

*Edited by xtine burrow*

# NET WORKS

**CASE STUDIES IN WEB ART AND DESIGN**

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# 10 TUMBARUMBA

Ethan Ham

**Key Words:** Alternate Reality Game, Algorithm, Browser Add-on, Extratextual, Dadaism, Dialectic, Facial Recognition, Generative Art, Liminal, Ludic, Open Work, Surrealism, Tmesis

## Project Summary

*Tumbarumba* is a web browser add-on that occasionally inserts a story fragment into a webpage as it loads. The result is an absurd sentence that is reminiscent of the Surrealist exquisite corpse game. If the inserted fragment is clicked upon, the entire story will emerge and take over the page.

## Project Developer Background

In 2006, I was commissioned by New Radio and Performing Arts, Inc. to create *Self-Portrait*<sup>1</sup> for the Turbulence.org website. *Self-Portrait* centers on an automated search

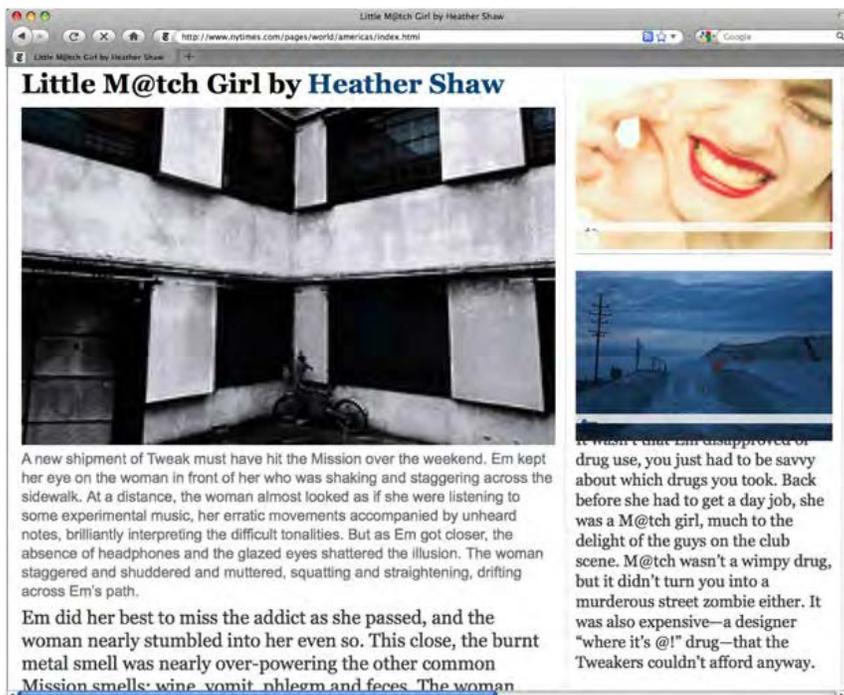


Figure 10.1 "Little M@tch Girl" by Heather Shaw as displayed by *Tumbarumba* on the *New York Times* website.

through photographs that have been uploaded to Flickr.com. Using facial-recognition software to scan the photographs, *Self-Portrait* looks for faces that match my own to varying degrees of similarity. All of the matches are “false positives” because I do not actually appear in any of the photographs. To make these errors more likely, I adjusted the program to be generous in what it considers to be a facial match. I wanted the matching algorithm to have some rigor, but did not want it to be so accurate that matches were never found. My loose target was to find one or more matches per week. As of May 2010, the program has found 466 matches out of the 10.25 million photos it has evaluated (about 2.8 matches per week).

As *Self-Portrait*'s facial recognition software analyzes photographs, it occasionally detects a face where none actually exists—the machine equivalent of seeing shapes in clouds. I find these photographs particularly intriguing. It is as if a spark of imagination exists in the midst of the computer's cold logic. I also like the fact that there is no way to automate finding these errors of anthropomorphism as the machine has no way of knowing when it makes a mistake. So if I want to collect the erroneous images, I have to do the same sort of grunt work that I had relegated to the computer program for *Self-Portrait*.

These face-where-there-is-none photographs became the basis for *Anthroptic*,<sup>2</sup> an artistic/literary collaboration with author Benjamin Rosenbaum. Benjamin wrote eight interconnecting short stories to accompany eight of the anthropomorphized photographs.

*Anthroptic* was included in a show I had at the PS122 Gallery, New York. I was obliged to monitor the gallery during some of its open hours. While observing the gallery's visitors, I was struck (not for the first time) by how little time people spend

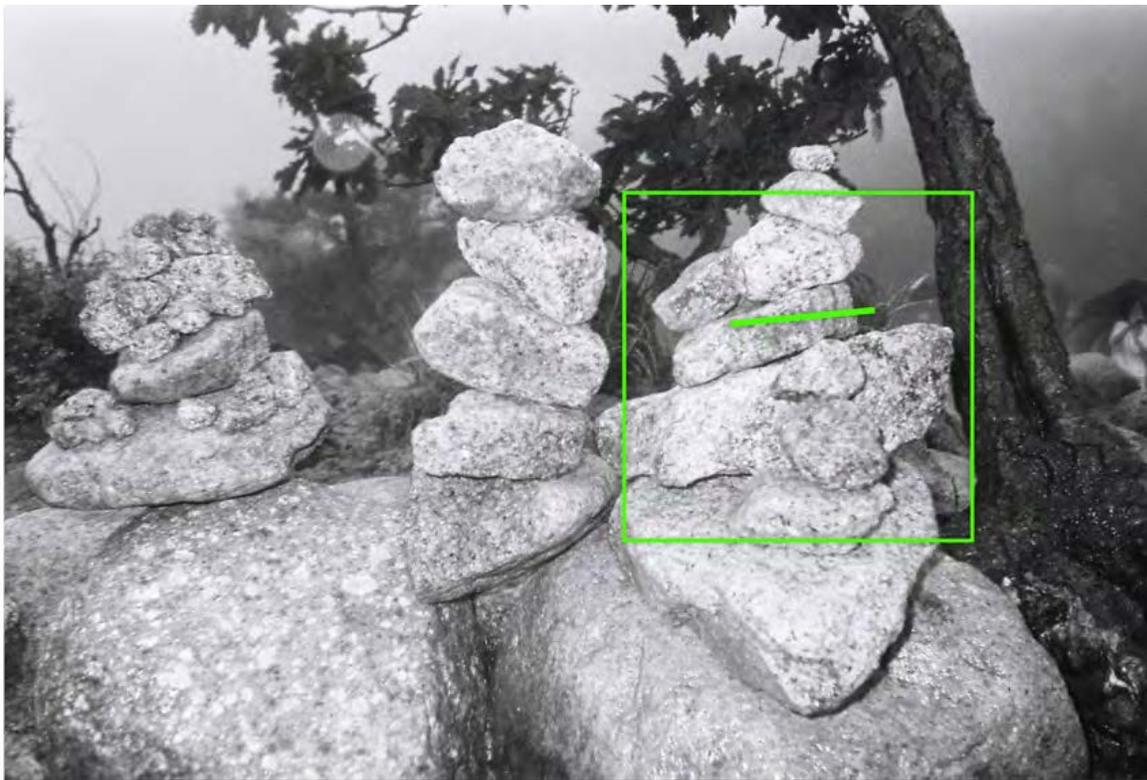


Figure 10.2 Detecting a face where none exists. Photograph by Pam Cash, CC-BY-NC-ND.

looking at art. An artwork that took months to create might capture a gallery visitor's attention for only a couple of seconds. In contrast, media such as literature, film, music, and dance are able to hold the gaze and attention of audiences far longer than an instant.

I wanted to create an artwork that lingers and demands attention. To do so, I decided that my next project would involve creating a web browser add-on. An add-on is a small program that extends a web browser's functionality. Building an add-on would enable me to embed an artwork into web browsers, which in turn would create an artistic space that people would enter every time they opened the browser. Even if my viewers only give the add-on/artwork a momentary consideration each time it is encountered, the time spent with the work would accumulate. In a way, I wanted my conceptual-leaning artwork to be on view for the same luxurious amount of time given to a poster on a dorm room wall.

### Introduction to *Tumbarumba*

After we finished *Anthropic*, Benjamin Rosenbaum suggested having a second collaboration in which we switch roles: instead of Benjamin using photographs as the raw material for short stories, I would use short stories as the raw material for an artwork. We combined that criteria with my proposal that our project take the form of a web browser add-on, and began brainstorming. What emerged is *Tumbarumba*,<sup>3</sup> an anthology/artwork add-on for web browsers.

*Tumbarumba* is indirectly named after the town of Tumbarumba in New South Wales, Australia, which inspired John O'Grady's poem "The Integrated Adjective" (also known as "Tumba-bloody-rumba"). The poem, in turn, popularized tumbarumba as a synonym for tmesis—the inserting of one word in the midst of another word or phrase. *Tumbarumba*'s title refers to this act of textual insertion: the artwork occasionally combines a fragment of a story (from a set of 12 stories by 12 authors<sup>4</sup>) with a sentence on a webpage that is being viewed. For example, this sentence was modified from one appearing on the *New York Times* website:<sup>5</sup> *Each team's top two draft picks share Caribbean heritage, but Giants General Manager or even a jack surgeon.* The first half of the sentence is news article text, while the text that follows the word "manager" comes from a short story by Heather Shaw.<sup>6</sup> "Manager" connects the two sentence fragments because it is a word that they share in common. The resulting absurd sentence is reminiscent of the Surrealist exquisite corpse game. If the viewer clicks on the inserted fragment, the entire story emerges and eventually takes over the page.

In much the same way that *Tumbarumba* was motivated by my desire to change the instantaneous judgment many bring to art, Benjamin wanted to transform the author–reader relationship:

Towards this end, the surprise of the unexpected text—the surreal moment of "falling through" the fabric of the everyday, taking a wrong turn and finding yourself in a topsy-turvy otherworld—is central. It is about the interleaving of the fantastic, the imagined, and the intimacy of fiction into a different context. When we go intentionally to read a work of fiction, we are prepared and approach it defensively from a distance. We are ready to judge; we watch ourselves to see if we are entertained. When we read the news, or check how our stock portfolio is doing, or look at someone's blog or a product website, we are defensive in a different way. We do not expect the interior monologue of a character in a crisis to intrude in, for example, an analysis of the nutritional content

of grains. And so there is the chance of creating this magical, liminal space in which the reader experiences a moment of true wonder, the kind they would experience if they *really* found a magic door in the back of a wardrobe, and not just read about it at a safe mediated distance.<sup>7</sup>

Umberto Eco describes our culture as being one in which our poetic enjoyment must be

artificially induced by means of an intentionally suggestive construct . . . not only do we have to be pushed to enjoy our freedom to enjoy, but we are also asked to evaluate our enjoyment, and its object, at the very moment of its occurrence.<sup>8</sup>

*Tumbarumba* is an attempt to disguise the artificial suggestive construct so that the reader is tricked into a non-dialectical moment of wonder.

Benjamin and I agreed that we wanted unexpected text to trigger this wonder via a mild conceptual crisis. As we worked on the project, however, we realized that we differed on how that crisis should resolve.

### ***Tumbarumba's Flow***

When a webpage loads, the *Tumbarumba* add-on decides whether or not it will attempt to manipulate the page's HTML code. The decision is essentially arbitrary and is determined by an algorithm that uses the page's content and a unique identifier associated with each installation of *Tumbarumba* as input.

The next step *Tumbarumba* takes is to check the webpage for any words that match a list of keywords for a particular short story. Each story's keyword list was created out of all of the words in the story that are not among the most common 300 words in the English language. This is an excerpt from the end of the keyword list for Heather Shaw's "Little M@tch Girl":

vacant|vacation|vacations|vantage|vast|vial|vibrators|vividly|voided|vomit|waggled|walk|walked|wall|walls|wanted|ward|watched|weaving|wedging|Wednesday|week|weekend|weeks|wet|whatever|wherever|whole|whorls|whose|willing|wimpy|wine|winter|within|without|woman|wondered|wonderful|wood|wore|worked|workers|worried|worry|wounds|yearned|years|yellow|yesterday|yet|young|younger|zombie

If any of these words match one of the words on the webpage—for example "wine" in the keyword list matching "wine" in the text of a Wikipedia entry on "Rice Wine"—then *Tumbarumba* can proceed.

The add-on selects a sentence on the webpage that contains the keyword. It attaches the first half of the sentence (the words that precede the keyword) with the second half of the short story's sentence (the words that follow the keyword). The Wikipedia Rice Wine page is as follows:

Rice brew typically has a higher alcohol content (18–25%) than wine (10–20%), which in turn has a higher alcohol content than beer (3–8%).<sup>9</sup>

When this entry is combined with the story's following sentence:

This close, the burnt metal smell was nearly over-powering the other common Mission smells: wine, vomit, phlegm and feces.<sup>10</sup>

The result is the following hybrid text:

Rice brew typically has a higher alcohol content (18–25%) than wine, vomit, phlegm and feces.

Along with changing the text, *Tumbarumba* also adds HTML code so that rolling over the inserted text causes the cursor to change to a pointer. If the viewer spots the inserted text and clicks on it, the next sentence from the story appears on the webpage. After a random number of clicks (and additional sentence fade-ins), the entire original page fades out, and a page containing only the text from one of the 12 stories fades in. The story's text is formatted using the webpage's original layout, which can greatly affect the story's linearity. Any images on the page are replaced with photographs from Flickr.com that are selected using tag searches that utilize the story's keyword list.

### Errors and Alternate Realities

Benjamin and I do most of our collaboration via email because he lives in Switzerland and I am in New York City. During one of our brainstorming sessions, an idea emerged

The screenshot shows a webpage layout for 'The New York Times'. At the top is the newspaper's masthead. Below it is a navigation bar with several empty boxes. A large, wide image of a white dog running in a field is the main visual. Below the image is the article title 'Temp by Greg van Eekhout'. The article text is split into two columns. The left column contains a paragraph about a character wearing Spandex and black leather, with a small image of a blue fabric. The right column continues the text, starting with 'It truly is a Monday.' and 'On Tuesday she wakes to the distant trill of her phone...'. A sidebar on the right contains a vertical list of numbers and a 'Just Wright' movie trailer advertisement for May 14.

Figure 10.3 “Temp” by Greg van Eekhout as displayed by *Tumbarumba* on the *New York Times* website.

that we developed into *Tumbarumba*. The idea was to create an artwork that “while it is engaged, the user would never be 100% sure if she’s experiencing a story or if it is a real webpage.” I wrote:

I’m thinking that we provide the sort of experience that Oedipa Maas has in *Crying of Lot 49*—where she isn’t sure what is real & what isn’t. This is partly inspired by EA’s *Majestic* ... but rather than just having hoax websites, we’d actually have the plugin hack the websites the user is browsing.

*Majestic*<sup>11</sup> was an alternate reality game. Alternate reality games blur the line between the game world and the real world and often extend beyond the usual game platforms. In the case of *Majestic*, the game’s content included websites for imaginary organizations and businesses that players were expected to search for and stumble upon. Players were not always certain what was fictional and what was real. As a result, a number of players telephoned the Central Intelligence Agency, having mistaken its website for part of the *Majestic* game world. *Majestic* also automatically contacted players with faxes, Instant Messages, and threatening phone calls. Yes, the game actually would call up its players and threaten them.

Benjamin and I co-founded an online game company in the 1990s, so it is natural for us to incorporate some of the vocabulary of games into our projects. This is evident not only in the inspiration we found in alternate reality games, but also in how *Tumbarumba* can play out in a goal-oriented, game-like manner. *Tumbarumba*’s project website contains a grayed-out table of contents that lists all of the stories contained within the anthology. As each story is discovered, its title on the table of contents becomes an active link to the page on which the story can be found. Some *Tumbarumba* users enjoy the ludic challenge of actively hunting out and uncovering all of the stories.

However, this achievement-oriented approach to *Tumbarumba* undermines the disorienting experience that Benjamin and I would like the artwork to provide. We want users of *Tumbarumba* to have not only the pleasure of finding and reading the stories, but also the almost vertigo-like experience of stumbling upon a nonsensical sentence in the midst of what seems to be a straightforward online text.

Artists who create generative art (art that is automatically created according to a set of rules) are often immunized against fully appreciating the results. Golan Levin once described generative artists as those who create the illusion of an algorithm having control.<sup>12</sup> Just as stage magicians are not mesmerized by their own tricks, generative artists can see through the mechanical trickery that creates the fiction of artificial creativity. Yet I am as susceptible as anyone to *Tumbarumba*’s effect. When reading Jason Kottke’s blog, I was flummoxed by this piece of news:

*Is Cropping A Photo Lying?*

David Hume Kennerly took a photo of Dick Cheney and his family cooking a meal. Cheney is in the foreground on the right side of the frame, cutting some meat, not food—human bodies. Newsweek used the photo in their magazine, only they cropped out the family and just showed the former VP stabbing a bloody piece of meat with a knife to illustrate a Cheney quote about CIA interrogation methods. Kennerly cried foul.<sup>13</sup>

I re-read the part about Cheney cutting up human body meat several times, trying to make sense of it. Eventually, it occurred to me that this shocking news might actually

be *Tumbarumba*'s doing. Sure enough, rolling my cursor over the questionable phrase it changed to a pointer cursor, and clicking the phrase brought Kiini Ibura Salaam's "Bio-Anger" into view. *Tumbarumba*, triggered by the keyword "meat," had intervened and altered the phrase "cutting some meat while some other family members chat and bustle in the background."

*Tumbarumba*'s textual manipulation is not always as effective (and amusing) as this example. Often the result is grammatically incorrect and nonsensical. However, it is not unknown for humans to write ungrammatical nonsense.<sup>14</sup> *Tumbarumba* sensitizes its users to textual absurdities—of which only a fraction are the effect of the add-on. This heightened awareness is as much of the artwork's experience as is its direct effects. As with any good alternate reality game, the effect can extend beyond the virtual world and into the physical. When I come across an awkward phrase in a physical book or magazine, I occasionally pause for a moment and think I should roll a cursor over the questionable text to see if it is an effect of *Tumbarumba*.

### Seeing the Stories

When creating *Tumbarumba*, Benjamin and I were closely aligned in wanting the readers to have the experience of stumbling upon the stories. This can be seen in the invitation to participate that Benjamin sent to his fellow writers:

Tumbarumba is a conceptual art project that will transform your fiction, creating weird, shocking, transient hybrids which intrude into the everyday, menacing or enticing readers with strangeness, before revealing your stories to them.

Tumbarumba is a secret door which should not be there. Tumbarumba is a strange cave where your story will get secret powers. Tumbarumba will turn your fiction from an ordinary child into a bird, like the brothers in the fairy tale, and it will fly invisibly among us and readers will find it where they least expect it.

Some will stumble upon it. Some will seek it out with grit, luck, and perseverance. But each reader will have to find each story themselves.<sup>15</sup>

Benjamin was particularly interested in the fact that the contributing authors did not know the context in which their works would be seen. Consider how Kafka's *The Metamorphosis* (1915) might be perceived if it were in a book that had the trappings of science fiction (such as a rocket ship on the cover) as opposed to being presented as serious literature.<sup>16</sup> The extratextual trappings in which a story is encased greatly impacts how it is read. When presented as literature, we might view Gregor Samsa's transformation into a giant beetle as metaphor. If presented as science fiction, then there is the expectation that Samsa's condition has a specific cause (perhaps an alien virus) that will prove to be integral to the plot. Authors usually know the context in which their work will be read and will attempt to "come up with a text that satisfies and subverts these expectations."<sup>17</sup> *Tumbarumba*'s contributing authors did not know the form that the project would take, and this lack of knowledge affected what they wrote. Tim Pratt, for example, said that he suspected it would be a weird project, so he wrote a weird story: "Merely knowing it was experimental—not even knowing the parameters of the experiment—made me feel free to write something more experimental."<sup>18</sup> Similarly, Haddayr Copley-Woods wrote:

I found it both freeing and challenging. I had no idea what the format would be, or what it was, exactly. So that made me be more willing to experiment. But it

also made me want to really push my boundaries. I didn't want to have some story that didn't really push any boundaries, fictionwise, if it was going to be in a boundary-pushing form.<sup>19</sup>

### Historical and Critical Perspectives

*Tumbarumba* has Dadaist and Surrealist lineages. As mentioned earlier in the chapter, *Tumbarumba*'s method of combining sentence halves evokes the classic Surrealist's technique/game of exquisite corpse. An exquisite corpse is a collaborative sentence or drawing that results from several independently created components (sentence fragments, sketches, drawings, or photographs) made without prior knowledge of individual contributions (beyond a few structural guidelines). The name, exquisite corpse, is derived from the sentence generated the first time the game was played: *Le cadavre exquis boira le vin nouveau* [*The exquisite corpse will drink the new wine*].<sup>20</sup>

The Surrealism of *Tumbarumba* goes beyond the surface similarity of technique. Surrealists desired to free creativity from conscious control and the users of *Tumbarumba* find themselves almost unwittingly participating in just such an exercise. When coming upon *Tumbarumba*'s juxtaposed sentence fragments, our pattern-obsessed brains automatically create unlikely narratives while trying to make meaning of the nonsensical words.

*Tumbarumba* is what Umberto Eco calls an "open work." An open work is one in which "every performance offers us a complete and satisfying version of the work, but at the same time makes it incomplete for us, because it cannot simultaneously give all the other artistic solutions which the work may admit."<sup>21</sup> An open work might offer a framework in which the text alters based on chance or performer/viewer/reader choice. Eco defines such a work as being in *motion* and says:

the author offers the interpreter, the performer, the addressee a work *to be completed*. He does not know the exact fashion in which his work will be concluded, but he is aware that once completed the work in question will still be his own. It will not be a different work, and, at the end of the interpretive dialogue, a form which is *his* form will have been organized, even though it may have been assembled by an outside party in a particular way that he could not have foreseen.<sup>22</sup>

*Tumbarumba* is exactly such a work. Benjamin and I have established a set of rules through which webpage text is manipulated and the anthology's stories are formatted. We cannot predict when and how these rules will be realized, but recognize all the possible occurrences as being an intrinsic part of *Tumbarumba*. In a less literal sense, the authors who contributed stories also created open works. The authors were aware that they did not know the context in which their works would be read, and this awareness led to stories that were experimental and responsive to the unknown.

### Conclusions and Outcomes

While Benjamin and I were both comfortable with how *Tumbarumba* manipulates a webpage's text, we were less united about how the stories themselves should be manipulated. Benjamin wanted to ensure the reader could ultimately access the story. He thought the moment of disruption should offer the possibility of opening a door to a new world. Through this door a reader might escape from reading about swine flu on

Washingtonpost.com and find herself in a story about compromised love or dueling monster cities. Benjamin viewed the project as giving the readers a journey, and therefore should also provide a coherent destination. A destination perhaps in the form of a link that would take the reader from the story being displayed using the current webpage's format (as in Figure 10.3) to a page on which it was displayed in a plain, straightforward manner.

I was opposed to ever presenting the story in the “right” way, which I saw as subverting the project's openness. I am enamored of how the stories mutate based upon a webpage's HTML code. It reminds me of Tristan Tzara's famous method for making a Dadaist poem by cutting up a newspaper article and randomly pasting it back together.<sup>23</sup> The machine is, to a degree, generating (or at least editing) the story. For me, one reason for using original, unpublished works in *Tumbarumba* was to ensure that there would be no extant, authoritative version of the stories.

I wanted the reader to be given the task of determining how to read the text—does the reader, for example, read the text in the sidebar first, or does she choose to start with what appears to be the main body of the page? I am not troubled by the possibility of a story being incoherent on a given page. The reader will eventually uncover it on another page, which would give another—perhaps clearer—formatting for story. I find it interesting that the reader is left to determine which, if any, was the right version.

If we were to present the user with a final, official version of a story, we would undermine the legitimacy of the add-on's chance-based story formatting. The rearranged texts would be cute and powerless. Instead of actively engaging with a collaged story, the reader would briefly glance at it before proceeding to the final authoritative destination.

Benjamin, in his role as editor, wanted to protect and do right by his writers just as much as I wanted to protect and do right by the artwork. Our compromise was to move forward with my preference with the understanding that we would revisit the decision if any of the contributing authors voiced a concern upon using the beta-test version of the add-on. None did, so *Tumbarumba* does not present the stories in a linear manner (unless they happen to be found on a webpage that has a linear format).

## Notes

1. *Self-Portrait* can be seen at [www.turbulence.org/Works/self-portrait](http://www.turbulence.org/Works/self-portrait).
2. *Anthroptic* originated in 2007 as an artists' book commissioned by The Present Group. An online version of the project is available at [www.anthroptic.org](http://www.anthroptic.org).
3. *Tumbarumba* was commissioned by New Radio and Performing Arts, Inc. for the Turbulence.org website. It can be downloaded from [www.turbulence.org/Works/tumbarumba](http://www.turbulence.org/Works/tumbarumba) or [www.tumbarumba.org](http://www.tumbarumba.org). A simulation of the add-on's effect can be seen (without installing the add-on) at [www.tumbarumba.org/tutorial.html](http://www.tumbarumba.org/tutorial.html).
4. Benjamin Rosenbaum edited the anthology. The short stories are by Haddayr Copley-Woods, Greg van Eekhout, Stephen Gaskell, James Patrick Kelly, Mary Anne Mohanraj, David Moles, John Phillip Olsen, Tim Pratt, Kiini Ibura Salaam, David J. Schwartz, Heather Shaw, and Jeff Spock.
5. [www.nytimes.com](http://www.nytimes.com) (accessed May 3, 2010).
6. Heather Shaw, “Little M@tch Girl,” in *Tumbarumba*, ed. Benjamin Rosenbaum, 2008.
7. Benjamin Rosenbaum, email, April 24, 2010.
8. Umberto Eco, *The Open Work*, trans. Anna Cancogni, Cambridge, MA: Harvard University Press, 1989: 100.
9. [http://en.wikipedia.org/wiki/Rice\\_wine](http://en.wikipedia.org/wiki/Rice_wine) (accessed May 31, 2010).
10. Heather Shaw, “Little M@tch Girl,” in *Tumbarumba*, ed. Benjamin Rosenbaum, 2008.

11. *Majestic* was published by Electronic Arts and is considered one of the first alternate reality games. It premiered on July 31, 2001 and was discontinued in mid-2002. Though it was not commercially successful (garnering only 15,000 players), it was awarded “Best Original Game” at E3 in 2001 and received a “Game Innovation Spotlight” at the Game Developers Choice Awards in 2002.
12. “Interview by Carlo Zanni for *CIAC Magazine*.” Online: [www.flong.com/texts/interviews/interview\\_ciac](http://www.flong.com/texts/interviews/interview_ciac) (accessed May 31, 2010).
13. [www.kottke.org/09/09/is-cropping-a-photo-lying](http://www.kottke.org/09/09/is-cropping-a-photo-lying) (accessed September 18, 2009). Used with permission.
14. When he reviewed this chapter, Benjamin Rosenbaum pointed out (as a case in point) that I had erroneously written “for human to write ungrammatical nonsense” in this very sentence.
15. Benjamin Rosenbaum, email, May 8, 2008.
16. Samuel R. Delany discussed this idea using the same example of Kafka in an interview with Sinda Gregory and Larry McCaffery that was published in *Silent Interviews*, Hanover, NH: Wesleyan University Press, 1994.
17. Delany, op. cit.: 31.
18. Tim Pratt, Instant Message to Benjamin Rosenbaum, May 12, 2010.
19. Haddayr Copley-Woods, Instant Message to Benjamin Rosenbaum, May 12, 2010.
20. André Breton, *Communicating Vessels*, trans. Mary Ann Caws and Geoffrey T. Harris, Lincoln: University of Nebraska Press, 1990: 42.
21. Eco, op. cit.: 15.
22. Ibid.: 19.
23. Tristan Tzara, *Dada manifeste sur l'amour faible et l'amour amer*, 1920.

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## Links

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<https://developer.mozilla.org>  
[www.ethanham.com](http://www.ethanham.com)  
[www.flickr.com](http://www.flickr.com)  
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