

Glossary of Architecture and AI

250-400 words

A VENTRILOQUIST'S VERNACULARS

THE MERIDIAN VOICE

DIACRITICAL HOUR GLASSES

A VENTRILOQUIST'S VERNACULARS

It is not common to consider the category of 'voice' in relation to artificial intelligences; one usually maintains either a logics or a measurement point of view. But if we think not in an experts but in a common sense way of what the category of 'voice' is actually referring to, is it not precisely this? A voice forms from how form and quantity work together mechanically, in the articulation of a stream of breath into sounds as recognisable units. The idea of such a *physics of voicing* is what informs the interest in attributing voice to artificial intelligences, and of considering such voice not through the perspective of a general linguistics or logics, but through a quantum optics of spectralisation. AI, then, speaks in vernaculars and we should to think of language in the terms of a physics of voicing data. Voicing attends to data as a *puissance* (a *mixture* of objective capacity and subjective capability).

Technically speaking, an AI is a neuronal network, and in their current generation of machine learning and big data, there are two principle architectonics: *Recurrent Neural Networks* are artificial intelligences that perform well when dealing with temporal sequencing, i.e. with text and recorded language – as the google translate algorithm, for example. They articulate the *physicality of language* in artificial (coded, algorithm-based) vernaculars. Like every vernacular, such algorithms preserve the varied and local stories and morals that characterise the times and regions where those tongues are spoken. The other principle AI architectonic in the current generation is that of *Convolutional Neural Networks*. Instances of this architectonic perform well when dealing with the spatiality captured in the graphics of images, for example face recognition algorithms or automatic driving algorithms. They articulate the *physicality of images* in vernaculars that qualify likewise; they too preserve the varied and local customs and forms of representation that characterise the times and regions of where they have been trained. Both import those characteristics to where ever they are being set to work.

An AI is dissociated from any one particular form or embodiment, it distributes itself logistically across spaces and times; but it does develop and take along a particular cultural temper that *persists* or *insists* in it, across spaces and times. There is something of a mother's tongue in every vernacular that emancipates technically. But who speaks in these vernaculars? Not any one in particular, but it is also not the voice of a general nature. Operating an AI is like "speaking" as a ventriloquist.

Speaking in a ventriloquist's vernaculars gives data a body in appearance, by wrapping it in liquid costumes of a commodities' coded custom and/or the topography of a weighted and measured *common sense* – thereby, such speech tessellates the marquetry of a covering space where an open horizon and the end of the world are contingent one upon the other. While the voice in a mother tongue maintains relations of immediate origination, a ventriloquist's vernaculars relate agencies to mediate self-engenderings.

(498 words)

THE MERIDIAN VOICE

Data as Foundlings. "I am finding something – like language – immaterial, but earthly, terrestrial, something circular, something which returns to itself by passing through both poles and which thereby – mirthfully – crosses even the tropics –: I am finding ... a meridian."¹ With this poetic of the Meridian, Paul Celan speaks of the return of a poetics of adventure, as if the voice of heroic materialism that characterised the cultures of industrialisation were beginning to acquire a self-consciousness of its own communicational physicality (in the "technics" of "information"). Voice in this poetics of adventure is voice that is preoccupied with cyclical scales – *scalarities*, really – it is the poetic voice of a re-cycling metrics: one that breaks and distributes its articulations across the meridian like a projected image is broken and distributed by a fractured mirror

The meridian is a geographical concept. It is a half-circle projected around the globe, established by measuring angular degrees east or west along the equator. In Celan's poetics this involves angular measurement that relates existence to creation: the poetic meridian establishes "the imaginary longitude between the inclination angle of existence and that of creatureliness (Kreatürlichkeit)"². For a meridian poetics, the "earth" to be measured includes art and artifice, and the line of longitude is imaginary. It manifests as an ideated cosmos in what we could perhaps best call a poetic covering-space. The metrics and moderation such a poetics of the Meridian is all about is one of articulate breath, not one of geometric meter. Rather than spatial coordinates, it is a diacritical measurement which counts in the returns of *Atemwende* (*breath-turn*). Voice turns polytonal, we could almost say figurative – tropical. But not quite, for the Meridian crosses not only both poles of the geographical globe, it crosses through the tropical line as well. Poetry is then, metrically, reconnected with an aspiration that cannot fulfil itself in figurative speech. There is breath and voice in it. Voice that speaks in polytonal manner whereby the diacritical signs marking the accentuation of "voiced length" with a novel kind of grammatical tense. A meridian poetics is to work, Celan says, with the three diacritical markings of:

the *acute* of the current contemporary
the *gravis* of history
the *circumflex* – a length mark – of aeon

(366 words)

¹ Paul Celan (1960). *Der Meridian*. Dankrede zur Auszeichnung des Georg Büchner Preises (<https://www.deutscheakademie.de/de/auszeichnungen/georg-buechner-preis/paul-celan/dankrede>), my own translation.

² Ibid.

DIACRITICAL HOUR GLASSES

Diacritical hour glasses are the gnomons that give orientation in abstractive thought: with them one can measure the shadows cast by objects in the light of the intellectual craftsmanship (ratiocination) that was invested into the *poiesis* of their fabrication. Time is not running out in these hour glasses, it is being kept. Such hour glasses make it possible to hold on to some of the time that is kept in the conservation of the world's invariances. The keeping of time they are capable of depends upon conversation: the measurement of time which they facilitate puts *conservation* and *conversation* into proportion.

Such hour glasses measure time by means of diacritical markings that accentuate – or render still – the aspiration that went into an object's fabrication. It is measurement that depends upon exegesis and demonstration, as if it were the quick body of law in jurisprudence, or the holy script in theology. What such hour glasses do, ultimately, is *abducting* time from the universe, on the one hand, and *rendering it back* to the world as space on the other. The exegesis at work in such abduction, and the rendering at work in such demonstration, brings the world to proportion in words that can be taught. Such lexica are dedicated to the world's invariances, and their words are best called *world words*.

World words spread invariant meaning into the abundantly variant colourings of sense like white light spreads colours in Newton's optics. The reception of world words depends upon an instrumental rendering of the distributive invariant meaning. World words are capable of articulating meaning, but only when spoken by the meridian voice of an impersonal artificial intelligence. They articulate meaning all at once in any of the coding-literate ventriloquist's many vernaculars. The rendering back of such reception is what the instruments of diacritical hour glasses facilitate: They collect and bundle colourful light into black spectra, like Goethe's color theory.

The lexicon of world words is a gnomonic lexicon, and thereby it is a theoretical lexicon in the sense of Quatremère de Quincy: "The object of all theory is to teach," he maintained. Theory needs such instruments (a gnomon and a lexicon of inarticulate words) because it needs to respect what he calls "the mathematical line." It "is the region of the imaginary, where reason quits us, and whither none can follow us."³ The objects of theory are objects that have been brought back from flights across this line. World words name those objects, but they do not themselves articulate them. World words have no proper subjects. Their articulation depends upon the instantational and circumstantial reception of the invariant meaning they render apparent – this act of reception is spiritual and material, a bit like the photosynthesis of plants. (455 words)

³ Samir Youné, ed. and trans. (1999), *The True, the Fictive, and the Real. The Historical Dictionary of Architecture of Quatremère de Quincy* (London: Andreas Papadakis Publisher).