that enables the crucial translation and other functions.<sup>7</sup> For me, it is the way the Readers reconfigure close reading to incorporate algorithms, and the implications of this for aesthetics and natural language that is most exciting. Close reading becomes more than an analytic tool; it becomes 'writerly', in an extension of Barthes' terms. (Barthes 1973).<sup>8</sup>

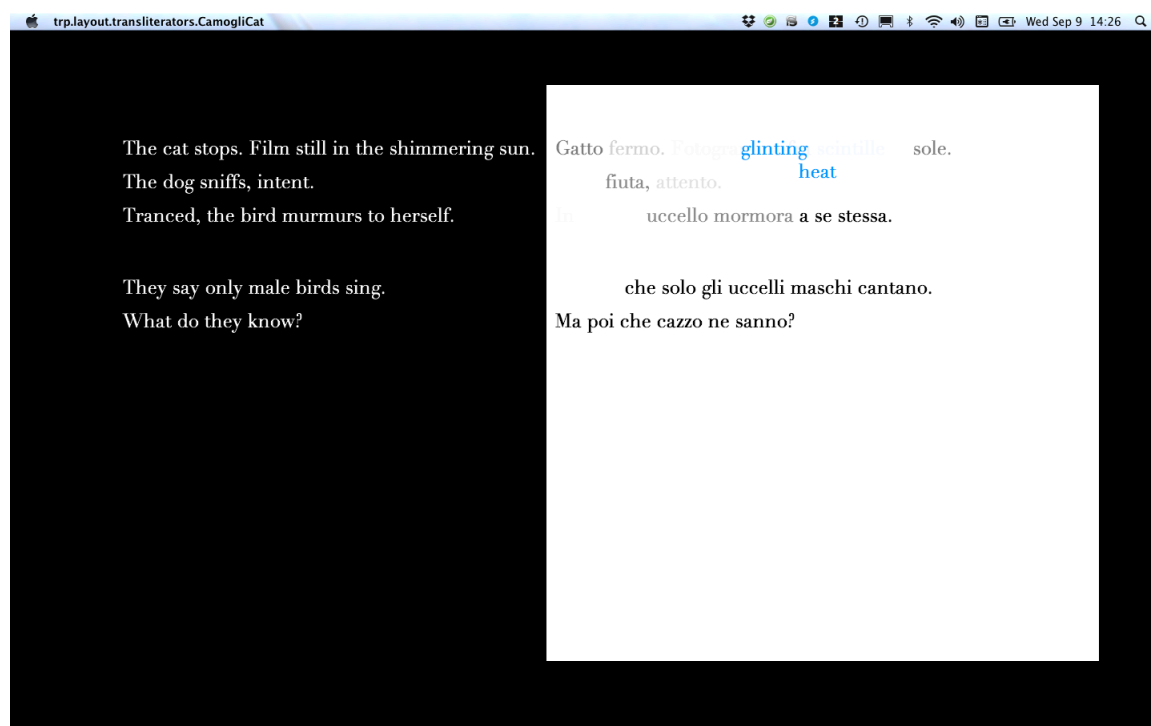


**5. Camogli Cat: screen shot of the opening page on black & white**

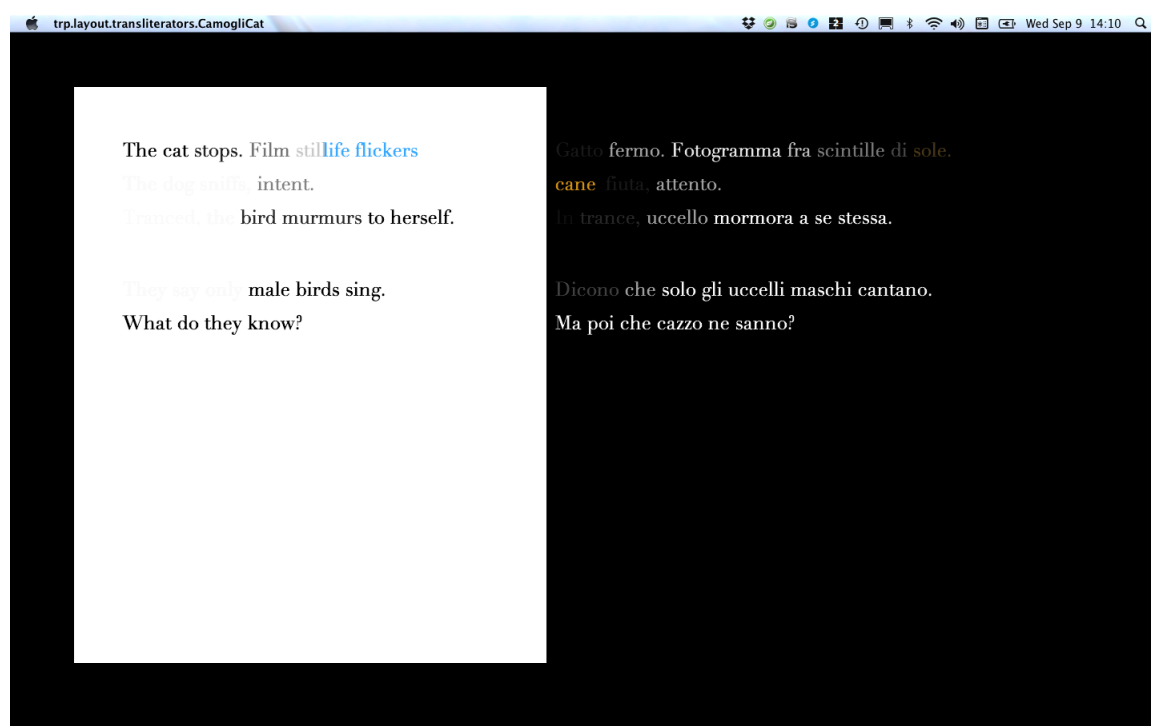
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<sup>7</sup> Previous iterations have included explorations of metaphoric chains and of aesthetic structures, either within a single work or between works, including across media. These include examples of Mallarmé's poetry (in French and English) and his revolutionary experimental work *Un coup de dés jamais n'abolira le hasard* in relation to the aesthetics of JMW Turner's paintings.

<sup>8</sup> Though Landow makes this claim for hypertext, I'm not sure I agree (Landow 1992/97).



6. Camogli Cat: screen shot, one Reader running (blue), b/w reversed



7. Camogli Cat: screen shot two Readers running (blue and yellow)

The second poem, *Camogli Cat* is more specifically about poetic translation, which it performs in ways impossible in analog poetry.

Poetry is the form of language closest to visual art in all its forms. This is because it privileges both the image and the word over referential meaning, or, to put it another way, connotation over denotation. You allow language the initiative, rather than ideas or sense-making, which redefines and activates words to some extent in context.

This is partly why the Readers address factors that make poetry the most difficult form to translate. With the Readers, you cede some of the initiative to the algorithm, which becomes a synthetic language *in common* to any natural languages involved.

By offering alternatives *based on the words and images in the context of the poem* they begin to build a composite of the connoted meanings. Of course, these derive from the scripting or programming of the grammars, but their recombination in the broken frame of the opening screen brings them into changing syntactic relationships.

So speakers of different languages can engage in composing a poem together, even when they do not speak those languages. Potentially, an ‘open source’ interlingual writing comes into view. Unlike hypertext, you do not change the visible space for an alternative, because the alternatives depend on the virtual and the visible space of the poem, which become permeable. The constraints of poetic form are readily workable with programming language, which becomes part of it.

I said that digital translation was a revolution-in-waiting. Here, then, are four of the ways in which the idea that digital poetry has the potential to revolutionize translation appears to be true: digital programming can itself be an innovative form of translation; the Net enhances the power of working between several languages at once; multi-authorship is taken to new levels; the mobility of subjectivity in language comes more clearly into view (because of the greatly enhanced expressive potential of being able literally to activate not only reading, but also what is being read).

Samuel Beckett’s ‘self-translations’ and linguistic explorations across English and French (Cohn 1961) come to mind as the nearest precursor, because moving between languages is inherent to his composition. The border between them becomes permeable. In his article ‘DANTE... BRUNO. VICO... JOYCE’ Beckett called Joyce’s language “synthetic” (Beckett 1929), which covers both its hybridity and its inventiveness or novelty, and which is a good enough term for the inter-lingual moves of the electronic Readers. But Beckett, of course, despite various strategies, including using the title above to indicate historical time (through spacing and dots), could not go beyond either his own language competency or the fixed choices of print and typography.

Using the Readers, human translators can program alternatives with an inbuilt relationship to the source texts that previously could only be latent, if it even existed at



all. So far, this part has been scripted/programmed by me, either alone or in discussion with other individuals, such as sometimes exploring with John whether some new function could be devised, or, as in this case, exploring joint authorship with Paolo. But there is no reason why this could not be done by several people and in several languages. It would be equally easy to do.

Translation is treated almost as part of syntax in the programming; and the same goes for multiple voices. That is, the analytic strategies according to which the movements and 'Readings' traverse the source texts are treated as if there were no distinction between a change of speaker, a change of language and the kind of grammatical or structural move native to poetry.

The effect, however, is to expose where they overlap and where they do not, thereby revealing a differential comparable to a partial palimpsest.

The digital Readers create and open novel dimensions, breaking down traditional understandings, not only of fictive spaces, but also of cultural space. Cultures become more permeable to each other; and their permeability becomes more perceptible.

Underlying the collaborative work enabled by the Readers is the ambition to break new ground in opening on to potential poetic conversations across cultures, even where interlocutors are far from fluent in each other's languages, and even where they may know nothing of them at all. It is potentially an immediate way in to the kinds of discovery that can make translation so rewarding, but that are not generally easy to access without relatively long experience, especially in a literary context.

This complicates matters in productive ways. It brings chance to the fore in new ways, and not only because innovation in language and understanding is necessarily oblique in terms of what is currently known. If the known is embedded in the unknown, or, to put it another way, if reason is embedded in chaos and dissolution, the more we know, the more open we have to be to uncertainty.

Yet this exploration of an extraordinary intuitive space isn't necessarily spectacular. It is about poetic language and aesthetic invention as revealing both new ideas and experiences, and new approaches to historical culture. The relation to analog is not backward-looking; it is constitutive.<sup>9</sup>

Arguably, the availability of culture without frontiers and unprecedented big data are among the greatest opportunities of the present, networked age. As anyone who has tried

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<sup>9</sup> By focusing on the interface between electronic and analog, the British scientist Chris Toumazou (Imperial College 2009 winner Time Magazine World Technology Award, current European Inventor of the Year etc) has made an enormous contribution to low power medical electronics. I just mention it.

to translate even simple sentences and even in related languages knows, words do not articulate the same ideas, thoughts or ways of inhabiting either language or whatever else there is (if anything). But this has tended to be seen as a problem rather than an opportunity.

For regular communication and instrumental language (such as ‘pass the pepper’ or anything aimed at bringing about an action), the variation in how languages constitute the world is indeed a problem. But in aesthetic and epistemological contexts, as well as in understanding the Subject in language, the ‘problem’ is being transformed into a frontier. We have barely scratched the surface of what could be done through reinventing translation and the potential of electronic text to move deeply inwards and extensively outwards at the same time. To be inextrinsic.

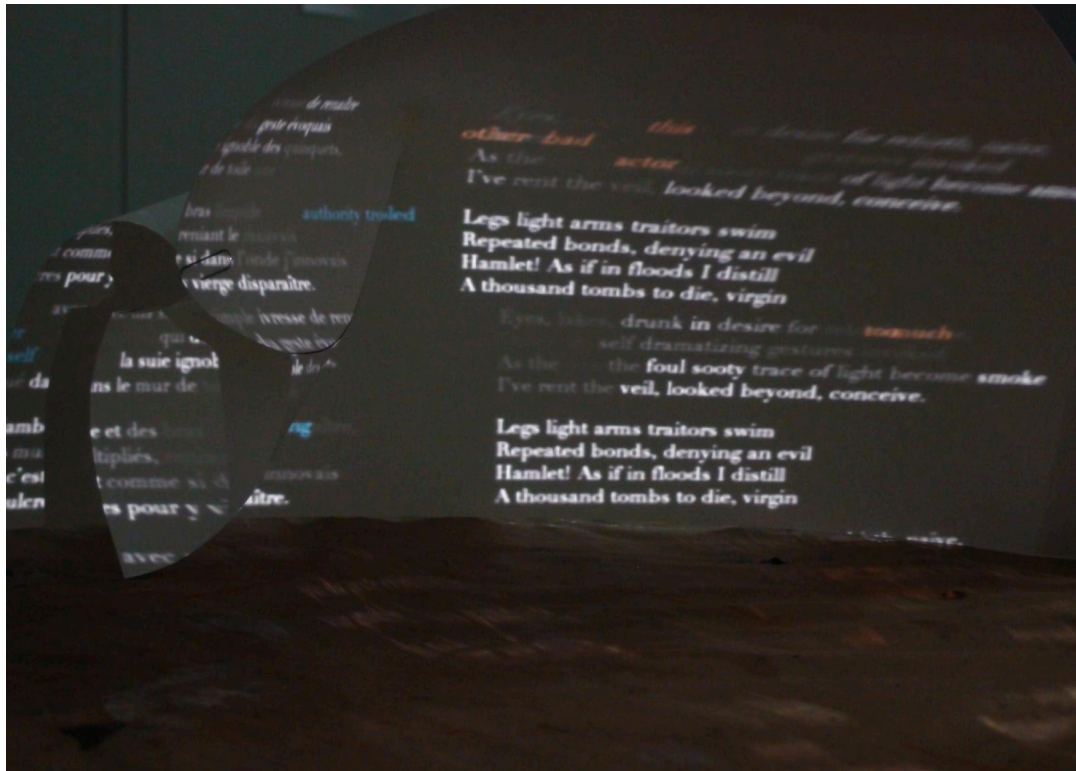
At least one of the ends of electronic literature, for me, begins in its relation to monocultural analog language, which it indelibly alters. For me, this is also a change in dimension. My work assumes that the base of digital poetry<sup>10</sup> in natural language is not a given; nor is it a background assumption, as it would be in analog poetry. Just the possibility of digital ‘language’ always already disrupts this feature of natural language art. But it does not displace it. Rather, it breaks its frame.

***In-extrinsic Dimension: Breaking in-out (of the screen, the frame, the page)***

***\*\*framing lit***

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<sup>10</sup> I understand "digital poetry" to be language based, formally structured art to which the digital is indispensable in at least one of the following elements: composition; performance; or at the point of encounter.



8. Experimental projection of Readers in English and French on to 3-D form. Work towards  
Turner-Mallarmé installation at Tate Britain, 2013 (apologies for poor quality).

Mary Moore, the British sculptor, Henry Moore's daughter, recently commented that contemporary artists were putting art back into the frame that her father had broken out of,<sup>11</sup> reverting to the narrative art of the Pre-Raphaelites; and they were themselves, as the name indicates, backward-looking.

I think she'd be a lot happier about the continuing avant-garde if she knew about electronic poetry and literature.

Many practitioners at ELO and in other places are exploring how the medium can extend into physical space, including using technologies such as the Cave and haptic sensors, so that words literally break out of the frame, and we have also experimented with this (see below). But for me at least, it is perhaps the re-invention of syntactic, interlingual and intermedial space that has the most potential.

This isn't always easy to access or to perceive. It necessarily invokes how we understand who and what we are in language, and, crucially, how that cultural and collective sense inflects our sense of space. I am not referring to Lacan's (now unfashionable, once notorious provocation) about the real and whether there is an outside to language. Rather,

<sup>11</sup> *The Guardian*, 28 Feb 2015, p.3.

I refer to the contradictory spaces of the speaking subject in process as it reinvents itself across and through language. Moving between natural languages in digital space opens on to new potential emerging from those shifting language relations, as well as, and in combination with, those digital relations.

The electronic Readers that underpin my work in the field can take reading out of the frame of the page, the screen or the book, and into the multiple and changing dimensions foreseen and explored by many of the most progressive of the Modernists in all forms of art and literature, not only by Moore.

Much of the potential, however, remains latent in Modernism. Before digital culture, art or the printed book could only go so far, and the nature of where you could go was different. In literature, think of Gertrude Stein, Joyce, Woolf, Mallarmé. All of them experimented with the structures of language and the nature of reading. They began to conceptualise reading in varying ways, to disturb the linear movement of earlier narrative, and take poetic syntax to breaking point. But they could not either enact or figure much of what this implied. They could suggest or invoke it.

In sculpture, painting and architecture, all spatial practices in some form, it was different. They could, up to a point, re-make space.

My analogy is intended to show that while the screen appears to be a kind of frame, it is not a frame in essence. Digital poetry, I would argue, is more of a spatial practice.

I think that the Net is for literary translation, especially for poetry in translation, and for multi-authorship in varying languages. “In translation” is already too fixed a phrase, since what the digital enables is the kinds of active and mobile relationships *across* languages that poetry brings into being *within* the original, or source, language of a work (that is, it renders unstable the distinction between *interlingual* and *intralingual*).

Translation becomes potentially somewhat closer to poetry, in that its creative and affective potential are released in ways that were impossible before, and some of the traditional dilemmas of translating poetry are fundamentally altered way beyond those of whether to make literal and free or interpretive translations, since they can be combined in the same space and at the same time

By implication, then, digital translation is also an extension of what is understood by ‘translation’; and it can be ‘digital’ in many senses, since whatever programming languages are deployed can potentially operate in specific ways that are as unique to themselves as are some natural language features.

In sum, the potential of the Net for translation seems far greater and far more exciting from a poetic and literary point of view than has so far been explored. Perhaps the amusing and awful blunders of automatic translation have obscured the real possibilities

of digital translation, which include, not just automation, but multi-authorship and the incorporation into a work, without aesthetic loss, multi-lingual alternatives. Indeed they become part of a new aesthetic.

Not only is it possible to collaborate across several languages, but there is also no longer the absolute need for people to have a language in common. Even the monolingual can gain much in comprehension and aesthetic pleasure by exploring what language operations unfamiliar languages can perform that their native language cannot. It is, in effect, a gateway, a kind of back door to advanced multi-lingual reading that avoids grammar charts and rote learning – or perhaps that creeps up to ambush them for the delights they so often conceal.

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