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Information Literacy as Bureaucratic Literacy

Introduction: Information, Rhetoric and Discourse

A college senior is writing a paper for a seminar in the anthropology department, the topic being normative images of femininity in popular culture. Her professor has told her that her sources so far are "too psychological," and that she should focus on the "tradition of scholarship in the field," but the student, not being an anthropology major, is perplexed. A doctoral candidate in special education hopes to establish the relevance of her work on disability and standardized testing to critical scholarship on race in schooling, but she is worried about losing focus or dibbling her dissertation with potential rabbit holes. A freshman has been instructed by her writing teacher to find a "lens text" in support of an analysis of Disney's *Toy Story* franchise. (Marx's work on the commodity fetish has been suggested.) Are these researchers looking for "information"? Popular discourse – stimulated by the ubiquity of information interfaces (*e.g.*, Google) – gravitates toward that term. In a student's own idiom, she needs "information on anthropomorphism in film." Each of these researchers, however, needs to pursue ideas and concepts through a maze of texts, alert to the clues lurking in citations, summaries, footnotes, and all the other devices whereby scholars discreetly signal their orientation toward the larger contours of a discipline or field. And in each case, the rhetorical

occasion is particular: making just *this* point about just *these* texts or data, and in *this* way. In none of these cases does "research" mean merely locating a source and mining it for information, though that may be part of the task. But in general, the task facing each writer is a discursive one. It demands that she perform certain kinds of authority and competence. In academic writing, one's authority derives from knowledge of other relevant authorities, where "relevance" means belonging to a specific academic discipline (or sub-field), and one's competence involves handling a discipline's vocabulary and its modes of argumentation, its assumptions and its methods, etc.

The idea that writing is a discursive performance is invoked regularly among scholars and pedagogues of rhetoric and composition (rhet/comp).[1] Given that writing and research go together in most academic settings, librarians would do well to acknowledge writing's discursive nature in their teaching practice. And implicitly at least, probably many do. But our professional discourse clings to the category of "information," applying it to both the inputs and the outputs of the research process. Hence a foundational document in the profession, the Association of College and Research Libraries' *Information Literacy Competency Standards* (hereafter "the Standards"), propounds the claim that the capacity "to recognize when information is needed and [...] to locate, evaluate, and use effectively the needed information" is the bedrock of sound research (and by implication, good writing), this *information* literacy being a skill "common to all

disciplines, to all learning environments, and to all levels of education." Admittedly, the Standards have come in for their share of criticism. Those advocating a "critical information literacy," like James Elmborg, call attention to the fact that no use of information is value-neutral, and that the concept of literacy has meaning only within concrete social and political-economic contexts. In suppressing these dimensions of literacy, the Standards – so Elmborg argues – subscribe to what Paolo Freire calls a "banking" model of education, which impoverishes learning and communication by treating them as modes of "information transfer."[2] In the same vein, Van Hillard takes issue with the Standards' emphasis on efficiency and effectiveness, which seems to equate the activity of research with the passive and possibly isolated consumption of information sources. Academic and public discourse, Hillard insists, requires collaboration, and aims at the joint construction of knowledge through conversation and debate. To the Standards' implied picture of "the information literate student" as monad among interfaces, Hillard opposes the convivial image of the library as "an elaborate house of argument."[3] And Maura Seale, who is attentive to the link between the consumption of information and certain kinds of political and economic agency, recommends that we cultivate a pedagogy alive to "the politics of knowledge production."[4]

These authors turn our attention to the role of the Standards *as* rhetoric: a professional rhetoric that affects librarians' work. They point out, these authors, the dissonance between forms of knowledge that are practical and

contextual, and the theoretical construct of information literacy. The latter advertises a universal capacity in relation to indefinite stuff – stuff in which many different forms of discourse (published texts with various kinds and degrees of authority, conversations among experts and peers, observational data, artistic works, ephemera, etc.) lose their generic, material, and rhetorical specificity. Information literacy, on this critical view, resembles a tonic peddled as the cure-all for a diffuse and nonspecific collection of symptoms, the suggestion being that the medicine may turn out to be snake-oil, discursive sugar for a profession urged to justify its own relevance in the digital age. But if the medicine is a placebo, is that because the symptoms fail to cohere, or because we have misdiagnosed the disease? What *is* information in the first place, and why do we care about being literate in it?

Wanting, in a Socratic spirit, to belabor the obvious until it yields something less than obvious, this essay addresses the genealogy of "information" as a key term in modernity. My argument is highly speculative, but I suggest that the prevalence of the term, and the attitude toward discourse that it represents, emerge from a discursive crisis: a crisis of which the *soi disant* Information Age is only the latest iteration (or is it now already the last but one?). This crisis, in a nutshell, afflicts discursive authority. Its silent refrain is an incessant posing and putting of the question, "Who has the right to be heard?" If modern forms of governance and knowledge have, in part, erupted out of the potential to make oneself

heard, then the response in question does not so much deny the promise, as attempt to manage it. But the attempt breeds a paradox I shall call, following John Guillory, "the forgetting of rhetoric."[5] In order to grasp the paradox and its relation to the concept of "information," we need to know first what is meant by "rhetoric." The term now carries a pejorative charge: often we use it to signify prevarication and deceit, as in "political rhetoric." If not necessarily a bald lie, a piece of rhetoric enjoys an oblique relationship to the truth. But the term suggests also an excess, a deficit masquerading as plenary; in that respect, we can consider it the contrary term to "information." For the latter suggests a distillate of bare fact, free from distortion or contrivance. Information – on this common-sense view – sustains knowledge; it is the reliable, the objective, the resolutely factual portion of what we know. Rhetoric, by contrast, dilutes fact. More precisely, it is parasitic on the distinction, dear to so many of our students, between fact and opinion: rhetoric is like opinion, but puffed up, swollen into the guise of something more sound.

The real problem with rhetoric – again, on this common-sense view – has less to do with epistemology than with politics. If facts exist out there, opinion exists in here; it is one's private property. Rhetoric appears objectionable because it circulates by design. Its promiscuity speaks to the possibly unethical intention to impose one's opinion on friends, neighbors, and fellow human beings. In this, rhetoric straddles the fine line between communication and coercion. That line is called "persuasion." I am

permitted, even encouraged, to inform you of what I think. But it remains a tenet of the liberal civic imagination that I must respect your way of thinking, too. According to this image of the world, trying too hard to bring you around to my opinion reveals intolerance, a failure to acknowledge your right to form your own mind about the matter at hand. I say this conviction is political, and indeed, it prevails in the public sphere, where the informed voter is regularly contrasted to the voter in thrall to partisan rhetoric.[6] But as I have suggested, it can likewise prevail in the classroom, among students (and perhaps their teachers) who assume that academic writing merely reproduces facts. Facts are important, and we must not be cavalier about them. But a one-sided insistence on them proves detrimental to the enterprise, for "factual" can become synonymous with "self-evident," meaning that no interpretation seems required. The corollary of *this* conviction, this appeal to self-evidence, is the thought that one's opinions, where expressed, should remain inviolate, a private little pantheon of genial spirits beyond reproach. "Don't try to persuade me," says this thought, usually with a strained defensiveness in its voice, "my mind is my own."

Clearly, the idea that we should abstain from persuasion poses problems in an academic setting. After all, I am trying to persuade you right now, writing this. But to redeem persuasion from the antagonism between fact and opinion, scholars and teachers of rhetoric and composition often resort to an explicitly discursive frame. "Discourse," as I take it, refers to the act of communication, but under the heading of reasoning and justification,

rather than opinion and fact.[7] As discursive activity, knowledge does not consist of bare fact plus some additive of opinion (as though we were all so many different flavors of the same basic elixir of human experience). Rather, facts are embedded, like beads of water caught in a spider web, in a network of mutual implication, of habitual and novel inference, or if you prefer, of values, judgments, and beliefs. And this web stretches between us – such that, to take a trivial example, the fact of my opening my umbrella in bad weather communicates to others a) that it is raining and b) that I want to stay dry. If I open my umbrella in other circumstances – *e.g.*, I am inside, and I am not on stage acting a play – then my behavior confounds conventional judgments. I may, in such cases, be called out on it, called upon to justify my actions explicitly: "What's up?" Discourse, as Michel Foucault has taught us, is part of the destiny of power, or the memory of power. It is how power becomes social. This is so because discourse is an activity, a practice, embodying social conventions. (Often these conventions are linguistic, but not always: gestures are discursive, and silence can be, too.) Through this activity, the human being entangles herself in another order of vulnerability and consequence – entangles, because she can never lose the stickiness of a singular history, the binding of a body to its trajectory through space and time. At the same time, this bond gives convention a specific reference and a meaning, *i.e.*, a unique perspective, putting its potential to work; hence we speak of discourse as *performative*.

Classical rhetoric – which lay at the core of the Western curriculum for more than two millennia – taught writing and speaking as performative practice.[8] Capitalizing on the speaker's or writer's embodied situation *vis-a-vis* an audience, rhetoric sought to turn that relation to the rhetor's benefit. Rhetoricians taught adaptive strategies for inserting oneself in various discursive settings, for making one's case. It must be emphasized that this pedagogy fundamentally concerns modes of civic reasoning and argumentation, since the classical loci of the rhetorical canon are just those social settings where issues of public or institutional concern may be broached: the courtroom, the political assembly, and the ceremony. Rhetoric thus has to do, first and foremost, with the conflicts between multiple points of view with compatible claims to validity.[9] The attitude toward communication that this teaching implies – and by extension, its dissemination in a wide array of cultural forms – is pragmatic, agonistic, and prone, we might say, to valorize the dominion of a single perspective over the achievement of consensus. Naturally, the rhetorical canon was never more than an idealization, tending toward a fantasy of the full agency and immediate presence of self and other, a gloss on the real grit of discussion, coercion, judgment, and dispute.

But as I shall argue, this idealization has been challenged in modern times by another, according to which a sufficient process of abstraction can bracket or filter out the perspectival elements in communication. What's left of discursive activity after the filtering of perspective – which means, once

again, the bracketing of the body's fact, the latter being what makes communication an event occurring between particular speakers – is captured by the concept of "information." The world implied by this concept is an atomic one, a universe of discrete perspectives that do not communicate except through the exchange of something neutral and non-perspectival. This implication forgets rhetoric because it signals an aspiration to be free, not so much from point of view, as from the need for it. This is how I understand Guillory's claim that with the rise of "information genres," we witness the disappearance of "the *art* of persuasion," thanks to "the deliberate suppression of rhetorical techniques."[10] What usurps this art demands a different standard of rationality, implying a very different relation between self and other, and very different patterns of social organization. This essay explores the conceptual role of information in relation to the latter: specifically, those patterns of social organization we may call, following Max Weber, bureaucracy.

Staging a *tête-à-tête* between a philosophical analysis of communication as *information*, and an analysis of it as *performance*, my exploration is more speculative than historical. But however speculative, my ultimate concern is pedagogical: I am curious about what might be lost in assimilating academic discourse to the bureaucratic: an assimilation in which the concept of information literacy seems to me complicit. And if I err on the side of speculation, let it be thought a symptom of my desire to eschew an explicitly prescriptive approach to the topic. Enough discourse in

the profession, I daresay, addresses itself to the explication and prescription of "best practices," perhaps to the point of cultivating a fetish for the practically expedient. The point of address I am advocating would make place for the performance of doubts, uncertainties, speculative reversals, and theoretical intrigue. The point of address I am advocating would reverse the inductive polarity between theory and practice; practice, instead of being the place where the rubber of abstraction hits the road of the particular, *i.e.*, instead of being the actualization of theoretical potential, would represent the horizons from which theoretical activity departs and toward which it travels – without, perhaps, ever safely arriving there.

The Message as the Medium of Control

It is clarifying, as Marx teaches, to start with the relations of production. My argument draws on and elaborates Guillory's provocative thesis that "the informational genres" are historically specific adaptations of discourse to the demands of the bureaucratic management of labor. "In our epoch," as Guillory points out, "large numbers of people write, are even compelled to write, but they do not for the most part write poems or scientific papers; they fill out forms, compose memos or reports, send interoffice emails."[11] When the late-nineteenth-century firm outgrew the frame of face-to-face relationships (think of the lawyer working beside his clerks, or the master among his apprentices) to become that modern many-tentacled monster – with branch offices, and far-flung shareholders, and

customers all over the map – the written traces of work assumed new importance. Increasingly, records of all sorts were written down, filed away, and reproduced, even as technology began to relieve some of the burden of copying and composition. In parallel, as complex tasks once the purview of a single worker or small team were broken up into discrete, distributed processes, the procedures behind these tasks were explicated and codified. These transformations, as Jo Ann Yates explains, fostered in turn the discourse and teaching of systematic management, of which "the need to transcend reliance on the individual in favor of dependence on system became a central tenet."[12] In other words, the modern practice of management discovers its possibility in the abstraction of knowledge from the knowing and doing subject. Whether the (declarative) knowledge that a particular event occurred, or the (procedural) knowledge of how to make things happen, management appeals to the potency of abstraction and the transparency of the document.

The document's transparency, as a normative ideal, reflects the impetus of the managerial relation to productive labor. As Shoshana Zuboff explains in her study of "informating" industries, it is crucial to the enterprise that "the worker's skills […] be made explicit."[13] The drive for the abstract explication and documentation of tasks – for documentation *as* explication – was observed most trenchantly by Max Weber, who saw in it the rise of a new type of rationality. Weber's typology, elaborated as it is within a historical narrative, is hard to abridge with justice, but we will limit

ourselves (good managers, we) to a few key elements. Weber defines an "organization" – of which bureaucracy is but a specific type – as the regularity and stability of government by a structure of command; it is a mode of "social relationship" characterized by the dependence of action on clearly delineated authority. What interests Weber is the ability of those in positions of authority to exert their will. This consideration leads him to distinguish between domination and power. On this point, it is worth quoting him at some length:

> "Power" (*Macht*) is the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests.
> "Domination" (*Herrschaft*) is the probability that a command with a given specific content will be obeyed by a given group of persons.[14]

Unlike *Macht*, which may figure into any type of relationship (even, say, that between two strangers on the street), the existence of *Herrschaft* is a necessary (if insufficient) condition of the existence of an organization. With *Herrschaft*, we have to do not only with action, but also with a speech-act, with discourse. The one who dominates issues commands. Where the commands regularly flow from a specific source and meet with a discipline thanks to which they are regularly obeyed, an organization can be said to exist. Bureaucracy, for Weber, surpasses other forms of organization in the degree to which it has rationalized such relationships. But Weber's usage of "rationality" is likewise specific. In the main, he uses it with reference to explicit rules and codified formulae for behavior. The existence of such rules

and formulae is said to permit those in positions of authority to optimize the probability that their commands will have the desired results. (The price of this achievement is that their own decisions must conform to the rules, leading to what Weber famously described as bureaucracy's "iron cage.")

In certain academic disciplines it has become commonplace to say that the concept of discourse implies the kinship of knowledge and power. But as Guillory suggests, the discursive role of information is less about power than control. Control – a term which in bureaucratic contexts aligns with Weber's *Herrschaft* – adheres to situations where the flow of power is kept within formally defined limits. These limits are meant to maintain a specific relation to the future, making the unknown predictable. Such limits, while surely only ever ideal, become a theoretical necessity where the responsibility for knowing or deciding on the one hand, and the capacity for doing on the other, no longer coexist in the tight suture of one human body. All work – whether manual or managerial – flows from the implicit, seemingly spontaneous, but habituated responsiveness that guides us in intimate occasions of practice and skill. But in the age of bureaucracy, the split between the responsibility and the capacity for work finds its echo in a theory of the communicative act: as divided between sender and receiver. "Information" is the concept that flickers into being inside this gap. As Yates notes, the need to coordinate a variety of disparate activities at a distance had begun to plague industry well before the end of the nineteenth century. Technical innovations like the telegraph and the vertical file accompanied

rhetorical changes in the modes of address, giving rise to the modern formalism of the memo and report. In the twentieth century, the familiarity of these technologies and practices inspired a theoretical formalism, a mathematical treatment of the act of communication itself.

In the seminal work of Claude Shannon, we find the problem of control-at-a-distance recast as an "engineering problem": "that of reproducing at one point either exactly or approximately a message selected at another point," which is, in his words, "the fundamental problem of communication." Before we delve further into what that is, let us note what it is not. As Shannon explains, "frequently the messages have *meaning*; that is they refer to or are correlated according to some system with certain physical or conceptual entities." Sidestepping a long tradition of philosophical debate about the status of the objects of our knowledge ("physical or conceptual entities"), as well as the equally thorny issue of reference ("they refer to or are correlated according to some system"), Shannon defines "meaning" only to bracket it: "these semantic aspects of communication are irrelevant to the engineering problem." Shannon's reputation testifies to the fact that his theory is, as a mathematical gem, brilliant, and as an advance in engineering, profound. However, my reasons for invoking it are philosophical. And philosophically speaking, the lynchpin on which the theory turns is this: "the actual message is one *selected from a set* of possible messages."[15] Defining "the message" in these terms – in terms of membership in a determinate set – reduces the scope of

communication to something manageable by the engineer. Which is to say, by a third party to the communicative process, himself neither sender nor receiver. The definition is abstractive, in the sense that concerns us here. The abstraction turns our attention away from *what* the message might mean – a question the engineer can hardly hope to answer systematically, given the slipperiness of the interpretative act – by positing another: *which* message was selected? And it is but a small leap from here to the related, but technically more feasible, question: which message was *most likely* to have been selected?[16]

The ingenuity of Shannon's theory lies in its rigorous elaboration of a quantitative model for the transmission of messages over a physical channel. This theory is the ground from which sprung the techniques of data compression and error correction on which modern telecommunications depend. But Shannon's mathematical insight also crystallizes a way of thinking about the phenomenon of communication itself. (Note that he did not christen his work a theory of *tele*communications). A thorough genealogy of the concept of information would have to untangle many threads, including the close kinship between cryptography and modern warfare, as well as the history of efforts to formalize the logic of natural language using set theory. For my purposes, it serves to emphasize the following: at the heart of Shannon's model is a way of treating "the set of possible messages" *probabilistically*. The parallel with Weber's definition of *Herrschaft* is precise. He who controls the message,

controls the future, where the possibility of control is pinned to knowledge of the set of relevant possibilities.

An epistemological position emerges here. But it remains obscure when we restrict our view – as do some accounts of the discursive prominence of "information" – to the technological artifacts on which this discourse seems most readily to thrive. Therefore, let us descend to an example from the analog world, an example at once mundane and absurd. It is furnished by Fred Dretske, in illustration of Shannon's original concept:

> There are eight employees and one of them must perform some unpleasant task. Their employer has left the nasty business of selecting the unfortunate individual up to the group itself, asking only to be informed of the outcome once the decision is made. The group devises some procedure that it deems fair (drawing straws, flipping a coin), and Herman is selected. The name "Herman" is written on a memo and sent to the boss.[17]

The thrust of Dretske's book is to establish the relevance of information theory to philosophical accounts of mind and knowledge. His choice of illustration is incidental to this project and, as I think, therefore all the more telling of the close cultural association between the concept of information and bureaucratic rationality. On Dretske's gloss, we can measure the quantity of information conveyed by the memo in his example: three bits. This measurement corresponds to the number of binary decisions necessary to pick one name out of a set of eight.[18] It reveals, with reference to a certain event, "the extent to which that state of affairs constitutes a reduction in the number of possibilities."[19] .Although this particular and

highly contrived example hardly compasses the nuances of information theory, it reproduces its contours as a normative ideal. What are the elements of that ideal? And what does it exclude?

First of all, the event that produces the information – in this case, the delegation of an employee – follows a procedure designed to be optimally efficient. "Efficiency," in information-theoretic terms, depends on the choice of an encoding scheme. Binary (digital) encoding requires a description of the event as a tree of determinate possibilities. To each branch of the tree corresponds a question that can be answered in these terms: *X* or *Y*, *yes* or *no*. Of course, such a description does not, on its own, rule out inefficiency. For a group of people trying to come to a decision, there may be, for any given branch, a hundred reasons to answer *yes* and as many again for *no*. (And a cat in that tree will be no easy matter to coax down, especially if he is of the Cheshire breed.) Consider, too, that a decision tree requires some initial enumeration of relevant possibilities ("relevant": we shall come back to that word), and it is *not* the case that we can describe *this* process – enumerating the possibilities – according to a binary procedure. If application of a binary method yields a gain in efficiency, this gain signifies a certain level of abstraction.[20] It is a presupposition of my argument that any abstraction involves a certain point of view. In Dretske's example, the boss expects one of his eight employees to assume responsibility for the "unpleasant task." He does *not* expect the group to decide not to do it – or in a moment of inspired subversion, to send him a slip of paper bearing only

his own name. Nor does Dretske leave room for a collaborative solution, such that some or all of the employees would share the task. Nor for something ingenious that the boss hasn't thought of, a creative approach that would spare them all. (Maybe the boss has his head wrong.) There is no room for such outcomes on the terms given in the example, because the chance for any of them would swell the possible outcomes to more than eight.

An admirable result of this restriction, from the information-theoretic point of view, is that the expected outcome is precise. We may think of precision as a kind of demand, here addressed by a boss to his subordinates: submit one of your eight names to me, nothing else. The aleatory procedure imagined by Dretske answers (however absurdly) to this demand. The eight alternatives are equally weighted.[21] If we assume that the boss is behaving rationally, it follows that he is indifferent to which employee performs the task; otherwise, he would have picked one of them by name. Obviously, he wants *someone* (other than himself) to do it. The exigency lies in actually delegating a particular person to fill that role, in which case – given managerial indifference – the toss of a fair coin offers the straightest route. To anyone who has sat through too many late-afternoon meetings chaffering with colleagues about some apparently trivial matter – should one or two librarians staff the reference desk on weekends? should we close an hour later during finals? – the idea of a coin toss might have a certain perversely beguiling ring to it (while being less desperate than the

imagined gun or garrote). What makes such discussions a source of frustration? The points raised, the passions mustered, pro and con, are not necessarily trivial in themselves – not insofar as they touch real nerves of anxiety and desire. What lends these prolonged disagreements their triviality, I propose, is their attachment to decisions that do not seem capable of bearing their weight. The possible outcomes are too few: X or Y, yes or no. This is suggested by the value, in such situations, of a fresh and unlooked-for proposal, or even a cheeky remark: let it fail to resolve the deadlock, it can at least cut the tension, restoring, in a way, our sense that words are more than mere tokens to be attached to events (like "heads" or "tails" in a coin toss) or bandied about. The fresh proposal or remark reminds us that words themselves *matter*, meaning that they make things happen (even if only a brief ripple of glee in the gut).

To anticipate, when we regard words as making happen, we broach those features of discourse dubbed by J. L. Austin "performative." Austin's program – to which we shall return – consists in adducing a dimension of language, and of the evaluation of language, that does not boil (we might say "bog") down to the question of whether a given statement is true or false. The analytical priority afforded to declarative statements in the Western philosophical tradition ignores the fact that utterances do more than report facts about the world. It is true that by neglecting the performative in favor of the constative (or, in the schema Austin adopts, by treating the locutionary as the only valid dimension of language), the

traditional view gains rigor in matters of logical description. This profitable neglect is parallel to the reduction, implied by the concept of information, of communication to transmission, where variables at work can be made explicit in abstraction from the situations in which transmission occurs. Dretske seems to have the Austinian alternative in mind when he writes that

> It is important [...] that the note to the employer (with the employee's name on it) not itself be taken as a kind of performative act *constituting* the employees' *choice* of the person named in the note. Rather, the note is intended to convey information about a prior, independent choice – *i.e.*, who lost the coin-flipping game.[22]

The note conveys information insofar as the message bearing Herman's name arises in what Dretske calls a "nomically" regular way from the coin-toss, which in this case can mean only by adherence to the prescribed procedure. This fact of adherence, from the information-theoretic view, is more significant than the particular procedure chosen.[23] A coin toss, being utterly mechanical, illustrates the quantification of information better than another means of deciding the issue that might prove more likely in such a case: *e.g.*, a blind vote. But conceptually, it is the relation *between* the event of decision (choosing Herman) and the act of communication (writing the note) that matters – that the concept of information describes.

Guillory contends that bureaucratic genres like the memo, being intended "*primarily* to transmit information," embody and sustain relations of control.[24] Control within bureaucracy is an epistemic relation: it refers,

strictly speaking, not to the ability of authority to enact its will, but (recalling Weber's *Herrschaft*) to the relative assurance that its wishes will be satisfied, its commands carried out. (While "having things under control" may be impossible without a certain amount of power, it is possible – and not uncommon – to exert power without being in control.) This assurance is at once a strategic goal – there being some forms of behavior more conducive to predictable and reliable responses than others – a working principle or assumption, and a theoretical desideratum. It is the latter two faces of control that concern us here, and in particular the third. As such, the self-assurance of command is thought to adhere to positions of authority in virtue of their formal definition: as Weber says, it belongs to the office, not the person.[25] This adherence is a normative ideal, meaning that challenges to authority fall, by definition, outside of the norm. In formal terms, only by appeal to other, equally well-defined procedures can such challenges be recuperated: think of what happens when someone objects to her treatment at the hands of her boss. (There may be informal, "unofficial" strategies for redressing the grievance, but these will address the boss as a person in relation to the person of his subordinate. In his *position as boss*, however, he is assumed to be within his rights, until it is demonstrated – usually, to his own superiors – that, in fact, he is not. There may be constraints on his authority, but in most organizations far fewer are the mechanisms, or more rarely invoked, that permit employees to enforce

limits on their supervisors, than those that allow the latter to discipline or sanction their subordinates.)

Doubtless, control in organizations involves the strategic manipulation (or for a gentler word, curation) of information from a variety of sources. But if Guillory's suggestion is apt – that knowledge is to power as information is to control – this is so on account of a more profound affinity.[26] The demand for control, which is an *a priori* demand on management, calls for keeping communication aligned with procedural norms. And this demand inevitably shapes communication itself. The documents that transmit information are written, says Guillory, to become "the object of knowledge," not its expression. And yet, the note naming Herman is not the "object" of the boss' knowledge in the usual sense, because it is not the memo that the boss wants to know about. He wants to know, of course, what transpired in the meeting. Once informed of it, the boss himself embodies this knowledge (as do Herman and the other employees). The memo, *qua* information, serves as the surrogate for this fact. In information-theoretic terms, it is a channel, the information it carries being a measure of the (nomically regular) connection between one embodiment of knowledge and another. Dretske's explication is again worth quoting at length:

> The channel, being that set of conditions (on which the signal depends) that have no relevant alternative states – thus generating no information – constitutes the fixed framework within which dependency relations between source and receiver are determined.[27]

In the contrast between "channel" and "source" we find the third key element – along with precision and efficiency – that makes the concept of information a normative ideal. Indeed, this contrast is essential to the other two dimensions of the concept's normative force, because it stipulates that "relevance" can be defined within a "fixed framework." To measure the amount of information in a message asserts an equivalence between two sets of possibilities: the set operating at the source of the message, and the set known about on the receiver's end. These sets must be determined not only in relation to everything that they exclude from the analysis (as *not* possible); they must be determined also to be the same.

And yet, in the case of communication among human beings, whose inputs and outputs cannot be easily described, the determination of relevance proves a practical matter, prone to an excess that spills over the abstractions meant to cover it. Indeed, such an excess seethes under the very word "determination," which in Dretske's usage carries two closely, but in this case indeterminately, related meanings. The fixity of the channel permits us, in theory, to determine the relation between source and receiver: the message *carries* information because it does not *generate* any. But this fixity does not spring spontaneously into being; it comes from somewhere. In our example, it comes from "the employees' determination to make their note to the boss an accurate indication of what transpired in their selection process."[28] But *that* determination – that of the employees to follow procedure – participates in a different order of things. Unlike our

determination of the set of possible messages, their determination does not abstract from the concrete act of one being or beings communicating with another. It belongs, rather, to the act as an intimate part: call this part "disposition" or "intention." It is to the peculiar non-place of this part in the theory of information that we now turn.

Toward a Theory of the Bureaucratic Speech-Act

We are trying to come to terms with the concept of information as an alibi of bureaucratic rationality. The inquiry matters not because we are, in the last instance, apes in an iron cage, but because this type of rationality remains normative in many domains of modern life. We expect, even if we do not nearly always get, a degree of explicitness about rules – we want the instruction manual, even if we do not want to read it. We rely on a precise degree of correlation between our actions, especially our commands and requests, and the results that we desire. For the sake of that correlation, we are often happy to follow the rules. The advance of information technology intensifies this expectation: placing a call on your iPhone is a very different thing from training a dog or coaxing an ox. Of course, what technology obscures are the specific social relations that sustain it: the engineers, the factory workers, the salespeople, the troubleshooters, etc., linked in a network of bureaucratic dependency that boggles comprehension.[29] And what sustains these links are the modern habits of documentation and explication. There is no use denying the reality, or the pertinence to our

reality, of information; not without reason, many have said that information is the basic unit of modern western life. All the same, we might benefit from following those who, in a critical spirit, have attempted to show the limitations of what modern reason prescribes.[30] It is to these limitations, and a glimpse of their genealogy, that we now turn.

When Dretske declares, emphatically, that the memo as a channel is not a "performative act," he evokes Austin's distinction between constative and performative speech. Austin launches the lectures collected in *How to Do Things with Words* on the legs of this distinction, exemplified by the intuitive contrast between statements like "He is running" (said of someone as he darts past) and statements like "I do" (as spoken when the speaker is at the altar, facing his or her spouse-to-be). Of the latter, Austin wittily observes, "When I say, before the registrar or altar, &c., 'I do,' I am not reporting on a marriage: I am indulging in it."[31] Here the distinction seems fairly – and thanks to Austin's phrasing, unforgettably – clear. But note that the crucial point of contrast is not the grammatical form of the utterance (which can, as Austin shows, be difficult to generalize). The contrast hangs on what we might call the framework of evaluation. With constative utterances, we can peg them to the apparently simple test of true or false: *e.g.,* is he really running? or doing something else? Performatives require a different test, a test of what Austin refers to as their "happiness" or "felicity." Thus, saying "I do" can fail to clinch the marriage ceremony for a number of reasons: the person officiating is neither ordained nor a judge,

there are not the requisite witnesses, I am in a certain locale and my partner is of the same sex, etc.[32] These reasons, or "conditions" as Austin calls them, are matters of convention, not truth. Again, the salient point is that without my performing the appropriate linguistic act – saying "I do" – I cannot, in fact, *be* married: the utterance is an act "constituting," as Dretske says, the event of which it forms a signature part.

As it happens, things are muddier than the apparent felicity of this first exposition suggests. The distinction between constative and performative buckles under the following observation, pursued by Austin over the course of his lectures: the success of declarative statements, too, rests on the fulfillment of certain socially enforced conditions. Asserting a fact, for instance, in the absence of belief – saying "Herman won (lost) the coin toss," when the speaker knows that it was someone else – amounts to that species of infelicity Austin labels an abuse, "parallel," he says, to tendering a promise that one does not intend to keep.[33] (That is why a falsehood and a lie are different animals: calling me a liar imputes to my statement not only lack of truth, but also breach of trust.) This parallel prompts Austin to abandon his initial distinction between types of utterances, and to speak instead of the multiple dimensions of a single speech-act: the locutionary, illocutionary, and perlocutionary. The *meaning* of an utterance, which Austin assimilates to the locutionary dimension, differs from but depends on its illocutionary *force*, in virtue of which to speak is to take action, to occupy an eventful point in social space. To

complete the analysis, we must attend to the perlocutionary *effects* which that utterance has on those who read or hear it.[34] On to this view, what is communicated emerges *within* the communicative encounter; it is (to appeal to the title of Austin's book) the work that our words *do*, when we employ them in concrete situations and in particular ways.[35]

Austin's three dimensions of analysis are meant for any kind of utterance, however apparently straightforward. But let us take an intentionally devious example. A manager says to a group of employees, "One of you ought to follow up with Smith about that." As locution, we need to grasp the meaning of the idiomatic phrase "to follow up with," along with the contextually specific references of the proper noun and the demonstrative. There may be other referential questions – *when* should this happen, *who* is among the people addressed as "you," and what would the intended following-up look like – in posing which we are sliding imperceptibly toward the illocutionary side. Here the questions concern intention as much as reference, which is to say, they are questions about the speaker, not the speech itself. It matters whether the manager intends her utterance as a command, a request, or the assertion of a suggestion; and equally important, whether she is authorized in this context to make demands. More problematically, we might interrogate the *sincerity* of her intention: does she believe that following up with Smith is really necessary, or is she perhaps paying lip-service to something that she would, in fact, rather not be bothered about? And unless she is speaking to an audience of

stones, or a room full of empty chairs, perlocutionary effects will ensue. The questions here concern the audience. Will someone follow up with Smith? Are there other, unintended consequences? These may be difficult to detect, but like a spider in a shoe, we neglect them at our peril. Does the manager's potentially passive-aggressive remark kindle resentment, for instance, which will make its sting felt later on?

This view of communication is thoroughly relational. The work words do is to create and sustain, and/or distort and disrupt, social relationships. This explains Austin's choice of examples generally – speech-acts like marrying and betting – and his special concern with the status of the promise. Indeed, the illocutionary dimension of the promise prompts a wider, epistemological worry about what it means for our words "to be taken 'seriously'":

> [W]e are apt to have a feeling that their being serious consists in their being uttered as (merely) the outward and visible sign, for convenience or other record of information, of an inward and spiritual act: from which it is but a short step to go on to believe or to assume without realizing that for many purposes the outward utterance is a description, *true or false*, of the occurrence of the inward performance.[36]

This assumption, to which Austin concedes that we are understandably liable, is precisely what he takes exception to, *i.e.*, the view that the "utterance is a description" of some *other*, non-linguistic – or more properly, private – event. His passing reference to "information" is *a propos*. The picture here (of "such fictitious inward acts"[37]) is not unlike what Dretske

presupposes in describing the message as "intended to convey information about a prior, independent choice […]." This view, the Dretskesque (as opposed to the Austinian) view, regards the meaning and the message as distinct not merely in theory, but as a matter of fact. Whether to an event in the room or an event in the mind, information *refers* to something of a different order from itself, and communication consists in the propagation of this reference along a stable channel to a different point in time and space.

Dretske, wishing to put the phenomenon of reference on firm ground, needs to assume both the stability of the channel and the fixing of possibilities at the source. Both assumptions require a prior decision about relevance: the channel, in contrast to the source, has "no relevant alternative states." That we treat this decision as "*absolute* and *fixed*" for the purposes of analysis, he calls "a harmless fiction," admitting that what counts as relevant "is an issue […] responsive to the interests, purposes, and yes, values of those with a stake in the communication process."[38] But how and when does one communicate about the parameters of relevance? Who decides what it is possible to say? And who decides, and according to what criteria, that one does or does not have a stake in the communication process, *i.e.*, the relevant parties? Such questions return us, in a way, to Austin's worry about the status of intention. Intending to convey information, or otherwise to communicate, does not require a separate act of disclosure, supplementary to or supervening on the act of

communication: rather, it is manifest in the success of our speech-acts. And if sincerity is one of the conditions of this success, relevance is another.[39] (The fear that we might have failed of this condition prompts such self-dismissals as "Never mind" and "I was only thinking out loud.") To talk "seriously" is to exert illocutionary force, but this force is incompletely pictured as the propagation of a signal along a physical channel. As Austin points out, though vocal noises produce words, "the uttering of a word is *not* the consequence of the uttering of a noise."[40] Nor can we predict a word's consequences by consulting a dictionary. What makes a noise communication is its participation in another order of complexity. It is, of course, perfectly possible to adopt a level of abstraction at which this complexity appears reduced to regular and purely physical chains of cause and effect. At least some of these causes and effects would be "inward acts," as Austin calls them. He objects to that "fiction," on the grounds that it threatens the mutual bondage that speaking and writing sustain, which is another way of saying that whether the fiction is harmless depends on where one stands.[41]

To take stock: we have two competing pictures of communication. One shows thickly textured speech-acts that require close, if spontaneous, interpretation; the other, causal chains that can be measured at a distance efficiently and with precision. We shall complicate this contrast exhibition. First, let us recall that the contrast has a history – the history that Guillory relates, of the submerging of the norms of rhetoric in the norms of

information. Eschewing the traditional devices of oratory (tropes, schemes, formulaic addresses of all sorts), the nineteenth- and twentieth-century manuals for business writing and general composition cited by Guillory promulgate models of clarity and concision. These models responded to the demands of new modes and technologies of communication and commerce.[42] The ornate and flowery business letter withered and died, and the modern memo, with its perfunctory "To:" and "From:" and its no-nonsense exposition, was born. With the memo – if we entertain Guillory's thesis – the concept of a purely informative writing found its paradigm. Guillory follows Mary Poovey in tracing the source of this sea-change to the vexed status of rhetoric in the eighteenth century. During this period, we find "opprobrium increasingly heaped on eloquence or rhetoric," with the opprobrious frequently being those who had themselves profited from rhetorical training.[43] But this censure was not necessarily democratic in spirit, a reaction to rhetoric's traditional status as a tool of the elite. Rhetoric falls into ill repute because persuasion itself becomes suspect, signifying a disruptive contagion. Poovey's work helps us see how new discursive norms emerged from a crucible of anxiety about the status of discursive authority – and perhaps more profoundly, about the inwardness of discursive intention. Thus the urgent question is not, as I said earlier, "Who has the right to be heard?" but the more subtle one, "How can one justify one's desire for a hearing?" In other words, what is the intention to

persuade? Is it a positive or negative, a necessary or superfluous, a publicly useful or merely a self-serving, social force?[44]

These questions ripple around an epistemic shift. On one telling, what broke rhetoric's hold, shattering its antique mirror of civic virtue and moral character, was the eruption of experience. In tandem with the spread of print, the promotion of experience as a category entailed a radical dispersal of the capacity to know. This is not the right to be informed (a distinct and probably subordinate, development). The capacity to know signifies the ability – indeed, the obligation – to advance claims, to claim a perspective. The claims to knowledge that print circulated – including scientific discovery, political argument, and religious epiphany – remain plagued by doubt. This doubt registers less the possibility for calculated deceit – something rhetoric's champions had always recognized – than a fear of systematic delusion. Such doubt, which we might well call "skeptical," registers a fear of the failure of experience itself. If we regard experience as the ground of all meaning, what happens if experience (yours, mine, anyone's) fails to mean? My conviction might rest on a dream; it might be the machinations of an evil demon. In which case, woe to those whom I cajole into sharing it.

Poovey offers many illustrative cases, but we can content ourselves with Daniel Defoe. As Defoe worries in the eighteenth century, "a man may speak in words, but perfectly unintelligible as to meaning; he may talk a great deal, but say nothing."[45] A traditional understanding regarded

language and meaning as inseparable, a double endowment of divine origin. The capacity to speak, and the capacity to reason and comprehend, distinguished humanity from the order of the beasts, for Nature was a book written by the Creator and lying open to the perusal of Man. Not only to acknowledge its possibility, but really to reside in the gap between words and meanings, is to lose sight of that order. In the grip of such loss, Defoe anticipates the modern theory of information by divorcing, analytically, the meaning from the message – or what he calls "words" from "sense." The agent of this divorce is a third term: "noise." For Defoe, sense retains the character of the true, the immutable, and the divine; of it, we can say that

> the same ever was and will be so, in what manner and in what language soever 'tis expressed. Words without it are only noise, which any brute can make as well as we, and birds, much better, for words without sense make but dull music.[46]

In the eighteenth century the word "noise" was hardly new. Nevertheless, we can detect in Defoe's usage a new level of abstraction. As the sediment left over after "words" have been separated out from "sense," "noise" differs from truth's traditional enemies: sophistry, lies, and deceit. It differs because it signals not the intentional perversion of the true, but rather a failure of intention: as "noise," words align their speaker not with the Father of Lies, but with the brutes. Noise is akin to nonsense, but the former evokes a phenomenon at once physical and social; as the *OED* records, from its earliest uses "noise" pertained to the sounds "made by

voices, shouting, outcry."[47] It raises the ghost of the crowd. It is a social sound, full of the fury of the masses, signifying anarchy and destruction.

Does the effort, chronicled by Guillory, to teach writing as *something other* than – as *anything but* – a rhetorical practice, speak to the fear of persuasion run amuck? And to an urge, not so much to suppress discourse, as to exorcise, to "forget," its perlocutionary effects? If so, to what degree is that fear still with us? According to Stanley Cavell, one of Austin's most sensitive interpreters, *How to Do Things with Words* shows traces of such an urge, in spite of its studied attention to the moral and ethical registers of everyday speech. With a connoisseur's delight, Austin tracks subtle but profound shifts of force behind apparently minor substitutions (the tense of a verb, the choice of a preposition). And yet, this attentiveness serves "a theory of language that pictures speech as at heart a matter of action and only incidentally as a matter of articulating and hence expressing desire."[48] Another way of putting this is to say that an emphasis on social convention – the motor, for Austin, of illocutionary force – can incline us to imagine that the impact of the speech-act is decided by convention: that its success depends primarily on fulfilling conditions that the student of language might, in abstraction, tally up. But this inclination neglects the fact that the force of an utterance lies open to negotiation, just as its meaning waits on interpretation. Austin's concern with failure can be read as a tacit acknowledgment of that vulnerability (as can the wit and brio of his prose). But to fail at a highly ritualized performance – "I see a vessel on the stocks,

walk up and smash the bottle hung at the stem, proclaim 'I name this ship the *Mr. Stalin*' and for good measure kick away the chocks; the trouble is, I was not the person chosen to name it"[49] – is very different from failing, say, when I make a promise. Failure at the first is often apparent, and it makes me a fool. Failure at the second, especially where I succumb to the temptation to insincerity, may come to light only later, and it brands me as something else (a knave? a bad friend? only human?). The latter sort of failure typically distributes its effects; while I, as the promisor, occupy the eye of blame, the responsibilities can ramify. Among other complications, the statute of limitations may be open to dispute. Or what if I did not explicitly flag my utterance as a promise – what if, as I later claim, you imputed the intention to me in error? Or what if, more troublingly, my intentions were good, but I had a false idea of my own abilities?[50] Austin deals with these difficulties, it is true. But his insistence on the binding force of convention may belie the ordinariness of its failure. (Voters and jilted lovers will know what I mean.)

Liability to failure haunts human communication. Efforts to insulate against failure's *physical* causes (by means of technology) consort with efforts to cope with its *social* causes – by means of ritual, convention, and procedure. Illocutionary formulas like "I promise" evoke normalized procedures and criteria for performance. "Perlocutionary acts," by contrast, "make room for, and reward, imagination and virtuosity, unequally distributed capacities among the species."[51] Unequally distributed,

perlocutionary effects can as easily comprise disequilibrium as promote stability, congregate as divide. Keeping that in mind allows us to see a discursive prescription in Weber's claim that

> Bureaucracy develops the more perfectly, the more it is "dehumanized," the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements which escape calculation.[52]

For "bureaucracy," read "bureaucratic discourse." I contend that the concept of information refers in the first place to the discursive performance of bureaucratic rationality.[53] For Weber (like his latter-day heir Foucault), the rationality implied by bureaucratic modes of power depends on a discipline ingrained in its subjects: a discipline perhaps historically unique to the degree that its ultimate goal is less the production of restraint than of homogeneity. The identification of the person with his function, as an ideal, reflects the suppression of personal differences – as opposed to their whetting to a finer point of distinction, which we find in more traditional forms of discipline persisting today (*e.g.*, athletic training, religious morality, or education in the liberal arts). No discipline is directly observable; we may observe only its effects in performance. But this invisibility poses a problem for the discipline described by Weber: how can we observe a performance distinguished by its lack of distinction?

We can reframe the problem in terms of the relation between belief and legitimacy. Bureaucratic authority, being in Weber's eyes the most rational in its methods, enjoys the greatest claim to being legitimate (which

derives from the Latin "lex" and denotes, as the *OED* has it, "conformable to law or rule"). But this claim is an empirical one. "[T]he legitimacy of a system of domination," Weber writes,

> may be treated sociologically only as the probability that to a relevant degree the appropriate attitudes will exist, and the corresponding practical conduct ensue. It is by no means true that every case of submissiveness [...] is primarily (or even at all) oriented to this belief. (p. 214)

The official issues commands, and in a legitimate structure of command, it is normal that his subordinates obey. But the attitudes giving rise to this obedience can only be inferred. This opens the door to a legitimacy nobody believes in – an obedience, in other words, performed without sincerity. Yet it is not so much that sincerity is absent, as that its presence doesn't matter, doesn't contribute anything. It is, from the point of view advocated by Weber, irrelevant. The classical sociologist and the paradigmatic bureaucrat have this in common: they stand at a remove from the social relations and discursive situations that they endeavor to organize or understand. This remove is – in contrast to the social distance enforced by older forms of stratification – a mode of abstraction.[54]

Conclusion: Information and Pedagogy

To return to the occasion of my essay, what does it mean when "information" becomes a governing term in the research process? I have tried at length to show the kinship between information and a certain type of rationality – a kinship at the heart of the historical development of

bureaucracy – because this type of reasoning is not necessarily what we mean, or what we want, when we talk about "research" in the academy. Such rationality insists that the rules governing judgment, the rules that distinguish "good" from "bad" in the exercise of an activity, can be made explicit. It assumes further that this explication can render the practice in question transparent to those who are not themselves steeped in it. On the idea of this transparency rests much of the modern idea of expertise. But there exists a philosophically serious critique of this idea. In order to be made explicit, a judgment must first be capable of being spelled out as a proposition: "I think *that*…" or "It is necessary *that*…." Echoing this grammar, philosophers refer to such judgments as instances of "knowing-that." The latter differ from the judgments that remain implicit in practice, which are said to exhibit one's "knowing-how."[55] If I know *how* to do something – reading a book, let's say, or riding a bike – must this knowledge take the form of submerged or latent propositions, like a list of instructions that I carry in my head? The classic argument for the priority of knowing-how comes from Gilbert Ryle:

> Knowing a rule of inference is not possessing a bit of extra information but being able to perform an intelligent operation. Knowing a rule is knowing how. It is realized in performances which conform to the rule, not in theoretical citations of it.[56]

We might very well express a rule of inference in propositional terms (*e.g.*, modus ponens). But my knowledge of that rule, like my knowledge of riding a bike, "is realized" only in my actually *doing* something: in making the

correct inference. To suppose the opposite plunges us into an infinite regress. As Ryle suggests, the activity of inference just *is* applying the right rule in a given situation: I am getting wet; aha! it must be raining. If this activity itself requires "extra information" about a rule, how do I know which rule to apply, if not by a prior act of inference? And if *that* judgment requires another rule in turn…I will never come in out of the rain.

Ryle's argument illuminates the gap between knowledge and information. If, as Martin Frické claims, information is "the recorded counterpart of true propositions,"[57] then it exists in abstraction from the knowing-how that embodies judgments about the world. Specifically, information exists, *a fortiori* confers on communication its properties of precision and efficiency, only in relation to a prior set of relevant possibilities. Yet this abstraction does not arise on its own; it comes about as a result of other judgments – judgments that isolate the relevant from all the rest. This relation has pedagogical significance. For one must know *how* to parse possibilities. Consider, for example, the way in which librarians frequently emphasize finding reliable information, where "reliable" is usually synonymous with "scholarly." This emphasis suggests that the relevant set is defined by regular limits on the production and dissemination of documents (academically credentialed authorship, norms of evidence and citation, peer-review, bibliographic control, etc.). Then consider a particular occasion for judgment in relation to this set. Does a psychological study reporting on the salience of advertising among college students count as

information? Let us suppose that there is no reason to doubt the authors' credentials or the journal's editorial process. The study may be informative: let's say that the reader did not previously know of the existence of such studies, or about such findings. But it may not be informative in the right way, in the "scholarly" way, to someone working in anthropology. Anthropologists of a certain stripe may not recognize the work of experimental psychologists as generating a relevant set of possibilities. But the possibilities in question have to do much more with modes of description, ways of sensing and feeling, and styles of argument – all of which are implicit in scholarly work – than with particular propositions abstracted from them: "This study says that X."[58] As Ryle puts it, in a passage worth quoting at length,

> The fact that mathematics, philosophy, tactics, scientific method and literary style cannot be imparted but only inculcated reveals that these too are not bodies of information but branches of knowledge-how. They are not sciences but (in the old sense) disciplines. The experts in them cannot tell us what they know, they can only show what they know by operating with cleverness, skill, elegance or taste. The advance of knowledge does not consist only in the accumulation of discovered truths, but also and chiefly in the cumulative mastery of methods.[59]

The concept of information, like Ryle's image of "the accumulation of discovered truths," corresponds to a world of atomic facts: facts plucked from the methods that collected and the perspectives that enunciated them, and remanded to a receiver for evaluation before being filed away.[60]

By identifying information with declarative knowledge, and failing to distinguish between knowing-how and knowing-that, the ACRL Standards resort to a highly abstract perch from which to survey the research process:

> 5. The information literate student determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences.
>
> *Outcomes Include:*
>
> a. Investigates differing viewpoints encountered in the literature
> b. Determines whether to incorporate or reject viewpoints encountered[61]

I do not dispute that this summary, after its fashion, describes the activity of thinking through the implications of one's research. But as an explication, it is not very good. It succeeds at both spelling out the obvious, and failing to capture the nuance and complexity of the intellectual labor to which it refers. Is surveying the literature in a field really a binary operation, a matter of "incorporate or reject"? The Standards here imply that the meaning ("the individual's value system") and the message ("differing viewpoints") are completely distinct phenomenon – as if to have "encountered" the perspectives of others is not also to be "impacted" by them, as if to be able to assess those perspectives does not require having "incorporated" them. We may, indeed, "reject" another's perspective, but we are not computers; we don't thereby erase it from our memory banks. Nor would it be useful to do so. Our "value system" is as informed by rejection as acceptance; both are performative, discursive acts.

The problem with the Standards, on my view, is not their inadequacy as description. It is the fact that they *prescribe* the very abstraction that, in the interest of administering reason, they resort to.[62] The explication of a skill amounts to its own kind of skill, and that skill is performative. As Ryle says, "experts […] cannot tell us what they know, they can only show us." Each showing will be particular. And academic discourse, for all its emphasis on methods and rigor, prizes this particularity.[63] "Show us something new" is the demand faced by virtually every researcher, whatever her field. Academia, of course, fetishizes expertise in many ways. But for those privileged enough to engage in it, the demand of academic discourse for novelty ritualizes the promise and risk of any communication whatsoever: where the writer or speaker has to cross that semi-permeable membrane between what a body knows, and what it knows how to say. Academic discourse inherits the institutional role of rhetoric (although to quite different political and social ends): to coax judgment into the open, to create space for the craft that makes explicitly intentional action out of curiosity, frustration, wonder, antagonism, and desire.[64] This is what the "forgetting of rhetoric" forgets in its own desire for a style of communication shorn of the motives of persuasion. What the practitioners of rhetoric grasped, implicitly, was that the explicit and the implicit inform and reflect each other. In his treatment of illocutionary verbs like *to promise* and *to bet*, Austin notes that they "serve the special purpose of *making explicit* (which is not the same as stating or describing) what precise action it is that is being performed by

the issuing of the utterance."[65] Here we see a different usage of "explicit" from Weber's; for Austin, to make explicit is *not* to describe, but to signal or flag, and this signaling or flagging remains part of the speech-act. If I tell you, "We have not much further to go," and you seem doubtful, I can reply, for emphasis, "I promise." My first statement may be a promise of sorts, but my second makes it clear, by clearly committing me to wrapping things up. In perlocutionary terms, I am trying to reassure you. The two statements share a reference (the distance we have left to go), but they differ along the other dimensions discussed by Austin. As explication, my second statement does not abstract from the situation; indeed, in virtue of my now explicit promise, it plunges me deeper in.

Discourse – how we respond to others, in an effort to justify ourselves to them – is where we perform our "value system" and so discover it. The work of revelation may happen only in our heads; it may happen on the page, around the table, or behind the podium. But acts of communication serve not merely to transmit our values to others. They reveal those values to ourselves. Apart from the communicative act (broadly understood), there is no access to the intentionality of others – nor to our own. To glean intention is an art, requiring finesse, an embodied way of leaning into an encounter, inseparable from the openness to perlocutionary effects. And the *art* of persuasion offers a platform for finessing our own intentions; hence it is a generative act, a mode of creating or discovering – rather than selecting among – possibilities.

1 For a seminal version of this argument, see David Bartholomae, "Inventing the University," in *When a Writer Can't Write: Studies in Writer's Block and Other Composing-Process Problems*, ed. Mike Rose (New York: Guilford Press, 1985), 273–85. An ongoing debate in the field of rhet/comp concerns the significance of disciplinary norms for academic writing, with some scholars insisting on a kind of mutual incomprehensibility among the disciplines, and some proposing a more fluid model, wherein certain features emerge as salient to all academic writing (or even public discourse writ large). Joseph Harris, for example, boils down academic writing to a "critical practice," the components of which are "a strong use of the work of others and a reflectiveness about one's own aims in writing." "Revision as a Critical Practice," *College English* 65, no. 6 (2003): 577, doi:10.2307/3594271.

2 James Elmborg, "Critical Information Literacy: Implications for Instructional Practice," *The Journal of Academic Librarianship* 32, no. 2 (2006): 196, doi:10.1016/j.acalib.2005.12.004. Other useful works advocating a critical approach to or, critique of, information literacy include the following: Wendy Holliday and Jim Rogers, "Talking about Information Literacy: The Mediating Role of Discourse in a College Writing Classroom," *Portal: Libraries and the Academy* 13, no. 3 (2013): 257–271, doi:10.1353/pla.2013.0025; Heidi Jacobs, "Information Literacy and Reflective Pedagogical Praxis," *The Journal of Academic Librarianship* 34, no. 3 (2008): 256–262, doi:10.1016/j.acalib.2008.03.009; Kevin Ketchner and John J. Doherty, "Empowering the Intentional Learner: A Critical Theory for Information Literacy Instruction," *Library Philosophy and Practice* 8, no. 1 (2005): http://digitalcommons.unl.edu/libphilprac/70; Allan Luke and Cushla Kapitzke, "Literacies and Libraries: Archives and Cybraries," *Curriculum* Studies 7, no. 3 (1999): 467–491, doi:10.1080/14681369900200066.

3 Van Hillard, "Information Literacy as Situated Literacy," in *Teaching Literary Research: Challenges in a Changing Environment*, ed. Kathleen A Johnson and Steven R Harris (Chicago: Association of College and Research Libraries, 2009), 16.

4 Maura Seale, "Information Literacy Standards and the Politics of Knowledge Production: Using User-Generated Content to Incorporate Critical Pedagogy," in *Critical Library Instruction: Theories and Methods*, ed. Maria T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 222.

5 John Guillory, "The Memo and Modernity," *Critical Inquiry* 31, no. 1 (2004): 108–132.

6 Christine Pawley observes that "the term 'information' as we understand it today traces its ancestry to the Enlightenment and the development of a rationalist belief that people could be shaped for the better – 'in-formed' – through reading. " "Information Literacy: A Contradictory Coupling," *The Library Quarterly* (2003): 428.

7 In the words of the philosopher Robert Brandom, discourse involves the "game of giving and asking for reasons." *Making It Explicit: Reasoning, Representing, and Discursive Commitment* (Cambridge, MA: Harvard University Press, 1998), 117 and *passim*. For Brandom, social intercourse entangles us in this game, the moves of which involve staking claims (explicitly or implicitly, in word or in deed) and passing public judgments (again, implicitly or explicitly) on the claims of others.

8 On the performative dimensions of early modern rhetoric, see Lynn Enterline, *Shakespeare's Schoolroom: Rhetoric, Discipline, Emotion* (Philadelphia: University of Pennsylvania Press, 2012).

9 Rhetoric was, in the Western tradition, a civic practice, *a fortiori* a predominately male one, because *domestic* conflicts – defined in contrast to the civic – were traditionally marked by the dominance of a man over his household, and as such, theoretically acceptable of resolution by coercive, rather than persuasive, means. For similar reasons, rhetorical training remained relatively confined to the social elites, there being little scope for the point of view, say, of a peasant or servant to demand consideration on parity with that of his landlord or employer.

10 Guillory, "The Memo and Modernity," 119.

11 Guillory, "The Memo and Modernity," 112.

12 JoAnne Yates, *Control through Communication: The Rise of System in American Management* (Baltimore: Johns Hopkins University Press, 1993), 11.

13 Shoshana Zuboff, *In the Age of the Smart Machine: The Future of Work and Power* (New York: Basic Books, 1988), 42.

14 Max Weber, *Economy and Society: An Outline of Interpretative Sociology*, ed. Guenther Roth and Claus Wittich, vol. 1, 2 vols. (Berkeley: University of California Press, 1978), 53.

15 Claude E. Shannon, "A Mathematical Theory of Communication," *The Bell System Technical Journal* 27, no. 3 (1948): 379.

16 As Shannon's paper shows, valuable statistical properties emerge from consideration of the message set. One of his extended examples involves sentences in English, which he analyzes as a simple type of Markov process. A "Markov process" describes a system of sequential states – in the case of natural language, either words or letters – in which each state is associated with a certain probability of transition to any other available state. Those states and their probabilities furnish predictive knowledge of the system as a whole. Given a table of two-word combinations and the relative frequency of their appearance before any third word, the engineer making apparently random selections can produce, like a literary Dr. Frankenstein, an awkward but eerily lively semblance of intentional human prose.

17 Fred Dretske, *Knowledge and the Flow of Information* (Cambridge, MA: MIT Press, 1981), 4.

18 More formally, $I(s) = \log n$, where $I(s)$ represents the information generated by a source s, and n represents the number of possible states at the source. Here $s = 8$ (the number of employees). This formula describes the simplest case, where all states are equiprobable. The logarithm taken is to the base 2 because the possible states are analyzed in binary fashion.

19 Dretske, *Flow of Information*, 8.

20 On the concept of "levels of abstraction," see Luciano Floridi, *The Philosophy of Information* (Oxford: Oxford University Press, 2011), 46-79.

21 Admittedly, Dretske himself is less than precise when he calls the procedure "fair": I take him to mean that the procedure allots to each of the employees an equal chance of election, and that in the act of selection they appeal to the impersonal power of chance ("drawing straws, flipping a coin"). The procedure is fair in the sense that a coin toss is fair, *i.e.*, not biased, which is a necessary but arguably insufficient condition of fairness in the full sense of justice.

22 Dretske, *Flow of Information*, 238-39.

23 Likewise, it matters less whether the boss himself prescribed the procedure, than that the procedure be in place. From the bureaucratic point of view, rules of procedure, like the authority that derives from them, ideally attach to the office, not the officeholder.

24 Guillory, "The Memo and Modernity," 113

25 Weber, *Economy and Society*, 1:218.

26 As two different paradigms, Guillory contrasts the manager's *informed* knowledge to the doctor's expert one. The doctor has power over his patients on account of his discursive monopoly of a specific kind of knowledge, access to which is institutionally policed (only those who can become doctors can have it), and which allows the possessor to mobilize institutional resources and powers (only doctors can prescribe medication). What the manager knows, in virtue of her function, pertains to what her subordinates are doing. Much of that is gleaned from the actual practice of relationships between people: the daily hello, the solicitous conversation in the elevator. But the existence of formal procedures of reporting exhibits the premium put on *ensuring* that these relationships are regular (in the sense of "abiding by a rule"). When Guillory suggests that "even the doctors have learned of late what it means to be controlled, or managed," he reminds us that the figure of knowledge as power, perennially popular for academic analyses of society, romanticizes the knowledge that academics have the privilege of being paid to exhibit: a knowledge not subject to bureaucratic normalization. "The Memo and Modernity," 122. Now, of course, academics know what it is to be managed, too.

27 Dretske, *Flow of Information*, 129.

28 Ibid., 14. On nomic regularity as a criterion for an information channel, see 74-79.

29 John Seely Brown and Paul Duguid, *The Social Life of Information* (Harvard Business Press, 2002).

30 This critical spirit would include, of course, Marx, Nietzsche, Foucault, etc., as well as Weber himself.

31 J. L. Austin, *How to Do Things with Words*, ed. J. O. Urmson and Marina Sbisa, 2nd ed. (Cambridge, MA: Harvard university press, 1975), 6.

32 Austin provides a schema of these conditions, which I shall not elaborate here, on 14-15.

33 Ibid., 50.

34 Or perhaps more rigorously, we might say that "meaning," *qua* locutionary dimension, is an analytic term, but the communicative act itself is, in Kant's terms, originally (*a priori*) a synthetic whole. We may take its meaning in isolation for the purposes of logical or philosophical analysis, but that is not how communication actually *works*.

35 For a related reading, though one laden with critical caveats, see Jacques Derrida, "Signature Event Context," in Margins of Philosophy, trans. Alan Bass (Chicago: University of Chicago Press, 1982), 302–330.

36 Austin, *How to Do Things*, 9. For a philosophically rich reading of this passage, see Stanley Cavell, *A Pitch of Philosophy: Autobiographical Exercises* (Cambridge, MA: Harvard University Press, 1996), 77-87.

37 Austin, *How to Do Things*, 10.

38 Dretske, *Flow of Information*, 80 and 133.

39 Dan Sperber and Deirdre Wilson, *Relevance: Communication and Cognition*, 2nd ed. (Oxford: Blackwell, 1995).

40 "[T]he sense in which saying something produces effects on other persons, or *causes* things, is a fundamentally different sense of cause from that used in physical causation by pressure, &c. It has to operate through the conventions of language and is a matter of influence exerted by one person on another: this is probably the original sense of 'cause.'" Austin, *How to Do Things*, 113, n. 1.

41 "Accuracy and morality alike are on the side of the plain saying that *our word is our bond*." Ibid., 10.

42 Guillory, "The Memo and Modernity," 125.

43 Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: University of Chicago Press, 1998), 165.

44 At issue is rhetoric as a practice or habitus expressly oriented toward persuasion. For those in the grip of this habitus, a certain kind of performative competence in speech and writing ("eloquence") was the coin of the realm for those of a certain social pedigree ("gentlemen"), those to whom traditionally appertained the duties of civic participation and the prerogatives of polite society. This habitus had its uses. For one, it offered a means of organizing social intercourse in a world where verbal disputation was hardly the usual way of resolving conflicts. For the classic argument about the substitution of rhetorical competence for physical prowess in the passage from the Middle Ages to the modern world, see Norbert Elias, *The Civilizing Process: Sociogenetic and Psychogenetic Investigations*, trans. Edmund Jephcott, Revised ed. (Oxford: Blackwell, 2000).

45 Quoted in Poovey, *The Modern Fact*, 165.

46 Ibid.

47 *Oxford English Dictionary Online*, s.v. "noise, n.," December 2013. http://www.oed.com/view/Entry/127655.

48 Stanley Cavell, *Philosophy: The Day After Tomorrow* (Cambridge, MA: Harvard University Press, 2006), 159.

49 Austin, *How to Do Things*, 23.

50 Again, the point is not that an appeal to "fictitious inward acts" is theoretically justifiable. But any of these situations may characterize the discursive *response* to the apparent failure of a promise – they may be things that I will *say*, assertions I will make – and they will thus contribute to how the effects of that failure will be negotiated (mitigated, exasperated, etc.). In other words, where illocutionary force meets resistance, there we need especially to attend to the perlocutionary

dimension.

51 Cavell, *The Day After Tomorrow*, 173. For a reading of Austin that deals with social convention along similar lines, see Judith Butler, *Excitable Speech: A Politics of the Performative* (New York, NY: Routledge, 1997).

52 Weber, *Economy and Society*, 2:975.

53 As a norm, this performance is certainly not limited to the actual sites of bureaucratic work, even if the latter remain its crucible. As Weber claims, "Bureaucracy is *the* means of transforming social action into rationally organized action," where "rationally organized" means according to the explicit formulation of rules and procedures. *Economy and Society*, 987.

54 The classic argument on abstraction as form of domination can be found in Karl Marx, *Capital: A Critique of Political Economy*, trans. Ben Fowkes, vol. 1, 3 vols. (London: Penguin Books, 1990). See also Poovey, *The Modern Fact*, 333.

55 Weberian bureaucratic rationality amounts to the systematic effort to express "knowing how" as a form of "knowing that," subordinating the former to the latter.

56 Gilbert Ryle, "Knowing How and Knowing That," in *Collected Essays, 1929-1968*, vol. 2, 2 vols. (New York: Routledge, 2009), 217.

57 Martin Frické, "The Knowledge Pyramid: A Critique of the DIKW Hierarchy," *Journal of Information Science* 35, no. 2 (2009): 139.

58 For similar points, see Jeff Purdue, "Stories, Not Information: Transforming Information Literacy," *Portal: Libraries and the Academy* 3, no. 4 (2003): 653–662, doi:10.1353/pla.2003.0095; and Michelle Simmons, "Librarians as Disciplinary Discourse Mediators: Using Genre Theory to Move toward Critical Information Literacy," *Portal: Libraries and the Academy* 5, no. 3 (2005): 297–311, doi:10.1353/pla.2005.0041. In their case study of a composition class, Howard, Serviss, and Rodrigue found that both the librarian *and* the faculty member referred to research as a matter of "finding sources," in spite of an explicit desire, expressed by both librarian and instructor, to teach their students a more complex and discursively nuanced approach to the research process. Rebecca Moore Howard, Tricia Serviss, and Tanya K. Rodrigue, "Writing from Sources, Writing from Sentences," Writing and Pedagogy 2, no. 2 (2010): 177–192, doi:10.1558/wap.v2i2.177.

59 Ryle, "Knowing How," 224.

60 As pointed out by Maura Seale in "The Politics of Knowledge Production," this discourse moots the issue of *who* had made the selection of possibilities in the first place – often a question of real political, economic, and cultural significance.

61 American Library Association, "Information Literacy Competency Standards for Higher Education," 1996-2014, accessed January 27, 2014, http://www.ala.org/acrl/standards/informationliteracycompetency. The "revised" standards, slated to appear sometime in 2014, may represent a shift toward a less explicitly procedural account of the research process. How far this shift is possible when the binding term remains "information" poses an interesting question, which I do not have scope to address here.

62 As John J. Doherty puts it, "information," according to the Standards, "is evaluated in strong procedural terms, not on critical terms." "No Shhing: Giving Voice to the Silenced: An Essay in Support of Critical Information Literacy," *Library Philosophy and Practice* 9, no. 2 (2007): 28, http://digitalcommons.unl.edu/libphilprac/133.

63 Luke and Kapiztke argue that information literacy is actually quite compatible with the "training for *homo academicus* in schools and higher education," training which embodies, for the most part, norms of "Cartesian and Newtonian rationalism and objectivism." "Literacies and libraries," 471-72. Without disputing their account of the rationalism implicit in dominant pedagogical strategies, I would argue that the concept of information can be more fully understood as part of the fate of that rationalism in modernity, *viz.*, the normative ideals of bureaucracy. No doubt I am slighting a topic that calls for a more extensive treatment: the bureaucratization of the academy itself (of which "information literacy" would be but one symptom).

64 A stronger formulation would run "explicitly *justifiable* action," since the aim of academic discourse is to make explicit not only particular claims but also – and more importantly – the justifications for those claims. An act's being justifiable (as in the phrase, "justifiable homicide") depends on there being an intention manifest in its performance; we would not say that

an accident was "justifiable."

65 Austin, *How to Do Things,* 61. On this sense of "explicitness" and its role in the intentionality of discourse, see also Brandom, *Making It Explicit.*