How We Became Automatic Poetry Generators:
It Was the Best of Times, It Was the Blurst of Times
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As the ripples of successive waves of cybernetic theory continue to impact a culture increasingly obsessed with the machine and its inner workings, it is beginning to dawn on us that the control we have always feared relinquishing to the machine has never been our gift to give. What we think of as individual conscious agency is as much a construction as the author we keep killing off. This realization manifests itself in the rhetoric around developing typologies in digital poetics. Consistently, these new categories seek to define texts by determining the locus of their control. This is particularly evident in discussions around algorithmically generated texts that use randomness in their processes. Randomness takes us right into the heart of the relationship between author/programmer/algorithm/text/ reader. Digital poetic practitioners and others have used randomness to seemingly opposite ends. For some, randomness is a tool that liberates the author from authoritative discourses, internalized codes of which she is unaware, and places control of the text firmly in the hands of the individual subject. Others deliberately construct chance operations in the writing process in an effort to expel themselves from the text, to write themselves out. In *How We Became Posthuman*, N. Katherine Hayles asserts that pattern and randomness are bound together in "a complex dialectic that makes them not so much opposites as complements or supplements to one another."(Hayles 25) The relationship between authorial control and its relinquishment as it is realized in textual production involving random procedures is characterized by a similar supplementarity. Operating in this splice, these procedures point to an emergent posthuman subjective agency.

Before proceeding, it is important to acknowledge that the randomness of automatic poetry generators is not truly random. Computer-based random event generators are in themselves deterministic procedures, but the results they produce have the appearance of obeying no particular law. This simulated pseudo-randomness, according to the *Web Dictionary of Cybernetics*, generates behaviour that is "nearly impossible to predict without knowledge of the starting number and its algorithm."(*Principia Cybernetica Web*) The concept of the "aleatory," that which depends on the throw of a dice or on uncertain contingencies, is perhaps a more useful term. In the activities that concern us here, part of the process always remains hidden from the author/programmer, and beyond her complete control.

The algorithmic process that forms the subject of this discussion is often referred to as "automatic poetry generation." While I now find the word "automatic" an unsatisfactory term, an examination of its use propels us straight into this paper's concerns. At once imputing a human-like quality to machines, and a mechanistic nature to living organisms, the word automatic generates a recursive semantic feedback loop. To call a living organism automatic is to rob it of life and volition. To call a machine auto-

matic is to bestow upon it will and independent action. As Haraway once remarked, "Our machines are disturbingly lively, and we ourselves frighteningly inert." (Haraway 152) The phrase begs the question, who or what is the generator in an automatic poetry generator. Who's running this show? As indicated earlier, practitioners of poetry that depends on aleatory techniques have differing answers to this question.

I meant to do that... The aleatory as a guarantor of individual subjectivity

The Oulipo, growing out and away from the Surrealist movement had fairly ambiguous feelings regarding random text generation. Warren F. Motte Jr. calls the aleatory the "bête noir of the Oulipo." (Motte Jr. 17) On the one hand, the group celebrated uncertainty. They worked to create potential literature. But they claimed repeatedly that they were "anti-chance." and delivered a sustained attack on the aleatory writing practice. Queneau and the Oulipo rejected the notion of chance in literary creation in response to the Surrealists' notion that in its liberation of the poet from formal constraints, chance could provide some kind of transcendence. (Motte Jr. 17-20) Queneau asserts that this liberation is a false notion: "The classical playwright who writes his tragedy observing a certain number of familiar rules is freer than the poet who writes that which comes into his head, who is the slave of other rules of which he is ignorant." (quoted in Motte Jr. 18)

The problem is that the Oulipo were not really attacking the aleatory. Their real battle was against the notion of inspiration, a mystical, external force, hurling ideas to the waiting poet like bolts from the blue. Queneau writes,

> ... the poet is never inspired, because he is the master of that which appears to others as inspiration. He does not wait for inspiration to fall out of the heavens on him like roasted ortolan. He knows how to hunt, and lives by the incontestable proverb, 'God helps those who help themselves.' He is never inspired because he is unceasingly inspired, because the powers of poetry are always at this disposition, subject to his will, submissive to his own activity... (quoted in Motte Jr., 36)

Queneau's aggressive language reveals an anxiety about the loss of authorial control. Having lived with the notion of the author's loss of control over the text for some years now, it is not unreasonable for us to assume that the author may not have complete control over the creative process as well. But more is at stake here than the loss of the conscious control of the author/programmer. What is at stake is the idea of conscious agency in the human subject itself. The Oulipo's championing of processual literature for its power to free the poet of unconscious rules resembles Burroughs' use of cutups as a way to guarantee the autonomy of the indi-

vidual. As described in *The Ticket that Exploded*, randomness is a tool used to "break obsessional associations" — personal, and cultural, and those of the WORD. There, Burroughs writes, "the only thing not prerecorded in a prerecorded universe is the prerecording itself which is to say any recording that contains a random factor." (Burroughs 166)

Neil Stephenson's *Snow Crash* can be read as a narrative exploration of these ideas. In *Snow Crash*, language is indeed a virus which can either manifest malevolently as in the *Snow Crash* drug which reduces the taker's linguistic utterances to a glossolailic "falabala-ing," and make them prime subjects for mind-control, or it can take the benevolent form of the nam-shab, given by the promethean figure of Enki, the hacker hero who brings noise into the channel and ruptures the relationship between the signifier and the signified, enabling individual subjectivity to develop and flourish. As Stephenson's hacker-heroine Juanita muses, "you might say that the nam-shab of enki was the beginnings of human consciousness-when we first had to think for ourselves." (Stephenson 372)

Ironically, what theses stories suggest is that individual autonomy is not part of our native processes — we have to submit to the workings of an outside force to gain independence. Even as these writers champion the individual autonomy of the human subject, they reveal what a fragile property it is. Conscious agency can be said to be a native function of the liberal human subject only in so far as the liberal human subject is a constructed entity. This is what is so threatening about the emerging figure of the posthuman cyborg. Joseph Weizenbaum and the Oulipo make strange bedfellows but they are united in their anxiety to protect maintain the individual autonomy of the human subject, even as she plays in the garden of algorithms. However, as Hayles elaborates in *How We Became Posthuman*, "In the posthuman view... conscious agency has never been "in control." (Hayles 288)

No discussion of authorial control in computer generated poetry would be complete without a consideration of Racter, the first "cymac" poet and reputed author of *The Policeman's Beard is Half-Constructed*. In the preface, William Chamberlain, Racter's programmer and official editor, rejects any authorship status in construction of *The Policeman's Beard is Half-Constructed*. Even if we are to ignore his role in writing the code which produced the texts, or selecting the input texts, and I don't believe we can, Jorn Barger & Espen Aarseth both note that Chamberlain played an active role in tweaking Racter's output through templates that would further shape the text. (Barger, Aarseth 132-4) If Racter were to generate these templates independently, one still could not ignore Chamberlain's design of the code which generated a machine which generates its own templates. A remarkable act of poesis. In any event, in Chamberlain's case, one doubts the seriousness of his disavowal of authorship status. As Aarseth notes, Chamberlain's insistence on the authenticity of the work in the preface is the oldest trick in the book. (Aarseth 134) (Incidentally, the

University of Toronto library catalogue does not accord Racter any author-
ship at all.)

Others who work with digitally generated aleatory techniques do
so out of a genuine desire to give up control over literary productions: one
thinks of Cage's compositional indeterminacy, or Jackson Mac Low 's poet-
ics of non-intention, where he used chance procedures to foreground the
independent workings of the text against his own design, to "let the words
themselves speak." (quot. in Jackson 208) Though these writers aren't so
cheeky as to not sign their name to their work, their implied absence in the
textual production is just as suspect as Chamberlain's.

In the Virtual Muse, Charles Hartman presents a vision of the poet
who "attends" to language: "if using randomness makes me a little more
passive — a little more obviously a judge than a creator- that's another sim-
ilarity between me & the reader and another point of contact or the
poem." (Hartman 35) Though the alliance of reader and writer may be
helpful here, the notion of the passive reader doesn't sit well with a post-
structuralist readership. Carl Peters offers Barthes' notion of jouissance,
the bliss that attends the reader who loses herself in the text, as a way to
read bpNichol's attempts to expel himself from the production of the
Martyrology through "the deliberate construction of chance." (Peters)
Jouissance, carrying with it connotations of sexual ecstasy and death, when
used to describe the authorial process, unite the reader and author in a
loss of self that can hardly be called passive.

The break with authorial control is just not that easy. Just as
Haraway, Hayles and all have made clear that the cyborg can never leave
the body behind, neither can the individual activity and intention of the
writing subject truly die in algorithmically generated poetry. Quoting from
John Cayley's "Pressing the Reveal Code Key": "One constructs with and
against and amongst the code. But most of all, one constructs." (Cayley)

*...and so the author vanishes to give place to a more thoughtful person, a per
son who will know that the author is a machine, and will know how this
machine works*

-- Italo Calvino

So how does this machine work? I have suggested that those who
use automatic text generative techniques in their work do so for conflict-
ing ends; I have also suggested that aleatory techniques in literary produc-
tion are no guarantor nor liberator of conscious control of the writing
process. I submit that the nature of the writing subject who uses these
processes more closely resembles the collective assemblage of Deleuze and
Guattari, Kristeva's subject in process, or Cixous's writer:

"Writing is the passageway, the entrance, the exit, the dwelling place
of the other in me — the other than I am and not, that I don't

know how to be, but that I feel passing, that makes me live — that
tears me apart, disturbs me, changes me, who? " (Cixous 583)

Though Hayles work suggests that we have always been part of a
distributed system, it is through our interactions with digital media that we
are beginning to confront this idea and we can no longer ignore it. The
idea of the author's conscious control over the creative practice held by
practitioners of aleatory techniques in non-digital media cannot remain
firm when these same practitioners move into digital media.[1] In addition,
digital media in networked environments further complicate the relation-
ship between the cast of characters that are involved in the production of
the text.[2]

Moolipo

In my own work in MOOs, multi-user text-based virtual environ-
ments, I have begun a project called the MOOlipo, an endeavour whose
original purpose was to bring home to the participant the notion that all
writing is the execution of an algorithm. I wrote various text-generative
procedures into the code that generates a series of rooms on the MOO. A
MOO room object also contains the code that generates a player's speech.
When activated, the algorithm uses the player's spoken text as input text,
runs it through a variety of constraints, and puts the output back in the
player's mouth. For example, in the lipogram room, a given letter will be
obliterated from the speech of any player in that room. In this way, the
player takes the role of the author in an algorithmically generated text
because they themselves supply the input texts. Equally influenced by
Haraway's "Cyborg Manifesto" and Jeff Noon's *Cobralingus Engine*, I wanted
to pursue the algorithms that made up my own being. My character on the
MOO, Salmon, is at once an algorithmic text generator and the execution
of a algorithm. She is a constructed coded object, and I, who knows which
I, operate within, amongst and against this code. The speaking subject and
the spoken subject, I can and cannot be programmed. For the MOOlipo
project, I coded a Markov Chain text generative process onto Salmon.
When the engine is active, any word I speak may trigger the Markov Chain,
which will then overwrite my text with a string generated from the various
input texts. The input texts are a combination of literary texts I have delib-
erately fed to the machine, and the text conversations I have had with oth-
ers in the MOO. When I read Burroughs' *The Ticket that Exploded*, it was
with a shock of recognition:

"splice yourself in with your favourite pop singers splice yourself in
with newscasters prime ministers presidents everybody splice him-
self in with everybody else..."
        (Burroughs 212-3)

The code involves me in an aleatory writing technique in more ways than one. The code is driven by random procedures, and this undermines my control over what I might say at any given moment. I have recently learned, however, that I have limited control over when I might say it: Salmon can be made to speak by another player even when I am not logged on, when I have no conscious control over her actions. One might say that she talks in her sleep. The possibility for a poetics of non-intention blossoms in the MOOlipo. The distribution of authorial activity creates an aleatory writing experience for whoever generates the text. Nevertheless, one constructs.

In her conclusion, Hayles remarks, "When the human is seen as part of a distributed system, the full expression of human capability can be seen to depend on the splice rather than to be imperiled by it." (Hayles 290) Just how this full expression of human capability manifests in the production of digital work using aleatory procedures is clearly the subject of further study. What is evident, however, is that to approach these texts by attempting to articulate who is in control of their production is a futile enterprise. We need a new language, one that does not seek to define these processes according ideas of control that involve us in a never ending who dunnit mystery (mystory, no no, mY story,) but rather, one that acknowledges a creative agency that is distributed across author/programmer/algorithm/text & reader. Only then will we be able to get down to the business of playing in the splice.

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Footnotes

[1] see Philipe Bootz commentary on the transformation of Oulipian techniques using digital media in his work on the ALAMO & LAIRE, in Visible Language 30.2

[2] see Christiane Heibach's work on the distributed author in networked environment: http://www.dichtungdigital.de/2000/Heibach/23-Aug/