reflects particularly well the cut-paste-burn sense of our time. This won't mean the end of printed books authored by a single person, of course. Rather, it allows some books to be more themselves in the way that photography freed painting to be more itself, i.e., to do things that only painting can do better than any other medium. For many books, e.g., bestsellers, it still won't matter if their text is poured into a paper or electronic container like the Kindle. But for others, the ability to take the book as a medium seriously, the way artist books have always taken the book as a medium seriously, and to do so by bringing a full range of talents to it, opens up exciting possibilities. It seems to usher in a new age for the book, whether electronic or paper, in the way that the movies, once heralded as the Grim Reaper for theater, instead

trimmed away those aspects done better in film, allowing the stem to flower into the plethora of forms we know as theater today.

Steve Tomasula is author of the novels VAS: An Opera in Flatland, The Book of Portraiture, IN & OZ, *and* TOC: A New-Media Novel.

Collaborations in E-lit Stephanie Strickland and Nick Montfort

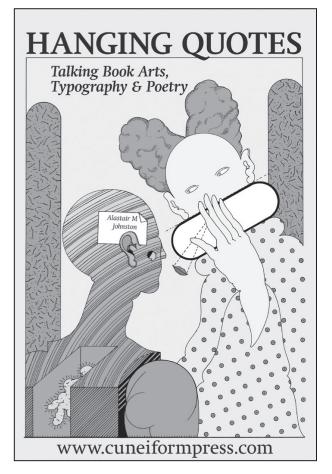
Both of us have collaborated with others to make works of e-literature, but collaborating with each other seemed unlikely as our work is so different. When we present *Sea and Spar Between* (http://blogs.saic.edu/dearnavigator/winter2010/ nick-montfort-stephanie-strickland-sea-and-sparbetween), we specifically raise this question with the audience:

S: How did *we two* come to collaborate on this poem? Nick, very roughly speaking, is interested in the assembly of language, the recombination of language fragments, and getting at the heart of things by squeezing out excess.

N: Stephanie, as I understand it, is interested in flows and relationships, the systems that underlie apparent discontinuities and disturbances. She has collaborated for many years to extend her work in poetic language from the page and book through the computer and onto the screen.

S: We both like poetry, and we both like math; neither of us would choose a brute force method when there might be an elegant solution. Yet I feel cautioned by the words of Oulipian poet Jacques Roubaud, a mathematician and a poet. He insists that "mathematics and poetry are completely separate, utterly unrelated discourses: the former is eminently paraphrasable, the latter is utterly *un*-paraphrasable (the poem 'says what it says while saying' it, whereas proofs in maths can and should be rewritten in as many ways as imaginable)."

N: I agree with Roubaud, but when it comes to code, a computer program is like a mathematical proof; there is even a named formulation of the connection between the two, called the Curry-Howard Correspondence. Just as a proof can be written in different ways, so too can a computer program—unlike poetry, which is what gets lost in



translation. But this flexibility in writing programs is one of the things that intrigues me about code. By leaving open space and allowing a certain amount of play, programming languages permit one program to be more beautiful than another, even when they both do the exact same thing.

S: Strangely, my interest in poetry generators is motivated not by un-paraphrasable economy of structure, something I love in *poems*, but by superfluity of output—by a state of affairs where one is awash in potentials we know we have, but cannot prevision. Why? Because, to my mind, language wants to evolve toward what Tim Morton calls "the ecological thought"; namely, that there is no outside, no inside, no secure perch or boundary, but only multiply woven interconnectiveness—at every level. I think that two kinds of current language practice might evolve to serve "the ecological thought": Poetry and Code.

Collaborators dissolve their individual claims and feelings of ownership while actually heightening their responsibility.

N: To these, I'll add Collaboration. There are many benefits to collaboration, such as the ability it gives writers to learn from one another. An even more important benefit: by sharing the writing task from the initial concept for the project through to completing the details of the work's presentation, collaborators dissolve their individual claims and feelings of ownership while actually heightening their responsibility. They discuss matters of writing and programming which would be passed over without comment or deliberation by a single author/ programmer. The text (in this case, both generated poems and the code that generates them) becomes of utmost concern to me, as I know it is to Stephanie, without being "mine" in a narrow, exclusive sense. If we can do this in our writing, perhaps it will help us to work, create, and explore together when it comes to our cities and our planet.

Beyond interpersonal cooperation, the signal collaboration in e-literature is with "it," the computer, or the database, the algorithm, and the limitations of protocols and software. Computational steps make it easy to re-combine, remix, mash, recycle, and appropriate every kind of legacy media-and sometimes to significantly alter it. This is true of Sea and Spar Between. The sourcetexts, the poems of Emily Dickinson and the entirety of Moby-Dick (1851), are used to generate as many new stanzas as there are fish in the sea. Well-known recombinant/remix works would include Talan Memmott's Self-Portrait(s) [as Other(s)] (http://collection.eliterature.org/1/works/ memmott_self_portraits_as_others.html) and Jim Andrews's (and others') Stir-Fry Texts (http://collection.eliterature.org/1/works/andrews__stir_fry_texts. html).

collection.eliterature.org/2/works/baldwin_basra. html), Brian Kim Stefans's *Star Wars, one letter at a time* (http://collection.eliterature.org/1/works/ stefans__star_wars_one_letter_at_a_time.html), and Rui Torres's *Amor de Clarice* (http://collection. eliterature.org/2/works/torres_amordeclarice.html); and many authors, including Baldwin, provide mods or modifications for multiplayer online role-playing games. Many, see Jason Nelson's extensive collection of works (http://www.secrettechnology.com), make frequent use of appropriated game engines and code.

Beyond collaborating with "it," the e-lit writer has to secure the collaboration of a diverse crowd of readers, none of whom are in possession of any kind of normalized conventions for such reading. Not only is e-lit itself a hugely diverse field (in the *ELC/2*, 2011, for instance, reading conventions are drawn from game-play, graphic, and animation conventions, conventions that rule interactive fiction play, gestural or ergodic interventions, and more), but readers arrive on a variety of platforms and/or browsers. As these proliferate, including to mobile devices, the attempt to securely *reach* a reader, much less collaborate with her, becomes significantly more difficult.

The interactive fiction in ELC/2, Jim Munroe's Everybody Dies (http://collection.eliterature.org/2/ works/munroe_everybodydies.html) and Nick Montfort's Book and Volume (http://collection. eliterature.org/2/works/montfort_bookvolume.html), comments on corporate power structures and the nature of work in contemporary society. A recent example of interactive fiction models a new way for writers and programmers to work together in creating electronic literature, an alternative to corporate content production and to individual "Romantic" authorship. In the 2009 release, Alabaster, Emily Short and ten others create a version (actually several versions) of the Snow White legend by writing different threads and branches of story that are later connected. The effect is much more powerful than a "World's Longest Sentence"-style production in which each writer posts text without regard for what has been written; it is also more complex and nuanced than a single author could have managed

Works of outright text appropriation include Sandy Baldwin's *New Word Order: Basra* (http:// in the same time.

Newly developed platforms and tools in interactive fiction have made entire code systems available for appropriation and collaboration. Graham Nelson's interactive fiction system, Inform 7, uses a natural-language-like syntax, so that code for a game "reads" like prose. It is in wide deployment and was used to create *Alabaster* and *Everybody Dies*. A more recent and experimental system is Nick Montfort's Curveship, which allows for computational control over aspects of narrative—for instance, who focalizes the story, in what order events are told, and what the narrator's position in time is.

In poetry generation, several new systems allow user/poets to set parameters, choose source and seed texts, and produce poetic output. A recent, powerful Web-based system is Edde Addad's charNG, an

— Strickland & Montfort continued on next page

n-gram generator in the tradition of Hugh Kenner and Joseph O'Rourke's Travesty. Eric Elshtain and Jon Trowbridge's Gnoetry is a complex, modifiable opensource system that uses machine learning techniques to generate poems by blending together existing literary texts. These poetry generators are not conceived as literary works, just as Inform 7 and Curveship are not, but they are interventions into computing and literature which serve appropriation and collaboration. Judy Malloy's Authoring System (http://www. narrabase.net/elit_software.html) project documents a wide variety of tools and software, the creators of which are perforce co-creators of any e-lit made with them.

Some literary works, called textual instruments, invent their own reading processes via idiosyncratic interfaces. Some of these require extensive collaboration from readers. This is true, for instance, of Noah Wardrip-Fruin's (and collaborators') *Regime Change* (http://collection.eliterature.org/1/works/wardripfruin_durand_moss_froehlich__regime_change. html), of Noah Wardrip-Fruin's (and collaborators') *Screen* (http://iowareview.uiowa.edu/TIRW/ TIRW_Archive/tirweb/feature/cave/), and also of Michael Mateas and Andrew Stern's interactive drama *Façade* (http://collection.eliterature.org/2/ works/mateas_facade.html). Other works, such as David Clark's 88 *Constellations for Wittgenstein* (http://collection.eliterature.org/2/works/clark_wittgenstein.html), require many hours to semi-exhaust and much patience to navigate.

Another sort of collaboration occurs with Sarah Waterson's (and collaborators') *Trope* (http:// collection.eliterature.org/2/works/waterson_trope. html), which engages the conventions of the Linden Lab Second Life environment, or with Eugenio Tisselli's *Synonymovie* (http://collection.eliterature. org/2/works/tisselli_synonymovie.html), which draws on online image-search engines as well as a Web-based synonym server. Here massive databases, compiled commercially, are the "it" counter-player in collaboration. Other pieces, such as Christoph Benda's *Senghor on the Rocks* (http://collection.eliterature.org/2/works/benda_senghor_on_the_rocks. html), rely on Google Maps.

In closing, we would especially like to mention Sharon Daniel and Erik Loyer's *Public Secrets* (http://collection.eliterature.org/2/works/daniel_public_secrets.html), a work that engages the voices of women incarcerated in the Central California Women's Facility. As the ELC/2 editors say,

These women narrate their experiences inside the prison while also giving an account of the structural conditions that reduced them to bare life, life that is without political value.... Daniel's critical commentary and theoretical reflections frame these testimonies, granting each its singularity while also articulating the systemic (il)logic of incarceration.

Here is collaboration not possible for these women in any other context.

Stephanie Strickland has published six books of print poetry, most recently Zone : Zero. A member of the Board of Directors of the Electronic Literature Organization, she co-edited volume 1 of the Electronic Literature Collection, and two of her collaborative digital pieces appear in the recently published ELC/2.

Nick Montfort is president of the Electronic Literature Organization and associate professor of digital media at MIT.

Beautiful Collider

Debra Di Blasi

It's possible we're Martians...possible that life arose first on Mars because its smaller size allowed it to cool faster and thus play host to early life forms while Earth broiled. Time (with a capital T) passed. The Red Planet chilled to ice. When comets and asteroids collided with it, debris scattered, eventually arriving on a now perfectly hospitable Earth, and *ergo sum*. I like this particular theory of exogenesis because it demonstrates the potential benefits of collisions. Mashups, after all, are aesthetic headons. The resultant "products" may bring new life to a dying world.

The contemporary concept of mashups can be traced to Musique Concrète and the mid-twentiethcentury experiments of sound engineer Pierre Henri Marie Schaeffer who juxtaposed various music and everyday "noise" in order to create new aural art forms. But that's a shortsighted, academic history. Interesting yet superficial. Essentially, mashup-asprocess lies at the heart of who we are as a species and why we've gotten ourselves into this simultaneously superlative and abysmal status among beasts. Enough of us are creatures of unfettered curiosity that we should be seen as born under the sign of the perpetually cocked head: I wonder what will happen if I put this with that? Stone to stick for fire. Stone to spit for paint. Stone to skull for murder. And on and on and on until we're colliding particle with particle to create a black hole. Or colliding text with image, sound, and objects to create a literary Chimera. Indeed, we've been living in this monstrous multimedia world for over two decades, increasingly influenced by the aesthetics of fast-evolving digital technologies: the badly lit, jerky videos of YouTube; the shallow-range music of iTunes; the brevity of tweets and Facebook status updates; and the increasing vapidity of headlines as the media tries (and fails) to compete with all of the aforementioned. Most of us no longer view narrative through a monocular. Nor should we: shifting technologies allow us to merge literature, visual art, music, and video into a whole that is so much greater than its parts, able to simultaneously comment from multiple perspectives on the way we live now. Multiplicity + diversity + intrepidity must become the modus operandi if we are ever to survive our own ingenuity and evolve literature out of the zombie field of nineteenthcentury expectations. (I promised I would not get political, but I lied.)

The hidden agenda behind my founding the publishing mashup, Jaded Ibis Press, is sociopolitical as much as aesthetic. In other words, when the press collides literary text with visual art, music, and digital technologies, we want to see what shape the "book" takes as art object and as tool for cultural, social, and political change. Literature may have come into existence for a variety of divergent reasons, but I'll talk about only three here, and how each relates to my concept of publishing mashups.

Mashup-as-process lies at the heart of who we are as a species.

First, literature exists because it must. Because language is who we are, and the manipulation of language-whether lyrical or rhetorical-is seduction. We're always on the make, always attempting to seduce one person or group into our peculiar "camp" because the more bodies we have, the more power we wield. Wanting to be right all the time, a condition endemic to human nature, is merely a symptom of the will to power. Ultimately, the trajectory of every species, human or not, resides in its DNA. Without a drive toward higher status, which provides more and therefore "better" sexual choices, a species' perpetuation ceases. (Defining "better" would take another essay, much longer than this one. Let's agree for the sake of argument that, in this case, "better" directly relates to factors presumed beneficial for continuation and evolution of a species.) By enlisting visual artists, musicians, and filmmakers in a book project, we grow readership by absorbing their camps into ours. Yet we respect their artistic DNA, never asking them to illustrate the book, but rather inviting them to respond using their own aesthetic—one that may be consequently altered by having read a work of innovative literature for the first time. Instead of manifesting as a single idea by one creator illustrated in multiple disciplines, the book becomes a single object of multiple creators' ideas manifested through multiple, parallel artistic disciplines. More paths into the camp, more bodies.

Through the mashup, breadth expands to include what we hope are viewpoints shaped by differences in race, gender, sexual preference, and geography. With expanding breadth comes greater knowledge for the reader/viewer/listener, yes, but also for society in general, via the sundry and often subtle ways that individuals and communities share information. Although most organizations—and individuals within those organizations—view knowledge as property, shared knowledge remains critical for the evolution of human society.

Which leads to my second point: literature as philanthropic communication of ideas, i.e., teaching. Humans and chimps, with the exception of psychopaths, are hard-wired for altruism. Even toddlers who can't yet form sentences will voluntarily help a stranger who, for example, accidentally drops a spoon out of reach. Think of literature, then, not just as the creepy guy trying to seduce us into the back of his van but also as that wee cherubic arm reflexively reaching out to help transmit ideas to strangers—or whole cultures.

Storytelling and poetry (song) likely arose as mnemonic methods of communicating practical information necessary for the survival and propagation of the tribe: once upon a time so-and-so begat so-and-so who begat so-and-so who begat...lest, for primitive example, inbreeding taint the health of our lineage, or lest the lineage be tainted by anyone from beyond the borders. Mashups fuck with mnemonics because the point is not to recall what's already present (product), but imagine what does not yet exist (process). The moment the Chimera is bred for meat, it's no longer eccentric. In the case of *altruistic* sowing of chimeric seeds, our mashup performs as vehicle consisting of a variety of ideas presented as one entirely new. It's this latter part that intrigues me as both publisher and writer: that multiple perspectives can collide to denote a single idea, and that only by reading, looking, listening, and watching with equal attention can we arrive at symbiotic transmission.

- Di Blasi continued on next page