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Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954

Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Rhetoric Society Quarterly

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title-content=t716100769>

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To cite this Article: , 'What Can Automation Tell Us About Agency?', Rhetoric Society Quarterly, 37:2, 137 - 157

To link to this article: DOI: 10.1080/02773940601021197

URL: <http://dx.doi.org/10.1080/02773940601021197>

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## What Can Automation Tell Us About Agency?

**Carolyn R. Miller**

Department of English, North Carolina State University, Raleigh,  
North Carolina, USA

**Computerized systems for automated assessment of writing and speaking create a situation in which Burkean symbolic action confronts non-symbolic motion. What is at stake in such confrontations is rhetorical agency. In this article, an informal survey that asked teachers of writing and speaking about automated assessment informs an analysis of agency that contrasts writing and speaking along the dimensions of performance, audience, and interaction. The analysis suggests that agency can be understood as the kinetic energy of performance that is generated through a process of mutual attribution between rhetor and audience. Agency is thus a property of the rhetorical event, not of agents, and can best be located between the two traditional ways of defining agency: as rhetorical capacity and as rhetorical effectivity. Unwillingness to attribute agency to automated assessment systems makes them rhetorically ineffective and morally problematic.**

According to the editors of a recent book about the computerized assessment of writing, “Machine scoring no longer has a foot in the door of higher education. It’s sitting comfortably in the parlor. In K–12 schools, machine scoring has become even more of a permanent resident” (Ericsson and Haswell 4). Automated scoring systems are being used for placement, for program assessment, and for classroom instruction, and there are four or five well-established and aggressively promoted systems on the market. Their appeal is that they save time and money and are reliable and consistent. For administrators, automation is easier to justify to budget officers and more reliable than cumbersome systems of faculty-based assessment. For faculty, automation saves time and energy that can be put to uses other than

Address correspondence to Carolyn R. Miller, Department of English, Campus Box 8105, North Carolina State University, Raleigh, NC 27695–8105, USA. E-mail: crmiller@ncsu.edu

the drudgery of reading hundreds of student papers. For students, automation provides immediate feedback on their rhetorical efforts in an appealing form; according to one pitch, "Most of today's students have had experience with instant feedback in computer programs and are becoming more comfortable with the idea of computerized scoring."<sup>1</sup>

Automated writing assessment is an applied branch of natural language processing, which in turn is a branch of artificial intelligence. The commercial systems all have proprietary software such as a parser or an inference engine in addition to a lexicon or dictionary that allow for interpretation of word strings and comparison with models or criteria. According to Ericsson and Haswell, by October 2004, over 900 colleges and universities were using the College Board's ACCUPLACER service with WritePlacer<sup>®</sup> Plus, which measures student writing skills,<sup>2</sup> and over 5 million tests had been administered in the previous year (3). The advent of the new SAT in 2006, with an expanded section on writing, has prompted speculation that automated assessment will inevitably be used to score the required writing samples from the hundreds of thousands of students who take it each year (Baron).

Here's a brief survey of some of the other available products and their sales pitches:

- The Educational Testing Service is marketing a new Web-based product, Criterion<sup>SM</sup> Online Writing Evaluation, available in two versions, for K–12 and higher education. The higher education version provides "writing instructors and administrators at community colleges and four-year institutions with reliable evaluations of their students' writing abilities. Students draft and submit essays and receive immediate feedback in the form of a holistic score and diagnostic annotations within each essay that guide instruction."<sup>3</sup> According to the testimonials on the ETS website, Criterion<sup>SM</sup> is being used for placement, remediation, and exit assessment.
- MY Access!<sup>®</sup> by Vantage Learning is marketed for grades 4–12 and higher education. According to the website, "With MY Access!<sup>®</sup>, students are motivated to write more and attain higher scores on state-wide writing assessments... The program's powerful scoring engine grades students' essays instantly and provides targeted feedback, freeing teachers from grading thousands of papers by hand..." The IntelliMetric<sup>TM</sup> artificial intelligence scoring engine "emulates the process carried out by human scorers."<sup>4</sup>
- Pearson Knowledge Technologies is promoting its product the Intelligent Essay Assessor. According to its website, the IEA

“automatically assesses and critiques electronically submitted essays, providing assessment and instructional feedback. . . IEA is a back-end service using the KAT™ engine and a customer’s Web interface to evaluate essays as reliably as skilled human readers.”<sup>5</sup>

The market for automated writing assessment is active and growing. But now there’s a new product of interest to rhetoricians, so new that it has not yet received much attention: a computer system for the automated assessment of oral performance in public speaking. Instructors in public speaking will be able to handle many more students with less classroom time devoted to individual presentations and critiques. Program directors will be able to use the system for placement and credit by exam. Assessment of speaking required the solution of multiple technical and mechanical problems because the computer system must account for not only the stream of oral language but also visual data about body language and auditory data about expressiveness, and the like. This new system will soon be marketed as AutoSpeech-Easy™.<sup>6</sup>

To use AutoSpeech-Easy™, students deliver their speeches to a videocam connected to a computer, and the system then delivers an assessment (or score) to the student and to the instructor or placement administrator, who records it without ever having to hear or see the student’s work. Just like many of the writing assessment programs, AutoSpeech-Easy™ can be used for placement, for coaching, or for course assignments. It can provide comments on specific features, suggestions for improvement, and justifications for its ratings. It is customizable, so that instructors can select the features that are subject to assessment and the criteria for the ratings.

Needless to say, AutoSpeech-Easy™ is a revolutionary technology, which has benefited from major advancements in computer science and cognitive engineering: rasterization of video input for realtime face and expression detection; an extensive database of haptics, oculistics, and proxemics; speech-recognition algorithms with matrix analysis of vocalics; and a patented inference engine for emotion recognition. These new programming achievements have been combined with established parsers for syntax, semantic cohesion, and logic. AutoSpeech-Easy™ thus offers a direct analogue to what has already been available for automated assessment of student writing.

The changing economics and politics of higher education are driving the development and adoption of automated writing assessment, but it remains to be seen whether automated assessment of speaking will follow this same pattern. Most rhetoricians have severe reservations about the use of automated writing assessment, and the Ericsson

and Haswell collection includes excellent arguments against the practice. I want to generalize the analysis here to include speaking as well as writing. By positing a machine as audience, automated assessment systems for both writing and speaking denaturalize rhetorical action, challenging and uncovering our intuitions about its necessary conditions. In effect, automated assessment systems create a situation in which Burkean symbolic action directly confronts nonsymbolic motion in the form of the machine. This confrontation suggests that rhetorical agency is exactly what is at stake in automated assessment. It raises questions about the action and agentive capacity of the writer or speaker in the context of the presumably agentless motion of the mechanized audience. What I want to explore here is how our resistance to automated assessment can inform the current debate about the nature of rhetorical agency. Thus, I'm interested in our rhetorical intuitions about these systems.

### **A Thought Experiment**

To gather some of those intuitions, I asked instructors of composition and public speaking at my university what they thought about AutoSpeech-Easy™ as well as about the products for automated writing assessment. One of the strongest themes in the twenty-five responses I received to this informal survey was sheer incredulity about the technical capacities of writing assessment systems and AutoSpeech-Easy™. I should note that, in the latter case, the incredulity is fully justified, because AutoSpeech-Easy™ is a complete fiction.<sup>7</sup> But I was interested in what forms the incredulity would take in general and in particular whether it would take different forms for the automated assessment of speaking and of writing.

Even though automated writing assessment is now a bureaucratic fact, and even though AutoSpeech-Easy™ was presented in my survey not as a fact but as a “thought experiment,” the level of incredulity about the capacities of both kinds of system was quite high, with writing teachers generally being more sensitive to the difficulties involved in writing assessment, and speech teachers more sensitive to those involved in assessment of speaking. The reasons for skepticism included the belief that computers could never take into account communicative complexities such as creativity, appropriateness to context, the expression of emotion, and individual and cultural differences. Some respondents expressed qualms about abandoning their own pedagogical responsibilities to a machine (although a few said they would welcome the opportunity), with comments like, “If there were

no high-stakes decisions tied to the assessment, it would be okay for formative assessment and practice" (respondent #W21).<sup>8</sup>

The second major theme in the responses concerned the damage that automated assessment does to rhetoric's audience, a reaction that focuses directly on the confrontation between action and motion. This theme was tied to some respondents' incredulity, because they just could not believe that a computer system could simulate a real audience. They said, for example, "Can the Program differentiate between audiences defined by each Instructor for each assignment?" (#S13) and, "Similar to written communication, speeches are used to express one person's ideas to other people. Computer assessment cannot be made sensitive enough to truly distinguish how a message is received by human beings" (#S11). But the concerns about audience go farther than skepticism about technological capability. For one thing, there was a practical concern that was particularly obvious in the case of public speaking: "To grade via computer takes away one of the hardest parts of public speaking: the public part" (W25). Speaking to a computer would "sanitize the speaking environment" and "negate all that is 'public speaking'" (#S15). Several respondents mentioned the dynamic interaction with audience that is the essence of a speaking situation: "A speaker's response to audience feedback needs the living dynamics of actual listeners" (#S12). And further, respondents spoke of the need for "engagement" with audience in both writing and speaking: "student writers," one said, should "engage in conversation with other academics" (#W18). And the concerns were also conceptual and even moral. One respondent said, "I think students need a sense of audience. . . . Even if the computer was able to . . . somehow grade based on audience awareness, I think the very notion of computer assessment would negate that idea" (#W24). Another said, "Each student comes to the lectern with different skills, backgrounds, and experiences. I believe assessing human beings require[s] human judgment" (#S9).<sup>9</sup>

These survey results have no statistical significance whatsoever, of course, so I treat them as informative supplements to my own speculations. These collective intuitions suggest that our resistance to automation is rooted in a commitment to agency, or more specifically that we find it difficult (and perhaps perverse) to conceive of rhetorical action under conditions that seem to remove agency not from the rhetor so much as from the audience. The concern for agency might seem misplaced, or futile, since rhetoric under the conditions of placement testing or classroom performance strikes many of us as having minimal agentive potential. Accordingly, these intuitions should perhaps be treated as unreliable mystifications, delusional vestiges of a

humanist ideology. But on the possibility that they might instead provide a way to reconcile the everyday lifeworld with the collision between modernist-humanism and postmodernity that has troubled rhetoric's understanding of agency, I will pursue their implications here and hope that the discussion to follow can put these intuitions in their place.

Because the conditions for rhetorical performance in writing and speaking are different, it is through a contrastive analysis that we may come to appreciate both the wisdom and the weaknesses of our intuitions about the nature of rhetorical agency. My initial hunch was that automated assessment is much more problematic for speaking than for writing, and there is some agreement with this in the survey. Asked whether automated assessment could be acceptable under some circumstances, assuming technical advances could make it as reliable as human assessment, more respondents said no for speaking than said no for writing. Asked directly whether they think there are any specifically rhetorical issues that will make computer assessment of speaking less satisfactory than computer assessment of writing, more said yes than no. Their comments suggest that the heightened resistance to automated assessment of speaking derives partly from first-hand experience that the performative aspects of speaking are more complex than those of writing, and thus that the technology that tracks or models them is less likely to be valid or reliable (the incredulity factor, again); but resistance also derives from the greater visibility and materiality of the audience for speaking and the perception that speaking therefore requires interaction between rhetor and audience. The survey responses thus point to three dimensions of rhetoric that may help us understand what we want from a concept of agency, that is, what is missing from the confrontation of action with motion: these are performance, audience, and interaction. These are certainly not new ideas, but what I hope to do here is to suggest what we can learn from their conjunction.

First, however, I should review the conceptual problem that the AutoSpeech-Easy™ thought experiment was designed to illuminate (though certainly not to solve). Agency has been prominent on the agenda of rhetorical studies recently, the cause of what Ronald Green has characterized as an “anxiety . . . lodged in the critical imagination” of the field (188). Traditional rhetoric presupposes—even celebrates—agency, as the power of the rhetor, of invention, of eloquence itself; poststructuralist rhetoric debunks agency as “ideology” (Gaonkar)<sup>10</sup> or “ontotheology” (Lundberg and Gunn). How we ought to understand agency was one of four “pressing questions” featured at the 2003 Alliance of Rhetorical Societies (ARS) conference (Clark 5), and the

report about the discussions on this question became the subject of an award-winning debate in these pages (Geisler “How Ought”; Lundberg and Gunn; Geisler “Teaching”).<sup>11</sup> *Philosophy and Rhetoric* published a special issue on agency in 2004. Conference panels and other forms of rumination on the topic abound.<sup>12</sup> And rhetoric is not alone in its preoccupation with agency: cultural studies, gender studies, literary studies, and political and social theory have been worrying for some time about the relative effectivity of the “subject” and the social order (or “structure” or “ideological state apparatuses”) and about the nature of their relationship. One protracted discussion, in the area of science and technology studies, challenges the Burkean distinction between action and motion by positing two forms of agency, human and nonhuman (or material), the latter including both machines and natural forces. These are understood to be complexly interrelated in what Pickering calls the “mangle of practice” and what Latour calls “hybrids” or “networks” (*We Have Never*). Whether these two forms should be treated symmetrically in inquiry and theorizing remains a point of contention.

Within rhetorical studies, three related sets of concerns—theoretical, ideological, and practical—prompt this anxious attention to agency. The theoretical concerns arise from the struggle of rhetoric to come to terms with the postmodern condition, or at least with poststructuralist theorizing. Since agency has traditionally been understood as a property of an agent, the decentering of the subject—the death of the author//agent—signals a crisis for agency, or perhaps more accurately, for rhetoric, since traditional rhetoric requires the possibility for influence that agency entails. Poststructuralist or posthumanist theories detach agency from the agent, challenging our syntactic habits of treating agency as a possession (Lundberg and Gunn 89) and of using agency after transitive verbs (Herndl and Licona)—tropes that reify the agent. Agents do not “have” or “acquire” agency. Instead, agency is said to “possess” the agent (Lundberg and Gunn 97), or to “precede” the agent (Herndl and Licona 13); agency is dispersed to the “intersection of the semiotic and the material” (Herndl and Licona 13), to “discursive and aesthetic conditions” (Vivian 241), to Lacanian tropes or the Symbolic (Lundberg and Gunn 97), to “the spaces in and from which rhetorical situations take shape and meaning” (Barnett 3), to “the structures and dispositions that constitute the habitus” (Atwill). Many have questioned whether rhetoric can survive this dispersion of agency.

The ideological concerns arise from the conflict between realities of political and economic power and ideals of civic participation and social justice. According to Greene, the “root cause of the anxiety over

agency” is its “attachment . . . to a vision of political change” (189). Rhetorical agency is important because it would give voice to the voiceless, empowering subaltern groups, and thus, presumably, weakening structures of institutional, corporate, and ideological domination. This set of concerns tends to produce resistance models of agency, models that usually rely on a metonymy between agent and agency. Thus, Paul Smith has understood the term *agent* as “a form of subjectivity where . . . the possibility (indeed, the actuality) of resistance to ideological pressure is allowed for” (xxxv). Feminism in particular, according to Smith, has seen in the fragmentation of the subject into multiple subject positions the opportunity, even the necessity, for “contradiction and negativity” that produce resistance (152). Thus, agency-resistance is both the product of domination and the negation of the same: it is agency-against-patriarchy, or agency-against-capitalism. In the work of Judith Butler, for example, agency takes the form of “a strategy of displacement of constraining symbolic norms” and is thus, according to Lois McNay, negative and uncreative (189). For rhetoric, the ideological approach to agency results in what Lundberg and Gunn call “rhetorical evangelicalism” (94), a self-righteousness about civic engagement, or what Greene calls “moral entrepreneurship,” a presumption that agency is “always already in support of, or opposition to, the institutional structures of power” (189, 198).

The pedagogical concerns about agency arise from the efforts of teachers to make rhetoric matter. These efforts are frequently tied to the ideological concerns described above; for example, Gerard Hauser’s reflections on the ARS discussions on the theme of teaching ends with the claim that faculty in rhetorical studies “have a birthright: rhetoric’s role in civic education. That role is not just in the public performance of political discourse but in the education of young minds that prepares them to perform their citizenship” (52). The pedagogical concerns are also tied to the theoretical concerns; Leff and Lunsford’s reflection on the ARS conference notes that “Teachers of writing and speaking can pursue an unrestrained deconstruction of the agency of speakers and writers only at the risk of theorizing themselves out of their jobs” (62). It is the agency of students (another subaltern group) that is the focus of these concerns, and the pedagogical situation highlights the conjunction of two dimensions of agency: the student’s developing competence (agency as capacity) and the goals of social change (agency as effect). Karlyn Campbell’s ARS plenary address illustrates this doubleness: “Rhetorical agency refers to the capacity to act, that is, to have the competence to speak or write in a way that will be recognized or heeded by others” (4). Similarly, Geisler’s report on the ARS conference uses a doubled definition, beginning with an understanding

of agency as the “capacity to act” and going on to note that agency is necessary because of rhetoric’s “social mission, . . . the goal of being efficacious in the world” (“How Ought” 12, 16). Because in this view agency must be not only a capacity of the rhetor but also in some way a capacity of the audience, the issues become considerably more complicated.

The AutoSpeech-Easy™ thought experiment challenges this double understanding of agency by radically truncating the pedagogical situation, leaving the student in a rhetorical desert, demonstrating her capacities to an “audience” capable only of motion, turning effects into algorithms. Can agency as rhetorical capacity survive when the possibility of agency as effectivity has completely dried up? (We might, of course, ask the same question about many other situations we put students into.) Automated assessment systems also cut to the heart of the theoretical and ideological concerns about agency. Can posthumanist theory disperse agency to a machine? What are our moral obligations to such hybrids? Is our resistance to the mechanized audience simply another example of rhetorical evangelicalism? A consideration of what the survey responses suggest about performance, audience, and interaction provides some perspective on such questions.

## Performance/Performativity

Although it wasn’t identified as one of the “pressing issues” for the ARS conference, Andrea Lunsford found that “performance” served as a key term in the discussions there (Leff and Lunsford 55). Similarly, Michael Leff has noted that terms like “performance” and “action” have gained priority over earlier preoccupations with “substance” and “theory” (“Up from Theory”), and Susan Jarratt recently identified a “turn to the performative” in rhetorical scholarship. The survey responses quoted above about the specifically *public* nature of public speaking also draw our attention here to the performative dimension of rhetoric. Speaking strongly resists automation because we understand it intuitively it as a performance, meaning that it is dynamic and temporal, that it requires living presence; as one respondent put it, “We are training students to present live speeches to living audiences” (#S12). Speaking is understood as *im*-mediate, both in the sense that it happens in the instant and in the sense that it is not mediated but direct. Speaking-performance highlights consciousness of the co-present subject and other, even as the possibility of self-consciousness and the knowability of the other come under question.

The bias of the speaking situation is to foreground the agent, the performing subject as the seat of rhetorical origin, seizing the *kairos*

(capacity) to instigate change (effect). This bias arouses suspicions of performative conceptions of agency and of what Leff has called the “homage to the rhetor” paid by much of the classical tradition of rhetoric (“Tradition and Agency” 137). As agency has been disconnected from the agent, these suspicions have disconnected performance from the performer-agent and dispersed it to structures of power and ideology; unlike agents, the “points of articulation” for these structures do not perform; rather, they exhibit performativity. Leff goes on, however, to urge us not to jettison the classical treatment of agency in our postmodern enthusiasm, by showing us how the classical tradition tempers the power of the rhetorical agent. Both Isocrates and Cicero, who celebrate the agential power of the speaker, also point to powerful constraints on the speaker, those of the audience and of communal tradition (“Tradition and Agency” 138–39). The rhetor cannot be an autonomous originator and expect to succeed in persuasion—and never could.

And indeed, performative conceptions of agency are tempered by other considerations like the ones I take up below, audience and interactivity. Like agency, performance points both to the rhetor and to the audience, and this doubleness is embedded in the tradition of performance studies. Foundational work by Erving Goffman characterized performance as behavior aimed at producing an impression on an observer but at the same time called attention to the performer’s efforts to control that behavior. A recent review of performance theory notes its roots in both psychoanalytic theory and social theory and its association with “consciousness and reflection” as well as with a theatrical focus on audience reception (Carlson 80).

In contrast to the speaking situation, the bias of writing is to obscure performance, *kairos*, and audience.<sup>13</sup> Writing, as Burke might put it, essentializes temporality, just as speech temporalizes essence. Jenn Fishman and Andrea Lunsford have recently urged us to attend to writing as performance and to learn from the anthropologists, linguists, and theater scholars who have made performance studies a lively field in the past 50 years. Fishman and Lunsford focus on enactments of writing, “scripted forms of oral communication” that put the rhetor and the audience together into a lived event (226–27). But a useful concept of agency could help us go beyond this to view all text as having a performative dimension, just as J. L. Austin finally concluded that all locutions are speech acts, that even constatives are performatives (150).

If the writing situation mystifies us with the absence of the performed event, however, the speaking situation mystifies us with its material presence. Speech tempts us to focus exclusively on bodily

motion, personal presence, eye contact—and to neglect symbolic action, mental presence, emotional contact, all of which are manifested in both writing and speaking and all of which are means through which we can infer rhetorical action and agency. I suggest, then, that we think of agency as the *kinetic energy* of rhetorical performance. The Greek root of energy is *ergon*, deed or work, and *energeia* is the deed in the doing, action itself. In invoking the distinction that physics makes between potential and kinetic energy, I'm comparing agency not to the energy of a stone sitting at the top of the cliff but rather to the energy it has as it falls, the energy of motion.<sup>14</sup> But in this case, we're interested not in the motion of stones but in the symbolic actions of rhetorical performers. If agency is a potential energy, it will be thought of as a possession or property of an agent (like a stationary stone), but if agency is a kinetic energy, it must be a property of the rhetorical event or performance itself. Agency thus could not exist prior to or as a result of the evanescent act. Our talk about agency has tended to essentialize the temporal, condensing into a property or possession of the hypostatized agent what more productively should remain temporalized in the act or performance. As the kinetic energy of performance, agency resolves its doubleness, positioned exactly between the agent's capacity and the effect on an audience. Our task is to understand how the kinetic energy of performance works in writing as well as in speaking.

### Audience/Addressivity

Audience is inherent in our understanding of performance, and one of the purposes of my thought experiment with AutoSpeech-Easy™ was to test that understanding with a limit case by turning the speaker's audience into a literal black box. But the responses to the survey unpacked the black box by indicating different forms of resistance to its two components, the camera and the computer. Both are instructive.

The videocam mediates the speaking event, removing the audience from the rhetor, an absence to which several respondents specifically objected: "I can't imagine actually having a student deliver a speech to a camera . . . since that would defeat the purpose of communicating with an audience!" (#W1); "Audience is lost when one stands in front of a camera. Even though I assume the presenter has been prepped to visualize his intended audience . . . that seems a bit far-fetched considering he will be staring into a video camera" (#W8); "When you are speaking into a camera, my personal experience is that you lose the connection to the audience because there is no one to talk to, thus you will often lose your tone and impact, often speaking faster than

normal and without much affect" (#S15); "The camera doesn't nod, smile or frown. Speeches need a certain amount of instant feedback" (#S16).

However, none of the respondents noted the widespread use of camera-mediated oral communication, in both broadcast and online environments. Even when there is an audience present with the camera, it may be much less important (as well as less numerous) than the audience mediated by the camera. Moreover, the mediating role of the camera makes the speaking situation similar to writing, where audience is more remote, less insistently present and visible, than in unmediated speaking. Mediation of either sort draws attention to the rhetorical effort required to anticipate an audience, effort we easily forget is also required for unmediated audiences. Just because we can see and enumerate our audience doesn't ensure that we can understand their presumptions and convictions. On these grounds it is difficult to condemn the camera itself as rhetorically destructive to audience.

Speaking *through* a camera to a computer also provoked objections, although respondents said little to explain these responses. For example, there were no comments to the effect that the computer might be more inscrutable or more intimidating to students than a human audience.<sup>15</sup> It was the simple absence of audience that was objectionable: "Students need an audience in order to give a speech. If the student gives a speech to a computer, then s/he is not getting the full speech experience" (#W10). However, asking students to perform in the absence of audience is not much different from the typical mass testing situation or even many classrooms. As one respondent noted: "It honestly doesn't seem like computers would be that different from the human readers of standardized tests" (#W25). In most educational situations, the possibilities for agency as rhetorical effect are artificially truncated: there is no exigence beyond educational accounting, and the teacher's role is that of grader, not that of a rhetorical audience capable of enacting change. In such conditions, rhetoric can be little more than declamation. But neither declamation nor our dissatisfaction is new, and it seems that, rather than being a new obstacle to agency, the computer serves as a surrogate for our dissatisfaction with declamation.

If it's not the literal machine—either camera or computer—that makes the mechanized audience so rhetorically objectionable, what does? A clue is provided by several respondents who objected to computer assessment of public speaking because it would alleviate "communication apprehension": "Students would most likely be less nervous speaking to a machine" (#W10); "a public speaking course should be teaching them skills to manage and/or overcome speaking

anxiety. The effect of a computer ‘audience’ would be different for writing because the element of anxiety about receiving public attention does not exist as keenly for writers as for speechmakers” (#S11); “by having the student speak into a computerized recorder you are changing the entire process, which might for some lessen the anxiety, while for most I think it will greatly reduce performance and grades” (#S15).

I suggest that what makes us apprehensive about public speaking is precisely the energy that signals the presence of agency. What is unmistakably present in the live speaking situation is an Other, someone who may resist, disagree, disapprove, humiliate—or approve, appreciate, empathize, and applaud. The problem with the mechanized audience is not that it is inscrutable—audience is always inscrutable to at least some degree—but that we are unwilling to grant it such presence and therefore cannot, in an important sense, perform. To produce kinetic energy, performance requires a relationship between two entities who will *attribute* agency to each other. Indeed, much of what inexperienced writers and readers have to learn is how to attribute agency to the invisible, mediated other within a written text, how to produce kinetic energy in a textual performance.

By the same token, what both speakers and writers in most pedagogical situations must learn is how (and how to be willing) to attribute agency to a mediating audience, one that is standing in for an audience that might change or enact change. In other words, they must learn how to engage in productive *imitatio*, how to benefit from the imaginative (re)construction of rhetorical situations in which agency is willingly attributed. This is the pedagogical value of declamation, which operates not in the dimension of effectivity but in the other dimension of agency, the student’s developing capacity. As Jeff Walker explains it in his response to the ARS plenary on rhetorical traditions, “the purpose of declamation is . . . to develop a capacity, a *dunamis* of thought and speech, a deeply habituated skill, that can be carried into practical, grown-up, public life—as the student gathers experience and matures” (8). If pedagogically successful, declamation teaches agency-attribution through imitation.

## Interaction/Interactivity

As audience is inherent in our understanding of performance, so interaction is fundamental to our understanding of audience. The energy of agency (whether direct or mediated) is rhetorically functional only through interaction. Leff’s discussion of how agency is represented within the classical tradition notes the essential role of interaction. Because the rhetor must adapt to the social context and to the

audience's knowledge, values, conventions, and expectations, the speaker's power in effect derives from the power of the audience; Leff cites the example of Crassus in the first book of the *de Oratore*, confessing to his fear of the audience and concludes, "Paradoxically, then, this man who strikes awe into the heart of his listeners is himself awed by his audience" ("Tradition and Agency" 139). Perhaps the example is not so much paradoxical as paradigmatic.

Many of the responses to my survey insisted that a speaker's audience must be rhetorically available to the speaker through interaction—this was by far the most important aspect of audience for this group of instructors. They talked about "feedback" (#S12, #S16, #W12), "reactions" and "responses" (#S12, #W8, #W19, #W24), the "ongoing relationship" between the speaker and audience (in contrast to that between writer and reader) (#S15), the "chemistry between a speaker and the audience" (#S9). They spoke of audiences as "live" and "living" (#W8, #W12). These respondents were unwilling to attribute agency to the AutoSpeech-Easy™ system—and assumed that their students would be similarly unwilling, or unable—in large part because it evidently would not offer any ongoing interaction with the speaker. It's an interesting corroboration of my claim here that computer scientists began to call their systems "intelligent agents" only when they achieved the capacity for the machines to "interact" with users.<sup>16</sup>

Interaction is necessary for agency because it is what creates the kinetic energy of performance and puts it to rhetorical use. Agency, then, is not only the property of an event, it is the property of a relationship between rhetor and audience. There are at least two subjects within a rhetorical situation, and it is their interaction, through attributions they make about each other and understand each other to be making, that we constitute as agency. Crassus is awed by his audience not so much because of anything they are doing but because he attributes to them the capacity to do something, including attributing agency to him. The interactive process of mutual attribution generates the kinetic energy of performance. In this sense, agency is, as Campbell says, "communal, social, cooperative, and participatory" (5). It is, as Lucaites and Condit put it, "bound in relationship, rather than [being] the solitary product of some sort of determinism" (612).

The shorthand version of all this is that we understand agency as an attribution made *by another agent*, that is, by an entity to whom we are willing to attribute agency. It is through this process of mutual attribution that agency does, indeed, produce the agent, much as Herndl and Licona put within their somewhat different explanatory framework: "it is the social phenomenon of agency that brings the agent into being" (13). Herndl and Licona go on to posit what they call

the “agent function,” which we can understand as a specialized or constrained version of the process of attribution that I have been describing. Developed by analogy with Foucault’s “author function,” the agent function “arises from the intersection of material, (con)textual, and ideological conditions and practices” (14). The agent function operates as a principle of discursive economy and control, constituting a position *into* which subjects are articulated. In the terms that I have been using, attributions of agency may rely on prefabricated conventions, ideologically imposed or culturally given. In other words, rather than having to posit an agent function existing in a totally abstract space, we can position it within the habitual or imposed patterns of attributions that rhetor or audience is prepared to make. The agent function, then, would be simply an indication of the ability or willingness of participants to attribute a particular form of agency.

Another analogy to the process of attribution that I am describing here can be found in the classical tradition, in what the ancients called *ethopoeia*, the construction of character in discourse (sometimes called “impersonation”). The early Sophists recognized that character (*ethos*) was an important dimension of speeches they wrote for others to deliver: they knew that character was not so much represented as constructed, and the best speechwriters were adept at persuasive impersonation. Aristotle described *ethos* as not only a matter of prior reputation (an inartistic proof) but also a dimension of a performative event, an effect of delivery and reception, in other words, an attribution (I.viii.6, II.i.2). In these conceptions, *ethos* appears very much as I described agency earlier—as an energy within performance produced by ethopoetic attributions, which in turn are necessary for rhetorical effects to occur.

Research in interpersonal communication, human–computer interaction, and computer-mediated communication has suggested that we have a very low threshold for *ethopoeia*: in other words, it doesn’t take much for us to be willing to attribute character to an interlocutor, no matter how primitive the cues are.<sup>17</sup> We go out of our way to construct a human relationship: the “Eliza effect,” or the attribution of intelligence and sympathy to an early computer program that simulated a psychotherapist is perhaps the most notorious example (Weizenbaum). Our predilection for *ethopoeia* results in frequent attributions of agency to machines: people name their cars, others talk to their computers, gamblers attribute beneficence or malevolence to slot machines,<sup>18</sup> and so on. And, like agency, *ethopoeia* can involve both rhetorical capacity and rhetorical effect. Discussions of “material agency” focus our attention on the single dimension of effect (this is Pickering’s position), though the full ethopoetic impulse of the everyday practices

exemplified just above adds the second dimension by endowing nature and machines with a human-like capacity for intentional action. A natural predilection for ethopoeia is necessary to the development of trust in infants (Baier), and a trained or cultural predilection of the same sort is necessary for mediated texts to operate as rhetorical performances.

We might expect, then, that automated assessment technologies could take advantage of our eagerness to attribute agency, and perhaps they can—and will. For now, though, many of us are culturally and economically positioned to deny agency to machines in this particular situation, especially if the machines threaten to substitute for our own agency. Others, like educational administrators, are culturally and economically positioned to welcome mechanized agency, to posit an agent function that will position the machine as an adequate reader of placement essays, for example. Better system design with more interactivity could help bring the rest of us around to this view, as could simple habituation on our part: given sufficient experience and exposure, we may accept these machines as Latourian hybrids to which we unproblematically delegate rhetorical agency, just as we delegate the functions of a doorman to an automatic door closer (Latour “Mixing Humans”). On the other hand, perhaps a better understanding of agency will help us determine how and where to draw the line—between the human and the nonhuman, between the symbolic and the material—and how to make our case to others.

## Conclusion

The attributing of motives, said Burke, produces “basic forms of thought” that underlie all kinds of symbolic action, and the basic forms of thought he worked with were the pentadic terms of dramatism, which together “treat language and thought primarily as modes of action” (xv, xxii).<sup>19</sup> In other words, the attribution of motives is a generative process, generative of rhetorical action. The process that I have been sketching, the attribution of agency, resembles what Burke is talking about. Our attributions of agency produce the kinetic energy of performance and thereby engage the performance *as* action.

Celeste Condit has called agency a “necessary illusion”:<sup>20</sup> I have tried to suggest something about why it is necessary—it makes symbolic action possible—and also to pin down what sort of illusion it is. It’s an illusion not in the sense that it’s a theoretical fiction but rather in the sense that it’s an attribution, an attribution that’s not determined but constructed (or pre-constructed) and offered in answer to Burke’s question in the opening of the *Grammar of*

*Motives*, “what are we doing and why are we doing it?” Agency is also an illusion in the sense that it’s an ideological construct: it arises from the “nature of the world as all [humans] necessarily experience it” (xv). In other words, agency is a product of the inescapable ideology of the Human Barnyard. Prefabricated agent functions are the products of more provincial ideologies. But if agency is an attribution, our ideological concerns have been misplaced. We should be concerned less about empowering subaltern subjects and more about enabling and encouraging attributions of agency *to* them by those with whom they interact—and accepting such attributions *from* them. We should examine the attributions we ourselves are willing to make and work to improve the attributions that (other) empowered groups are willing to make.

This same point applies to our pedagogical concerns. Part of our responsibility is to be willing to attribute agency to students and part is to educate their capacities of attribution. This requires both technical and moral education, for our attributions of agency are ultimately moral judgments, matters of human decency and respect, matters of “acknowledgment,” to use Michael Hyde’s more theological term. Acknowledgment, he says, is a “life-giving gift” (23), and attribution gives the gift of rhetorical agency. Do we owe such acknowledgment, such agency-granting attribution, to automated assessment systems? Right now, I suspect that most of us agree that we do not, and moreover that out of respect for our students we should not ask them to make such attributions either.

## Acknowledgments

I am grateful to the twenty-five instructors who responded to my survey; their thoughtful comments proved to be highly productive stimulants to my own thinking. Christian Casper assisted with the setup of the survey questions on the SurveyMonkey site and retrieved and organized the responses. I benefited from discussions of agency with Scot Barnett during an independent study we undertook in 2005 and from his comments and those of Carl Herndl, Jerry Blitefield, and Lisa Keranen on an earlier draft of this article.

## Notes

<sup>1</sup><<http://www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=f5d9af5e44df4010VgnVCM10000022f95190RCD&vgnnextchannel=6aae253b164f4010VgnVCM10000022f95190RCD#q20>>; accessed 8 June 2006.

<sup>2</sup><<http://www.collegeboard.com/highered/apr/accu/accu.html>>; accessed 8 June 2006.

<sup>3</sup><<http://www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=ef972d3631df4010VgnVCM10000022f95190RCRD&vgnnextchannel=d07e253b164f4010VgnVCM10000022f95190RCRD>>; accessed 8 June 2006.

<sup>4</sup><<http://www.vantagelearning.com/myaccess/index.php>; accessed 8 June 2006; <http://www.vantagelearning.com/myaccess/faqs.php>>; accessed 8 June 2006.

<sup>5</sup><<http://www.k-a-t.com/prodIEA.shtml>>; accessed 8 June 2006.

<sup>6</sup>This product is many steps beyond the only other effort I am aware of so far, Speech-Grader™, which is a spreadsheet designed for teacher grading; see <<http://www.speechgrader.com>>; accessed 8 June 2006.

<sup>7</sup>At least for now. Some of the features described earlier are not quite as ridiculous as I had intended when I started making them up. See “HCI and the Face,” <<http://www.bartneck.de/workshop/chi2006/index.html>>; the “Affective Computing Portal,” <[http://www.bartneck.de/link/affective\\_portal.html](http://www.bartneck.de/link/affective_portal.html)>; the “Face Detection Homepage,” <<http://www.facedetection.com/>>; all sites accessed 8 June 2006.

<sup>8</sup>The survey was conducted at <[www.surveymonkey.com](http://www.surveymonkey.com)>. An explanation and link were sent to the listserv for first-year writing instructors and to the director of the basic course in public speaking, who forwarded it to instructors. At the end of the anonymous survey, respondents were asked to indicate whether they were teachers primarily of writing or of public speaking. Quotations are identified by the respondent number assigned by SurveyMonkey and by W for those who identified themselves as writing instructors or S for speaking instructors.

<sup>9</sup>Another respondent identified the issue in moral terms but said, “I have no moral dilemma with letting a machine save me what amounts to about a month of hours worth of grading per academic year” (#W22).

<sup>10</sup>Sometimes this ideology seems to be “humanist,” however, and sometimes it seems to be “modernist.”

<sup>11</sup>This exchange won the 2005 Charles Kneupper award for the “most significant contribution to scholarship in rhetoric” in the pages of the *Rhetoric Society Quarterly* (see Awards and Honors at <<http://rhetoricsociety.org/>>). Information about the Alliance is available at <<http://www.rhetoricalliance.org/>>.

<sup>12</sup>Interestingly, however, “agency” appears as a main entry in none of the three recent reference works on rhetoric and as an index entry only in Enos (under “Marxist rhetoric” and “Voice”) (Enos; Jasinski; Sloane).

<sup>13</sup>The effects on rhetoric of the bias of writing have been characterized in many ways; useful discussions are by George Kennedy (*Classical Rhetoric*), Walter Ong, and Jan Swearingen.

<sup>14</sup>My suggestion here is reminiscent of George Kennedy’s definition of rhetoric itself as “the energy inherent in an utterance” (*Comparative Rhetoric* 5).

<sup>15</sup>In fact, some thought the computer would be *less* inscrutable (several speculated that students would learn to “game” the system) and less intimidating.

<sup>16</sup>See my earlier discussions of intelligent agents such as the software robot “Julia” and pedagogical agents (“Writing in a Culture of Simulation”; “Expertise and Agency”).

<sup>17</sup>See my discussion of ethopoeia in the context of artificial intelligence (“Writing in a Culture of Simulation”), where I cite some of the research referred to. See also Stewart Guthrie’s discussion of anthropomorphism as a cognitive bias with survival value and Justin Barrett’s hypothesis that humans possess a “hyperactive agent-detection device,” or HADD (31).

<sup>18</sup>Thanks to Scot Barnett for this example.

<sup>19</sup>It should be remembered that Burke’s “agency” differs from the agency under discussion here. Burke defines agency as the instrumental means in an action and usually exemplifies it as a tool or machine (although of course it has considerable

flexibility) (xx), whereas its central use in the ongoing conversation I have referred to is much closer to Burke's own "motive."

<sup>20</sup>See also Sharon Crowley's contention that "sound and useful theories of rhetorical agency are important to the survival of rhetorical studies" (Crowley 7).

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