The Virtual Sentence:
A Book of Exercises

Exercises by

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Introduction
Jeff Dolven

There is no shortage of actual sentences. They are the basic unit of linguistic exchange, even in a time of tweets and text messages; the internet is made of them, as much as it is of images. There are reasons, however, to suspect some depopulation of the space of the virtual sentence.

"Virtual sentence." The phrase is indebted to Gilles Deleuze, who uses "virtual" to name a reality that is neither actual (already here), nor potential (not yet). Said of the sentence, "virtual" points to the articulate alternatives that surround what gets spoken out loud or committed to ink and pixel. Not the total space of linguistic possibility—what Saussure calls *langue*, in contrast with the specific utterance of *parole*. Nor the particulars of what you might have said, considered afterward in a spirit of regret, or relief. Rather, what you might be saying, even as you say what you actually say, and what you might be hearing, even as you hear what you actually hear. A *might* that is not before or after but simultaneous with *is*, surrounding the *is* and making it meaningful. The virtual sentence inhabits a space defined by a kind of immanent syntactic and lexical alterity. What might be otherwise is already there.

There is a familiar story often told about how public discourse—in newspapers, for example, or political oratory—uses simpler syntax and narrower vocabulary these days than it did however many years ago. Be that as it may, the real danger to the space of the virtual sentence is the accelerating aptitude of text-prediction algorithms. In text messages and email, Google and Apple volunteer to finish your sentences for you. Google's Gmail (used by a billion and a half people) allows you to toggle a switch so that "Smart Compose is personalized to your writing style." Gmail knows your style because it has read every email you have written, and also what everyone else has written, and it is quicker to propose what you want to say than your own wants are.

As of this writing, Gmail restrains itself to pointing a few words ahead. Open AI's series of large-scale, unsupervised language models—GPT-2, GPT-3, and now GPT-4—reach much further into the writer's future. The immediate future is their immediate business, trained as they are to predict the next word in a series, based on previous words. But the accumulation of those local wagers can produce hours of work in the blink of an eye. You sit down and type the first sentence of your report, your essay, your poem into the ChatGPT interface, and tip back in your task chair to watch it write what you had intended to write. You might have to tweak a word here and there, like you jog the wheel of a Tesla. But it is pretty much exactly what you wanted, is it not? Exactly what was wanted? Is wanted? Will be wanted? Even better: Imagine having the text already waiting for you when you sit down. Imagine not having to sit down. Or get up. Imagine not even imagining.

ChatGPT itself has a hard time recognizing this diagnosis. If you ask it about the "virtual sentence," it gives you prompts for starting a virtual conversation:

"You could say something like, 'How are you doing today?'" If you go on to explain the concept more or less as I have done here, it ventures that you are talking about "'metacommunication,' which is when you communicate information about your communication itself." No? Then maybe it is "the concept of 'implicature,' which is a type of meaning that is conveyed indirectly by what is said." Or perhaps "'felicity conditions,' which are the conditions that must be met in order for a particular speech act … to be considered appropriate or effective in a given context." Keep pressing and it will get around to "the idea of 'prediction' or 'anticipation' in language comprehension." But for a large language model—and more to the point, for most users querying it—there are no other words next to the next word, at least not on the vertical axis of unspoken possibility. You've already got what you asked for.

That other word, and the sentences that branch from it, are our business here. The little book you have in hand is meant as a renewed stimulus to the human faculty of linguistic prediction. It consists of a series of exercises to provoke exploration, and expansion, of the space of the virtual sentence. It is published as a binder so that we can keep adding exercises: it is both a book and a subscription, since we do not expect the need of it to go away. The values in its pages are variety and self-surprise, and the genre of the exercise—a miniature ritual of permutation and invention—is meant to generate rather than to stipulate. The first five exercises were set for the audience at a panel and practicum on 17 January 2020, at Cabinet's space in Berlin. The original five panelists were Brian Dillon, Jan Mieszkowski, Sally O'Reilly, Elena Vogman, and me; we are joined here by Kyle Booten, D. Graham Burnett, and Mónica de la Torre, with others to come.

Our premise is that listening is more like talking, and reading more like writing, than we ordinarily allow. We reach out to predict what we will hear as we hear it and what we will say as we say it. Those predictions branch into the virtual even as they converge on the actual. Alertness expands that virtual space, alertness not only to linguistic variety, but also to ethical and political alternatives. It is where you can find the sentences no one expected. The business of the markets and the major political parties is to slip into that space ahead of you, and provide you with what you already think. The efficiency is obvious, and so this book, in its playful proliferations, is advisedly inefficient. The sentence offers us a local, moment-to-moment praxis for the work of holding the world open—not in the tragic, counterfactual subjunctive of the might-have-been, but as a model system, in a grammar everybody already knows, for the alternatives that ride just alongside the actual. You will find some space inside this book, opposite the exercises, for writing the sentences they inspire, and you will find infinite space outside it.

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He is the author or editor of a number of
books, including, recently, *Scenes of Attention:
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(Columbia University Press, 2023; co-edited
with Justin E. H. Smith) and *Twelve Theses
on Attention* (Princeton University Press,
2022; co-edited with Stevie Knauss), a text
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Burnett was a visiting artist at the Academy
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Kyle Booten

Exercise
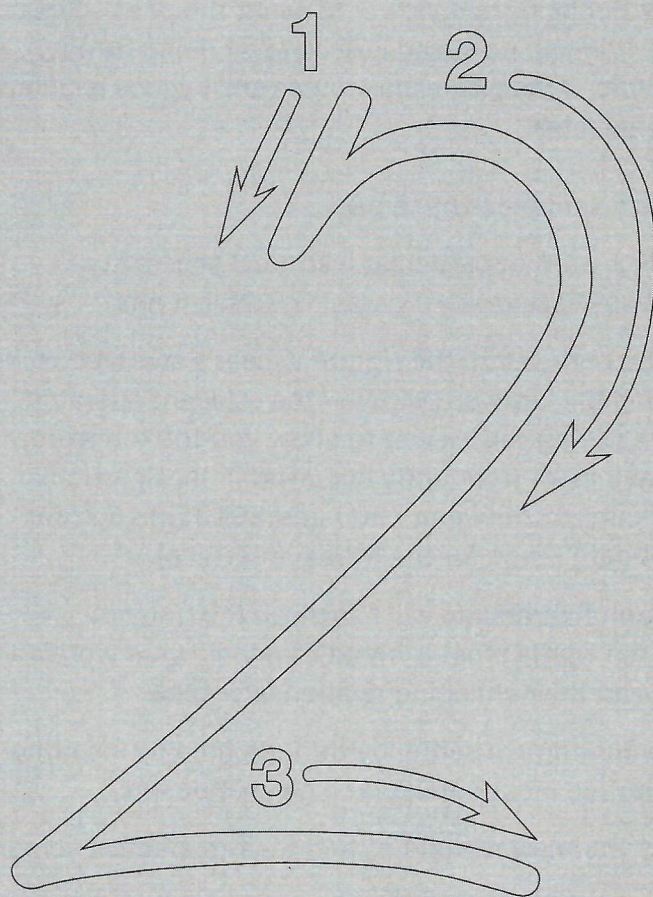
We use words to make sentences. To make *our* sentences. But the words come from elsewhere. They report when we hail them, but go into our service like wise and tight-lipped old soldiers, indulgent (if also, perhaps, slightly contemptuous) of the latest commanding officer—who is so pleased to be ordering them about, but also so deeply ignorant of the places they've been, the past battles, old comrades, sad partings, bright parades, the many phalanxes and formations now forgotten. This exercise—which uses the Google Books Ngram Viewer to scout the past—aims to recover, from our po-faced lexicon (ever doing its duty), some measure of the picaresque routes and bygone relations each word secretes.

1. Choose a sentence with a past.

2. Identify a word of particular historical sensitivity, and a two- to four-word phrase in which it sits.

3. Type the phrase into the Ngram Viewer's search box, replacing the key word with *—the wildcard operator. You are asking the Viewer to show you the ten words that have most frequently occurred in that particular verbal context between 1800 and 2019 (the current default date range for the Ngram interface).

4. The graph that results will show you the frequency of the ten words most likely to have held your word's place, and their changing relation over time.

5. Move your original sentence through time by inserting the variation most popular at a given moment.

6. Record your new sentences and their respective years.

Reflections

Ah, history! What's to be done with it? How does it work? So vexing, the whole matter. After all, there seems to be excellent evidence that thought itself simply *depends* on ignoring it. (Who could get out of bed, really, if the succubus of the whole past *and* the essential changeability of everything truly sat upon them?) But, at the same time, we are so obviously *time-creatures*, in that we make sense of ourselves (when we do) and nearly everything else (nations, frogs, languages) *by means of stories about the past*. There are many books on this problem. Arguably all of them, really. (They have beginnings, middles, and ends, these books; they do not *explode into instantaneous truth*; presentness may be grace, but books take time.) Even those tomes that really go straight at it (Hegel, Dilthey, Gadamer, etc.) don't really clarify things much. Some of them even get interested in whether, in the end (but what is *that?*), historical thinking requires accepting that historical thinking might itself be one of the things that comes and goes in the course of history. Which is puzzling. But also might be right. Who can say? It's a muddle.

But it's *our* muddle. And it seems safe to add that, whatever history is, it participates in the structure of the "virtual" in the sense invoked in the present volume: indeed, isn't the past the very vastest repository of realities "neither actual, nor potential"? We may well have invented what is now called "virtual reality" in the quixotic hope of somehow accessing the *mother lode of otherwise* we feel just behind us. We shall see.

Now we can. More and more. Drawing on a database of more than eight million published books, Google's Ngram Viewer provides a large and easily accessed tool for investigating the shifting frequencies of words and phrases in English and several other languages. While various data-science issues (OCR reliability, etc.) require that results be interpreted with critical scrutiny, the power of the instrument as a helpmate to historical reflection on language would be hard to deny. Search tools include the ability to trace word pairs ("bigrams") and larger groupings ("trigrams," etc.) as they rise and fall in usage across time. A wildcard operator permits one to identify words that have stood next to a given word, and with what frequency, from year to year, decade to decade. With a little experimentation, one discovers a language-explorer of great power.

This exercise proceeds from the premise that every sentence wishes to be read through a historico-lexical manifold of tremendous scope. Each word and word-assemblage in a given sentence has stood beside vast numbers of other words in a nearly infinite array of other expressive configurations; all of these "adhere" to any given usage in the manner of shadows or kinship relations. Moreover, this extensive "hauntology" of linguistic familiars changes over time, leaving a legacy of rivalry, lost intimacy, and new juxtapositions. Each sentence means what it does both because of this fact and despite it.

As you try the exercise, a few practical pointers, and an example, may be useful. You will find that many queries will simply replace your word of interest with function words and commonplaces: if you search "old soldiers *," the Viewer will return "of," "who," "and," "in," "were," and so on. The past is, like the present, mostly boring and typical of itself. But a well-constructed query—one that increases the likelihood of a noun or adjective or adverb in the wildcard slot—can produce better results. "Old * never die" is quite a bit more interesting, as you will see if you try it. Or take this sentence: "Words are soldiers of fortune, / Hired by different ideas." It comes from a poem published in *Poetry* magazine in 1921, "Sappho Answers Aristotle," by Maxwell "Bogey" Bodenheim, Chicago literary celebrity and later king of the Greenwich Village bohemians. Let us take that word, "soldiers," and the phrase in which it is embedded, "soldiers of fortune." Now type into the Ngram Viewer, "* of fortune." The result is graphed below.
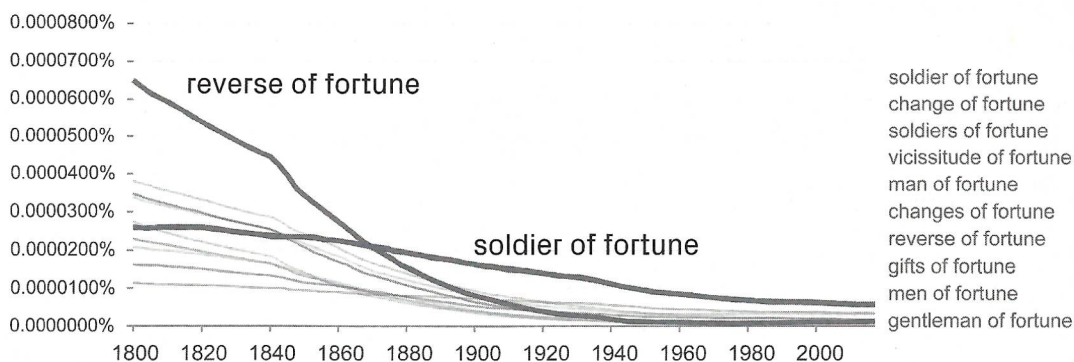
"Soldiers of fortune" turns out to be an impeccably conventional choice ca. 1921, and Bogey's feel for his age was repaid with an interlude of louche celebrity. Had he written the poem sixty years before, however, or had he simply taken a longer view of the language, he might well have chosen "reverse of fortune," the leading usage in the first half of the nineteenth century. "Words are reverse[s] of fortune, / Hired by different ideas." The longer view might in turn have served him as a useful caution, for he drifted gradually, over the following decades, from the center of his city's attention, and ended up murdered in a flophouse on Third Avenue in 1954. Reverses haunt poet and soldier alike.