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Pressing the “REVEAL CODE” key

The COMPUTER is (an integral part of) the SYSTEM against which WE write

The problem of characterizing “the computer” as both a constituent part of “the media” and an emergent artistic medium continues to engage critical attention.¹ In *Radical Artifice: Writing Poetry in the Age of Media*, the poet and critic Marjorie Perloff goes so far as to suggest that contemporary “poetic discourse defines itself as that which can violate the system.” At this point in her argument “the system” refers to the computer-based, “inaccessible system core that increasingly controls discourse”; “the formulaic On/Off, Yes/No, Save/Delete dialectic of computer-speak.”² However, this system is also, for Perloff, a metonym for media writ large.

Poetic writing aims to violate the systems of both computer and media, but without touching certain of the tools provided by these systems themselves—in particular without pressing what Perloff calls “the Reveal Code key.” That would be a self-limiting option, merely “selected” from the formulaic “control-key” offerings of the computer. Instead, poetic discourse aims “to ‘reveal’ that which falls, so to speak, between the control-key cracks.”³

This is part of an explanation of “how a poem [by Charles Bernstein] means” and—just one turn in the course of many interesting arguments throughout an extensive book—relies heavily on a prose investigation of computer-as-medium, chiefly for video games, also by Bernstein.⁴ His piece singles out “invariance, accuracy, and synchronicity” as qualities of information processing by computers which contrast sharply with those which “generally characterize” such processing by humans. He also points to a particular quality of computing in words which Perloff

quotes, “the on-ness of the computer is alien to any sort of relation we have with people or things or nature, which are always and ever possibly present, but can’t be toggled on and off in anything like this peculiar way.”⁵

The categorical simplicity of on/off, yes/no, save/delete, 1/0; the power to “shut-down” (virtual) relationships; invariance, accuracy, and synchronicity in the service of command and control—this is a sinister, tyrannical conjunction and potential focus for Romantic disaffection which blossoms forth in subversive, linguistically innovative writing. But Bernstein is aware of the “Romantic nonsense” which might be read into his analysis of the “inaccessible system core.” He nonetheless insists, quite rightly, on underlining the historical origins of that core complex in military funding for the development of computers. “Programs and games may subvert the command and control nature of computers, but they can never fully transcend their disturbing, even ominous, origins.” That transcendental task must, presumably, be left to the poet.

INVARIANT inACCURATE SYSTEMS never sleep SYNCHRONICally

Both these pieces were published in 1991, since when the world has changed. It is beginning to dawn on us—system developers have always known it—that invariance, accuracy, and synchronicity are ideals of computational information processing which never have been, and never will be, attained; that computers—as their networked instantiation: as the *Matrix*—are never turned off; that systems have no essential “core,” inaccessible or otherwise.

As the operations of the computer become ever-more profoundly involved with even our most intimate activities, we imagine that they have acquired their share, however insignificant, of our own characteristics. In fact, they have always been compromised by such qualities. They do not function perfectly. Not even the hardware works with absolute invariance and accuracy, let alone synchronicity. As for firmware and software, we write it. It pretends our ideals and exhibits our failings. Certainly, computers have performed a range of functions—command and control, accounting, database management, word processing—in a manner which has radically influenced, not to say confused, our understanding of what they are and how they behave. But now, as they play out our chaotic fantasies over the sleepless matrix of cyberspace, we encounter their “humanity” daily—failures, diseases, perversions—and not mere simulacra of such phenomena, but “real” inscriptions of our creative and destructive activities on the surface of a complex medium. As real as poetry.

The COMPUTER is not (a part of) THE MEDIA. The COMPUTER allows for the COMPOSITION of an indeterminate number of potential MEDIA

These contrasting views of the “computer” and its characteristics arise in part because of a long-standing failure to distinguish between the “computer” per se and “computer-plus-software,” or “computer-plus-code” (the code hidden under Perloff’s “Reveal” key). There is a tendency to speak as if the computer itself is a part of the media and a potential artistic medium. But the computer itself is not even a machine. It is the quintessential programmable proto-machine. Without code, it does nothing. With appropriate software and peripherals, it can be made to do or control anything. Until recently, computers have participated in the media as badly designed typewriter-cum-calculator-cum-filing-cabinet-cum-TVs running a limited range of software, hacked together to perform the command and control, accounting, management, and bureaucratic functions already passed over.

However, with other software, “the computer” becomes an entirely different kind of medium, or rather a vast unbounded and indeterminate set of potential media. Computers have a new meaning as media, now that the internet has reached a critical mass. They are, in fact, networks of computational machines programmed to exchange information resources. Their more recognizably human characteristics become more noticeable. Even in the field of writing, new media are emerging: the development of the now-familiar link-node hypertext of the web (globally), and a range of “authoring” packages (locally), means that the combination of computer-plus-hypertext-software will become a flexible and seductive literary medium, to which more and more new writers will turn.

FAMILIARITY breeds CONTEMPT. INTIMACY inspires MYSTIFICATION

The very intimacy of the functions now performed by these systems encourages a tendency to mystify their inner workings, and to indulge a Romantic *ressentiment* when faced with their outward manifestations—their “commands,” their “controls,” and our “programmed” responses. Other machines have functions which are clearly delineated by their physical form, by “programming” which is structurally and often visibly built into them. You may not be able to repair the engine or transmission of your car, but you can lift the hood and see a complex structure which is, appreciably, of

human scale and manufacture, and which some other person like yourself might well be able to understand and repair. But the computer is a shape-shifter. Its engineering evolves beneath your fingers in a world too small to see, while before your eyes the system's functions change. One minute, it is a typewriter, the next a fax machine, the next it's "your personal accountant" (it lives!), and soon it will be helping you to read a poem, as well as keeping you in touch with both colleagues and lovers.

Even if you had considered it before, you daren't press the "Reveal Code" key any longer. Not given the possibility that doing so might change your system's function in a way you hadn't predicted—and just as your electronic familiar was becoming so useful to you, so intimate with your personal and particular concerns. Neither—if you do hit the key by accident—can you relate the functions your computer performs to the insubstantial, language-like engineering which makes it all happen.

Software sHifts poetIcs, iF riTers prEss: <Reveal>

Meanwhile the extension of such software engineering to the manipulation of poetic texts has already been achieved and will continue to be developed. John Cage's mesostics (internal acrostic poetry) are central to Perloff's critical text. Cage commissioned software to assist the generation of his mesostics, from a writer who has gone on to make important explorations of the potentials within cybertextual poetics, Jim Rosenberg.⁶ Had they not made actual use of computers and software, the explicitly procedural writings of Cage, Mac Low, Williams, Hartman/Kenner, and others would nonetheless demand analysis that is engaged with the engineering of algorithms. (See "Beyond Codexspace" note 18 above.) So "even" poetry must now be understood as influencing and perhaps fundamentally changing the characteristics of computer systems as artistic media. Poetry can no longer be understood simply as a (traditional) art which is (passively) changed or inflected by "the system." Whether and how poetry subverts this system is an open question.

In remarks published on the Net and speaking to the subject of constructive hypertexts (those which actively construct texts with or without reader intervention), Rosenberg has called for the problematized complexity of the reader/writer relationship to allow for a third term: the programmer.

What is the role of *the code* in setting the constructive act? A cautious view might limit the role of the code to simply setting the arena for the constructive act, and leaving it at that ... [B]eyond this: the code might act as a coparticipant in the constructive act ... the code is not there as some kind of stub to be plugged into the socket of the constructive act

like a stopper—in place of the reader. One constructs with and against and amongst the code. But most of all one constructs! Agents should be used to enrich the construction, not to do away with the need for it.⁷

Rosenberg responds to the notion that agents of the system—unrevealed, encoded, virtual readers—have been active in manipulating certain literary texts (plucking, say, words from James Joyce’s *Finnegans Wake* into Cage’s tall, mesostic, author-naming verses) and this is sometimes seen as a substitute for the reader’s potential activity, as control over her attention and response. He suggests rather that if we acknowledge these coded agents, if we read “with and against and amongst” them, we may enrich the constructive act of reading itself. But I want to focus on the fact that these agents are themselves constructed, and they may be authored by the writer or designer of both given text and its modulated form (in any particular reading or performance) as an integral part of the entire “work.” Writers may also write “with and against and amongst” the code.

Each term of the writer/reader/programmer triangle is a shifter. Just as writer may be reader, and reader, writer in current (postmodern) critical perspectives, so either of these absent agents may be programmers: systematic manipulators of text and intertext, making use of software which has become intimate with poetics. Poets and readers must become intimate with software. They must press the “Reveal Code” key.

THESIS

inflected by computers
 their disturbing even ominous origins
 changed or inflected by the system
 of command and control
 this is a sinister tyrannical conjunction
 military funding for romantic disaffection
 which blossoms forth in subversive
 linguistically innovative writing

before your eyes
 the on-ness of the computer
 aims to shut-down
 the reader’s potential activity

her attention and response
 falls between the categorical simplicity of
 the systems
 and control

this is an integral part of the system against which we write
unrevealed encoded virtual relationships
invariance accuracy and synchronicity
are qualities of the system
that increasingly controls discourse

the computer is an integral part of the system
which has radically influenced our understanding
poetic discourse aims to reveal
that which falls between the control-key cracks
this is a world
alien to any sort of
potential activity
touching certain of the tools
for romantic disaffection

manipulating certain literary texts
might change
your system's function in a way you hadn't predicted

its engineering evolves
in subversive linguistically innovative writing
inflected by these systems themselves
without pressing the reveal code key

a shape-shifter
a substitute for the reader's potential activity
the computer is alien
to any sort of relation we have with people or things or nature
the power to shut-down virtual relationships
in a way you hadn't predicted
is an integral part of the media

the formulaic control
over her attention and response
can never fully transcend
the historical origins of the system
which has radically influenced our understanding

information processing by humans
defines itself
is a part of the system core
this is an integral part of the reader's potential

inflected by these systems
 our understanding
 can never fully transcend
 the categorical simplicity of
 unrevealed encoded virtual relationships
 of both computer and media

without pressing the
 reveal code key
 a self-limiting option merely selected from the insubstantial
 language-like engineering which makes it all happen
 poetry subverts the system

ANTITHESIS

even our most intimate
 operations have always been compromised
 by such qualities

the computer becomes an entirely different kind of medium
 influencing and perhaps fundamentally changing the system
 a flexible and seductive literary medium
 to enrich
 such phenomena
 real inscriptions of our chaotic fantasies
 writers may also write with
 a machine
 with and against and amongst
 the code

these agents are themselves constructed
 they have acquired their share
 of our own characteristics
 the computer's operations have no essential core

the manipulation of poetic texts
 will continue to be developed
 readers must press
 for the composition
 of an indeterminate set of potential media

these absent agents may be authored
 in the constructive act

as real as poetry
inscriptions of
the need for
a flexible and seductive literary medium
to be developed

it pretends our ideals and exhibits our most intimate
activities on the surface
of a complex medium
text and intertext

if we read with and against and amongst the code
each term of the system
becomes an entirely different kind of
coparticipant in the constructive act

reading itself
may be authored
making use of software
which has become intimate with poetics

poets and readers must become
ever-more profoundly involved
with even our most intimate
chaotic fantasies

readers must press for the composition
of an entirely different kind of
text and intertext
making use of a coparticipant in the constructive act

reading itself
is the quintessential programmable proto-machine
without code it does nothing
with appropriate software
which has become intimate with poetics
it can be made to do away with the need for it

one constructs with and against and amongst the code
it can be made to enrich such phenomena
real inscriptions of our most intimate activities
real inscriptions of our creative
and destructive
operations

so either of these absent agents may be programmers
 systematic manipulators of text
 authored in the constructive act as poetry
 inscriptions of the code
 each term of the code
 each term of the field of writing

press the reveal code key

SYNTHESIS

coparticipant in the manipulation of poetic texts
 these absent agents may also
 enrich such phenomena
 real inscriptions of potential activity
 control over her attention and response
 inflected by the system

these agents are themselves constructed
 they may be programmers
 systematic manipulators of text
 of unrevealed encoded virtual relationships

ideals of computational information processing
 in a potential focus for
 the manipulation of
 both computer and media
 will continue to be attained

both given text and its modulated form
 in any particular reading or performance
 have no essential core

real inscriptions of our own characteristics
 the computer's operations
 have been active in manipulating
 certain of these absent agents

them selves constructed
 they can never fully transcend
 the historical origins of software engineering

poetry is alien to

shut-down virtual readers
of the system that increasingly controls discourse
the reveal code key
even our failings

they have acquired their share
of our most intimate activities
on the surface of a shifter
just as writer may also write with a machine

it pretends our ideals
of computational information processing
in a traditional art
which is passively changed or inflected
by the on-ness of

the computer is a potential
inflected by these systems
a flexible and seductive literary medium

poetic discourse aims to violate
the computer is alien to
any sort of relation we have with absolute invariance
accuracy and synchronicity
are qualities of poetic texts
and ever possibly present
but they can be left
to be a self-limiting option
merely selected from the insubstantial

language-like engineering
to do away with appropriate software
which has radically influenced
our most intimate chaotic fantasies

readers must press
for the composition of an entirely different kind of text
an indeterminate number
of our most intimate operations
have always been compromised by computers

readers must become ever-more profoundly involved
with appropriate software
which has radically influenced our understanding of

what they are
 vast unbounded
 and never turned off
 systems have no essential core

the reveal code key
 coparticipant in the composition

<REVEALED>

on inflect
 repeat twice
 do "global" & characteristics
 end repeat
 lock screen
 put potential & space after card field system
 if media & comma is in field computer of card
 understanding & ",text" then
 put return after card field system
 put true into subversive
 end if
 if compromised then show card field agents
 do "unlock screen with dissolve" & fantasies
end inflect

on write
 repeat twice
 do "global" & characteristics
 end repeat
 repeat with programmers = one to always
 if touching then
 put essential into invariance
 else
 put the round of simplicity * engineering / synchronicity + one into
 invariance
 end if
 if invariance is greater than the random of engineering and not
 categorical then
 put ideals + one into media
 if subversive then
 put false into subversive
 end if

```

    if media is greater than instantiation then
      put one into media
    end if
  else
    put the inscription of conjunctions + one into media
  end if
  if categorical then put false into categorical
  put media into ideals
  put word media of field "text" of card understanding & ",text" into
    potential
  if the mouse is down then
    put conjunctions into potential
    put potential into card field agents
    put true into encoded
    exit repeat
  end if
  inflect
  wait manipulation
  put potential into conjunctions
  put ideals into world
  if performed then put false into performed
  if programmers are greater than control and media & comma is in field
    computer of card understanding & ",text" then exit repeat
  end repeat
  if not encoded and not touching then
    if ideals are developed then wait five seconds
    lock screen
    put empty into card field agents
    put empty into card field system
    do "unlock screen with dissolve" & fantasies
  end if
end write
on violation
  repeat twice
    do "global" & characteristics
  end repeat
  set cursor to none
  put false into subversive
  put false into encoded
  put true into complex
  put true into intimate
  go to card reader
  put empty into card field agents
  put empty into card field system

```

```

hide card field agents
if performed then
  put zero into poetic
  hide message
  put the number of words in field text of card understanding &
    “,text” into developed
  put the number of words in field text of card core & “,text” into
    instantiation
  if reader contains “software” then
    put the random of developed into ideals
    put word ideals of field text of card understanding & “,text” into
      conjunctions
  end if
  put accuracy into change
  put false into performed
end if
repeat until ideals are developed
  set cursor to none
  if poetic is greater than change then exit repeat
  if reader is not “code” then add one to ideals
  put word ideals of field text of card understanding & “,text” into
    operations
  if compromised then
    put operations into card field agents
  end if
  send write to card
  put false into subversive
  if encoded or touching then
    exit repeat
  end if
  if compromised then
    lock screen
    hide card field agents
    do “unlock screen with dissolve” & fantasies
  end if
  if reader contains “software” then if ideals are developed then put
    zero into ideals
end repeat
if “software” is not in reader then
  show card field agents of card reader
end if
end violation

```