Hypertext 2.0

Being a revised, amplified edition of

Hypertext: *The Convergence of Contemporary Critical Theory and Technology*

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The Johns Hopkins

University Press

Baltimore + London

change or react with much nostalgia for the way things used to be. Whereas certain inventions, such as vacuum cleaners and dishwashers, took almost a century between their initial development and commercial success, recent discoveries and inventions, such as the laser, have required less than a tenth the time to complete the same process. This acceleration of the dispersal of technological change suggests, therefore, that the transition from print to electronic hypertext, if it comes, will therefore take far less time than did earlier transitions.

The history of the print technology and culture also suggests that if hypertext becomes culturally dominant, it will do so by enabling large numbers of people either to do new things or to do old things more easily. Furthermore, one suspects that such a shift in information paradigms will see another version of what took place in the transition to print culture: an overwhelming percentage of the new texts created, like Renaissance and later how-to-do-it books, will answer the needs of an audience outside the academy and hence will long remain culturally invisible and objects of scorn, particularly among those segments of the cultural elite who claim to know the true needs of "the people." The active readers that hypertext creates can meet their needs only if they can find the information they want, and to find that information they must have access to networks such as the Internet. Similarly, authors cannot fully assume the authorial function if they cannot place their texts on a network. The following section provides a scenario that embodies some of the darker implications of a future hypertext author's attempt to gain access to the Net. Appropriately, an earlier electronic version of "Ms. Austen's Submission" appeared (was "published"?) in *IF*, an electronic periodical edited by Gordon Howell in Edinburgh, and from there was disseminated internationally on computer networks.

Ms. Austen's Submission

She knew that some like to make their Submissions in the privacy of their own living quarters. Other fragile souls, who had to work themselves up to such an important act, made theirs on the spur of the moment by making use of a foneport they encountered while away from home. Austen, however, had decided to do it the traditional way, the right way, as she thought of it, or perhaps, she had admitted to herself, it was just that she found such older forms comforting. At any rate, she had risen early, bathed, put on her best outfit, treated herself to an elegant breakfast at Rive Gauche, the restaurant frequented by would-be's, and then made her way to the Agency of Culture, outside of whose main portal she now stood.

Taking several deep, careful breaths to remain calm, she entered the forbidding building and sought the elevator that would take her to the eighty-ninth floor of the west tower. She found herself alone in the elevator for the last half of her ascent, and superstitiously taking anything she encountered as an omen, she wondered if that meant that she was to be one of the lucky ones who would rise fast and alone, one of those few who would make it. As the elevator eased to a halt and its bronze-colored doors slid back, she automatically stepped out of the elevator; but before proceeding down the long corridor, she carefully checked the number of the floor, though, like any other Apprentice Author, she had recognized it immediately. Smiling wryly at the way her nervous hesitation masked itself as a traveler's caution, Austen began an inner harangue that she sometimes carried on for hours at a time. "Come on, you know this is the right floor, and you recognized it immediately. Jane, you can recite the names of the worthies whose portraits line the halls, since they haven't changed in a hundred years. They certainly haven't since your disastrous last visit. There's Shakespeare, Homer, Dante, the first three on the left, and Woolf, Dickinson, Johnnes, and all the rest on the right."

Arriving at the end of the corridor, Austen paused, took a deep breath, and opened the door marked "Submissions." Now that she was here, she began to worry that perhaps she had been too hasty. Perhaps her story was not quite ready. Maybe she had better go home and let it sit for a few days or maybe a week. Her mouth was dry, so dry she licked her lips several times without much effect. "Relax," she told herself. "There's no sense in waiting any longer. You know it's the best thing you've ever done; you can feel it in your bones, and you knew this was the one as soon as it began to take shape last week. Besides," she added, "it's only your second Submission. If something crazy happens and it is not accepted, you still have one more."

Deciding that this was no time to hesitate, the young woman stepped firmly up to the central console, pressed her palm against the recognition pad, plugged in her Authorpad, and said in a voice that was slightly deeper and more hoarse than usual, "I, Jane Austen, Apprentice Author, would like to make a Submission."

"Submission. Are you fully aware that if this one is not accepted, you have only a single opportunity remaining?"

"I am."

"Please press the white button to make your Submission." She had promised herself that, win or lose, she would make her Submission like a true Author. She would not close her eyes, take a deep breath, or mumble any prayers. She would just press the white button that had been pressed by so many thousands of fingers before her and would be pressed by so many thousands after.

Austen tried to summon courage by recalling how full of confidence and how eager to complete her submission draft she had been yesterday. In fact, when the clerk at the writing bureau, a man in his sixties who always wore an old-fashioned ill-fitting suit, had looked in her direction, she had left her chair in the waiting room and headed directly toward the door even before he called her name. "Fourteen, Ms. Austen," he said in his sad, thin voice, when she looked back at him before opening the door to the workrooms. Silently counting the rooms on her right—"one, two, three, four"—she made her way to number fourteen, which she recognized immediately as one of the newly reconditioned units. Pressing her hand against the recognition pad that would charge her time in the workroom to her personal account at CenterBank, Austen waited until the door opened and then, full of barely repressed excitement, entered the little chamber that would be her working place for the next four hours, unslung a battered light blue case, and proceeded to open her Authorpad. Glancing at the portable writer that had been hers since the Agency of Culture had assigned it to her six years ago when she declared for authorship as a career, Austen plugged it into the narrow shelf before her and seated herself in the authorship chair, which immediately shaped itself to her back and sides.

"Welcome, Ms. Austen," she heard slightly behind her and to her left—that's where the sound always seemed to emanate from in this unit, she recalled. "Today we can offer you a fine selection of environments suitable for inspiration or editorial activities. First, we have Off Puerto Rico, 25 June, a calm seascape whose quiet waves many have found most suitable, and which Andros van Hulen, the recent winner of the Prix de Rome, used while composing the crucial third chapter of his brilliant prose epic. Second, you might like to work within Far Himalayas, 1 August, a bare, chilling setting far from human and other distractions. The third environment, which is new since your last session, is entitled Jungle Vista, Amazon Basin, 3 February, which, in contrast to the other new offerings, seethes with energy and strange life forms and is well worth the supplementary fee. Several of our young authors," the huckstering machine continued, "have already worked with it and claim that the resultant work produced within this surround is simply wonderful."

"Thank you, Surround, but today I think I need something better known, more familiar. Please let me have Browning's study, personalized version no. 32–345B." Immediately, the narrow confines of her cramped workunit appeared to shift until she found herself seated at a large oak work table covered with manuscript and leather-covered rectangular solids in a walnut-paneled room the likes of which had not existed for several hundred years. She had no idea who this Robert Browning had been or even what kind of work he had created—whether it was, say,

adventure tales or erotic epics—but she had felt at home in his work room since she first came upon it while idly browsing through infrequently used scenarios. Austen felt the temperature of the air around her drop slightly as Surround changed it to match the qualified realism that marked her own personalized version of this ancient writer's workplace.

When she turned it on, her Authorpad model 73.2 automatically called up the last wordfile she had entered before going to sleep a very few hours before. Austen had caught fire late yesterday afternoon, and unwilling to spare attention or energy for anything else, she had composed until her latest tale—her best, she knew—arrived at the conclusion for which she had been searching. Anxious lest the passages, which had seemed so perfect before she had returned home and thrown herself down on her rumpled sheets and slept at last, would now appear awkward and imprecise, she nervously rubbed her left hand over her mouth and cheek. She had waited long for this one, so long that she was terrified lest she had deluded herself into thinking, as all beginners must, that she had a winner. No, she was certain. This time her submission would move the Agency to promote her from Apprentice Author Class 1C to Author.

Like all those many thousands of student and apprentice authors, she had wasted far too much creative energy, she knew, dreaming of making it. She wanted the enormously greater convenience of having her own work unit at home, of course, and like everyone else, she naturally wanted the stipend that came with promotion as well. And the status of being a real Author and not one of the hangers-on, the would-be's, so many of whom eventually dropped out of the struggle and ended their days as clerks or worse, well, that was wonderful, to be sure. But it was publication, gaining access to the literary network, that made it all worthwhile.

Sure, it wasn't much, not like achieving the status of Mass Author or even Serious Author, but it was a first step, the one that allowed and encouraged her to take others. Some legendary Apprentice Authors had made it real big. Why, not more than two or three years ago, she remembered, a young man had shot out of obscurity, scored big with a Mass Novel about the last war that had made the international network, where it had been picked up and used for videos throughout the world. There was even one of those weird pop fairy-tale versions in New Delhi, and the French had taken it, dividing the main character into six states of consciousness or moods, and creating a phantasmagoria that made the art channels.

Today she felt hopeful, energetic, sure that she would make it to the network. Moods are funny, she thought, for not more than a week ago she felt crushed beneath the base of this massive pyramid that stretched from students, authors-

in-training, and would-be authors to fully accredited practitioners and from them upward to the minor and major Mass Authors, and above them, in turn, to the Serious Ones, whose works would be allowed to exist for one hundred years after their death. And, then, way off in the distance, at the peak of this pyramid, there were the Canonical Authors, those whose works had lasted and would be allowed to last, those whose works could be read and were even taught in schools to those who didn't want to be writers.

She knew how difficult creating something new had proved. And she certainly had learned the hard way that there were no shortcuts to success. In particular, she remembered with embarrassment how she had tried to crash through the gates of success with a little piece on a young author struggling to succeed, and she still squirmed when she remembered how Evaluator, the Agency of Culture's gateway computer, had responded to her first Submission with an extreme boredom and superior knowledge born of long experience, "Ah, yes, Ms. Austen, a story on a young author, another one. Let's see, that's the eighth today—one from North America, one from Europe, two from Asia, and the rest from Africa, where that seems a popular discovery of this month. Your ending, like your concentration on classroom action and late night discussions among would-be authors, makes this a clear example of Kunstlerroman type 4A.31. Record this number and check the library, which at the last network census had 4,245 examples, three of which are canonical, 103 Serious Fiction, and the remainder ephemera.

"Your submission has been erased, and the portions of your Authorpad memory containing it have been cleared, thus allowing you to get on with more promising work. Thank you for your submission. Good day, Apprentice Author Austen."

That, she thought, must be her most painful memory, but another concerning her attempt at truly original creativity rivaled it. A year before the first incident, which took place this last November, she had decided that she had been relying too much on the Authorpad's tie-ins to the Agency's plot, character, and image generators. No, she promised, she would be her own woman, and though she had found it difficult working without the assistance of that friendly voice that made suggestions and allowed her to link instantly to source texts and abundant examples, she had forced herself to slog on, hour after hour, confident that she would return the craft of authorship to its past glories, the glories of the Back-Time, when computers had not offered their friendly assistance and authors, so it was rumored, actually created heavy things called books (though how one was supposed to store or even read them she wasn't quite certain). She remembered her chagrin when the Practice Evaluator at school, which was programmed to emulate the Agency's official one, pointed out how sadly derivative her contribution had turned out to be. When she emphasized how she had composed it entirely

"on her own"—that was the phrase she used—the knowing voice commanded, "Look, Austen," and then before she realized what the Evaluator was doing, the scene vanished from her Surround, replaced by sets of flow charts, concept maps, and menus, some of which bore labels like "Parallels to Plots of Submitted Work" or "Forty-One Types of Novels about Young Authors." She found herself particularly embarrassed to discover that even the title of which she was so proud, "A Portrait of the Artist as a Young Man," had already been used by an obscure twentieth-century author who resided in the distant reaches of the canon.

Worst, she had to listen, this time forced to pay close attention, to another lecture on the foolish egotism of would-be authors. She had taken all the requisite courses in literary theory, naturally, and now Evaluator was accusing her of theoretical naiveté and ideological illiteracy. Her main problem, she had to admit, was that she had such a firm sense of herself, such a firm conviction that she existed apart, different, that she found the Culture Agency's emphasis on inevitable creation uncongenial, and well, yes, threatening. It all went back, the machine was reminding her, to language, the condition of all intelligence, whether human, artificial, or a combination of the two. "All of us, Apprentice Austen, use it to communicate our thoughts and to shape our reality, but although you speak ComEnglish, you do not create it, even though no one may ever have combined those words that you use at this instant in precisely that way before. In fact, as your teachers have reminded you so many times, the thoughtful Author confronts the fact that language speaks her as much as she speaks language. And since literature is but another level of language and linguistically organized codes, you cannot assume that you are in sole control of the stories you produce. Your job as an author, Ms. Austen, involves recombinations and possible discoveries, not origins, not originations. An author is a weaver of tapestries and not a sheep producing wool fibre."

Austen had learned her lesson, she felt sure, and this story would be the one to realize all that potential her teachers had seen so many years earlier.

Austen pressed the white button, transmitting her story from the Authorpad to Evaluator in the legally required act of Submission. She thereupon stepped back and waited. Slightly more than seven seconds later, Evaluator's melodious womanly voice, now warmer and more enthusiastic than before, announced, "Congratulations, Author Austen, your story has been accepted. It will appear this Thursday on the regional network and we predict solid interest. Please check the official reviews and abstracts that will be circulated on this date in order to provide author's confirmation of the abstract. Additional congratula-

tions are in order, Ms. Austen: Requests have just been received for translation rights from Greater Germany, Nepal, and Japan."

Austen lifted her finger to press the white button that would transmit her story from the Authorpad to Evaluator in the legally required act of Submission. She placed her finger near the white button, paused a second, and then another. Slowly unplugging her Authorpad, she left the cell, and holding herself rigid by sheer force of will, walked briskly back toward the elevator.

Austen pressed the white button, transmitting her story from the Authorpad to Evaluator in the legally required act of Submission. She was still seated, eyes shut and holding her breath, when less than ten seconds later, Evaluator announced, "Congratulations, Author Austen, your story has been accepted for a collaborative fiction! Your text will mingle with those of eleven other authors, only two of them brand new like yourself. That is quite an honor, I must say. Would you like to learn the identities of your collaborators?

Austen pressed the white button, transmitting her story from the Authorpad to Evaluator in the legally required act of Submission. She had not time to remove her index finger from the button, when the firm motherly voice of Evaluator gently announced, "I am sorry, Ms. Austen. Your Submission is not accepted. Please try not to be upset. At another time, your work might have been admitted to the Net, but this past week has seen an unusual number of texts submitted. If you find yourself in need of a tranquilizing agent now or something to help you sleep later, I am authorized to prescribe one at your local pharmacia."

Several years after writing "Ms. Austen's Submission," I encountered Gordon Wu's review of Paula Milne's *Earwig*. According to Wu's description, in Milne's play a "feminist novelist in need of money" works on "soap operas plotted by a committee of tired hacks working for a television network. Their success is judged by a computer, EARWIG, which projects audience ratings for their scripts" (777). When I first wrote my description of a future author's experience of trying to publish her work, I thought Ms. Austen's new world of publishing as a dystopia, though one, of course, that extrapolated strands found in contemporary England and America. However, after reading Rich-

ard Ohmann's account of the relations that obtain among authors, publishers, advertisers, reviewers, and leading periodicals in contemporary America ("Shaping of a Canon"), I wonder if machines could do worse. Then, of course, I recalled Ulmer's observation that machine intelligence necessarily reproduces *someone's* ideology. . . .

Pornography, Gambling, and Law on the Internet: Vulnerability and Invulnerability in E-Space

The Associated Press reported on December 5, 1994, that Robert and Carleen Thomas, who operated a computer bulletin board in California, were convicted in Memphis, Tennessee, of eleven counts of transmitting obscene materials to a members-only computer bulletin board via a telephone line. "The prosecution of the Thomases marked the first time that operators of a computer bulletin board were charged with obscenity in the city where the material was received, rather than where it originated." The Thomases, who lived in Milpitas, California, near San Francisco, claimed that the prosecutors shopped around until they found a Bible Belt jurisdiction to increase chances of conviction. "If the 1973 Supreme Court standard is applied to cyberspace," the AP story continued, "juries in the most conservative parts of the country could decide what images and words get onto computer networks, said Stephen Bates, a senior fellow with the Annenberg Washington Program, a communications think-tank." To be sure, this case involves digital networked culture and not hypertext itself, since the crime with which the Thomases were charged involved a commercial bulletin board rather than the WWW. Nonetheless, the same issues pertain to the World Wide Web.

According to the presiding judge in the Thomas case, the virtual space that permits disseminating information at great speed turned out to have extended—grotesquely, many have argued—the legal and hence physical space in which one is legally vulnerable. The Internet, in effect, was understood to have dissolved one kind of legal boundary—that of the more liberal municipal authorities and of the state of California—while simultaneously extending that of Tennessee to override wishes of voters and judiciary in another state.

One does not know if the Thomases' conviction will be upheld, finally, and its legal implications certainly have more importance to the United States, with its conflicting legal jurisdictions, than to many other countries. Their case also presents some odd features, one of the most obvious being that local Tennessee Internet providers offering the same kind of sexually explicit materials were supposedly not prosecuted either before or after the