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# The Potential Energy of Texts [ $\Delta U = -P\Delta V$ ]

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*The Potential Energy of Texts* [ $\Delta U = -P\Delta V$ ]

*A dictionary would begin the moment it no longer gave the meaning of words, but their labors.*

—Georges Bataille<sup>1</sup>

In Stefan Themerson's novel *Bayamus and the Theatre of Semantic Poetry*, the exasperated narrator vents his frustration with the linguistic abstractions of modernism's avant-garde. "I had been fed up," he declares, with "ezrapoundafskinian jazz plus joyce plus dadamerz plus homespun rachmaninoff glossitis."<sup>2</sup> Concurring with an anti-Cratylian Renaissance nominalism that "a rose, called by any other name, smells as sweet," he then counters the ethnopoetic transcriptions, neologisms, and portmanteaux flaunted by sound poetry with "lots of diction, good avant-garde Diderot dictionary defined diction."<sup>3</sup> Rather than freeing words of "their semantic weight and letting them loose on the ear-drums," the narrator instead attempts to increase their meaningful mass, "enlarging their weight, spreading it on to a wider cognitive and affective spectrum."<sup>4</sup> By way of demonstration, he distributes the "semantic mass" of Li Po's poem "Alone and Drinking under the Moon" with a metaphrastic transformation. The line "the wine among the flowers," for example, becomes "the fermented grape-juice among the reproductive parts of seed-plants."<sup>5</sup> This procedure similarly amplifies the swooning sigh of the poem's climactic conclusion—"drunk, we are united"—into a garrulous congeries. Ostensibly equivalent in meaning, Themerson's enumeration breaks the satisfied spell of Li Po's languorously triumphant closure with its superfluity: "having the fermented grape-juice in our stomach / absorbing it into our cerebro-spinal fluid / paralyzing various parts of our nervous system with it / speaking thickly / unable to maintain equilibrium / our vision blurred and double / we get merged with one another cognitively and affectively."<sup>6</sup> Themerson's narrator continues to expatiate the poem before wreaking the same expansive ruin on the xenophobic ballad "Taffy was a Welshman." Perhaps simply delighting in the distortion of a once-familiar nursery rhyme, perhaps taking a cue from the homonymous sweetmeat's metaphoric ability to be stretched to great lengths, and perhaps playing on the centuries-old stereotype of the Welsh as "loquacious dissembles" speaking an unintelligible language in place of proper English,

Themerson's narrator loquaciously dissembles and distends the original verse.<sup>7</sup>

Before offering these illustrative examples, however, he opens his lecture at the "Theatre of Semantic Poetry" with figures that hint at the ultimate failure of the very procedure they seek to justify. Each word, he explains, "should have one and only one meaning.... They should be washed clean of all those diverse aureolas which depend on the condition of the market."<sup>8</sup> By way of examples, he offers *war* and *snow*, words he feels to be especially liable to inexact, subjective understanding. To avoid idiosyncratic interpretations shaded by personal experience, he proposes replacing *war* with "the open conflict between nations, or active international hostility carried on by force of arms" and *snow* with "multishaped crystals, belonging to hexagonal systems, formed by slow freezing of water-vapour."<sup>9</sup> Readers who recall Carl von Clausewitz's famous description of the cognitive weather common to the uncertain terrain of the field of battle can see the link between the three seemingly random terms. Clausewitz's forecast for "the territory of uncertainty" calls for fog, where even the density of that mist is itself uncertain: "fog of a greater or lesser extent."<sup>10</sup> From "diverse aureolas" to the fog of war to "vapour," these atmospheric conditions of low visibility all render outlines indistinct and suggest a nebulous lack of focus. In other words, they figure the exact opposite of *definition*: precisely what Themerson's orator is after and precisely what is lost in his surfeit of semantic dilatation. Simultaneously invoking the two principal denotations of his key word—the exact statement of what a word means and the sharp rendering of a visual form or outline—Themerson emphasizes the polysemy that will ultimately doom his semantic enterprise.<sup>11</sup>

That same semantic play, however, offered hope to two writers who saw a use for the inherent slippages of metaphrastic translation. Themerson anticipatorily plagiarized what the Oulipo would come to call "definitional literature," a practice first proposed by Queneau.<sup>12</sup> However, whereas Themerson's semantic poetry displaced each word by only one remove, the Oulipians imagined an infinite regress of displaced definitions, each of which provided further words for further definitional relief. Marcel Bénabou explains the rule as follows: "In a given statement, one replaces each significant word (noun, adjective, verb, adverb) by one of its definitions from a given dictionary; the operation is repeated on the new sentence thus obtained, and so on."<sup>13</sup> René Étiemble was perhaps the first to recognize the poetic potential of such a procedure, opining, "Replaced by the definition given by an ingenious dictionary, every word of vulgar prose becomes the seed of poetry."<sup>14</sup>

Those seeds were cultivated most carefully by Georges Perec and Marcel Bénabou, who exploited and encouraged the tendency to divergent drift in substituted definitions. As the *Oulipo Compendium* explains, “The goal of differentiation in Definitional Literature is consummated in a complementary method” known as “semo-definitional literature,” or LSD, a variation that Perec and Bénabou also referred to as the “automatic production of French literature,” or PALF for short, underscoring a valence of automatization and mechanization that—as we will see—serves as a litmus test for whether readers understand the failure of their literary production as necessary or avoidable.

In Bénabou and Perec’s apotheosis, two quite different sentences were to be translated into their dictionary-definition equivalents, and the process was to be repeated, transforming the sense with each successive substituting iteration. Moreover, the inevitable drifts, connotative allowances, and small margins of semantic play inherent in the dictionary’s denotations were precisely what permitted Bénabou to “hypothesize, not without a certain audacity, that the results obtained will eventually, inevitably, coincide.”<sup>15</sup>

Not without a certain audacity, he and Perec set out to equate “Workers of the world, unite!” and “The presbytery has lost none of its charm, nor the garden its sparkle.” It was to be their calling card to the Oulipo, gaining them membership in the young organization, even though they never succeeded in coaxing those sentences toward much evidence of a semantic convergence.<sup>16</sup> Bénabou blamed the failure on his own negligent laziness, but, as David Bellos suggests, Perec may have been haunted by the thought that they had in fact proven that the two sentences belonged to fundamentally different, incompatibly alien languages.<sup>17</sup> From the beginning, the direct imperative of the Communist rallying cry and the refined observation—with its balanced correlative conjunctions, gentility, and *recherché* vocabulary—evinced obvious stylistic differences; nonetheless, they still might have been drawn from the same discourse (one in which, for example, the speaker of the former would want to dismantle the privileged ecclesiastic architectures of the latter). Bénabou and Perec’s failure to link them, however, could have further proven that the sentences come not just from different subject positions, but from radically incomprehensible ones. They may have demonstrated, in other words, that the sentences do not, in Ludwig Wittgenstein’s terms, participate in the same language game. Or, as he summarized in a memorable shorthand, “If a lion could talk, we would still not understand him.”<sup>18</sup>

Whatever the case, the inability to stop the semantic proliferation once and for all in a single, master sentence had been predicted by Michel Foucault at precisely the same moment as Perec's experiments with semo-definitional literature. Foucault proclaimed,

Perhaps for the first time in Western culture one finds completely laid bare the aspect of a language that cannot stop itself, because it is never enclosed in a definitive statement; it announces its truth only in some future discourse entirely devoted to what it *will have* said. But even this future discourse itself does not have the power to halt the progression, and what it says is enclosed within it like a promise, a bequest to yet another discourse.<sup>19</sup>

Or, in short: "Language contains its own inner principle of proliferation."<sup>20</sup> Decades earlier, Antonin Artaud had phrased a similar sentiment in a statement related to Michel Leiris's experiments with tracing subversive and subterranean passages through dictionaries:

From now on language has only one use: as a means for madness, for elimination of thought, for rupture, as the unicursal labyrinth of insanity, not a *dictionary* where certain left-bank pedants channel their spiritual strictures.<sup>21</sup>

PALF short-circuits Artaud's dichotomy by using the pedant's dictionary as a means for madness, leveraging a personal constraint against the coherence of expressive thought. Arthur Rimbaud triangulates Foucault's meaning and Artaud's madness with his famous call for the "*dérèglement de tous les sens*," which translates equally to "the disruption of all meaning" and "the derangement of the senses."<sup>22</sup> Foucault would call this "the standoff of poetry and madness"—on the one hand, a poetics in which the play of well-defined distinctions masks a language of resemblances; on the other hand, the insane erasure of those signs under the burden of similitude—"this insane game of writing," as Maurice Blanchot quotes Stéphane Mallarmé.<sup>23</sup> Adhering to the rules of their senseless game, Perec and Bénabou follow that spiraling labyrinth of Artaudian rupture, hopeful that they are not merely going in circles but moving ever closer to the convergence of "Prolétaires de tous les

pays, unissez-vous!” and “Le presbytère n’a rien perdu de son charme, ni le jardin de son éclat.”

Those two germinal sentences, however stylistically distinct and ultimately unresolvable, are both far from incidental. Something of the revolutionary political spirit of Communism carries over to the optimistic experimentalism of the poetic project, which shares the same fundamental goal as the *Manifeste du parti communiste*: to unite. (One can almost hear Perec and Bénabou urging, “Paroles de tous les mots, unissez-vous!”) Though less well-known, the source of the other seed sentence is also significant. David Bellos, inexplicably, attributes the line about the presbytery to Mallarmé, though it originates in George Sand’s second “Letter to Marcie,” and comes to Perec—who would quote it again in *La Vie: mode d’emploi*—by way of its reprise in Gaston Leroux’s locked-room detective novel *The Mystery of the Yellow Room*, one of the serial “extraordinary adventures of Joseph Rouletabille, Reporter,” a genre fiction probably better known in France than his international hit *Le Fantôme de l’Opéra*.<sup>24</sup> In Leroux’s *roman policier*, the talismanic sentence functions as a kind of secret code. Both a mystery in itself and the clue to solving the book’s primary mystery, it works for the eponymous reporter (and amateur detective) as a sort of *open sesame* password, allowing for the passage from one level of architectural and narrative enclosure to another, even as the characters who utter it cannot fathom what the sentence itself means.

With its paradoxical requirement that a chamber be hermetically sequestered and its threshold necessarily crossed, the locked-room mystery is a narrative version of a philosophical problem: a closed system that must try to account for itself. The various exercises in definitional literature pose a linguistic variant of this same problem; they can be seen as extrapolations of the realization that words in a dictionary only point to other words, which are also in the same dictionary, gesturing toward other words, and so on, *ad infinitum*. “One could, in effect, consider the concatenation of definitions as the autonomous conversation that language holds with itself,” as Bénabou puts it, explaining elsewhere, “Language runs in a circle, operating in a closed circuit.”<sup>25</sup> With those implications of growth and activity, made explicit in Bénabou’s sense that when used for semantic poetry “the dictionary becomes a living being,” his statements recall Foucault’s claim that “language contains its own inner principle of proliferation.” This may be what Perec was acknowledging when he conceded, in the preamble to the LSD notebooks, “One can only control language by obeying it.”<sup>26</sup> Moreover, these pronouncements sound like linguistic versions of what the physics pro-

fessor in Leroux's novel intends to read before the Academy of Sciences. The professor, father of the victim, has written a sensational paper on his new theory, the Dissociation of Matter, a "theory destined to shake the foundations of all official science, which has so long been based on the famous principle that nothing is lost and nothing is created."<sup>27</sup> Antoine-Laurent de Lavoisier's maxim, quoted in part by the professor, concludes, "Everything transforms."<sup>28</sup> Perec and Bénabou might well have had Lavoisier in mind as their sentences continually transformed, all the while adhering to a law of conservation for semantics.

Leroux's hero explains his procedure as if he were describing Perec standing before his battery of dictionaries: "I do nothing more than transcribe certain facts on which some exceptional documents in my possession enable me to throw a new light."<sup>29</sup> Competing with a rival detective (the criminal himself, as it turns out), the hero and his nemesis represent two different theories of deductive methodology, and the difference between them hinges on the hermeneutic, and even the epistemological, viability of a closed system—whether anything may be legitimately "added to the material facts so far established" and whether significance should be given exclusively to the "external signs" of a crime.<sup>30</sup> Indeed, the reporter's *coup-de-théâtre* discourse on method and the virtues of being methodical rhyme nicely with Bénabou and Perec's own *modus operandi* of philological tracking through the dictionary toward a shared convergence. Rouletabille explains that the course of his investigation led him to follow a series of footprints, each obviously related but each also slightly different from the next, gradually diverging in their paths but ultimately leading back to the same, identical spot: the scene of the crime. Leroux then repeats the basic contours of this scene when he describes the two detectives (not unlike the two collaborating Oulipian poets) following two sets of parallel boot prints until they lead back to the same location. One set of prints was evidently made by a rough, hobnailed worker's boot, while the other indicates a more elegant, neatly symmetrical pair of footwear—the perfect figures for the contrasting quotations from Marx and Sand selected by Bénabou and Perec, respectively.

*The Mystery of the Yellow Room* further reveals itself to be a relevant intertext on account of its paradoxical foregrounding of both an ineluctable logical telos as well as a series of distracting, diverting, nonsensical aporiae. On the one hand, the plot follows from a crime that must, by the end of the novel, have a solution discoverable by deductive reasoning, while on the other hand, that plot's maladroit execution litters the story with illogical leaps and implausible coincidences. The novel

veers from transparency to deceit, moving between the twin poles of its adherence to, and its simultaneous failure in, the genre of the detective story. (One hesitates to be unkind, but Leroux was such a bad writer that the Surrealists took him as a hero of irrationality, an absurdist *avant la lettre*.) Beyond delighting in the novel's general preposterousness, the Surrealists would come to learn specific literary lessons from the gaps and decoys produced by Leroux's multiplication of "manufactured evidence and false trails."<sup>31</sup> Moreover, as Jonathan Eburne has described the poetics of Leroux's novel, "the imposition of logic is as mechanical, and indeed as solipsistic, as the 'sensational machines' of [Raymond] Roussel's photographic writing." Indeed, the machine was the figure singled out by Philippe Soupault as the hallmark of Leroux's interest to the avant-garde—an ironic relation to the rote formulae of the detective-story genre that permit "the transformation of positivist description into a kind of killing machine."<sup>32</sup> Not coincidentally, the two antipodes of telos and aporia—which ramify at the levels of both Leroux's plot (the deceptive, murderous trick of the criminal and ensnaring trap of the amateur detective) and his stylistic execution of that plot within its ostensible genre (the dogged necessity of a logical conclusion arrived at by deductive reasoning)—are precisely what define the discursive uses of the engine and the figure of the machine itself.

Most obviously, *machine* and *engine* connote analytic reasoning and analytic purpose. Beyond referring to any kind of complicated mechanism with moving parts, *engine* specifically denotes a calculating machine, as in Charles Babbage's early-nineteenth-century proto-computer, which was referred to as a "difference engine" or "analytical engine." Today, accordingly, the word also means "a piece of hardware or software with a specific computational function; a program module which performs a particular kind of operation."<sup>33</sup> The earliest definitions for *engine*, however, suggest a chain that slips toward something quite different: from "ingenuity; artfulness; and disposition" to "cunning, trickery: a plot, a snare, a wile." These connotations reinforce the deceptive, false, illusionistic theatricality of "stage machinery" and the prevalent early-modern uses of "machine" associated with the theater and the means of its deceptive tricks. In short, they suggest *machinations*, in the sense that also haunts the early, now obsolete senses of the word *machine*, an early synonym with *engine* in the sense of an "engine of war" or a "siege engine," a military device for circumventing the constraints of fortifications. This militarized, anti-architectural association of *engine* and *machine* goes as far back as post-classical Latin, and so all of these registers, one should note, obtain in French as well. Continuing



from these senses of deceit and danger, *machine*, in the Elizabethan period and throughout the seventeenth century, primarily denoted “a scheme or plot,” and the word was used as a transitive verb meaning “to contrive or plot the death or downfall of a person; to plot *against* a person.” So Eburne’s characterization of Soupault’s interest in “a kind of killing machine” marks a philological redundancy by naming a kind of machining machine. In fact, the early idiomatic senses and stereotyped uses of *engine* are all iniquitously negative as well: *evil engine*, *false engine*, *malengine* (meaning an “evil machination, ill intent; fraud, deceit, guile,” as the pedantic dictionary explains). So the word carries both the senses of craft and crafty, of devising and deviousness, schemes and scheming—*calculating*, in both senses of that word. The verb form corroborates; “to engine” means “to trick or deceive; to ensnare.” In summary, before becoming computers and algorithmic programs, engines are instruments of war, instruments of torture, instruments of entrapment: nets, snares, decoys—gins, in a sense that derives aphetically from the Old French *engin*. These senses are all obviously relevant to both the story and the method of a crime novel like *The Mystery of the Yellow Room*, with its backstory of a criminal plot, followed by the narrative account of the detectives’ attempt to entrap the culprit in turn—both of which constitute the plot of the author, who further plots against inquisitive readers who might discover it too soon.

These senses of *engine* and *machine* are also relevant to definitional literature, which “one can operate in the most mechanical way,” and to PALF in particular, with its identification of a “production automatique,” as well as to the frequent description of procedural poetics as “text engines” or “writing machines.”<sup>34</sup> More broadly, when Sol LeWitt explains conceptual art by stating that “the idea becomes a machine that makes the art,” the future of conceptual art and writing opens out along two diametric paths, depending on how the rhetorical figure of the machine and the ghosts of its history are understood.<sup>35</sup> LeWitt, not coincidentally, describes conceptual art in distinctly pataphysical terms with his pronouncement that “irrational thoughts should be followed absolutely and logically.”<sup>36</sup> His signature white open cubes, in their various mathematical permutations and series, provide a prime example; whatever their scale, the relative dimensions of the cubes always strictly adhere, with an absurd precision, to a meaningless architectural ratio of 1:8.5 (that is, the open space between the edges of a cube is 8.5 times the width of each edge). LeWitt elaborates on this imaginary solution: “As with the white color, the 8.5:1 ratio was an arbitrary decision, but once it had been decided upon, it was always used.”<sup>37</sup> The pataphysi-

cal underpinnings of LeWitt's practice have been largely ignored, but Rosalind Krauss picks up on the primacy of that assertion and comes all the way to the verge of identifying its pataphysical tenets without ever quite mentioning Alfred Jarry's name explicitly. With an echo of Jarry's definition of 'pataphysics as the "science of imaginary solutions," Krauss reads LeWitt's open cubes and line drawings, alongside Samuel Beckett's permutational syntax, as the answer to a false problem:

It is the ironical presence of the false "problem" that gives to this outburst of skill its special emotional tenor, its sense of its own absolute detachment from a world of purpose and necessity, its sense of being suspended before the immense spectacle of the irrational.

For LeWitt's generation a false and pious irrationality was seen uniformly as the enemy of art.... [I]t was an extraordinary decade in which objects proliferated in a seemingly endless and obsessional chain, each one answering the other—a chain in which everything linked to everything else, but nothing was referential.

To get inside the systems of this work, whether LeWitt's or Judd's or Morris's, is precisely to enter a world without a center, a world of substitutions and transpositions nowhere legitimated by the revelations of a transcendental subject.<sup>38</sup>

Krauss's recognition of the tension in postwar art between irrational procedures and deodorized surfaces is astute, but I quote at length to juxtapose her machinic description of that art with the writing of definitional literature, in which language (to recall Foucault's description) cannot stop itself. Like the artworks she outlines, the words of Bénéabou and Perec's project are motivated in endless and obsessional chains, each answering the next with their series of denotative equivalences, until each new sentence has coupled a chain of inclusive linkages in which nothing is referential beyond the horizon of the dictionary's lemmas. The twin facets of this seemingly endless movement are the very poles that have defined the modern conception of the machine, with its double-edged promise and threat. On one side, that movement is relentless, focused, and single-minded, but the obverse is dizzyingly eccentric ("a world without a center"); similarly, the procedure of definitional literature is relentlessly determined, but each stage of its results is subsequently shunted by further transpositions and substitutions—a

perpetual motion machine that is also something of a Rube Goldberg machine. Accordingly, incessant persistence and inevitable diversions, the two paths that fork from LeWitt's pataphysical art, are the same that follow from his assertion that "the idea becomes a machine that makes the art," because they figure the two models of the idea of the machine itself.

On the one hand, the machine would seem to offer the perfect figure for rule-following: mindless repetition; uniform regularity; analytical perfection; ceaseless effort; and efficient, single-minded telos. Or, as Ludwig Wittgenstein puts it more abstractly:

The machine as symbolizing its action: the action of a machine—I might say at first—seems to be there in it from the start. What does that mean?—If we know the machine, everything else, that is its movement, seems to be already completely determined.<sup>39</sup>

This symbolization would be true for *engine* as well, with its etymological ties to the Latin *ingenium* (an inherent quality or character), or what "seems to be there in it from the start." On the other hand, however, as Wittgenstein goes on to note,

We talk as if these parts could only move in this one way, as if they could not do anything else. How is this—do we forget the possibility of their bending, breaking off, melting, and so on? Yes; in many cases we don't think of that at all.<sup>40</sup>

These two aspects of the machine—its ineluctable, relentless repetition and its propensity toward inevitable error and erratic failure—are nicely narrativized in one of the vignettes that make up John Cage's lecture "Indeterminacy: New Aspect of Form in Instrumental and Electronic Music," written just as Perec was beginning his investigations into the automatic production of French literature:

One evening I was walking along Hollywood Boulevard, nothing much to do. I stopped and looked in the window of a stationary [*sic*] shop. A mechanized pen was suspended in space in such a way that, as a mechanized roll of paper passed by it, the pen went through the motions of the same penmanship exercises I had

learned as a child in the third grade. Centrally placed in the window was an advertisement explaining the mechanical reasons for the perfection of the operation of the suspended mechanical pen. I was fascinated, for everything was going wrong. The pen was tearing the paper to shreds and splattering ink all over the window and on the advertisement, which, nevertheless, remained legible.<sup>41</sup>

The opening catachresis signals the punning spirit of Cage's seemingly sincere, naive recollection. By stopping, he becomes like the pen and paper in the window in front of him: both "suspended in space" and "stationary," with the stationery, ironically, in frantic motion. "Suspended before the immense spectacle of the irrational" and fascinated by the scene of a literalized *écriture automatique*, Cage then mechanically reiterates the words *mechanized* and *mechanical*, echoing four times in a single sentence and spoiling his prose with excessive repetition. But that repetition allows him to enact as well as to describe the writing process he observes (a process that is itself an excessive repetition of the drills that taught him to write in the first place). Behind its anecdotic tone, Cage's writing of the scene of writing is carefully performative.

His sketch also foregrounds one of the key tropes of the modern machinal imagination. Since the nineteenth century, wonder at the machine's feats of repetition have been bought at the cost of a fear that it might not stop, and Cage offers a tame and comical version of the Victorian paranoia that the same machines that seemed to work so tirelessly—propelled by hidden, hermetically contained, internal processes of combustion—might never stop working at all, resulting in runaway trains, steam engine explosions, and the specter of unstoppable automaton juggernauts.<sup>42</sup> Cage's scene of inscription describes a decidedly modern understanding of writing not merely on account of its underscored mechanization and opaque materiality, but because it exhibits a particularly modern conception of the machine. As Michel Serres has argued, the ideology of machines in the seventeenth and eighteenth centuries, when mechanical devices were understood primarily as tools for transferring and transforming external forces, ceded to a nineteenth-century imagination of the motor as an engine with internal powers of its own, circulating with a theoretical continuity by exploiting differences within thermodynamic systems and consuming prestocked stores of fuel.<sup>43</sup> The textual mechanism of Perec's definitional procedure accordingly operates as a specifically modern engine by locating its motivation

internally. As Bénabou explains, PALF “suppresses the external criteria of language in favor of internal linguistic constraints.”<sup>44</sup> He continues, clarifying: “The very definition of automatism implies that something labors diligently under its own steam” to such a degree that “automatism requires a rigorous construction which carries in itself the principle of its own movement.”<sup>45</sup> Animated by its own internal powers, motivated by the dynamic alternation between contiguity and continuity and the reservoir of the dictionary’s accumulated semantic fuel, “the dictionary becomes a living being, since it operates by moving from adjacent to incessant.”<sup>46</sup> Foucault, as we have seen, similarly locates an engine-like agency in language itself, with its own inner principle of proliferation: “Words ceaselessly renew their power of strangeness and the stores of their contestation.”<sup>47</sup> That movement, for Serres, arises from both material and semiotic changes of state: “Movement is effected by differences in the state of things and by the calculus of signs.”<sup>48</sup> In Serres’s analysis, all motors are the mechanical elaboration of some differential, and they operate through the dynamic tensions between difference and equivalence.<sup>49</sup> In definitional literature, the calculus of signs moves between identity and incompatibility, motivating the textual engine by means of the potential energy generated by the gap between reversible equivalence (the semantic conversion presumed by the exchange of a word for its denotation) and entropic difference (the drift and play of connotative imprecision; homonymic ruptures; the wandering stray from idiomatic syntax).

In the passage from “Indeterminacy,” Cage confesses that he delights in what is “going wrong,” but going wrong—as Wittgenstein reminds us—is in fact part of the proper operation of machines. Recalling one of T.E. Hulme’s fragments, in which the critic proclaims “the grit in the machine” to be “the fundamental element of the machine,” Gilles Deleuze and Félix Guattari similarly theorize that not only does “breaking down become part of the very functioning” of machines, but that malfunction is in fact the essential element of the machine: “*In order to operate, a machine must malfunction.*”<sup>50</sup> And here is where we can begin to see the further convergence of the concept of the machine and the concept of ‘pataphysics. The notion of the clinamen—a chance, atelic disruption—became a key tenet of Jarry’s pataphysical doctrine. Jarry’s *terme de métier* derives from a Lucretian understanding of the machinal pre-Socratic universe, in which

bodies are carried downward by their own weight in a straight line directly through the void, at unforeseeable moments and in unpredictable places they swerve a bit.<sup>51</sup>

In Serres's analysis, this atomism already contains the seeds of the twilight of mechanical machines and a brave new modern world of entropy and turbulence.<sup>52</sup> That nonlaminar turbulence, initiated by the clinamen's minimal disruption of the atoms' vertical fall and playing out in the unmappable eddies of fluid mechanics, transforms noise into a new order of signification, generating meaning from the interplay of coherence and chaos:

There is the vast data set and the clinamen, that's all. The noise of the cascade, in the spray's chance dance of myriad droplets, and that inclination, from high to low, which produces movement. And which makes meaning—because it is the meaning of movement—in the crush of signs.<sup>53</sup>

Lucretius describes, in essence, an abstract model of the machine on two counts: a perpetually generating structure of difference (void and matter, laminar and nonlaminar flow, uniformity and singularity, determinism and stochastics, linear monotony and Brownian white noise) in which the diametric differentials are themselves exactly what we have seen to be the defining characteristics of the figure of the machine—uniform repetitive perfection and the inevitable malfunctioning derangement of its parts “bending” and “breaking off.” The machine of Lucretian nature contrasts the endless repetition of the uniform rain of prime atoms, perfectly alike in their linear plumb, with the disruption wrought by the occasional errant swerve—inevitable but unpredictable—of an outlier breaking off and bending from the orthogonal for no predictable or externally motivated cause. Bénabou understood that swerve to be “precisely the most interesting aspect, to my mind, of the definitional method,” because the unpredictable errancy “introduces, into the too-tightly regulated play of definition, the possibility of a slight drift, which is reminiscent of the principle of the *clinamen*.”<sup>54</sup> It is the persistence of that clinamenatic drift, I would submit, which keeps the Oulipo—with its roots in the Collège de 'Pataphysique—from becoming a too-perfect parody of itself.

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## Notes

- 1 Georges Bataille, "L'informe," *Documents* I (1929): 7.
- 2 Stefan Themerson, *Bayamus and the Theatre of Semantic Poetry* (London: Gaberbocchus, 1965), 67.
- 3 Ibid.
- 4 Ibid., 68.
- 5 Ibid., 69.
- 6 Ibid., 72.
- 7 The bigoted phrase is from A.A. Gill: "Smile—You're on Cameo Camera," *Sunday Times* (September 28, 1997), quoted in Jeremy Paxman, *The English: A Portrait of a People* (Woodstock: Overlook, 1998), 40. Christina Luckyj notes, "Renaissance dramatists often used Welsh as the prototype of an unintelligible language." *John Webster: The White Devil*, 3rd ed. (London: Methuen, 2008), 59n.
- 8 Themerson, *Bayamus*, 65.
- 9 Ibid. With negligible alterations, the definition of *war* occurs in *The Universal Dictionary of the English Language*, ed. H.C. Wyld (London: Routledge & Kegan Paul, 1932), 1375. The definition of *snow* occurs in Wilhelm Kôersner, *Praktik handbok för alla utarbetad af sakkunniga personer* (Stockholm: Fahlcrantz, 1886), 186.
- 10 Carl von Clausewitz, *Vom Kriege* (Berlin: Dümmler, 1905), 38.
- 11 *Oxford English Dictionary*, 2nd ed., s.v. "definition."
- 12 Sylvie Cassayre, *Les fleurs bleues de Raymond Queneau* (Nantes: Editions du Temps, 1999), 10.
- 13 *Anthologie de l'OuLiPo* (Paris: Gallimard, 2009), 417.
- 14 René Etiemble, review of *Exil*, by St. John Perse, *Valeurs: Revue de critique et de littérature* 2 (July 1945): 61, repr. in *Hygiène des lettres*, tome IV, Poètes ou Faiseurs? (Paris: Gallimard, 1966), 147.
- 15 Marcel Bénabou, *Presbytère et Prolétaires: Le dossier P.A.L.F.*, Cahiers Georges Perec, vol. 3 (Paris: Éditions du limon, 1989), 17.
- 16 Jacques Roubaud, interview by Marcella Durand, *BOMB: Artists in Conversation*. The OuLiPo was founded on November 24, 1960 (Mireille Calle-Gruber, *Histoire de la littérature française du XXe siècle, ou, Les repentirs de la littérature* (Paris: Editions Champion, 2001), 135).
- 17 David Bellos, *Georges Perec: A Life in Words: A Biography by David Bellos* (Boston: Godine, 1993), 342.

- 18 Ludwig Wittgenstein, *Philosophische Untersuchungen / Philosophical Investigations*, revised 4th ed., ed. P.M.S. Hacker and Joachim Schulte (London: Blackwell, 2009), §327.
- 19 Michel Foucault, *Les mots et les choses: Une archéologie des sciences humaines* (Paris: Gallimard, 1966), 56, ellipses in original.
- 20 *Ibid.*, 55.
- 21 Antonin Artaud, *La Révolution surréaliste* 3 (April 1925): 7.
- 22 Arthur Rimbaud to Paul Demeny, letter, 15 May 1871, in *Œuvres Complètes*, ed. Antoine Adam (Paris: Gallimard, 1972), 251.
- 23 Foucault, *Les mots*, 63; Maurice Blanchot, *L'entretien infini* (Paris: Gallimard, 1969), 622.
- 24 Bellos, *Life in Words*, 342; George Sand [Amantine-Lucile-Aurore Dupin], *Œuvres Complètes*, nouvelle édition, Tome XV (Paris: Perrotin, 1843), 179; Georges Perec, *La Vie: Mode d'emploi* (Paris: Hachette, 1978), 382.
- 25 Bénabou, *Presbytère*, 9.
- 26 *Ibid.*, 32; 16.
- 27 Gaston Leroux, *Le Mystère de la Chambre Jaune*, in Supplément "Roman," *L'illustration* (Paris 1907), 4.
- 28 Attributed to Lavoisier, the maxim is a classically modeled *ex post facto* reduction of his more discursive description of state changes; see Lavoisier, *Traité élémentaire de chimie, présenté dans un ordre nouveau et d'après les découvertes modernes; avec figures* [...] (Paris: Cuchet, 1789).
- 29 Leroux, *Mystère*, 3.
- 30 *Ibid.*, 6; 93.
- 31 Jonathan Eburne, *Surrealism and the Art of Crime* (Ithaca: Cornell University Press, 2008), 42.
- 32 *Ibid.*
- 33 Unless noted otherwise, all definitions are drawn from the *Oxford English Dictionary*, 2nd ed.
- 34 OuLiPo. *La Littérature potentielle: Créations Re-créations Récréations* (Paris: Gallimard, 1973), 119; see, for examples, Stephen Bury, "The Text Engine and the Artist's Book," *At the Turn of the Centuries: The Influence of Early 20th Century Book Arts on Contemporary Artists' Books* (New Haven: Jenny Press, 2010), 10–14 and the special issue of *L'esprit créateur* XXVI, no. 4 (Winter 1986), "Machines in Texts, Texts as Machines," ed. Linda Kleiger Stillman.
- 35 Sol LeWitt, "Paragraphs on Conceptual Art," *Artforum* 5, no. 10 (June 1967): 79.
- 36 Sol LeWitt, "Sentences on Conceptual Art," *o to 9* no. 5 (January 1969): 3.
- 37 Irving Sandler, *American Art of the 1960s* (New York: Harper & Row, 1988), 347.
- 38 Alfred Jarry, *Gestes et opinions du docteur Faustroll, pataphysicien* (Paris: Charpentier, 1911), 31; Rosalind Krauss, "LeWitt in Progress," *October* 6 (Autum 1978): 60.
- 39 Wittgenstein: *Philosophische*, §193.



- 40 Ibid.
- 41 John Cage, *A Year from Monday: New Lectures and Writings by John Cage* (Middletown: Wesleyan University Press, 1969), 134.
- 42 See Julie Wosk, "The Traumas of Transport in Nineteenth-Century Art," *Breaking Frame: Technology and the Visual Arts in the Nineteenth Century* (New Brunswick: Rutgers University Press, 1992), 30–66.
- 43 Michel Serres, *Feux et signaux de brume: Zola* (Paris: Grasset, 1975), 209–210; but see also, more generally, "Moteur et Circulation," chap. 2 (pages 60–128).
- 44 Bénabou, *Presbytère*, 25.
- 45 Ibid., 26.
- 46 Ibid., 32.
- 47 Foucault, *Les mots*, 64.
- 48 Michel Serres, "Moteurs: Préliminaires aux systèmes généraux," *Hermès IV: La distribution* (Paris: Éditions de Minuit, 1977), 52.
- 49 Ibid., 44 et seq.; see especially, "Le moteur produisait du mouvement de la rupture d'équilibre à son rétablissement, de la différence à l'égalité" (47).
- 50 T.E. Hulme, *Selected Writings*, ed. Patrick McGuinness (New York: Routledge, 2003), 24; Gilles Deleuze and Félix Guattari, *Capitalisme et Schizophrénie: L'Anti-Oedipe*, nouvelle édition (Paris: Éditions de Minuit, 1973), 39; 177, emphases in original.
- 51 Lucretius, *De rerum natura*, Loeb Classical Library, trans. W.H.D. Rouse (Cambridge: Harvard University Press, 1975), 112.
- 52 Serres, "Moteurs," 55.
- 53 Ibid. Cf. Serres, "The Genesis of Sense," *The Birth of Physics*, ed. David Webb, trans. Jack Hawkes (Manchester: Clinamen Press, 2000), 144–147.
- 54 Bénabou, *Presbytère*, 11–12.