THE ALGORITHMIC IMAGINATION:

POTENTIAL LITERATURE AND NEW MEDIA

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SUBLIME DATA:

GEORGES PEREC AND THE VERTIGO OF LISTS

In his 1982 essay "Penser/Classer," the last piece he wrote before his death, Georges Perec offers the following reflection on the art of writing lists:

> There are two contradictory temptations in any act of enumeration: the first is to cover EVERYTHING, the second is to leave something out all the same; the first temptation would seek to close the question forever, the second would leave it open; between the exhaustive and the incomplete, enumeration seems to me to be, prior to any sort of thought (and prior to any thought of sorting), the intrinsic mark of our need to name and to collect without which the world ("life") would be unmappable. (*Thoughts* 131)

A list that strives for completeness must also confront all the miscellaneous things that it cannot account for. The "unmappable" and the "incomplete" signify a negation that is also a surplus, disrupting the list from within and gesturing toward the world without, a world that is too capacious and too chaotic to be subsumed under an abstract rubric. If enumeration gives rise to "ineffable joys," that is because the list conceals an abundance that cannot be collected or named, even if "our need to name and to collect" carries the force of an obligation.

The word *enumeration* itself exemplifies this problem. Derived from medieval rhetoric and negative theology, the trope of *enumeratio* involves composing a deliberately incoherent list in order to evoke the unnameable attributes of God. From the sixteenth century onwards, as Christopher Johnson observes, *enumeratio* begins to register a waning belief in the power of analogy to structure our knowledge of the world: the

redundancies and digressions of the list serve less to instruct and delight than to dramatize its own failure to achieve closure. At the same time, enumeration is etymologically related to number: to enumerate is also to count. In programming languages such as Python and Swift, the enumerate() function loops through a data collection by returning each of its members as an index-value pair.[1] Wolfgang Ernst observes a similar association between list-making and computation in an essay on the intertwined etymologies of the German words for telling and counting ("Zählen und Erzählen"): "The numeric order, the basis of digital technologies, has always already been performed as a cultural practice before becoming technically materialized" (147). This double sense of enumeration stretches back to the rhetorical origins of the word: Renaissance poets and rhetoricians frequently draw comparisons between metrical verse and empirical measurement, two complimentary ways of comprehending the world by number. What Perec implies by "exhaustive" in the paragraph above is not merely *capacious* but *finite* and *exact*: enumeration constitutes a set whose members can be counted.

This tension between the exhaustive and the incomplete, between the quantitative rigor of the list and its inconclusive form, also characterizes recent debates in the digital humanities about the relation between literature and new media. In a special issue of *PMLA* on the database as a literary genre, Edward Folsom invokes *Leaves of Grass* as a pre-digital example of information overload:

> Anyone who has read one of Whitman's cascading catalogs knows this: they always indicate an endless database, suggest a process that could continue for a lifetime, hint at the massiveness of the database that comprises our sights and hearings and touches, each of which could be entered as a separate line of the poem. (1572)

Folsom goes on to suggest that such a "database does not handle completion well – it is voracious and thrives on revision, addition, and supplementation." Other contributors to the special issue echo this language of the endless and the incomplete. Meredith McGill observes that the database "holds out the promise of completeness" and yet also embodies "the open-endedness of the digital medium itself, a quality that points toward a utopian future in which archival scholarship is bound not by financial or physical constraints but by the imaginations of its creators and users" (1592). Jerome McGann contrasts the power of the database "to draw sharp, disambiguated distinctions" with the literary text that is "necessarily n-dimensional, protean, shifting," but adds that "works like poems and novels are already marked data … multiply coded" (1589–1).

Perhaps the most compelling response is from Katherine Hayles, who challenges Folsom's assertion (following Lev Manovich) that database and narrative are "natural enemies." On the contrary, she argues, they are "natural symbionts," casting narrative (and the literary more broadly) as an elusive figure that the database depends upon but is unable to capture or exhaust. On the one hand, databases are "self-describing artifacts" governed by "formal properties of closure": they must articulate their values explicitly and unambiguously in order to reliably store information. On the other, narratives "gesture toward the inexplicable, the unspeakable, the ineffable," supplementing the rigor of data

with "the unknown hovering beyond the brink of what can be classified or enumerated" (1605). Hayles associates this "unknown" with the inherent polyvalence of literary texts and their potential to afford a nearly endless array of possible readings. The ineffable here is not so much a specific mode of aesthetic experience, a moment when language strives to represent the supersensible by confessing the impossibility of doing so, than the concept of the literary as a disturbance *within* the formal logic of the database. Narrative and interpretation endure in the new millennium because they are supple enough to engage with forms that defy representation, not only forms that cannot be quantified as numeric data but also the unrepresentable excess of the database itself.

This tension between the ineffable and the digital echoes a broader concern among media theorists with what Alan Liu (after Julian Stallabrass) calls the "database sublime." Liu draws upon both Kantian and Lyotardian conceptions of the sublime in order to describe the surfeit of information produced by postindustrial (and especially digital) culture, a surfeit that is too vast to be captured in a single image and yet which for just that reason has inspired countless attempts to depict it. Invoking Lyotard's definition of the postmodern sublime as what "puts forward the unpresentable in presentation itself," Liu extends this definition to include the way that new media work to dissolve both "the substrate of a work and the bodily practices of the artisanal artist," so that the unrepresentable or "transcendental" character of disembodied data becomes the general condition of aesthetic practice in the digital age.

If data are unrepresentable, however, it is not just because they lack a proper medium,

but also because the very concept of data denotes something that cannot be grasped by the senses. The word derives from a Latin participle meaning literally "the things having been given," a sense preserved by the French term *les données*. As Alexander Galloway observes, a datum is not simply a fact or measurement but rather a "natural gift" or "empirical trace" that is "not so much thrown into the world, but left over, bare, remaining after the tide of being recedes" (81). For this reason, data as such are unrepresentable: they have no pre-given form and must be shaped into information in order to become perceptible. Information is a process as much as a product: "the act of taking form or putting into form" (81). Since data are fundamentally mathematical values that lack any inherent or self-evident relation to the objects they measure, any representation of data reveals more about the procedure used to generate the representation than about the data itself. Visualizing data requires "a contingent leap from the mode of the mathematical to the mode of the visual," a leap made possible by artificial rules for converting abstract numbers into legible signs. For this reason, Galloway argues, every data visualization is "first and foremost a visualization of the conversation rules themselves, and only secondarily a visualization of the raw data" (83).

Galloway goes on to argue that the unrepresentability of data and its tendency to generate uniform images feeds into what Friedrich Kittler would call "convergence": the way in which new media appear to erase distinctions among media and medium-specific forms and genres by encoding diverse media (images, audio, film, text) as an undifferentiated stream of numeric data. Galloway puts the matter rather bluntly:

> What are the aesthetic repercussions of these claims? One answer is that no poetics is possible in this uniform space. There is little differentiation at the level of formal analysis … One can not talk about genre distinctions in this space, one can not talk about high culture versus low culture in this space, one can not talk about folk vernacular, nor about modernist spurs and other such tendencies. (Galloway 85)

To reduce the unrepresentable to "aesthetic information," whose purpose is no longer to educate or communicate but to stultify observers with the vertigo of massively complex systems, is to nullify its power to estrange. If the mathematical sublime belittles our imagination by presenting a phenomenon so vast that we cannot apprehend it as a unified image, the graphs described by Galloway do the opposite, reducing the unrepresentable surplus of the web to an infographic we can easily download and digest. Galloway echoes Lyotard's thesis that the postmodern sublime (or the database sublime) presents the unpresentable: what appears most radical about data overload, its sublime power to overwhelm, is neutralized when sublimity becomes a stock image for any dataset whatsoever. The argument is not that data is unrepresentable but that the unrepresentable itself, as a figure for surfeit data, is now a banal representation.

If new media threatens to exhaust the sublime, however, that does not mean that it exhausts aesthetic judgement altogether, or that we can no longer attend to differences among media, genres, and forms. Patrick Jagoda observes that Galloway's claim "resembles the common critique (really, the truism) that realist representation fails to totally capture its object" (21). He goes on to argue that collections of data (specifically networks) take many diverse forms that invite close reading and medium-specific analysis (as well as receptiveness to analogies across media). The unrepresentable remains an

integral concept for understanding new media and one that is irreducible to its use in network graphs that aestheticize data into a static image. Liu anticipates this position in his analysis of the data sublime: artists who strive to depict the nebulousness of disembodied information, to mediate demediation itself in the form of an image, are still constrained by the affordances of the media in which they work. One striking example is W. M. Turner's *Light and Color (Goethe's Theory)*, a painting of Moses writing the Heptateuch that figures the overflow of the divine word as a vortex of radiant light. Liu observes that this effect, "a romantic prefiguration of the data pour," takes shape through Turner's "rough yet limpid handling of oils" (229), allowing the layered opacity of paint to register traces of the formless and the transcendent. Liu takes this painting as well more recent works by new media artists as evidence that the data sublime has by no means exhausted "the ethos of the unknown": what is "unencoded, unstructured, unmanaged … in human experience." Nor has it exhausted the media that strive, impossibly but persistently, to depict this unknown: artistic media are one domain where an "experience of the structurally unknown can still be conveyed in the structured media of knowledge" (236).

How can the unknown endure in a quantified world? This is also the question posed by Perec in "Penser/Classer." Much as Whitman's epic catalogues offer literary scholars such as Folsom and Hayles a way to theorize the database through the lens of genre theory, Perec's reflections on enumeration shed new light on this debate by drawing rich analogies between language and computation, even though (or perhaps because) those

analogies rarely move beyond the hypothetical. Like media theorists and digital humanists who query the uncertain future of literature in the new millennium, Perec turns to the figure of the unrepresentable as a way of tracing the intertwined fates of literary expression and quantitative data. If the joys of enumeration are indeed "ineffable," that is partly because enumeration is inseparable from the numeric, and numbers have the potential to reach unthinkable sums. The question then becomes: is thinking also a sort of counting, a type of sorting? In Perec's own gloss, the forward slash between *penser* and *classer* implies that the relation between thinking and sorting cannot itself be sorted out (an ambiguity ingeniously preserved by David Bellos's translation, "Thoughts of Sorts"). Must one think before one sorts? Or is sorting (images, words, thoughts) a prerequisite for thinking? To think is itself to sort intuited objects under general concepts, to encapsulate and abstract. But what separates this sort of abstraction from more programmatic or procedural methods of organizing information? Is there a sort of thinking that is irreducible to the output of a thinking machine?

One answer is that there are sorts of thoughts that cannot be sorted, and perhaps even ones that cannot be thought. Much as enumeration spans the abyss of the "unmappable" and the "incomplete," thinking must inevitably confront the "unthinkable":

> It is as if the question prompted by the title, "Thoughts of Sorts / Sorts of Thoughts," questioned thinking and sorting in such a way as to make "thinking" unthinkable except in splinters, in dispersion, forever returning to the fragmentation it was supposed to try to put in order. (*Thoughts* 120)

The unthinkable embodies many of those values that Hayles associates with narrative and

the literary: it is fragmentary, polyvalent, resistant to being classified under fixed categories or abstract concepts, and for that reason never merely exemplary. But rather than oppose the dispersive force of the unthinkable to the inflexible logic of taxonomy, Perec figures the unthinkable as a fold *within* the thinkable and the sortable.[2] The sentence unravels like a möbius strip whose two sides share a continuous plane: the question of how to sort thoughts reveals thinking itself to be unthinkable (i.e. unclassifiable under the rubric of a determining concept) and, at the same time, implies that the unthinkable precedes and conditions the logical orders that try to assimilate it. Like Perec's concept of the "infraordinary," an imperceptible fabric that dwells in the interstices of lived experience, the unsortable is thoroughly intertwined with the systems that we use to map and comprehend the world, even as it threatens their coherence.[3]

The essay itself is an unsortable collection of lists culled from diverse sources: grammar manuals and dictionaries (including a section on interjectives from "a rather poor crossword dictionary"), the Universal Decimal Classification, a catalogue of the 1900 Paris Exhibition, Sei Shōnagan's eleventh-century *Pillow Book*, Borges's Chinese Encyclopedia, and novels by Jules Verne, Raymond Queneau, Harry Matthews, and Italo Calvino. A single letter marks each section of the essay but the order of the letters is not alphabetical, a system that Perec critiques (in Section L: "The Alphabet") for "superimposing a hierarchy onto a sequence that is inert by definition" (*Thoughts* 126). Instead the sections take their order from the first sentence in Calvino's *If On A Winter's*

Night A Traveller and, like the stories in that book, they could be reordered at random without making the text any less readable. Perec describes his process as "a matter of *montage*" – an apt metaphor both because he splices together disparate chunks of text ("notes scrawled on pads or loose sheets") and because the disjunctive structure produced by this method allows the examples to form their own series of "fortuitous encounters" (*Thoughts* 136). An essay about sorting that is nothing but unsorted fragments: the text exemplifies its own argument that literary enumeration, despite its ambition of forming a cohesive image of the world, ultimately dissolves into parataxis.

For Perec, one of the most perplexing examples of such "taxonomic vertigo" is the Dewey Decimal System. The DDS is a universal method for classifying books, encoding their primary topic as a three-digit arabic numeral and specifying subtopics with a series of fractional decimals. This system replaces an older library model that assigns books a fixed location in the stacks, usually following their order of acquisition. By contrast, the DDS gives each book a relative index and corresponding relative location that ties it to a stable yet flexible category. What makes such a system vertiginous is not just its dizzying scale but also its systematic reduction of things to numbers: a library is no longer a collection of objects but an array of indices that bear no resemblance to the things they index:

> By what sequence of miracles was it ever agreed, more or less all over the world, that
>
> 668.184.2.099
>
> refers to toilet soap (finishing processes), and
>
> 629.1.018-465
>
> refers to ambulance sirens, whereas
>
> 621.3.027.23
>
> 621.436:384
>
> 616.24-002.5-084
>
> 796.54
>
> 913.15
>
> refer respectively to electrical tension under fifty volts, foreign trade in diesel engines, prophylactics for tuberculosis, camping, and the historical geography of China and Japan! (*Thoughts* 127)

Here vertigo is a matter of style as much as of quantity. Perec heightens our sense of bewilderment by translating this array of numbers into a catalogue of disconnected topics. Jumps in syntax are also jumps in scale: the apposition between the list of numbers and the list of things underscores the power of numeric abstraction to shrink-wrap objects of any size into a portable fraction. The use of asyndeton, the rhetorical trope of omitting conjunctions between parts of a sentence, translates the structure of the library database into a human-readable form, looking forward to the use of comma-separated lists in defining data collections such as arrays and sets. In this way, Perec forges an analogy between the rhetorical art of enumeration and the indexical art of sorting: both express the vertigo of data by removing the connectives that would otherwise shape it into an intelligible form.

This vertigo of the index finds another rhetorical counterpart in the *etcetera*, a word that innocently conceals the unsorted surfeit that every list is compelled to exclude. Perec cautions against the abstraction of the etcetera even as he concedes its necessity:

> nothing seems simpler than making a list, but in fact it's much more complicated than it seems: you always leave something out, you're tempted to write etc., but the whole point of an inventory is not to write etc. (Perec, *Thoughts* 14)

The etcetera guards against infinity while also conjuring up a hoard of unlisted things that remain barely concealed, waiting to spring into view. It is a sort of carte blanche, assuring the reader that, given sufficient time and space, the list would be complete. Confessing upfront to exclusions that can then be dismissed as negligible or irrelevant is an effective way to preempt our suspicion that something crucial has been omitted: the etcetera suggests that the elided information is accessible somewhere else, if only there were an interface capacious enough to represent it. Many of Perec's lists call attention to this elision. For example, in a list of categories of animals culled from bureaucratic records (a response to Borges's infamous encyclopedia of impossible animals), Perec inserts an etcetera between "stuffed animals" and "animals which are carriers of leprosy," adding in a footnote: "There's nothing intrinsically odd about 'etc.'; it's just its position in the list that makes it seem bizarre" (*Thoughts* 129).[4] But that is precisely the point. The list relegates its own excess – what is too numerous to count or too random to sort – to this trailing delimiter that offers a semblance of closure, assuring us that we have read everything we need to know, that there is nothing more of import to tally. Shifting the etcetera to the middle of the list destroys this semblance. It is no longer a coda but an internal limit, a fold or *point de capiton* that reveals the incompleteness and incoherence of the set it sutures together.

Perec's work includes countless examples of lists that struggle with miscellaneous

excess: all of the objects on his writing desk, everything he can see from a café window in central Paris, all the places has has slept. Undoubtedly the most bizarre of these experiments is his Rabelaisian catalogue of everything he ate and drank for a year. The title is itself a mouthful: "Attempt at an Inventory of the Liquid and Solid Foodstuffs Ingurgitated by Me in the Course of the Year Nineteen Hundred and Seventy-Four." An analog forerunner of the now almost ubiquitous practice of posting realtime images of meals to Instagram and Twitter, the inventory is one of Perec's many attempts to trace the infraordinary, the sensible fabric and granular texture of everyday life. In contrast to other texts in *L'infraordinaire* that deviate freely from the task of describing the everyday, "Inventory" is remarkably strict, comprising nothing but a list of food and drink loosely grouped by category. Imagine ten pages of paragraphs like this one:

> Two Guéméné andouilles, one jellied andouillette, one Italian charcuterie, one cervelas sausage, four assorted charcuteries, one coppa, three pork platters, one figatelli, one foie gras, one fromage de tête, one boar's head, five Parma hams, eight pâtés, one duck pâté, one pâté de foie with truffles, one pâté en croûte, one pâté grand-mére, one thrush pâté, six pâtés des Landes, four brawns, one foie gras mousse, one pig's trotters, seven rillettes, one salami, two saucissons, one hot saucisson, one duck terrine, one chicken liver terrine. ("Inventory" 477)

More interesting than *what* Perec ingurgitates (read: gargantuan portions of meat, cheese, and cake, and over a hundred bottles of wine and spirits) is how he tries to sort this gastronomic data into meaningful categories. Should a salad with crab and Roquefort be filed under salads, seafood, or cheese? (For Perec the answer almost always seems to be cheese. Yogurt, too, is apparently a kind of cheese.) Do fruity sweets count as fruit? Yes, especially if you only eat one piece of fresh fruit a year and need to bolster your Vitamin C

intake with such healthy alternatives as "one pêce de vigne in syrup, one peaches in Sancerre, one bananas flambées." And what does it mean to eat *one* peaches or *one* bananas? Perec often uses the singular article to describe plural nouns ("one stuffed dates"), presumably because stuffed dates or bananas flambées count as a a single dish, albeit a dish whose size is left speciously ambiguous. He also mixes the general and the specific in ways that undermine the authority of his tally: how can one eat "five rabbits" *and* "two rabbits en gibelotte, one rabbit with noodles, one rabbit à la crème, three rabbits à la moutarde, one rabbit chausser, one rabbit à l'estragon, one rabbit à la tourangelle, three rabbits with plums"? Such redundancies dispel the illusion of rigor promised by the title. The inventory serves less as a culinary portrait than as a critical reflection upon its own enumerative method.

The gap here between descriptive rigor and Perec's reluctant confessions (or calculated omissions) recalls a passage in *Life A User's Manual* when the seventeen-year-old Beatrice Breidal attempts, in vain, to watch her calorie count. In a parody of her namesake Beatrice Portinari, Dante's abstraction for perfect feminine beauty, Breidal is "constantly preoccupied by her weight" and subjects herself to a Spartan diet that, like Perec, she records in a diary "obviously kept for this purpose alone." Consulting her personal database, the *Complete Table of Energy Values of Customary Foods*, she draws up a list of each item together with its caloric value:

Tea, no sugar, no milk	0
One pineapple juice	66
One yoghurt	60
3 rye biscuits	60
Grated carrots	45
Lamb cutlets (two)	192
Courgettes	35
Goat cheese, fresh	190
Quinces	70
Fish soup (without bread or garlic mayonnaise)	180
Fresh sardines	240
Cress and lime salad	66
Saint-Nectaire	400
Blueberry sorbet	110
TOTAL	1,714

But if the purpose of this diary is "obvious," an act of self-accounting legitimated by hard facts, such candor also serves to veil the countless repasts that go unmarked:

> Despite the Saint-Nectaire, this analysis would be absolutely reasonable if it did not sin grievously by omission; to be sure, Anne has scrupulously entered all she ate for breakfast, lunch, and dinner, but she has taken no account at all of the forty or fifty furtive raids she made between meals on the fridge and the larder to try to calm her insatiable appetite … In fact she is practically continuously nibbling something or other, and whilst she is now doing her self-consoling sum with her right hand, with her left hand she is gnawing a chicken leg. (*Life* 203)

Raw data is an oxymoron, as Lisa Gitelman reminds us, and the data in this table is most certainly cooked. Each food is equated with its caloric value – rather than, say, its nutritional content or gustatory savor – a value that is itself abstracted from a statistical average. (Not all quinces, after all, are exactly seventy calories). But Beatrice's palate rebels against such abstractions: her nightly binges are the consequence less of her personal foibles than of the system's failure to account for the sensuous appeal of each food and its

claim on the human appetite. The discrepancy between *rillette pâté* (600) and *tea, no sugar, no milk* (0) is one of sensible quality as well as caloric quantity, the difference between an object of desire – singular, irreplaceable, affectively charged – and a countable sum that renders any food potentially equivalent to any other.

To sin grievously by omission: we might say the same of Perec's inventory, if the omission were not so self-consciously marked. The text includes not one but three lacunae, three etceteras, disguised under the rigor of algebraic variables: "*N* cold buffets," "*n* coffees," and "*N* sundry wines". A buffet, of course, is already an unspecified quantity of food, and n is the algebraic equivalent of all-you-can-eat. Stranger still are the wines: paired with the epithet *divers* (sometimes translated as "miscellaneous," although I prefer the archaism of John Sturrock's "sundry," implying something that is sundered or set apart), the phrase is doubly ambiguous, refusing to specify not just how many but how many of what: glasses, bottles, cases? This ambiguity contrasts starkly with the wine list that precedes it, which meticulously records both variety and vintage:

> Nine Bordeaux, one Bordeaux Clairet, one Lamarzelle '64, three Saint-Emilions, one Saint-Emilion '61, seven Château-la Pelleterie '70s, one Château-Canon '62, five Chaˆteau-Négrits, one Lalande-de-Pomerol, one Lalande-de-Pomerol '67, one Médoc '64, six Margaux '62s, one Margaux '68, one Margaux '69, one Saint-Estèphe '61, one Saint-Julien '59. ("Inventory" 481)

The two-digit year after each wine forms a sort of poetic refrain that harmonizes the list even as its achronological order breeds confusion. It is no less thorough than the ledger that keeps stock of the Altamont's cellar in *Life A User's Manual*: "a wine list in which every bottle is entered by geographical region, name of grower, name of supplier, vintage,

date of entry, optimal maturity date, and, where relevant, date of leaving," followed by a two-page deluge of just such oenological data (*Life* 176). But Perec's own wine list seems ill-content to be reduced to a series of abstract figures. Shifting his attention from the orderly to the sundry, he echoes the moment in *Georgics* II when Virgil, after spending over two dozen lines describing nothing but vineyards, confesses that he cannot go on:

> Nor thee must I pass over, vine of Rhodes …
> Nor thee, Bumastus, with plump clusters swollen
> But lo! how many kinds, and what their names
> There is no telling, nor doth it boot to tell.

Umberto Eco cites this passage in *The Infinity of Lists* as an example of "the topos of ineffability," the reduction of "something that is immensely large, or unknown" to "a specimen, example, or indication, leaving the reader to imagine the rest" (*The Infinity of Lists* 49). The overripe grapes form a fitting analogy for the poet's own excess, both truncated and extended *ad infinitum* by a negation. Perec amplifies the trope from the ineffable to the innumerable: not just too many to tell, but quite literally beyond count. "*N* sundry wines" gives the illusion of quantitative rigor but instead opens the floodgates to an endless binge, permitting any amount of wine to be smuggled into the list untabulated. The phrase recalls what Christopher Johnson describes as the inbuilt "redundancy" of enumeration: much as engineers add a similar or identical component to any part of a complex machine that is likely to fail (n+1), poets and novelists in the baroque and neo-baroque tradition often compose hyperbolic lists that repeat previous elements for rhetorical effect. As the redundancies grow (n+3, n+4, etc.), the encyclopedic function of

the list, its power to collect, order, and ratify information, threatens to dissolve into a string of unregulated particulars.

The joke, of course, is that Perec is too blotto after drinking these sundry wines to accurately record their labels. Ian Jack suggests that *sundry* "presumably mean[s] the stuff that just arrives slyly at the table in a carafe, or the stuff that one is too drunk to remember drinking." The task of composing the inventory involves ingesting substances whose deleterious effects on human memory make this task impossible, a sort of self-defeating constraint. In this way, Perec stages a tension between visceral confession and clinical detachment: the fact that he is drinking these wines as he attempts to record them undermines his position as an impartial observer. This is an old quandary. In the *Third Critique*, Kant relegates the enjoyment of wine to the status of the merely "agreeable" [*angenehm*], a counterexample to the universal subjective validity of the beautiful:

> [A person] is perfectly happy if, when he says that sparkling wine from the Canaries is agreeable, someone else should improve his expression and remind him that he should say "It is agreeable to me"; and this is so not only in the case of the taste of the tongue, palate, and throat, but also in the case of that which may be agreeable to someone's eyes and ears. (97)

As with so many of his examples, Kant's invocation of wine at the critical juncture in the text is hardly accidental. Wine is agreeable rather than beautiful not only because its enjoyment is a matter of personal taste, *merely* subjective rather than subjectively universal, but also because the senses involved in its perception ("the tongue, palate, and throat") are more vulgar and proximal than the ears and the eyes. To judge wine means ingesting it into one's own body, abolishing the fragile distance between subject and object

proper to disinterested aesthetic reflection. And wine itself dulls and perplexes our powers of judgement, making it more agreeable the more we drink.

In a similar way, the humor behind Perec's sundry wines lies in the gap between the aloofness implied by the catalogue form and the obvious impossibility of remaining distinct from or impartial towards the things we eat and drink. Everything listed is also ingested, making the cataloguer's own body as much a part of the list as the foodstuffs he ingurgitates. As with Beatrice Breidel, a failure of accounting betrays an incurable habit or insatiable appetite that is indifferent to the distinction between one portion and the next, an error in description that is also a confession of unmastered desire. What Craig Dworkin and Kenneth Goldsmith call "Perec's Rabelaisian list" unleashes a sense of *copia* no less monstrous than the one Christopher Johnson finds in *Gargantua and Pantragruel*:

> To list for Rabelais is to ludically dissolve ossified categories and concepts in the face of more vital, contingent truths. It is to give voice to the dynamic profusion of material things and words, but especially to express, the undeniable, if irrational claims of the body." (1112)

But the confession is not without an air of calculation: Perec is suspiciously eager to confess his vices while staying circumspect about his virtues. He gobbles up a cornucopia of beef and pork but only one (unspecified) piece of fresh fruit. And besides an innumerable quantity of coffee ("*n* cafés"), the only nonalcoholic drinks can be counted on one hand: a tisane and three Vichy waters. Such glut is less a matter of what he eats than of how he collects and organizes the data: the imbalance between booze and healthy drinks, for example, might look very different if he had decided to include tap water. It is

as if the capacious form of the inventory demands an equally intemperate diet, even if the author must resort to hyperbole. Roland Barthes argues that taking pleasure in food above and beyond its function of sustaining life makes gastronomy perverse, and this perversion takes the form of an elaborate sequence (from the first whiff of a new dish to its lingering aftertaste) that memory prolongs indefinitely.[5] If the list is a genre that tends toward excess, the food list redoubles that tendency by making excess its own visceral theme.

Like other Perecian catalogues involving his body – places where he has slept, his movements through urban space – embodiment in this context has less to do with sensory experience than with data about the body. In another essay in *Penser/Classer*, Perec describes how he staves off his fear of "losing track of myself" by keeping a detailed log of "objective" experiences: "time of waking, timetable, journeys, purchases, progress in work (measured in lines or pages), people met or just seen, details of the evening meal I had eaten in this or that restaurant, books read, records listened to, films seen, etc" (*Thoughts* 51). If such timetables and biometrics threaten to make the body docile and governable, they also constitute a reparative practice that seeks to insulate the self from being reduced to a mere number.[6] Perec contrasts his method of logging the infraordinary with more sinister forms of enumeration: the death tolls published in weekly newspapers, for example, which quantify the impact of plane crashes and hijacked airplanes by counting lives as statistical metrics rather than grievable losses. Our compulsion "to measure the historic, significant, and revelatory" obscures the sensible fabric of daily life and its power to resist totalizing systems of abstraction. Yet the infraordinary opposes big data not

through nostalgia for the lost world of things, but by appropriating the former's own programmatic logic. To record every nuance of modern life, a life that is composed as much of numbers as of objects or words, requires a method that is algorithmic as well as imperative: "Describe your street. Describe another street. Compare." Such rigor is what distinguishes Perec's peculiar form of enumeration from more capacious genres such as the epic catalogue or the encyclopedic novel. (Rabelais, for example, shows Pantagruel gobbling hordes of tripe but never deigns to give an account of exactly how *much* he eats.) A list should be exhaustive rather than merely copious: to omit details simply out of convenience is to legislate unjustly what sorts of things deserve to be remembered.

Omission is inevitable, of course, which is why Perec calls his gargantuan list a *tentative* as well as an *inventaire*. Derived from the medieval scholastics, both the English and the French forms of this word signify an experiment as well as an attempt, a provisional trial that proceeds with rigor despite the uncertainty and contingency of its result.[7] As with the two other tentatives in Perec's oeuvre – *Tentative de description de quelques lieux parisiens and Tentative d'epuisement d'un lieu parisien* – this attempt to capture his annual diet as a finite set runs aground on its own surfeit. Perec's redundancies and elisions register traces of a world that is too subtle and too complex to be counted, even if, without "our need to name and collect … the world ('life') would be unmappable" (*Thoughts* 131). It is these glitches, more than the system they corrupt, that makes the infraordinary palpable. A bottle of pinot gris left untabulated, an extra portion of duck confit – what is stake in such omissions is not Perec's appetite but the system that records

it, a system that is too riddled with error to succeed in reducing life to a statistical average or a governable sum. What is not "computationally tractable," to borrow Willard McCarty's phrase, can still be felt a disturbance, however tentative, within the order of the list, a gap between our embodied sense of being-in-the-world and the abstract models that call that world to account.[8]

THE SOVEREIGN GRID:

CODE AND IMAGE IN ITALO CALVINO

In *Six Memos for the Next Millenium*, a series composed for the Charles Eliot Norton Lectures at Harvard (and which he never delivered), Calvino describes *Invisible Cities* as "something between a fable and a petit poème on prose," an effort to achieve "a peculiar density … that finds its proper dimension in the single page" (*Six Memos* 49). *Petits Poèmes en prose*, of course, is the subtitle of Baudelaire's *Le spleen de Paris*, and Calvino's prose shares many of the qualities of the post-romantic or symbolist lyric – from its synesthetic descriptions and sense of suspended time (underscored grammatically by the continual present) to the way that Marco Polo interrupts his solitary monologue to address his silent audience ("wise Kublai" is an apostrophe as much to the reader as to the emperor). In many ways the book more closely resembles a collection of lyric poems than it does a novel: the plot is so meticulously uneventful that the chapters can be read in any order. It is a world where nothing happens (or that *makes* nothing happen, as Auden says of poetry) and where anything that does happen is strategically inconsequential.

At the same time, however, Calvino draws an implicit analogy between the highly condensed and immaterial world of the lyric and the dematerialization of physical media in what he calls "our post-industrial age of technology": in these "congested times," when data flows along electric circuits with unimaginable speed and yet we grow increasingly sluggish amid an abundance of information, the compactness of potential literature seems

especially felicitous. If Calvino dreams of "immense cosmologies, sagas, and epics reduced to the dimension of an epigram," he also dreams of all human knowledge placed in the storage capacity of a microchip – in an age when "orders of weightless bits" supersede a modernist iconology of "rolling mills and molten steel" (*Six Memos* 8).

Later in the lectures, exemplifying the "exactitude" promised by this computational turn, Calvino cites a passage from *Invisible Cities* in which Kublai Khan attempts to map his empire onto the surface of a chessboard.[9] A Cartesian grid whose sixty-four squares align with the book's sixty-four chapters, the chessboard is a fitting analogy for the "geometric rationalism" embodied by the emperor and his desire to reduce the "tangle" [*groviglio*] of urban life to a governable structure of lines and points. It is the chessboard that prompts Kublai to envision his empire as "a desert of labile and interchangeable data, like grains of sand, from which there appeared, for each city and province, the figures evoked by the Venetian's logographs." Chess is a medium that allows the two characters to establish "a different communication": when Polo arrives at the court "totally ignorant of the Levantine languages," he expresses himself "with objects he took from his knapsacks – ostrich plumes, peashooters, quartzes – which he arranged in front of him like chessmen." At first blush, this strained effort to communicate with objects ("a helmet, a seashell, a coconut, a fan") evokes a sort of nostalgia for the lost immediacy of things – an allusion, perhaps, to the professors at Jonathan Swift's Academy of Lagado, who carry enormous sacks containing every possible object they might need to name. In a 1971 letter to Paolo Valesia, Calvino calls for just such a language, which he associates with the

Renaissance figure of the Zanni: "a hypothetical language, an attempt at linguistic construction outside the rules of rhetoric and logic, a language without a speaking subject, language of things, Gurdulù-language …" (409). The Zanni is a popular character in the *commedia del arte*: a dispossessed worker from the Lombard countryside who serves the wealthy nobles and merchants of Venice, contorting his body into acrobatic movements that replace his absent speech. Sianne Ngai traces the modern legacy of this figure by arguing that the zany constitutes an aesthetic category in its own right, encompassing "the intensely embodied affects and desires of an agent compelled to move, hustle, and perform in the presence of others." Polo is a little zany himself: before he learns to speak with objects, he can "express himself only with gestures, leaps, cries of wonder and of horror, animal barkings or hootings." The objects arranged on the chessboard signify nothing on their own (nor do they fulfill Calvino's hypothesis of a primordial language where things signify themselves). It is Polo's animate body – his "improvised pantomimes" – which the khan must "interpret" and "decipher": a city depicted by "the leap of a fish escaping the cormorant's beak" or "a naked man [*l'uomo nudo*] running through fire unscorched." A comically excessive display of affect that animates and enlivens the body, these gestures also encipher the body into a mere instrument of semiosis: speech is stripped away, but rather than returning to a naïve or prelinguistic sense of completeness, Polo performs – at the command of his sovereign – a form of nude life from which the dignity and polity imparted by speech has been subtracted. The desire to overcome his muteness through zany gestures only further reveals the degree to which his performance,

staged on the surface of a life-sized chessboard, is subject to the emperor's self-legitimating power.

What Calvino calls "a language without a speaking subject," then, undergoes a grotesque inversion in *Invisible Cities*. Rather than allow gestures to signify the continuity of a world that has not yet been discretized by alphabetic writing (as Swift does), the text codifies the gesturing body itself into the differential logic of the grid. There is no illusion here of what Bernard Stiegler calls "the state of continuity" of pre-alphabetic speech, in which the speaker "hears no discrete elements" and which the invention of writing irrevocably fractures into "a play of analyzable, diacritical, combinatorial elements." *Invisible Cities* traces this combinatory logic from writing to the city itself: the citizens of Zenobia, for instance, imagine a replica of their metropolis that is "perhaps quite different, a-flutter with banners and ribbons, but always derived by combining elements of that first model." The chessboard enacts this combinatory in miniature: an eight-by-eight grid that analyzes even gestures and interjections into a grammar composed of discrete signs. But unlike natural language, where signifiers acquire meaning through shared convention, the language of the chessboard takes on a sovereign force the moment each object is *assigned* an arbitrary referent:

> *To each piece, in turn, they could give an appropriate meaning [si poteva volta a volta attribuire un significato appropriato]: a knight could stand for [rappresentare] a real horseman, or for a procession of coaches, an army on the march, an equestrian monument: a queen could be a lady looking down from her balcony, a fountain, a church with a pointed dome [una chiesa della cupola cuspidata], a quince tree.*

If William Weaver's translation effaces the semiotic valence of some of these words (*rappresentare*, *significato*) in favor of familiar monosyllables, his crib of *cupola* as *dome* adds another layer of meaning by echoing Coleridge's "Kubla Khan," one of Calvino's models for the book.[10] Like his romantic namesake (who did "a stately pleasure dome decree" – above "a mighty fountain" and "many an incense-bearing tree"), the emperor of *Invisible Cities* decrees his *duomo*, fountain, and quince tree through a speech act that both engenders and replaces the things it names. The sovereign act of naming aligns with the decisive operations permitted by the grid: the connection between signifier and signified is not merely arbitrary but forcibly arbitrated into being. At the same time, the use of passive voice in the Italian ("*si poteva volta a volta attribuire*": to each piece *could be attributed*) abstracts the source of this power away from the emperor to the game itself (which is played "*volta a volta*," turn by turn). If the passage draws an analogy between sovereign power and the power of a chess player over the pieces he commands, it also reveals the degree to which the emperor is subject to protocols outside his control. Chess permits little ambiguity: a piece cannot occupy more than one cell at once (by straddling the border between two cells, for example) nor can the game be left suspended between two turns (as any novice discovers who unwittingly lets go of a piece before fully committing to its new position, an action that irrevocably ends the turn.) Each piece occupies both an absolute point in the sequence of turns and an absolute position on the grid. These two systems converge in the algebraic notation used to record games (and codified quite strictly by the Fédération Internationale des Échecs), where a step-by-step

ledger coordinates the exact coordinates of each piece at any given point in time ("c5," for example, signifies a classic opener: a pawn advancing two spaces to the third column of the fifth row). When Kublai compels Polo to contort his body across the surface of a life-sized chessboard, then, he also makes the board a figure for the structures that precede and condition his own authority. If the emperor succeeds in deciphering Polo's pantomime of cities, it is only because he is himself "an emblem among emblems."

This tension between sovereign power and rigorous protocol comes to a fore at the end of book, when the chessboard allegory reaches its logical conclusion.

> *At checkmate, beneath the foot of the king, knocked aside by the winner's hand, a black or a white square [quadrato] remains. By disembodying his conquests [a forza di scorporare le sue conquiste] to reduce them to the essential [all'essenza], Kublai had arrived at the extreme operation [operazione]: the definitive conquest, of which the empire's multiform treasures were only illusory envelopes. It was reduced to a square [tassello] of planed wood: nothingness [il nulla]…*

Scacco matto: a synecdoche for regicide. Kublai concludes his meditation on chess with the figurative death of a king. Checkmate "disembod[ies]" him, or rather he arrives at the *essenza* of chess only by force (*a forza*) of his own excorporation. The verb *scorporare* (from ecclesiastical Latin: *(e)xcorporare*, to dissolve a body or uniform substance) carries a legal and economic force in Italian: to expropriate part of a whole in order to redistribute it elsewhere, such as removing land from an inheritance. In this context, as an antonym of *incorporate*, it recalls the theological doctrine of the king's two bodies: the emperor embodies a divinely ordained kingship to the extent that his power is excorporated from (and therefore able to outlive) his mortal body. With every checkmate a king dies, and yet

the king survives to play another game.

This sovereign afterlife depends in turn upon the differential logic of the chessboard, the "black or white square" on which the king's chess piece lies toppled and deposed. Kublai arrives at the *ezzenza* of sovereignty by way of an *operazione*, a word that combines military conquest, surgical precision, and algebraic calculation: in chess, the tactics of warfare coincide precisely with formal operations performed on a grid. The operation is "extreme" and "definitive" to the degree that it excludes the possibility of a middle term: either the white king dies or the black. Black or white: a binary that describes the outcome, not of a particular game (underscored by the indefinite article: *un quadrato* and not *questo quadrato*), but every possible game, which can be reduced to one of two possibles outcomes. A multiplicity of conquests inheres in a "a square of plain wood": not a *quadrato*, a shape capable of standing alone, defined by its angles and edges, but a *tassello*, a shape that exists only as part of a pattern, a shape that can *tessellate*, forming a mosaic by repeating itself without overlapping or leaving gaps (as in Escher's images of chessboards formed from the tessellated silhouettes of birds). The shift from *quadrato* to *tassello* in the passage fortifies the analogy between sovereign force and binary logic: the square on which the "definitive conquest" takes place is itself defined purely by difference, one stitch in a recursive pattern where each element signifies only the absence of its neighbor.

A *tassello* is also a wedge or a plug, with the same technical connotation as in English: a device that draws electricity from a socket. If this plug is capable of powering Kublai's

empire, it is partly because it is a conduit for those "weightless bits," as Calvino calls them, that "flow, as electrical impulses, through circuits." Like a digital processor, the *operazione* of the chessboard toggles between a pair of discrete values: one and zero, something and nothing (where *nulla* echoes *nullo*: null, void, invalid). The bit (or *binary digit*) is the elementary unit of information, the unit that gives the digital its name: every number and every instruction manipulated by computers is ultimately encoded as an array of binary digits. Although bits are proverbially described as ones and zeros, Calvino's use of *nulla* here registers a pivotal distinction between the binary and the numeric: a sequence of bits can *encode* a number, but they do not *represent* it. In his notes for the Norton lectures, Calvino uses the bit as the exemplary instance of lightness [*leggerezza*] precisely because it lacks any sensible texture or conceptual heft: in the post-industrial epoch, "[t]here are still machines of iron, but they obey bits without weight" ["ma obbediscono ai *bits* senza peso"]. If "software is in command" [il *software* che command], that is because the bit, as an essentially *logical* category that only happens to be materialized by silicone chips, appears to transcend the machines it governs. An array of bits that encode a letter (as an 8-bit Unicode character, for example) may well be realized as an electrical charge on the device that stores it, but, as Aden Evens observes, "no longer does that materiality bear any inherent or sensible relation to the letter it encodes" (11). Data composed of bits is severed from sensible matter just as each individual bit is severed from every other bit (and from its own opposite value): a binary between presence and absence that is rigorously enforceable (if not always incorruptible). The bit is the "apotheosis" of

abstraction, as Evens aptly puts it – a unit of pure difference, a *grammē*, seemingly immaterial, immutable, and yet, like a kingly body, capable of assuming a material form.

If new media also entail a new form of sovereignty, as many theorists have argued, that sovereignty has its basis in the abstraction of the bit. Every operation performed by a digital computer is stored as an array of bits. Those bits encode instructions compiled from source code written by a human programmer. And although the programmer has the power to tell the computer exactly what to do, her instructions must conform to the rigorous syntax of the programming language in which the code is written. Like the algebraic notation used in chess – which records a sequence of moves so precisely that they can exactly replayed – the code written by programmers represents a series of commands that the machine must execute in the exact form in which they are given. A single thread on a CPU core can perform only one operation at a time – and the order of those operations is guaranteed (at least in theory) to match the order of lines in the human-readable source. Operations form a queue from which they are dispatched in lockstep one after another. To the human programmer, source code appears as a series of lines (often but not always terminated by semicolons) that the compiler transforms into an executable binary: a program composed of bits that the processor can actually execute and run. In this way, the linearity of digital logic guarantees its iterability. Lineated code is compiled into an isomorphic series of executable instructions, and the processor, in turn, executes those instructions at runtime in a precise and immutable order. The identity between human instruction and machine execution, however, is not an intrinsic property

of computation. A whole series of protocols – a vertical chain of command from the syntax of source code to the compiled binary – promises the perfect iterability of the original instruction. It is this iterability that defines the digital as such: an algorithm executed with a given set of parameters will always produce the same irrefragable result. In this way, the abstraction of the digital – its dream of transcending the endless variation of the physical world – gives rise to (and follows from) this fantasy of the human programmer (as well as the human user) as a sovereign with the power to execute unwavering commands.

But *Invisible Cities*, for its part, does not end with the deadlock of checkmate. Nor does the binary logic exemplified by chess succeed in governing the divergent subplots and lyric vignettes that fill the long gaps between the Khan's decrees. Challenging established readings of the book as a defense of the rational and the geometric, many recent critics observe that Kublai, however formidable, contributes only one half of a dialogue in which Polo frequently holds the cards. Jennifer Scappetone, for example, argues that "[w]hile Kublai seeks refuge in the chessboard as a model of the invisible order that governs the destiny of cities, Polo's telling stresses the 'infinite deformities and discords' that ultimately elude the imposition of a 'coherent, harmonious system' from without" (298). Rather, Kublai and Polo together stage a dialectic between order and disorder, between the colorless geometry of the grid and the intricate texture of urban life that no abstract structure can map without remainder. Polo's penchant for digression and deferral (often disguised as flattery and deference) not only frustrates the emperor's desire to exhaustively

chart and thereby govern his empire but also unravels the rhetorical and narrative forms that underwrite his power.

The most significant of these digressions follows immediately after the passage quoted above. No sooner does the emperor posit the reducibility of his empire to a binary square than the Venetian explorer launches into an ekphrasis of the chessboard itself that systematically undermines its function as a medium for information.

> Your chessboard, sire, is inlaid with two woods: ebony and maple. The square on which your enlightened gaze is fixed was cut from the ring of a trunk that grew in a year of drought: you see how its fibers are arranged? Here a barely hinted knot can be made out: a bud tried to burgeon on a premature spring day, but the night's frost forced it to desist.

No longer a grid of information or a platform for gameplay, the chessboard appears for the first time as a solid block of wood. A hand-carved block, to be precise, whose rustic texture is untouched by mechanical reproduction: the wood has been cut by a lumberjack ("chosen for chopping down" rather than deforested) and "scored by the wood carver with his gouge." Nothing about the board is uniform. It is made of two woods ("ebony and maple"), interwoven in such a way that the two types of fibre – and even the rings of their separate tree trunks – remain distinct. The surface bears traces of half-formed life: a knot left by a frozen bud, a pore gnawed through by a caterpillar. Even the grid of the chessboard is uneven, and protruding squares have been pared down by hand. If these details converge in a nostalgic (albeit ironized) scene of pastoral labor that suspends the clockwork of the game in a moment of idyllic reverie (a reverie, moreover, that seems largely indifferent to the imperial subjects on whose handiwork it depends), the passage

also interrupts the emperor's *operazione* in order to give the chessboard what the clockwork of the game (which quantizes time *volta a volta*, turn by turn) have so far precluded: a moment of sustained attention.

Directed toward a crafted artifact, this attention (and the heightened rhetoric it occasions) elevates the passage from a mere description of a woodblock into an ekphrastic description of an aesthetic object. Polo's labored speech seems to absorb the solidity of the thing he evokes, charging language with the vividness of an image even as he digresses from (and thereby suspends) the Khan's demand for narrative progression. The slightest hint of a plot is cut short and ossified into the woodgrain: a spring bud is frozen into a knot, a caterpillar a hollow pore. Polo trades the lockstep of chess (and the imperial conquests it subtends) for what Murray Krieger calls the "still moment" of ekphrasis, the moment when image and text are "sutured" to each other and the properly temporal medium of language assumes the frozen guise of the artwork it evokes. Even as ekphrasis strives to narrativize the saccades of an eye roaming across the surface of an image, the ekphrastic description itself arrests the narrative in which it is embedded, imitating the solidity of painting or sculpture in a way that also intimates the stillness of death. As with Paul de Man's analysis of prosopopoeia, the act of addressing an inanimate object not only animates the object but also strikes the living speaker dumb.[11]

Diverging from the chronology of plot, Polo's ekphrasis also offers a respite from the quantized time of the game, a time governed by sequential moves and the swift execution of unquestionable commands. In his memo on "Quickness," Calvino contrasts the rigor of

such clock time with the pleasures of digression, citing Carlo Levi's introduction to an Italian translation of *Tristram Shandy*:

> Death is hidden in clocks, as Belli said, along with the unhappiness of individual life, of this fragment, of this thing that is divided, disintegrated, deprived of wholeness – death, which is time, the time of individuation, of separation, the abstract time that rolls toward its end.

If abstract time disintegrates the continuum of lived experience by making it calculable and accountable, digression redoubles this fragmentation in order to make time "so complex, tangled, tortuous, and so rapid as to obscure its own tracks." Clock time divides the temporally continuous into the spatially discrete, a process of grammatization, as Stiegler observes in his reading of Heidegger in *Technics and Time*, that reveals "[t]he 'clockness' of the *grammē*, or rather the *grammē* or programmness of the clock." If Heidegger's antidote to the administered time of modernity is to champion the yet undiscretized presence of the *now* (a move that Stiegler critiques as fundamentally logocentric), Levi proposes an alternative model in which narrative digression, rather than nostalgically seeking to restore "wholeness," reveals a self-difference at work *within* clock time itself.

Even as digression halts the fragmentation of narrative time into discrete episodes and sequential (if largely inconsequential) events, brought to the *punctum* of a checkmate just a moment before, the sustained attention enabled by this reprieve occasions a description that gives the chessboard (as well as the prose through which it becomes visible) a sort of fragile solidity, allowing language to congeal – and this is the ekphrastic illusion – into an

almost sculptural form that evokes all the texture and heft of a silent work of art. Ekphrasis is always digressive to the extent that it suspends the causal entanglements of plot for the dilated and often asynchronous time of description (as in Homer's ekphrasis of Achilles' shield, where a story of oxen plowing a golden field becomes indissociable from the forging of the golden shield itself as well as the writing of the furrowed lines of the poem: three moments, all superimposed). But the passage is also digressive in the more narrow sense described by Levi, interrupting the discretized and purely logical time of the game (a time already at odds with the digressive travelogues that preface it) with a description that is much too hesitant, too carefully qualified to achieve that sense of ambient stasis that distinguishes the ekphrastic mode. Of course, one could agree with W. J. T. Mitchell that hesitancy and self-doubt are themselves hallmarks of the genre, serving to register an ethical ambivalence towards the other as well as toward the artwork whose alterity ekphrasis seeks to neutralize. In Polo's case, however, the tentative character of his speech also extends a long line of similarly halting (and unabashedly ekphrastic) descriptions of cities, many of which begin with a modesty *topos* that is as impish as it is disarming: (…). Ekphrasis is one way of navigating the tension between mathematical and rhetorical modes of description that Calvino describes in the memo on "Exactness": (…). It is through omissions, negations, and slippages that the ekphrastic object imprints itself on language as a sort of negative impression: a "black hole," to borrow Mitchell's phrase for the sublimely ineffable artwork that remains forever indescribable even as it warps language around the gravity of its absence.

The reduction of the empire to a black or white *tassello* depends, in turn, upon the reduction of the chessboard to a material substrate for the information it encodes. The sensible texture of the wood – its melange of ebony and maple, its knotted surface, and, presumably, any variation in the whiteness or blackness of its painted squares – must be quantized into a uniform grid that counts every square as either wholly black or wholly white and discounts everything else as noise. Together, these details disrupt the emperor's attempt to reduce the chessboard to the binary logic of a white or black *tassello*, instead dissolving its surface into a welter of minutiae. Polo reveals a discrepancy between the insensible structure of information and the sensible texture of its material substrate. Insofar as encoding information onto a binary grid requires the reduction (or more precisely, the quantization) of these minute variations into discrete quantities – different shades of black or white count as pure white or black in relation to a certain threshold, for example – the act of describing the chessboard reverses this process and reveals the multiplicity on which it depends.

Stiegler argues that the digitization of the image (or "discretization," to use his term: the encoding of images as discrete arrays of numeric values) stages an analogous crisis to the one inflicted on speech by the invention of alphabetic writing, revealing the fact that the continuous analog image is always already discrete. The discretized image destroys the "continguity of luminances" supposed to inhere in the analog image: the belief that light reflected off the photographic subject actually touches a strip of film, and that we are touched in turn by analogous lightwaves reflecting off the surface of the printed image.

Every time Nadar's famous photograph of Baudelaire is printed, for example, "this whole 'umbilical cord' constituted by the photons that come to imprint and *physically* touch, from out of the nineteenth century, the *photosensitive* silver halides." Analog media are indexical: they bear the imprint of physical waveforms (either lightwaves hitting unexposed film or soundwaves moving the diaphragm of a microphone) that analogically resemble the sounds and shapes that produced them. This is why photographs and phonographs are called analog in the first place: they store information in a form that is strictly analogous to its source. As Kittler observes:

> They are not only supposed to resemble the object, but rather guarantee this resemblance by being, as it were, a product of the object in question, that is, by being mechanically produced by it – just as the illuminated objects of reality imprint their image on the photographic layer … a reproduction authenticated by the object itself.

This continuity is destroyed by digital media: a bitmap image, for example, stores its data as an array of floating-point decimal values, each pixel represented by a triplet of such values (one each for red, green, and blue). A bitmap is discrete in at least two senses, strictly analogous to Kublai's chessboard. First, the continuous plane of the image is divided into equally sized cells. Second, the average color of each cell is sampled (since the cell represents a minute region of light rather than a single point) and each color component of the sampled value is encoded as a floating-point number with a finite bit depth (an 8-bit number, for example, could represent one of 2^8 or 256 discrete possible values). An image digitized in this way no longer *resembles* the scene it encodes: its relation to the physical lightwaves it records is purely one of statistical measurement. The

digital image comprises a series of instructions for reconstructing an image – rather than an analogue of the original source. Because the digital image takes the form of a discrete code rather than a continuous texture, it can be exactly reproduced in any format capable of representing binary data: an image copied across physically diverse media (a solid-state drive, an optical disc, a wifi signal) remains structurally identical. Digital copying does away with the noise inherent in mechanical reproduction: although physical media can be corrupted, the data they store is itself an abstraction completely separate from its medium and can be perfectly reconstructed (as long as another copy exists). In this way, the digital sacrifices the continuity of analogy (where an image is coincident with its material substrate) for the iterability of code. The image becomes a form of writing, a form whose identity – to a degree unprecedented in alphabetic writing – can be rigorously enforced.

LETTERS ENFETTERED:

CHRISTIAN BÖK'S *EUNOIA*

"Constraint, as everyone knows, has a bad press," writes Marcel Bénabou. "All those who esteem the highest value in literature to be sincerity, emotion, realism, or authenticity mistrust it as a strange and dangerous whim" (40). Few books of contemporary poetry are as whimsical (or as dangerous, some might say) as Christian Bök's *Eunoia*. Inspired by the Oulipo – that group of French writers and mathematicians infamous for inventing absurdly difficult literary constraints (and using them to write equally difficult works of literature) – *Eunoia* follows a simple premise: each of the five chapters uses a single vowel. The resultant text reads something like a truncated dictionary, a Rabelaisian catalogue of obscure words that nevertheless form a surprisingly legible and compelling narrative. Despite its difficulty, *Eunoia* has been wildly successful: it is the most popular book of poetry in Canadian history, an international bestseller (hitting number eight on Amazon.uk a few weeks after its British publication), and the winner of the prestigious 2002 Griffin Prize for Poetry. It has been choreographed for dance ensemble, mined for hiphop lyrics, and translated into emoji.[12] The book's success – almost unprecedented in the world of experimental poetry – has also fueled the animosity of its detractors, who complain (as Bénabou might predict) that Bök trades authentic expression for gimmickry and repartee.[13]

What is it about *Eunoia* that appears so threatening to its detractors? How can a text

so widely celebrated by its mainstream readers also elicit suspicion and contempt from other contemporary poets? One answer I will propose is that the Oulipo appears to dismiss the concept of organic form integral to a great deal of post-romantic aesthetic theory: the idea that the imagined totality of a literary work dynamically shapes the arrangement of its particular elements. Like most Oulipian texts, *Eunoia* is procedural: the constraint, aspiring to the rigor of an algorithm or an axiom, largely determines the form of the work in advance. At the same time, Eunoia thematizes its proceduralism as a pervasive feeling of tedium: both the text itself and Bök's commentary on it emphasize the repetitive and unfathomably boring character of the writing process. What offends many critics is not just that the writing is constrained, but that its self-presentation as the effect of drudgery and toil intrudes upon (and thereby destroys) the space of disinterested aesthetic reflection proper to lyric poetry. *Eunoia* foregoes *otium* for *labor* – and so appears both to capitulate to the capitalist demand for valuable work and to dismiss poetry's power to oppose that demand with scenes of idleness and repose. This is a reading, however, that I will ultimately push back against: Bök's commentary on *Eunoia* together with his scholarly work on 'pataphysics frame his poetic practice precisely in terms of the post-Kantian aesthetic tradition and its emphasis on autotelic play.

In the postface to *Eunoia*, Bök describes his procedure thus:

> 'Eunoia' is the shortest word in English to contain all five vowels, and the word quite literally means 'beautiful thinking.' *Eunoia* is a univocal lipogram, in which each chapter restricts itself to the use of a single vowel. *Eunoia* is directly inspired by the exploits of Oulipo . . . the avant-garde coterie renowned for its literary experimentation with extreme formalistic constraints. The text makes a Sisyphean spectacle of its labour, willfully crippling its language in order to show that, even under such improbable conditions of duress, language can still express an uncanny, if not sublime, thought. (103)

Eunoia's immediate predecessor is Georges Perec's *La Disparition*, a 300-page novel written without the use of the letter *e* (a true feat in French, where this letter is even more ubiquitous than in English). A parody of hard-boiled detective fiction, *La Disparition* tells the story of several friends in search of a missing companion, Anton Vowl. In the course of their search, they begin to discover that an uncanny yet indescribable absence pervades their fictional world. Dozens of characters are murdered on the verge of pronouncing the forbidden letter: the Corsican detective Ottavio Ottaviani, for example, spontaneously dies just as he is about to announce that the text he is reading is a lipogram that lacks the letter *a* ("Mais il n'y a pas non plus d' …").

Like Perec's novel, *Eunoia* obeys one of the basic principles of Oulipian writing: "a text written according to a constraint describes the constraint" (Roubaud 41 – 2). Constraints are generative as well as restrictive: they shape the content whose expression they constrain. The opening salvo of each chapter is glibly self-reflexive: "Awkward grammar appalls a craftsman" (1); "Enfettered, these letters repress free speech" (31); "Writing is inhibiting" (50). And, as with Perec, characters die on the brink of saying the unsayable: Hassan, the protagonist of Chapter A, expires amid a "grand mal spasm and, *ahh*, gasps a schwa, as a last gasp" (30). But there are more constraints:

> All chapters must allude to the art of writing. All chapters must describe a culinary banquet, a prurient debauch, a pastoral tableau and a nautical voyage. All sentences must accent internal rhyme through the use of syntactical parallelism. The text must exhaust the lexicon for each vowel, citing at least 98% of the available repertoire (although a few words do go unused, despite efforts to include them: *parallax*, *belvedere*, *gingivitis*, *monochord*, and *tumulus*). The text must minimize repetition of substantive vocabulary (so that, ideally, no word appears more than once). The letter Y is suppressed. (103 – 4)

Many of these constraints are also Oulipian. The goal of exhausting the available lexicon recalls another common principle: "the Oulipian text actualizing a constraint [is] envisaged only on the condition that this text contain all the possibilities of the constraint" (Roubaud, "Deux Principes" 95). Raymond Queneau's *Cent mille milliards de poèmes*, for example, does not just give us a new collection of sonnets; it gives us so many sonnets that even the most assiduous reader could never hope to read them all in a lifetime – indeed, the work relieves poets of the need to write a sonnet ever again.[14] The Oulipian text generates an unmanageable surfeit that exhausts the novelty of its constraint. Kenneth Goldsmith's endorsement in the book's blurb is apt: "*Eunoia* takes the lipogram and renders it obsolete."

Even *Eunoia*'s thematic content seems to derive from the constraint: by Bök's own account, the four principle motifs (banquet, debauch, tableau, voyage) emerge fortuitously out of the vocabulary common to all five vowels. By setting out to exhaust his repertoire, Bök seeks to reveal the latent preoccupations of the English language: what topics recur so frequently in the dictionary that we can speak of them even under the harshest of restrictions? Of course, the motifs are also suspiciously literary: Bök notes that they are "the kinds of scenarios that you typically see in Greek epic poetry" ("On Being

Stubborn"). Chapter E, whose heroine is Helen of Troy, retells the entirety of Homer's *Iliad* – and with a sense of elegance and poise that befits the epic tradition of aestheticizing violence: "When the helmeted men get pelted, the slender needles (*les fléchettes*) dent the crested helmets" (45).[15] Bök would maintain, however, that Chapter E is only epic because the epic is deeply inscribed in the history of our language: not just centuries of translating the classics, but centuries of glorified combat have left English with a rich vocabulary for speaking eloquently about war.[16]

Despite its international success, *Eunoia* has not always met with enthusiasm. What some readers celebrate as the deftness and ingenuity of its *difficulté vanqué*, others see as an obsequious display of the poet's labor. For many poets sympathetic to the lyric tradition, the book's technical artifice comes at the expense of poetic affect: the book substitutes elbow grease and gimmickry for emotion recollected in tranquility. Bök would seem to agree: such a "Sisyphean spectacle," he notes in the afterword, "has required seven years of daily perseverance for its consummation" (105). This is no joke. In an interview with Charles Bernstein, Bök recounts the duress of his writing process: an overworked graduate student at the University of York, holding down two jobs at sixty hours a week, he toiled away on the project from midnight to early dawn every night for the better part of a decade, gradually succumbing to the paranoid suspicion that the vowels themselves were conspiring against him ("On Being Stubborn"). The story is hyperbolic, of course, and possibly apocryphal, but it is part of the mythos of toil that has shaped *Eunoia*'s reception, a mythos promulgated by the text itself. Work is a recurrent motif in Bök's

oeuvre: by way of prefacing his recent translation of the fourth book of Virgil's *Georgics*, for example, he explains how he micromanaged his workload by parsing the text into fifty blank verse sonnets, each to be completed in just under two days. He maintained this pace for the duration of the ninety-day project, mimicking Virgil's own analogy between the geometrical structure of the beehive and the division of apian labor.[17]

This emphasis on work has led many critics to dismiss *Eunoia* as "pointless toil." The Canadian poet Carmine Starnino coins this phrase in an infamously scathing review that describes the book "not so much as a triumph of ambition as a triumph of stamina" (130): technically adept, yes, and a "spectacular *jeu d'esprit*," but ultimately frivolous and lackluster in its failure to convey any real depth of thought or feeling. Starnino's reading, for all its polemic, is representative of critiques leveled at the Oulipo in general: on the one hand, constraint-based writing appears juvenile and self-indulgent, indifferent to any extrinsic purpose beyond the reshuffling of written signs; on the other hand, it is ruthlessly logical to the point of masochism.

Such critiques are often indignant towards the Oulipo's apparent disregard for the value of literary and artistic freedom: the sense that language games of this sort are fundamentally hostile to the free play of the imagination. Starnino condemns "such self-punishing acts of technical adroitness" not because they produce absurd results (130), but because they threaten the concept of the lyric as an organic form: "A difficulty mastered should never itself be the prompt that motivates poems into life, particularly since that difficulty will stop representing a danger the moment it can no longer shock the reader

with its impossible surmise" (131). Novelty value has a half-life, we might say, although Starnino's point is also that the book fails to sustain its defamiliarizing effect because the procedure itself is static. If the effect of *Eunoia* is "attritional – less and less achieved," that is because the constraint effectively generates the text in advance, foreclosing at the outset the dialectical play between literary form and conscious thought that defines lyric poetry as such. Starnino's authority here is Coleridge: "The idea which puts the form together cannot itself be the form" (133). Poetry submits itself to the rigor of form in order to bring that form to life (and thereby justify that rigor in the first place); *Eunoia*, on the other hand, offers only the "confirmation of a conundrum solved" (133). Hence the irony of Starnino's witty if spiteful remark that *Eunoia* places "authorship" on "autopilot" (134): the procedure submits poetry to just the kind of tedium and automatism that the avant-garde's tactics of *ostranenie* set out to disrupt. If *Eunoia* estranges conservative readers who expect poetry to be expressive, it also estranges many avant-garde readers who see its constraint as an affront to aesthetic freedom and an effort to subdue the contingency of quotidian life.[18]

One way to defend *Eunoia* against this charge is to argue that the constraint does, in fact, generate surprising images and turns of phrase that are every bit as pleasurable as those we find in poetry written with all five vowels. If we accept that poetry is characterized less by personal expression than by verbal originality (the traditional formalist defense of the genre), *Eunoia* is profoundly poetic: the constraint gives rise to highly improbable yet beautiful sentences that would otherwise have been unthinkable.

The book is multi-generic, rich in literary allusions, and tonally complex, ranging from epigrammatic wit to somber elegy to ribald humor. In "The Oulipo Factor," Marjorie Perloff defends *Eunoia* on just these grounds: not only do such constrained texts reward (and continue to reward) close reading; they give us an antidote to a pervasive lack of formal competence among contemporary poets who see language as a self-effacing vehicle for spontaneous feeling. Perloff laments that today the word *poetry* typically designates "not the melopoetic origins of lyric poetry or the page designs of visual prosody but rather an ironized narrative or, more frequently, the personal expression of a particular insight" (31). Her objection is not to expression as such, but to the way it is often taken to justify a paucity of formal rigor – as if the best language for expressing oneself were also the most transparent. If such an argument runs the risk of scapegoating the lyric (especially now that the fervor of the poetry wars is swiftly on the decline), Perloff is quick to emphasize that what is at stake is not the lyric/avant-garde divide, but the fact that the concept of form inherent to both appears to be endangered.[19] What the Oulipo offers contemporary poetry – amid the play of homophones and lipograms, amid all the pantoums, rondeux, and villanelles – is a renewed sense of the value of form. From this perspective, constraint-based writing shares a common imperative with modernism: by foregrounding the materiality of poetic language, texts such as *Eunoia* revive the avant-garde project of estranging us from our naturalized habits of perception – starting with our perception of the graphic and phonetic materiality of language.

Perloff mounts a powerful defense of Oulipian writing that side-steps the charge of

gimmickry by linking the work of constraint to a modernist paradigm whose literary value is difficult to deny. On the other hand, she does so by privileging the verbal originality of such works, even though (as she observes herself in *Unoriginal Genius*) this is precisely what contemporary procedural writing calls into question. By his own account, Bök is a founding member of the conceptual writing movement – and *Eunoia* is a definitively conceptual text, part of a genre that champions boredom, disdains originality, and resists close reading (or even reading at all). In Kenny Goldsmith's words, such poetry aims to procure a "thinkership" rather than a "readership." It is strategically illegible – not because the language itself is disjunctive, paratactic, or otherwise difficult in the sense that Ezra Pound's *Cantos*, Zukofsky's *"A,"* or the work of the Language poets is difficult, but because the texts are unbearably tedious and boring to read.[20] Such texts invert the relation between linguistic difficulty and literary value so integral to formalist criticism: if they are difficult, it is because their language appears so quotidian, so bereft of verbal texture; if they are valuable as works of poetry, it is because they appear so profoundly unpoetic. Either these works are written in everyday prose lifted wholesale from unremarkable sources (such as Goldsmith's *Day*, which transcribes the entirety of a random edition of the *The New York Times* into a *Ulysses*-sized tome) or they follow an axiomatic procedure that renders the text uniform, mechanical, and repetitive (such as Craig Dworkin's *Parse*, which parses a Victorian grammar manual according to its own rules). For Sianne Ngai, these conceptual works evoke an affect she dubs "stuplimity": the sublime power of tedium to stupefy its audience – achieved either via a "minimalist

lexicon" deprived of the causal links that would otherwise propel the work forward or via or "a strategy of agglutination – the mass adhesion or coagulation of data particles or signifying units" (262). *Eunoia* falls into the latter category, akin to the effect of "fatigue" that Ngai compares to "the kind of exhaustion involved in the attempt to read a dictionary." (Bök, in fact, read the 1976 edition of Webster's *Third International Dictionary* five times while mining vocabulary for the book.) The result, some might say, is as tedious to read as it was to write: an anonymous poster on the *Harriet* blog describes the experience of reading the book as "somewhat akin to reading all the cryptic-crossword clues from the Daily Telegraph for a year." Like Starnino's dismissal of *Eunoia* as "pointless toil," however, such an account overlooks the fact that toil is all to the point: what makes *Eunoia* a conceptual work (and arguably distinguishes the text from its Oulipian precursors) is the pervasive tactics of tedium that characterize both the mode of its composition and its literary effect. From this perspective, *Eunoia* is not simply defendable on the grounds that it rewards close reading – even if, in the hands of a critic as astute as Perloff – it can indeed be close read. To cite the book's final epigram (from Darren Wershler-Henry): "[t]he tedium is the message" (103).

Part of the problem is that such tedium often takes the form of a rigid uniformity that makes the book seem retrograde or even authoritarian, a critique often leveled at the Oulipo in general. Potential literature, as Jan Baetens and Jean-Jacques Poucel observe, has often been maligned as the work of an *arrière-garde* that rejects the avant-garde's equation of "innovation as freedom and freedom as innovation"– a nostalgic *retour* borne out of

what Paul Valéry would call "sympathy for the return to order" (620). But which order, precisely? Jean-François Puff argues that the Oulipo's passion for reviving and reinventing *formes fixées* threatens to reabsorb the avant-garde within what Jacques Rancière calls the "representational regime of the arts." Originating with Aristotle's *Poetics* and finding its fullest expression from the Renaissance to the end of the eighteenth century (without concluding there), the representational regime defines the fine arts primarily as ways of imitating action, ways of narrating or legislating forms of doing and making (*manière à faire*). The logic of representation is hierarchical, organizing and classifying the arts according to constitutive conventions: the fitness of genre to subject matter, the primacy of living speech over pictorial representation, the causal logic of fictive action (as opposed to the contingent sequence of historical facts), and a close alliance between social standing and rhetorical eloquence – all of which work to establish a hierarchy of artistic forms analogous to the social hierarchy of occupations. With the rise of European romanticism, the representative regime gradually gives way to (without being totally eclipsed by) the aesthetic regime of art, which works to dissolve classical hierarchies by defining art as the "sensible fabric and intelligible form" of a specific mode of experience – a capacity for affection rather than a mimesis of action (*Aisthesis* ix). Even as the aesthetic regime delimits art as an autonomous sphere, collapsing the hierarchy of *manière à faire*, it also makes this new autonomy precarious by erasing the distinction between art and life, making art an experience common to all. For Puff, then, what is at stake in the Oulipo's nostalgia for order is precisely the tension between these competing regimes of art,

between *mimesis* and *aisthesis*. The problem is not just that the group has a strong predilection for perversely restrictive poetic genres that happen to have originated in the classical age or the baroque – or even that, by reviving pantoums, acrostics, or villanelles, the group succumbs to nostalgia for the courtly elegance of the ancient régime. The problem is that the Oulipo identifies art with a set of rules rather than with a mode of experience and, in this way, threatens to reverse the political force of the aesthetic regime: its emancipation of art (and of its spectators) from the hierarchical logic of representation.

In many ways, *Eunoia* is an exemplar of such logic. Bök has said that the project "reflects a kind of neoclassical set of values about beautiful thinking." The book's epigram is taken from *The Triumphs of Temper* (1781) by William Hayley (the friend and biographer of William Cowper): "*Source of my being and my life's support*! / EUNOIA call'd in this celestial Court" (9). *Eunoia* bears out the courtly decorum of this heroic couplet on several fronts: there is the lipogram itself, of course; the restaging of classical genres with a drollness characteristic of the mock epic (Chapter E shows all the refinement of Alexander Pope's translation of the *Iliad*, if not also the witticism of "The Rape of the Lock"); the allegorical flatness of the characters; the simple causal logic of a plot composed primarily of short transitive sentences (enforced partly by the absence of available prepositions); the use of Rabelaisian catalogues. Even the design of the book is decidedly classical: Bök constructed the layout himself and typeset the text in Adobe Minion (a humanist typeface based on several old-style typefaces of the late Renaissance and now a mainstay of academic monographs – you are reading it now). Indeed, the design is another unstated

constraint: each chapter has the exact same number of lines throughout (12 for *o* and *a*; 11 for *i* and *e*; 13 for *u*) and the text fits squarely into a right-justified block with minimal hyphenation and no rivers or text-wraps from page to page. This is a nontrivial feat: Bök had to truncate his writing to fit the page, typesetting as he wrote and discarding otherwise viable lines because they were too long or too short. The effect of this Procrustean treatment is a rigorously uniform design that compliments the lipogram's power to marshal language into order.

And yet Bök also characterizes this pursuit of order in terms that are distinctly aesthetic. He describes the writing of *Eunoia* (and of avant-garde poetry in general) as an activity "done for its own sake – as a kind of hedonistic enjoyment of language, language free from the need to mean … That's what going on in *Eunoia*: language has taken a little holiday from the dictionary" ("On Being Stubborn"). Echoing Gregory Bateson's definition of information, Bök argues that the poet's task is to "produce a minimal difference that, in fact, makes a difference." On the one hand, then, he anticipates Perloff's argument (derived ultimately from Russian Formalism and Jakobson's structural linguistics) that poetry diverts language from its communicative function in order to render it newly palpable, to demystify the relation between its naturalized capacity to convey thought and its basis in a differential system of arbitrary signs. Such demystification, moreover, is aligned with the avant-garde's critique of mimesis: to reject poetry's illusion of transcendental meaning (by analogy with painting's impression of depth via the illusion of linear perspective) is to reclaim the surface of language as poetry's

proper medium.

On the other hand, Bök's remark invokes a competing theory of the avant-garde under the sign of Theophile Gautier's dictum *l'art pour l'art*, a vestige of the post-Kantian aesthetic tradition and its concept of art as a sphere of disinterested, self-directed play. This is how I read Bök's claim that his practice involves "a kind of hedonistic enjoyment": not just a snub to mimesis (or worse, a vindication of the Oulipo's alleged quietism), but a recognition that avant-garde poetry stages its break with past forms on behalf of aesthetic experience as such. Responding to Starnino's review – and specifically to its invocation of Johnson and Coleridge to defend the romantic concept of organic form – Bök sets out to "rebut these critics by citing the contrary argument of Kant, their peer, who suggests that forms are beautiful, only if they exist for their own sake, divorced from any reference to a superior function" ("Nude Formalism"). Leaving aside the complicated question of Coleridge's interpretation of Kant (whom Starnino clearly misreads, ascribing to him the opinion that form must be an *instrument* of thought), I want to underscore Bök's more general point that art is autotelic – a point he makes at greater length in his doctoral thesis on Alfred Jarry and the imaginary science of 'pataphysics.

Perhaps best known for his proto-absurdist play Ubu Roi (whose *enfant terrible* also stars in Chapter U of *Eunoia*) and a major influence on futurism and surrealism, Jarry is also the author of a cryptic work of speculative fiction whose protagonist, Dr. Faustroll, proclaims the birth of a new science:

> [P]ataphysics will be, above all, the science of the particular … It will investigate the laws that govern exceptions, and it will explain the universe supplementary to this one; or, less ambitiously, it will describe a universe that one might envision – and that perhaps one *should* envision – in place of the traditional one. (30 – 31)

Bök's study traces the afterlife of this enigmatic definition in post-structuralist theory (Deleuze, Baudrillard, and Seres, among others) and across a surprising range of avant-garde writers and artists: the Oulipians, of course, but also Jorge Luis Borges and Marcel Duchamp (who joined the *Collège de 'Pataphysique* in the 1950s). 'Pataphysics imitates scientific procedures while strategically refusing to yield calculable results: the task of the 'pataphysician is to posit absurd hypotheses that can be tested with systemic rigor and yet whose solution produces no positive knowledge. Consider, for example, Duchamp's notes for *Boîte verte*, proposing to "classify combs by the number of their teeth." Or his *Trois stoppages étalon*, a work composed by dropping three meter-long strings onto the ground and using their resultant shapes as blueprints for machine-cut rulers. Since each ruler has a curved extension of exactly one meter but a different linear extension, it is both perfectly exact and completely useless for measuring actual objects. Bök describes such practices as radically speculative: 'pataphysics makes hypotheses not in order to prove their validity, but in order to envision an imaginary solution to a problem that was never posed. The logical sequence from hypothesis to proof, from the operative *as if* to the conditional *if then*, is short-circuited, instead giving rise to a virtual space between quantitative rigor and aesthetic play. If science, Bök argues, is "allotelic … justifying itself for the sake of a finality outside its own language," then poetry (and the aesthetic imagination more

generally) is "autotelic … justifying itself for the sake of a finality inside its own language" (15). The task of 'pataphysics is to deconstruct this symmetry: to make science a space of self-directed play (relieved of its monopoly on the production of truth) and poetry a process of rigorous inquiry. 'Pataphysics, then, is also an aesthetic praxis that suspends the demand for meaningful action in order to create literary and artistic works that are disinterested, purposive (without purpose), and resistant to conceptualization even as they offer the semblance of conceptual thought.[21]

Starnino's dismissal of Eunoia as a literary game "upheld for its own sake" (134), then, overlooks the way that the post-romantic aesthetic tradition, like Bök himself, champions poetry precisely for its resistance to instrumentalization. Craig Dworkin describes Eunoia as "an interface to the database of entries in the three volumes of the 1967 edition of Webster's *Third International Dictionary*" (52). But this interface is anything but user friendly. It is designed, rather, to strategically dismantle the dictionary's effort to order and taxonomize the English language. Although the words contained in its lexicon form a complete set delimited by the constraint (every word, or almost every word, that uses only a single vowel), those words are neither defined nor available for random access. What is more, because the lipogram excludes so many common words, Bök must dredge up terms whose specificity belies their context: a poet is not just a poet, but "[a] Dada bard as daft as Tzara," "[a] madcap vandal," or "a pagan skald" (12). Such lexemes index the absence of the common terms they replace while at the same time giving rise to a surfeit of meaning. In this way, the text inverts the relation between the specific and the general, between

hyponoym and hypernym, that makes dictionary definition possible in the first place. The uniform logic of hierarchical definition is broken; the dictionary dissolves into a chaotic welter of examples all competing for equal attention. Umberto Eco describes this effect in an essay on the Porphyrian tree that might easily apply to *Eunoia*:

> The tree of genera and species, the tree of substances, blows up in a dust of differentiae, in a turmoil of infinite accidents, in a nonhierarchical network of *qualia*. The dictionary is dissolved into a potentially unordered and unrestricted galaxy of pieces of world knowledge. The dictionary thus becomes an encyclopedia, because it was in fact *a disguised encyclopedia*. (68)

As an interface to the dictionary, *Eunoia* is strategically useless, but useless in a way that also mimics the dictionary's desire to systematize knowledge. The book claims to reveal statistical trends in English usage, which it does in part (the fact that words for food, sex, nature, and travel occur with such high frequency in the language that one can write at length about these topoi using only one vowel). But at the same time, the logic of statistical organization is everywhere subverted by what Dworkin (after Jarry) calls "the perverse spin of the expected" (31): witticisms, tautologies, double entendres (to say nothing of Ubu's scatological humor) – all of which signify more than the dictionary bargains for. *Eunoia* thus showcases the limits of statistical metrics by parodying their effort to form coherent totalities. The book demonstrates, in Dworkin's words, "the 'pataphysical power of exceptions – singularities, anomalies, perversions, swerves – to belie the ambitions of any general system of statistical average" (39).

Eunoia refuses to deliver calculable results even as it makes the logic of calculation into a form of play. And the text itself thematizes such play as an image of lyric repose

– staged within and against the lipogram whose ardor it negates. For a text so obsessed with toil (and especially the toil of its own composition), *Eunoia* is surprisingly full of leisure: of the four repeated genres (banquet, debauch, tableux, voyage), at least three are pastimes (or all four, if the voyage counts as a cruise) that the poem elaborates at great length – and with much gusto: Helen of Troy, for example, enjoys a feast no less sumptuous and ethereal than the infamous *blancmanche* stanza of Keats's "Eve of St. Agnes": "[H]er serfs get the best gels ever jelled; *les pêches gelées* – blended sherbet, served fresh. The scented desert smells even sweeter when served ere the sweetness melts" (35).[22] Such moments of *otium* are most vivid and emphatic when they appear, as they often do, in the final line of each page, suspended in the empty space between pages even as they offer the semblance of closure. This happens most often in Chapter A, perhaps because the indefinite article is best suited to the presentation of singular objects:

> A naphtha lamp can give a calm warmth. (13)
> A lass as sad as a swan twangs a glass harp. (15)
> A clasp snaps apart, and a scant shawl falls. (16)
> A damp flag flaps at half mast. (25)

Other such lyric suspensions abound. Chapter O is lit with "glowworms" (like Marvell's "ye living lamps") that glow like "[d]ots of color, blown off from blowtorch glow" (75). Chapter E is ephemeral, partly thanks to all the nouns that end in *ness (feebleness, helplessness, wretchedness, dejectedness*): nominalized adjectives that give feelings the fleeting solidity of things. In Chapter I, the most lyric of all, the poet muses: "I sight high cliffs, rising, indistinct in thick mists, lit with lightning" (53). Or he surveys Tintern

Abbey with Wordsworth (who also makes a cameo in Chapter O): "Hiking in British districts, I picnic in virgin firths, grinning in mirth with misfit whims, smiling if I find birch twigs, smirking if I find mint sprigs" (52). Such images of idleness – which offer a fleeting respite from the onslaught of the dictionary – remind us that the constraint itself is a way of suspending the demand for profitable work. They are at once artful and effortless, the result of an exacting procedure whose goal is to make us forget the presence of the lipogram that the text also flaunts. In this way, *Eunoia* thematizes its own reception as an artwork whose appreciation invites disinterested reflection.

Nowhere is this more clear than in the deaths that conclude each chapter. We have already witnessed how Hassan dies: "alas, alack: a shah has a grand mal spasm and, *ahh*, gasps a schwa, as a last gasp" (30). But if that gasp recalls Olga's fatal cry of "Maldiction!" in Perec's *La Disparition* – marked by the impossibility of uttering the vowel that kills her – it also recalls an ekphrastic tradition that associates the stillness of death with the breathless awe proper to the contemplation of works of art.[23] On the one hand, Hassan's death parodies the trope of ekphrastic reverence: to witness an "asthma attack" whose victim "barfs and farts" as he expires is both unglamorous and sadistically funny. But the image still enjoys a certain kind of awe (albeit vicariously) by suggesting that we should indeed catch our breath, if not at the solemnity of death, then at the virtuosity of the parody. Helen's death is only hinted at (even if, *pace* Homer, she survives the fall of Troy): Chapter E ends simply "*elle régne éternellement*," but as with Chapter A, her passage from life to death is partly ekphrastic. Painted images gradually eclipse her living person:

"When Vermeer sketches *les belles femmes de Delft*, he remembers Helen … When the sketchers (Erté, Ernst, Klee, Léger – even Bellmer) render *les événements des rêves*, these esthetes get felt pens, then sketch her presence" (49). That presence, moreover, inspires awe of the kind we usually feel for art: "Men see her elven slenderness, then pledge themselves her serfs." Chapter U, lewd and irreverent almost to the bitter end, relents in its final line with the elegiac image of a shipwreck: "[G]ulfs crush us, *gulp*, dunk us – burst lungs succumb" (81). Like Eliot's "Lovesong of J. Alfred Prufrock," whose final stanza turns from its speaker's self-obsessed doubt to an anonymous *we* who spontaneously perish in the sea ("[t]ill human voices wake us, and we drown"), Chapter U ends by abandoning the manic escapades of Jarry's Ubu in order to posit a community of readers united by the image of their mutual death. *Eunoia* thus forms a kind of loop – from Hassan's "last gasp" to Ubu's "burst lungs" – that prompts our own response to the work: the hush of reverence, perhaps, or the author's sigh of exhaustion.

Exhaustion – but not resignation. The last gasp of *Eunoia* is more akin to what John Barth, writing of Borges's story "Pierre Menard," calls "an image of exhaustion" (73): the feeling that literature has exhausted its potential, which itself is a powerful literary trope capable of overcoming the exhaustion it describes. The imaginary solution that Bök invents is to write a book that figures its own composition as a process of crushing fatigue, one that thwarts any desire to recuperate fatigue as the byproduct of meaningful work. But the tedium of *Eunoia* emerges not only from Bök's own narration of his Sisphyean labor, but also from within the seemingly affectless, cerebral system that the book itself

constructs. Like other works of Oulipian and conceptual poetry, *Eunoia* displays what Eve Meltzer (writing of conceptual art) calls "affective investment in disaffected mastery" (14): the pleasure or displeasure we take in Bök's effort to wrangle language into an idea of order (an effort, as we have seen, that is programmed to fail) becomes part of the work's constitutive tension between procedural rigor and affective texture. In this way, *Eunoia* falls short of reinscribing the lyric/avant-garde divide on which conceptualism stakes its polemic, refusing any simple antagonism between, on the one hand, post-romantic conceptions of poetry as a space of imaginative free play and, on the other, avant-garde and poststructuralist efforts to equate the poetic as such with the inhuman materiality of language. It is through Bök's rigidly impersonal procedure that the aesthetic and affective dimension of the text emerges, a dimension that shares with lyric poetry a strategic neglect of purpose. If the Oulipo are too often accused of forsaking the emancipatory power of art for crossword puzzles and language games, *Eunoia* stands as a poignant reminder that aesthetic play and the emergent play of constrained systems are not principally opposed: in Bök's words, the lipogram dons its straight-jacket in order to allow language, released from the injunction to mean, to "express an uncanny, if not sublime, thought" (103).

SAMPLING THE LYRIC:

CAROLINE BERGVALL AND JEN BERVIN

In a series of reflections on Georges Perec's unfinished project *Lieux*, the poet Caroline Bergvall observes how his use of time as a constraint exposes his writing to contingency and variation, eventually leading to the project's abandonment. Describing one of the few published excerpts from this work, "Tentative d'epuisement d'un quartier parisien," collected in *L'infra-ordinaire* (alongside that other tentative inventory of everything he ate and drank for a year), she writes:

> A *tentative* is as tentative as an attempt. Open to the fallibility of an experiment that ties writing to a contingent, unpredictable investment in social space and time. How does one invest oneself in all the comings and goings-on at street-level of various Parisian quarters? (44)

As this passage suggests, Bergvall remains ambivalent towards the more orthodox readings of the Oulipo that inform conceptual poetry, which equates constraints with axioms or algorithms whose execution is a merely perfunctory affair. If *Eunoia* concludes with a tribute to Perec that identifies the French author with the lipogram conceived as law or dogma ("nevertheless, Perec's creed gets expressed; nevertheless, Perec's tenet gets preserved" [100]), Bergvall instead reads his attempts to chart the infra-ordinary as a futile struggle against incompletion.[24] Constraint neither guarantees the seamless execution of a work nor insulates the writer from the contingency of the world he describes. Bergvall later quotes Paul Virilio's portrait of Perec (with whom he co-founded

the journal *Cause Commune*) as a situationist *flâneur* who wanders the streets of Paris with an ear attuned to the *bruits de fond* or ambient noise of the city that engulfs him. Although Bergvall situates these writings "at the most anodyne, anonymous, yet structured level possible," this structure also allows Perec to register the contingent effects of time on the body and embodied memory: "Structuring time spent in sites, in places, is simply structuring the oncoming of forgetting" (102–3). More aligned with the reading of Perec that I present in my first chapter, then, Bergvall characterizes constraint-based writing as a productive tension between the tentative and the exhaustive, countering the way that conceptual poetry (at least in its most canonical guise) seeks to bracket contingency.

The tension that Bergvall finds in *Lieux* – between the momentum of its durational constraint and the tentative (and ultimately unfulfilled) promise of its execution – also animates her most explicitly constraint-based poem. In "Via: 48 Dante Variations," she transcribes and collates English translations of the first tercet of the *Inferno*, using only editions housed in the British Library before May 2000 – exactly seven centuries after Dante is said to begin his journey. Discounting latecomers and manuscripts under restoration, she collects forty-seven versions in all, alphabetizes and numbers them, and removes all paratextual details except the author's surname and the date of publication. What emerges, in her own words, is a "musicalised sense of panic … a perfect plot in the massing of time."[25] The haunting refrain of the same words repeated again and again with subtle yet telling variations gives readers the sense that we too, like Dante, are lost in a

dark wood. Here is the original Italian, followed by the first five tercets:

> Nel mezzo del cammin di nostra vita
> mi ritrovai per una selva oscura
> che la diritta via era smarrita.

1. Along the journey of our life half way
   I found myself again in a dark wood
   wherein the straight road no longer lay.
   (Dale, 1996)

2. At the midpoint in the journey of our life
   I found myself astray in a dark wood
   For the straight path had vanished.
   (Creagh and Hollander, 1989)

3. HALF over the wayfaring of our life,
   Since missed the right way, through a night-dark wood
   Struggling, I found myself.
   (Musgrave, 1893)

4. Half way along the road we have to go,
   I found myself obscured in a great forest,
   Bewildered, and I knew I had lost the way.
   (Sisson, 1980)

5. Halfway along the journey of our life
   I woke in wonder in a sunless wood
   For I had wandered from the narrow way
   (Zappulla, 1998)

First composed as a score for digitally-processed voice (in collaboration with the Irish composer Ciíaran Maher) and later published in *Chain* magazine alongside other seminal works of conceptual poetry, "Via" exemplifies an emergent poetics of the database despite (or perhaps because of) the fact that it was written entirely by hand. Generated by a constraint that determines every dimension of its form in advance, the poem

demonstrates what Craig Dworkin calls the "proleptic" character of texts by human authors that nevertheless "anticipate the computerized new media that would seem to be their ideal vehicle" ("Imaginary" 30). In this sense, "Via" deviates from a high modernist poetics that often invokes Dante (and medieval poetry in general) as a metonym for craftsmanship and innovation. Eliot's famous epigram to the *Wasteland* ("For Ezra Pound, *il miglior fabbro*": the better craftsman, Dante's praise for the troubadour Arnaut Daniel in *Purgatorio* XXVI) gives way to the figure of the scribe or the scrivener who aspires merely to copy rather than to create. If Eliot's epigram registers a sense of *agon* or competition among friendly or not-so-friendly rivals (implying that Pound is *il miglior fabbro*, but Eliot the better poet), Bergvall's poem works to systematically dissolve any hierarchy or logic of succession among the authors it compiles: poet translators (Pinsky, Longfellow, even Rosetti, whose version Pound praises in *The Spirit of Romance*) are lost amid the rabble of so many anonymous others, reduced to a string of surnames that echo and chatter like the personae trapped in the *Inferno* itself. This tension between singular innovation and divergent translation plays off an infamous crux in the original tercet: as Leo Spitzer observes, Dante finds *himself* ("mi retrovai") precisely in the middle of *our* life ("nostra vita"), a doubling effect that encompasses the poem as a whole and gives the texture of singular experience to an allegorical journey that is shared by all.[26] "Via" extends this analogy between the singular *mi* and the plural *nostra* to a contemporary milieu where poets freely sample the words of others in an effort to dissolve the authority of the lyric voice – or rather to register the way in which new media at the turn of the millennium

(and the remix culture that accompanies their emergence) render an enduring belief in lyric ontology both impossible and obsolete.

Even as the poem works to deskill poetic labor, then, dismantling the modernist vision of the poet as singular craftsman, it also engages with an emergent poetics of the database. Bergvall enumerates and alphabetizes the translations into an index that permits random access, inviting readers to skim and skip among the various stanzas without privileging the original tercet as the only viable point of departure. And while this indexical structure promises a semblance of order, a way of disambiguating an otherwise vertiginous array of copies, Bergvall ultimately sabotages her index by making its interface unusable. Disregarding more conventional indices such as the author's surname or the date of publication, the poem instead alphabetizes each translation by its first letter, transforming the left margin into a string of repetitions (seven lines begin with *half*, eleven with *in*, nineteen with *midway*, and four with *upon*) whose indexical principle forecloses at the outset any imaginable use. Like the giant *S* on first page of *Ulysses* (severed from the word *stately* on the next verso), the first letter of each stanza bears a merely contingent relation to the text that follows, calling attention to its own graphic and phonetic texture (with a nod to the drop capitals and rubricated initials of illuminated manuscripts) while, at the same time, thwarting the accessibility of the very system it instantiates. Just as *Eunoia* provides an interface to the dictionary that delights readers precisely to the degree that it could never help them locate specific words (since its lexicon is entirely monovocalic and its sequence is narrative rather than alphabetical), "Via" turns the list into a literary and

aesthetic form by divesting it of any instrumental value. As Perec does with enumeration, she unravels a highly technical form – the alphabetical index – by extending its principle to an absurd extreme.

Although Bergvall remains ambivalent about her association with conceptual writing, "Via" shares with poems such as *Eunoia* a desire not only to borrow formal structures from new media, but also to disrupt their systematizing logic. In his seminal essay "The Imaginary Solution," Craig Dworkin argues that conceptual poetry (as well as its precursors among the Oulipo and the Collège de 'Pataphysique) reveals errors and glitches within the edifice of the database that undermine its fantasy of seamlessly integrated data:

> [The absurdity generated by constraints] points to the inevitable discontinuity between all generalized systems and the incongruous individuals those systems are meant to account for; to the alienation of each concrete experience from the narratives of normalcy meant to absorb it; to the proscriptive inadequacy of descriptive schemes. In literary terms, these works contrast a formal rigidity, guaranteed by their preestablished rules, with the fluid interchangeability of the content structured by that form. (38)

The preceding chapters have all furnished examples of this mode of critique: Perec's attempt to inventory his diet, which runs aground on the etcetera of appetite (a theme that returns in Bergvall's "Fried Tale," a list of every mention of food and drink in Chaucer's *Canterbury Tales*); Calvino's dialectic between the algorithmic logic of chess and the suspended time of ekphrasis in *Invisible Cities*; and, perhaps most relevant here, Bök's distillation of the dictionary into a poetic reverie that renounces its own desire for disaffected mastery through the nimble play of the vowels. More minimalist and

understated than any of these projects, *Via* is no less relentless in its deconstruction of the database genre, tugging at the seams not only of Dante's epic (whose authority unravels in the face of its endless variations) but also of the list that gives these variations their form. A handful of recurring elements (*journey*, *road*, *myself*, *life*) serve as a leitmotif that throws each deviation into greater relief: the wood is by turns *obscure*, *sunless*, *gloomy*, *darksome*, *dusky*, or *shadowed*; the road is either *lost* or *misplaced*. Like Gertrude Stein's injunction to begin again, Dante's epiphany ("I found myself again") echoes throughout these translations as a reminder that no two are alike, that there is no such thing as repetition. Recalling Perec's definition of enumeration as a perennial tension between perfection and incompletion, Bergvall describes the way that error threatens to corrupt her seemingly irrefragable procedure:

> Surprisingly, more than once, I had to go back to the books to double-check and amend an entry, a publication date, a spelling. Checking each line, each variation, twice. Increasingly, the project was about keeping count, making sure. That what I was copying was what was there. Not to inadvertently change what had been printed. To reproduce each translative gesture. (*Fig* 65)

Each variation is itself threatened by variation, differing not only from the original Italian but also from itself, twice transcribed and so exposed, even if exactly copied, to the difference inherent in repetition. The poem's subtitle ("48 Dante Variations," although there are only forty-seven) implies that even the original tercet, cited as an epigram at the top of the text, constitutes a variation, an origin devoid of originality, no more and no less authoritative than the multitude of translations it inspires. In this flat network of stanzas, ordered only by the arbitrary sequence of the alphabet and linked by the irregular echo of

a refrain, no voice, no version, has priority over any other. The order promised by the list (and the encyclopedic ambitions of the medieval epic it distills) converges with a dispersion of registers and dialects. Not even alphabetization – our most ubiquitous and indomitable method of organizing text – can reabsorb the centrifugal force of a poem that seems determined (no less than Perec's tentative inventories) to dismantle the very principle on which its form depends.

In the essay cited above, Dworkin goes on to argue that conceptualism's *detournement* of new media also works to expose forms of information management that subtend more sinister projects such as mass surveillance, drone warfare, and (more recently, with the advent of Web 2.0) the commodification of the affective labor performed by online communities. In this way, he offers a riposte to the widespread objection that conceptual writing is politically disengaged and naïvely optimistic about the emancipatory potential of digital technologies. Yet there is a danger here: if the political stakes of conceptualism are tied to its ability to expose the structural artifice of systems larger than itself, that is, to function as a *symptom* of new media, this desire for exposure also threatens to re-inscribe the very phenomenon it sets out to critique. This is what Eve Sedgwick calls "paranoid reading": the ways in which literary and cultural critics feel compelled to expose the complicity of literature with historically-conditioned structures of power. Paranoia in this sense is highly contagious: the impulse to expose an object that is itself concerned with exposure – digital surveillance, for example – partakes of that object's own desire to withdraw to a vantage that affords unchecked mastery. If the critical work of

conceptualism is to register a widespread paranoia about the politics of digitization, it risks adopting those politics as its own.

For Sedgwick, the real danger of paranoid reading is not that it misses its target, that our suspicion will turn out to be unjustified or misplaced. The danger is that paranoia leaves no room for other modes of reading (including "the weaving of intertextual discourse") that serve to sustain precarious selves and communities in a world that appears indifferent to their nurture. Sedgwick describes an alternative practice of "reparative reading" that might offset our discipline's obsession with critique: to suspend judgement, to read with the grain, in ways that "assemble and confer plenitude on an object that will then have resources to offer an inchoate self" (149). This reparative impulse also has a temporal dimension, assembling fragments of the past into eclectic heaps that are "*not necessarily like any preexisting whole*." Such assemblages cannot be totalized or normalized precisely because they are belated and asynchronous – which is to say, as Elizabeth Freeman adds in a gloss on this passage, "we can't know in advance, but only retrospectively if even then, what is queer and what is not" (xiii).

Repair has been a key concept for queer theorists who seek to oppose normative regimes of time that are constitutive of modernity (the linear time of reproductive genealogy, the cyclical time of domestic labor). If, as Freeman argues, modernity compels us to move in lockstep with historical time (or what she calls "chrononormativity"), yolking lived experience to temporal regimes that are irreversible, teleological, and homogenous, we can also break out of this regimen by engaging in reparative practices

that cut across time and imagine temporal modes that are wayward and nonlinear. This is partly why queer temporality has enjoyed such a rich following among medievalists: the medieval (or the premodern more generally) often appears as the term that modernity must exclude in order to delimit itself as adequately secularized and disenchanted.[27] The endurance of the medieval within the modern or the contemporary, then, registers a profound dissatisfaction with concepts of modernity that are defined by historical progress and enlightened critique.

In this light, "Via" performs a mode of queer time not only by rewriting a medieval text and its modern afterlives, but by doing so within a poetic form that is structurally asynchronous. By alphabetizing the text, Bergvall disrupts the historical chronology of the translations, charging the gap between each tercet with a leap backwards or forwards in time. Such leaps are formally marked both by rapid variations in style (by turns archaic, minimalist, or colloquial) and by the fluctuating dates, positioned emphatically at the end of each stanza, that punctuate our time travel even as their rhyming digits form a sort of unifying refrain (1989, 1893, 1998, 1993). On the one hand, these points of temporal rupture look back to the paratactic, collage-based techniques of the modernist epic: Pound's *Cantos*, for example, partly modeled on Dante's *Commedia*, assembles fragments of text from disparate moments of history, where the gap or cut between each pair of fragments, as with cinematic montage, radically disrupts our sense of linear time. But Bergvall's poem, by contrast, works to dull the disruptive force of parataxis, its potential to shock, demystify, or estrange. Absent here are the aggressive shifts in dialect, register,

voice, or syntax that poets of the Pound era use to roughen the texture of language in an effort to emancipate readers from automatized habits of perception. Bergvall alters her sources as little as possible: the diction and syntax of the poem, while sometimes archaic or obscure, always remains legible, and paratext such as names or dates, unlike the notoriously obfuscating footnotes to the *Wasteland*, form a complete (if radically disordered) system of reference. Her original performance of the poem, dirge-like and mellifluent, accompanied by a subharmonic drone synthesized from her own voice, sutures the otherwise hetereoglossic stanzas into a continuous stream of vocables. Hers is what Tan Lin calls an "ambient poetics," a mode of appropriation that foregoes "radical disjuncture" and the "shock effect of montage" for an aesthetic or even anesthetic experience that is "relaxing, boring, absorptive, sampled freely and without effort." The ambient texture of "Via" emerges partly through the miscellany of affects invoked by the translations: for Musgrave, Dante is *struggling*; for Sisson, *bewildered*; for Zappulla, he *wakes in wonder*. None of these words appears in the Italian (which says nothing about how Dante *feels*, only that he is lost) and yet as a group they index the very feelings of struggle, bewilderment, and wonder that readers are apt to experience as they wend their way among the maze of variations. The cumulative force of these affects properly belongs neither to the medieval poet nor to any of his translators: unmoored from any one persona, affect circulates freely among the stanzas and across the many centuries they encompass. Like the denizens of the Inferno, who each suffer alone and yet form a chorus by virtue of their inclusion in the poem, the network of feelings at play in "Via" gives rise

to a community of asynchronous voices that forestall the normative momentum of historical time.

Bergvall's method of assembling divergent texts without provoking shock or estrangement also recalls theories of the lyric as an unheroic or inconsequential genre, suspending narrative time without making this suspension a model for redemptive action. Read this way, the queer time of "Via" resides less in specific moments of temporal rupture than in a pervasive disinclination to move forward. Bergvall does again and again what she has already done, copying the same words in minimally different combinations, often returning to the Library to double-check her work. This gesture of doubling back, of retracing one's steps, mirrors the suspended temporality of the poem: like Dante lost in the dark wood, the time of transcription lags behind not only the text being copied, but also the copy itself, which is never self-identical or wholly at rest. We encounter here, in Bergvall's words, less the "causal horror of linear travel" than "a narrative of structure, stop-start, each voice trying itself out, nothing looped, yet nothing moving beyond the first line, never beyond the first song, never beyond the first day" (ctd. in Perloff 39). The poem enacts the *retrouvai* of Dante's original tercet, as the conflicted *I* finds himself again and again amid a catalogue of texts that have themselves been refound.

Comparing her work to the practice of digital sampling in electronic music ("stop-start … nothing looped"), Bergvall imagines a very different form of temporality than that of conceptualism's procedural logic. The poem suspends epic momentum for lyric inconsequence, a time where nothing happens (or that *makes* nothing happen),

withdrawing from the demand for redemptive action or narrative progression.[28] Bergvall lyricizes the *Inferno*, although hers is a lyric whose scene of solitary repose – a poet alone in the woods – is routinely thwarted by the proximity of other voices that resemble, without ever being equivalent to, his own. If there is a modernist Dante at play here, it is not Eliot's *miglior fabbro*, tied, as I have argued, to the heroic rivalry of poets vying for the right to succession, but Belacqua, the indolent persona of *Purgatorio* IV (and a recurrent figure in Beckett's novels and plays), who neglects to ascend the steps to Purgatory because, as he says, "Frate, l'andare in su che porta?" ("Brother, what is the use of going up?"). "Via" assumes a similarly inoperative pose, Belaqua's indolence – not, as for Dante, a vindication of his sin, but a disarmingly equivocal refusal to undertake decisive action or perform meaningful work.

There is a minimal yet crucial difference between such unheroic agency and conceptualism's desire to supplant the lyric voice with the impersonality of a literate machine. "Via," to be sure, follows a programmatic logic that determines much of its structure in advance, but that logic also comes undone through its own figures of asynchrony, stoppage, and impasse. Readers are not forced to choose (as the rhetoric of conceptualism often implies) between unexamined complicity with the inhuman abstraction of digital systems, on the one hand, and, on the other, an avant-garde tactics that seeks to expose the contradictions of new media through radical forms of mimesis. Bergvall instead shows how the modes of temporal rupture that emerge from her alphabetical list thwart the sequential time both of the epic it rewrites and of enumeration

itself – a refusal, in short, to make time count.

NOTES

1. The Swift Standard Library defines *enumerated()* as a function that "[r]eturns a sequence of pairs (n, x), where n represents a consecutive integer starting at zero, and x represents an element of the sequence." Enumerating the first line of Perec's "Inventory" would produce the following array: [(1, "Nine beef consommés"), (2, "one iced cucumber soup"), (3, "one mussel soup")].

2. Like the unrepresentable, the unthinkable and the unsortable posit a limit to conceptual thought and linguistic expression. But for Perec these terms also describe a mathematical limit: according to axiomatic set theory, every set must presuppose an empty set as one of its members, a category that is routinely left implicit (sometimes marked by the symbol ø, sometimes by empty brackets) but nevertheless legitimizes the set as a finite totality by marking all the other things it excludes.

   Giorgio Agamben invokes this aspect of set theory in *Homo Sacer* in order to describe the sovereign logic of the *exceptio* and its power to render the border between inclusion and exclusion – or between law and extra-judicial force – indistinct. Both Agamben's critique of sovereignty and Badiou's use of set theory in Being and Event have become important reference points for media scholars attempting to think through the persistence of sovereign power after the rise of decentralized networks. In *Programmed Visions*, for example, Wendy Chun draws a compelling analogy between the sovereign prerogative to kill and let live and the way software divides power between compilable source and executable code, a division that encodes the historical (and typically gendered) division of labor between computers and operators at a time when both roles were still performed by humans. Also see Hu, *A Prehistory of the Cloud* (especially 11-27 on "the sovereignty of data").

3. Johnson describes *enumeratio* in baroque poetry in similar terms: even as the proliferation of redundant elements threatens the coherence of such rhetorical lists (and the world of which they are a microcosm), redundancy "provides the necessary, material abundance out of which new thinking might emerge" (1111).

4. We might compare this anomaly to the one that Foucault discovers in Borges's original list: the category of animals "that are included in the present classification," a species that includes its own genus and so forms an infinitely recursive loop.

5. For Barthes, the *jouissance* of gastronomy is inseparable from the pleasure of the text. Prefacing a new edition of Brillat-Savarin, a writer who "desires the word as he desires truffles, a tuna omelette, a fish stew," Barthes describes the language of gastronomy as "a twofield delight": "greedy [*gourmand*] for the words it wields and for the dishes to which it refers" (261). No less greedy, Perec's inventory enjoys a palate that is as

delectably polyglot as any modernist poem: besides French, there are words from English (*apple pie*, *haddock*, *Jack Daniel*), Italian (*figatelli*, *mozarella*), Spanish (*chivas*, *porto*), Russisan (*vatrouchka*, *slivowitz*, and of course *vodka*), Turkish (*tarama*, *yaourt*), and Egypt (*moulakhia*: curiously enough, the only italicized foreign word in the whole text). Not to mention his inclusion – on the cheese platter, wedged between *boursin* and *bree* – of "two Brillat-Savarins."

6. Glossing John Sturrock's description of Perec's use of constraints as a form of "willed objectivity," David Levin Becker characterizes such a practice as "a way of foregrounding the technical in order to take enough pressure off the personal that it can express itself more or less organically" (182). In a similar vein, David Bellos associates Perecian enumeration with "the basis human impulse to hold on to things, to fend off loss by compulsive acts of recording."

   Not everyone would agree. The uptake of the Oulipo among conceptual writers, for example, has consistently downplayed the reparative and expressive potential of constraint-based writing. In their preface to "Attempt at an Inventory" in *Against Expression: An Anthology of Conceptual Writing*, Craig Dworkin and Kenneth Goldsmith argue that Perec's errors and omissions undermine the ostensibly confessional nature of the list: "Slippages of accounting and excursions into the realm of fantasy move Perec's quest more into a realm of Wittgensteinian language games that of accountability or self-definition" (477). But this reading misses the point: if Perec sees list-making as a way to know and remember the self, it is because the descriptive process itself (and not the facts it records) registers the whims and idiosyncrasies of the one who describes. Slippages are where the list is most personal.

7. The tentative differs from the logic of exhaustion, which seeks to turn description into a scripted procedure that always produces the same irrefragable sum. Perec's oeuvre is full of characters who undertake exhaustive projects that never amount to more than provisional attempts. Perhaps the most famous is Bartlebooth, aptly named after Melville's scrivener, who spends decades of his life painting watercolors of fifty seaside ports and making them into jigsaw puzzles – only, in the end, to have them chemically erased. (*Life A User's Manual* famously ends with Bartlebooth's corpse slumped over a nearly finished puzzle, complete but for a single x-shaped hole, and clutches in his dead fingers the final piece which the spiteful puzzle-maker Winckler has carved into the shape of a w.) Like puzzle-making, the art of enumeration tarries with the tentative and the incomplete. It is a self-defeating attempt at systematic description, a form that cannot abide tentativeness and yet cannot function without it.

8. McCarty coins this phrase to describe the "complete explicitness and absolute consistency" required by digital models.

9. Compare the structure of George Perec's *La vie mode d'emploi*, a novel whose ninety-

nine chapters correspond (minus one exception) to the grid of a ten-by-ten chessboard. This chessboard, in turn, maps the façade of a Parisian apartment, and the chapters jump from room to room, following the pattern of a knight that touches every square on the board only once. Calvino praises this work in his memo on "Multiplicity," comparing it to Balzac's *Comédie humaine* and calling it "the last real event in the history of the novel." For a comparative reading of *La vie mode d'emploi* and *Le città invisibili* (with a detour through Walter Benjamin's *Passagenwerk*), see Chiesa.

10. In a letter dated 2 September 1960, concerning a theatrical production with Mario Monicelli and Suso Cecchi D'Amico, Calvino describes his attempt "to follow Coleridge's method, who by smoking opium and reading *Il Milione* wrote 'In Xanadu, Kubla Khan …' in his sleep." This project eventually became *Invisible Cities*: a decade later, in a letter to Gianni Celati dated 12 December 1970, Calvino notes that he is at work on "a remake of Marco Polo's *Il Milione* full of brief descriptions of imaginary cities" (ctd. in Serra 329). He recalls this connection in a 1983 lecture at Columbia University, comparing *Invisible Cities* to the work of other writers inspired by Polo's travelogue: "Coleridge in his famous poem, Kafka in *The Emperor's Message*, Dino Buzzati in his novel *The Desert of Tartars*." What brings these influences together is not just their use of *Il Milione* as a source text but their desire to discover there an imaginary "elsewhere," a romantic horizon that fades as the world becomes, in Calvino's words, "more and more uniform (and for the worse)" (179).

    For a fine-grained (and mostly sympathetic) critique of Weaver's translation, see McLaughlin, 211–17.

11. In *The Rhetoric of Romanticism*, De Man describes prosopopoeia as a form of "disfiguration" or "defacement" (114), where addressing an inanimate object as if it were alive simultaneously deprives the speaker of voice. At the same time that prosopopoeia makes the dead speak, "the living are struck dumb, frozen in their own death" (78).

12. Denise Fujiwara and her ensemble premiered their dance adaptation of *Eunoia* at the Harbourfront Centre in Toronto on March 2014. Among other constraints, the dancers were required to "initiate movement from body parts that contain only the appropriate vowel: for example in Chapter E, from the neck, knee, temple, and spleen" (Fujiwara). The hiphop group Eek the Alien remixed sentences from Chapter I for the track "Nihil Dicit" on their album *The Paranoia Within*. Leslie Ahenda tweeted an emoji translation of the first page of *Eunoia* on 18 Feb. 2016.

13. For a recent example, see Calvin Bedient's aptly-named polemic in the *Boston Review*: "Against Conceptualism: Defending the Poetry of Affect." Bedient targets Eunoia as an especially disaffected example of conceptualism's rejection of the lyric:

> What is the politics implicit in Oulipian writing, if any? I ask it, first, of Christian Bök's popular *Eunoia* (2001), narrative poetry in the improbable form of a lipogrammic fantasia on the vowels, each one marched in order in its five chapters, each word conscripted for its contribution to the vowel of the moment. Fans of the poem like to discover profundities in it, but I find it clichéd and shallow. It replaces André Breton's directive, revolt so as to be adequate to oneself, with the message: be as ingenious as you can. Delight in the auto-affection of your faculties.

14. Queneau's *Poèmes*, often cited as the inaugural text of the Oulipo, consists of ten fourteen-line sonnets whose lines are interchangeable: any line can replace the corresponding line of another sonnet while preserving the rhyme scheme and the laws of syntax. The text is a machine for generating sonnets: 100 000 000 000 000 (or 10^{14}) sonnets, to be exact. Queneau calculates that it would take 190 258 751 years to read the work in its entirety, reading one sonnet a minute, all day long, every day of the year. (334)

15. Bök also happens to be a fan of War Music, Christopher Logue's modernized retelling of the *Iliad*, which was shortlisted for the Griffin Poetry Prize the same year *Eunoia* won.

16. Chapter E is also a nod to the classical origins of the lipogram: in late antiquity, the Greek poet Nestor of Laranda composed an *Iliad* in twenty-four books, each of which omitted a subsequent letter of the Greek alphabet. Tryphiodorus of Sicily did the same for the *Odyssey*. See Perec,"History of the Lipogram."

17. Bök, Christian. Poetry reading. Pages Bookstore, Calgary, AB. 22 Aug. 2014. The published version of the translation appears in *The Xenotext: Book 1*.

18. Bök anticipates these scruples within the text itself, which uncannily rebukes its future critics: "I fit childish insights within rigid limits, writing shtick which might instill priggish misgivings in critics blind with hindsight. I dismiss nitpicking criticism which flirts with philistinism" (50).

19. For examples of recent efforts to move beyond the lyric/avant-garde divide, see Izenberg, *Being Numerous*; Jennifer Ashton, "Poetry of the Twenty-First Century"; Rei Terada, "After the Critique of Lyric"; and Perloff 's own essay, "Towards a Conceptual Lyric."

20. See, for example, Goldsmith's introduction to a special issue of *Poetry* magazine on Flarf and conceptual writing:

> Start making sense. Disjunction is dead. The fragment, which ruled poetry for the past one hundred years, has left the building. Subjectivity, emotion, the body, and desire, as expressed in whole units of plain English with normative syntax, has returned. […] Why atomize, shatter, and splay language into nonsensical shards when you can hoard, store, mold, squeeze, shovel, soil, scrub, package, and cram the stuff into towers of words and castles of language with a stroke of the keyboard? ("Flarf")

The idea that contemporary avant-garde poetry is turning away from modernist disjunction is widespread, and not only among conceptual poets. Compare Tan Lin's call for "a softer, ambient avant- garde that works against radical disjuncture" and instead explores work that is "relaxing, boring, absorptive, sampled freely and without effort" ("Interview").

Bök, for his part, sees this shift away from disjunction as one of scale – from relatively visible linguistic units (letters, words, syllables) – to the inhuman abstraction of the Word .doc or the BitTorrent file. Unlike Goldsmith, however, he remains skeptical of efforts to break with the historic avant-gardes: see, for example, his critique of Reginald Shepherd's concept of "post-avant poetry" in a blogpost for *Harriet* ("Late Past the Post").

21. Bök is hardly alone in casting his avant-garde poetics in Kantian language. As Robert Kaufman persuasively argues, the Third Critique (partly by way of Adorno's unorthodox reading of Kant in *Aesthetic Theory*) underwrites a wide swath of modern poetry and poetics – from Baudelaire's *Les fleurs du mal* to the work of the Language poets. Poetry is aesthetic, for Kaufman, in its desire to stretch language towards "affect and song," making available a kind of "quasi-conceptuality" and yielding an experience of concepts that have yet to be determined or realized. If, as Adorno writes in "Lyric and Society," the lyric is a form in which "language acquires a voice [die Sprache selber laut wird]" (56), this is not because language usurps the subject by revealing its artifice, but because the lyric, by making language musical, restores its lost suppleness as a medium for thought. For a fuller account of the connection between avant-garde poetry and the Third Critique, see Kaufman's essays "Negatively Capable Dialectics: Keats, Vendler, Adorno, and the Theory of the Avant-Garde," "Everybody Hates Kant: Blakean Formalism and the Symmetries of Laura Moriarty," and "Lyric's Expression: Musicality, Conceptuality, Critical Agency."

22. Marjorie Perloff briefly makes this connection in "The Oulipo Factor," describing "The Eve of St. Agnes" as "a poem that, like *Eunoia*, dramatizes the inextricability of pain and pleasure" (38). For a reading of the specifically gastronomic pleasure of that poem (or what Timothy Morton calls "the blancmange effect" of Stanza 30) see Morton, *The Poetics of Spice*, 148 – 170.

23. 12 One oft-cited example (exemplary, no doubt, because it can also be read as parodic) is Frank O'Hara's "The Day Lady Died," which ends just as Billy Holiday "whispered a song along the keyboard / to Mal Waldron and everyone and I stopped breathing" (28 – 9).

24. For a more sustained comparison between Bök and Bergvall, see Marjorie Perloff, "The Oulipo Factor." Perloff reads these two poets not just as neo-Oulipoeans but as heirs to a more capacious poetic formalism with roots in the historic avant-gardes. Departing from the rhetoric of conceptualism (which holds that a poem is reducible to the articulation of its generative constraint), Perloff aligns the Oulipo and its successors with the modernist (and Russian formalist) argument that moments of heightened artifice serve to estrange and thereby renew our atrophied attentiveness to form. Bök and Bergvall, in this reading, serve as antidotes to a contemporary scene awash with naïvely confessional lyrics that Perloff disparages (with a nod to Ezra Pound's *A Few Don'ts by an Imagiste*) as little more than lineated prose.

    Although Perloff has been instrumental in forging transatlantic and transhistorical connections between modernism, the Oulipo, and contemporary anglophone poetry, the division she makes here between lyric expression and avant-garde formalism has come under attack in recent years, especially by critics associated with the new lyric studies. For a judicious account of the lyric/avant-garde divide (and a careful reading of Perloff's formative dissertation on Yeats), see Izenberg, *Being Numerous*.

25. The phrase is from an unpublished draft of the poem (ctd. in Perloff 38). In *Fig*, Bergvall describes the original Italian in similar terms:

> I had started this piece by accident. Stumbling upon Dante's shadeless souls on my way to other books. Perhaps following a lead, in the dark of dark, in the woods of woods, in the sense of panic of the opening canto: 1-2-3 1-2-3 1-2-3 1-2-3 lines, and the three menace him. (64)

26. Spitzer critiques biographical interpretations of the *Commedia* for "their confusion of the 'poetic I' with the empirical or pragmatic 'I' of the poet – who, in the very first lines of his poem, has taken care to present his 'poetic I' as representative of humanity." Rather, the opening tercet figures Dante as a "composite 'I'" that sublates the individual into the universal even as it requires "an individual eye … to perceive and to fix the matter of experience" (416).

27. For a felicitous example of such scholarship, see Dinshaw, *How Soon Is Now*, which traces the afterlives of medieval literature and philosophy (especially in the work of amateur philologists) in order to uncover "forms of desirous, embodied being that are out of sync with the ordinary linear measurements of everyday life" (5). Also see Cole and Vance Smith, *The Legitimacy of the Middle Ages,* a sustained critique of Reinhart Koselleck's theory of modernity as a self-legitimating break with the premodern.

28. My discussion of the unheroic here owes much to Anne-Lise François. In *Open Secrets*, François coins the term "lyric inconsequence" to describe romantic and post-romantic poems that do not so much valorize inaction as subtract it from any system of "demonstratable yields" where failure might secretly count as success (xvii).

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