Argumentation studies and dual-process models of persuasion

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Abstract

This essay discusses some interconnections between argumentation studies and persuasion effects research. Persuasion effects research is social-scientific work concerned with how and why persuasive messages have the effects they do; expressed broadly, such studies are concerned with identifying the factors influencing the effectiveness of persuasive messages and with constructing explanations of such effects.

The focus of this essay is an attractive general picture of how persuasive messages work that has emerged from research on persuasion effects: "dual-process" models. I first describe this emerging general picture, and then display some interconnections between it and argumentation studies, discussing both what it has to offer to argumentation, and what argumentation has to offer to it.

Dual-process models of persuasion

This description of the "dual-process" image of how persuasion works begins with a general overview, which is followed by a somewhat more detailed account. The description actually represents an amalgam of two different theoretical viewpoints--the elaboration likelihood model (ELM) of Richard Petty and John Cacioppo (Petty & Cacioppo 1986a, 1986b) and the heuristic-systematic model (HSM) of Shelly Chaiken (Chaiken 1987). But for my purposes here we can happily run these together.[1]

Overview of dual-process models

Dual-process models of persuasion are based on the idea that, under different conditions, receivers will vary in the degree to which they are likely to engage in systematic issue-relevant thinking--that is, thinking about issues and arguments relevant to the persuasive issue at hand. (This issue-relevant thinking is termed "elaboration" in the ELM version of this general approach.)

Thus sometimes receivers will engage in extensive elaboration, extensive issue-relevant thinking: they will attend closely to a presented message, carefully scrutinize the arguments it contains, reflect on other issue-relevant considerations (e.g., other arguments recalled from memory, or arguments they devise), and so on. But sometimes

[1] This description of the dual-process approach draws from an earlier treatment (O'Keefe 1990).

receivers won't undertake so much issue-relevant thinking; no one can engage in such effort for every persuasive topic or message, and hence sometimes receivers will display relatively little elaboration.

Elaboration continuum. The degree to which receivers engage in issue-relevant thinking thus forms a continuum, from cases of extremely high elaboration to cases of little or no elaboration. And these dual-process models suggest that this continuum is crucial in determining how persuasion works in any given circumstance--that is, the nature of persuasion varies as the degree of issue-relevant thinking varies. To bring out the variation in the nature of persuasion, dual-process models offer a broad distinction between two different persuasion processes (hence "dual-process"), sometimes described as two different "routes to persuasion": a "central" and a "peripheral" route.

Two routes to persuasion. The "central route" to persuasion represents the persuasion processes involved when elaboration is relatively high. Central-route persuasion comes about through extensive issue-relevant thinking: careful examination of the message's information and arguments, consideration of other issue-relevant material (e.g., arguments recalled or devised by the receiver), and so on. In short, persuasion through the central route is achieved through the receiver's thoughtful examination of issue-relevant considerations. (Hence this central route is also sometimes referred to as a matter of "systematic" processing by the receiver.)

The "peripheral route" represents the persuasion processes involved when elaboration is relatively low. Peripheral-route persuasion comes about because the receiver employs some heuristic principle, some simple decision rule, to evaluate the advocated position. For example, receivers might be guided by whether they like the communicator, or by whether they find the communicator credible. Thus in such cases receivers are said to engage in heuristic (rather than systematic) processing; instead of engaging in extensive issue-relevant thinking, they employ decision-making short-cuts.

The two "routes to persuasion" are not conceived of as exhaustive and mutually exclusive categories or kinds of persuasion. The two processes simply represent convenient idealized extremes on the underlying continuum of issue-relevant thinking. So, for example, at intermediate levels of elaboration, one expects to find some combination of systematic and heuristic processes. But it's convenient, for expositional purposes, to talk in terms of "two processes" or "two routes."

The general idea thus is that with variations in the degree of issue-relevant thinking (the degree of elaboration), different kinds of persuasion processes are engaged--systematic central-route processes for high elaboration, heuristic peripheral-route processes for low elaboration. And (as will be seen shortly) because different kinds of persuasion processes are engaged, the factors that make for persuasive success vary (that is, what makes for successful central-route persuasion is different from what makes for successful peripheral-route persuasion).

Given that the degree of elaboration is so important (to determining how persuasion works in any given case), the question naturally arises: what influences the degree of elaboration (the degree of issue-relevant thinking engaged in by a receiver)?

Factors affecting the degree of issue-relevant thinking

There are two broad classes of factors influencing the degree of elaboration that a receiver will likely undertake in any given circumstance. One of these classes concerns the receiver's motivation for engaging in elaboration, the other the receiver's ability to engage in such elaboration.

Influences on motivation. Although a number of different factors can influence a person's motivation for engaging in issue-relevant thinking, here I want to mention two leading factors. One is the personal relevance of the topic to the receiver (this is often glossed as a matter of the receiver's degree of "involvement" with the issue). As a given issue becomes increasingly personally relevant to a receiver, the receiver's motivation for engaging in thoughtful consideration of that issue increases (see, e.g., Petty & Cacioppo 1984; Petty, Cacioppo, & Goldman 1981; Petty, Cacioppo, & Schumann 1983).

A second is the receiver's level of need for cognition. "Need for cognition" refers to a person's tendency to engage in and enjoy thinking. This tendency varies among persons: that is, some people are generally disposed to enjoy and engage in effortful cognitive undertakings, whereas others are not. As one might suppose, people higher in need for cognition have generally greater motivation for engaging in issue-relevant thinking than do persons lower in need for cognition (see, e.g., Axsom, Yates, & Chaiken 1987; Haugtvedt, Petty, Cacioppo, & Steidley 1988).

Influences on ability. There are two notable factors influencing a person's ability to engage in issue-relevant thinking. One is distraction in the persuasive setting, that is, the presence of some distracting stimulus or task accompanying a persuasive message. (Researchers have used distractions such as having an audio message be accompanied by static or beep sounds, or having receivers monitor a bank of flashing lights.) Obviously, under conditions that would otherwise produce relatively high elaboration, distraction will interfere with such issue-relevant thinking (for a general discussion, see Petty & Cacioppo 1986a: 61-68).

A second factor influencing elaboration ability is the receiver's prior knowledge about the persuasive topic. The more extensive such prior knowledge, the better able the receiver is to engage in issue-relevant thinking (see, e.g., Wood 1982; Wood & Kallgren 1988).

Summary. As a way of summarizing these influences on the degree to which receivers are likely to engage in systematic issue-relevant thinking, consider these two circumstances: (a) a low-need-for-cognition receiver, listening to a persuasive message on a topic that he doesn't know much about, and that isn't very relevant to him personally, while there's simultaneously some distraction going on, versus (b) a high-need-for-cognition receiver, listening to a persuasive message on a personally-relevant topic where she's very knowledgeable and undistracted. Plainly, the latter case is likely to produce much more systematic thinking about the persuasive message.

The reason why these variations in the degree of issue-relevant thinking are important, according to these dual-process models, is that depending upon the degree of

issue-relevant thinking, different kinds of persuasion processes are activated--central-route in the case of high elaboration, peripheral-route in the case of low elaboration. I now turn to a somewhat more extensive description of each of those different kinds of persuasion processes, focussing on what's key to persuasive success in each process.

Central-route persuasion

Key: elaboration direction. In central-route persuasion (when elaboration is high), what's key to persuasive success is the evaluative direction of the receiver's elaboration (the evaluative direction of the receiver's issue-relevant thinking). That is, persuasive effects will depend upon the predominant valence of the receiver's issue-relevant thoughts: to the extent that the receiver is led to have predominantly favorable thoughts about the advocated position, the message will presumably be relatively successful; but if the receiver has predominantly unfavorable thoughts, then the message will presumably be relatively unsuccessful. Thus the question becomes: given relatively high elaboration, what influences the direction (the valence) of elaboration?

Influences on elaboration direction. Two particular factors stand out as influences on the direction of receivers' issue-relevant thinking. The first is whether the message's advocated position is proattitudinal or counterattitudinal. When the advocated position is one toward which the receiver is already favorably inclined--that is, when the message advocates a "proattitudinal" position--the receiver will presumably ordinarily be inclined to have favorable thoughts about the position advocated. By contrast, when the message advocates a counterattitudinal position, receivers will ordinarily be inclined to have unfavorable thoughts about the point of view being advocated. That is to say, everything else being equal, one expects proattitudinal messages to evoke predominantly favorable thoughts, and counterattitudinal messages to evoke predominantly unfavorable thoughts.

But if this were the whole story, then nobody would ever be persuaded by a counterattitudinal message. And we know that at least sometimes, people are persuaded by the arguments contained in counterattitudinal communications, and hence dual-process models suggest that a second influence on elaboration direction is the quality (the strength) of the message's arguments. Under conditions of extensive issue-relevant thinking, receivers are able to carefully examine the message's arguments. Unsurprisingly, then, the direction of receivers' elaboration depends (at least in part) on the results of such scrutiny: the more favorable the reactions evoked by the close scrutiny of message material, the more effective the message is.

So if a receiver's examination of the message's arguments reveals shoddy arguments and bad evidence, there's likely to be little persuasion; but if the message contains powerful arguments, sound reasoning, good evidence, and the like, the message will be more successful. Hence under conditions of high elaboration the quality (the strength) of the message's arguments influences the direction of elaboration (and thus influences persuasive success). (For examples of relevant research results, see Heesacker, Petty, & Cacioppo 1983; Petty & Cacioppo 1984; Petty, Cacioppo, & Goldman

1981; Petty, Cacioppo, & Schumann 1983.) Under conditions of high elaboration, then, it turns out to be important for persuaders to have good arguments (high quality evidence from well-qualified sources, discussion of important issues, evidence that is relevant to the conclusions drawn, and so forth).

Summary: central routes to persuasion. Under conditions of systematic issue-relevant thinking, the outcome of persuasive efforts depends upon the direction of receivers' elaboration: where a persuasive message leads receivers to have predominantly favorable thoughts about the position being advocated, persuasive success is likely. And the direction of receivers' elaboration depends (at least in part) on the quality of the message's arguments.

Peripheral-route persuasion

Key: heuristic principles. Dual-process models of persuasion suggest that under conditions of relatively low elaboration, the outcomes of persuasive efforts will turn not on the receiver's careful consideration of the message's arguments, but will instead be much more influenced by the receiver's use of heuristics, simplifying decision rules. These heuristics require little information processing, and are activated by peripheral cues, that is, by extrinsic features of the communication situation such as communicator characteristics (e.g., credibility). These heuristic principles are ordinarily not consciously articulated, but there is indirect evidence (of various sorts) that people do rely on these heuristics.

Two heuristic principles. A number of different heuristic principles apparently operate in persuasion; here I want to discuss just two relatively more prominent ones: the credibility and consensus heuristics.

One heuristic principle, the credibility heuristic, is based on the apparent expertise of the communicator, and amounts to a belief that "statements by credible sources can be trusted" (for alternative ways of putting this idea, see Chaiken 1987: 4; Cialdini 1987: 175). Thus, higher-credibility sources generally have greater persuasive impact. But--consistent with the dual-process image--the communicator's credibility has been found to have greater impact on persuasive outcomes when the receiver's degree of issue-relevant thinking is relatively low (e.g., when the issue is not very relevant to the receiver; see, e.g., Johnson & Scileppi 1969; Kiesler & Mathog 1968; Petty, Cacioppo, & Goldman 1981; Ratneshwar & Chaiken 1986; Rhine & Severance 1970). That is, the peripheral cue of credibility has been found to have greater impact on persuasive outcomes when elaboration is relatively low.

A second heuristic principle is the consensus heuristic, which is based on the reactions of other people to the message. This heuristic might be expressed as a belief that "if other people believe it, then it's probably true" (for variant phrasings, see Chaiken 1987: 4; Cialdini 1987: 174). When this heuristic is employed, the approving reactions of others should enhance message effectiveness (and disapproving reactions should reduce effectiveness). A number of studies have revealed the operation of such a heuristic; for example, several investigations have found that receivers are less

persuaded when they overhear an audience expressing disapproval (as opposed to approval) of the communicator's message (for a review, see Axsom, Yates, & Chaiken 1987).

Summary: peripheral routes to persuasion. Under conditions of low elaboration, the outcome of persuasive efforts depends less upon the direction of receivers' issue-relevant thinking than upon the operation of heuristic principles, simple decision rules activated by peripheral cues in the persuasion setting. Where receivers are unable or unmotivated to engage in extensive issue-relevant thinking, their reactions to persuasive communications will be guided by simpler principles such as the credibility and consensus heuristics.

Summary of dual-process models

The dual-process model is a convenient way of displaying the variation in persuasion processes, but it's important to keep in mind the underlying continuum of issue-relevant thinking. One way of crystallizing this idea is to see that (in considering what influences persuasive outcomes) there is something of a *tradeoff* between the impact of peripheral cues and the impact of elaboration (issue-relevant thinking): as elaboration increases, the effect of peripheral cues declines, and the effect of the receiver's issue-relevant thinking increases. For example, as variations in argument quality make more and more difference in outcomes, variations in communicator expertise make less and less (e.g., Petty, Cacioppo, & Goldman 1981).

Hence these "dual-process" models do not claim that (for instance) variations in argument quality will make no difference when elaboration is low, or that variations in communicator credibility will make no difference when elaboration is high. Rather, the suggestion is that, broadly speaking, the relative impact of elaboration and peripheral cues will vary as elaboration varies. With greater elaboration, persuasive effects come to depend more and more on the direction of elaboration (and less and less on peripheral cues); as elaboration decreases, the impact of peripheral cues increases (and that of elaboration declines).[2]

These dual-process models do not offer *the* definitive picture (for all time) of how persuasion works; they are not without flaw or immune to criticism. This general approach is only one of a number of different theoretical avenues to understanding persuasion; it does not explain everything about persuasion, and it certainly has defects. But this is plainly a very useful general picture (arguably the best in hand), and it certainly is an important step forward in our understanding of persuasive effects. For instance, one attractive feature of dual-process models is their ability to account for

[2] Actually, this description of dual-process models is not quite accurate, as one key issue dividing different dual-process models is precisely whether there is inevitably this sort of tradeoff between heuristic and systematic processing. The description given here represents the viewpoint of one dual-process model, the elaboration likelihood model (ELM): these are taken to be opponent processes. But the heuristic-systematic model (HSM) takes a different view, namely that where these processes co-occur they may produce additive or interactive effects (see Bohner, Chaiken, & Hunyadi 1994; and Chaiken & Maheswaran 1994).

apparently-conflicting findings in earlier research. Why is it that the communicator's credibility sometimes exerts a large influence on persuasive outcomes, and other times very little influence? Because (the dual-process models suggest) the degree of issue-relevant thinking varies, and (correspondingly) so does the degree of reliance on a simple decision rule such as the credibility heuristic.

With this general description of dual-process models in place, we can now turn to a consideration of some interconnections between these dual-process models and argumentation studies, beginning with what these models have to offer to argumentation.

What dual-process persuasion models offer argumentation

I think that dual-process models of persuasion have two offerings to bring to argumentation studies: some reassurance that normatively good argument matters, and an expanded conception of rationality.

Comfort and reassurance

The existence (and powerfulness) of central-route processes should give some solace to anybody, including argumentation scholars, concerned with normatively good argument. Anyone who has tried to teach argument-analysis skills (or critical-thinking skills, or the like) has had at least one moment of utter despair about the human condition and its perfectibility. In fact, as Willard (1989) has pointed out, there's a common theme in argumentation-related pedagogy to the effect that, left to their own devices, people will be "intuitive, lazy, and impulsive, swayed this way and that by their attitudes, prejudices, and pieties" (1989: 183). Hence the importance of teaching people appropriate skills and principles: "argument principles are seen as remedies to passivity, apathy, and ignorance" (1989: 198). Without such training, the argument-consumer-in-the-street "escapes from freedom, shuns the political arena, wallows in lethargy or cussedness, and succumbs to 'the forces of nonreason'" (1989: 199).

But the research associated with these dual-process models of persuasion has made it clear that people *do* operate in a familiarly "rational" fashion, at least sometimes. Argument quality *can* matter, *does* matter. Central-route persuasion *does* work. People really are (at least sometimes) more swayed by the force of the better argument.

I think that sometimes persuaders are inclined to think that they have to choose: either they can be successful in persuasion (by using various underhanded tricky manoeuvres), or they can make normatively good arguments (and be unsuccessful). But these dual-process models have made it plain that in fact making normatively good arguments doesn't necessarily mean having to sacrifice practical persuasive success. In various ways, then, those who are concerned with normatively good argument can find a good deal of comfort and reassurance in the findings associated with these dual-process models.

Expanded conception of rationality

This general dual-process picture (of how persuasion works) also suggests the usefulness of an expanded conception of rationality with respect to the processing of persuasive messages--expanded in two ways.

Heuristic use. First, this image of persuasion suggests a conception of rationality that is expanded to include the idea that the use of specific heuristics can be rational. Consider, for example, the credibility heuristic. In a world in which knowledge is so specialized, there will inevitably be experts and non-experts, and it's no good pretending otherwise. Particularly in circumstances in which a person is not inclined to give much systematic attention to the argumentative details, invoking the credibility heuristic is arguably a very rational thing to do.

Now of course this point should be heard as very much connected with recent discussions in the fallacy literature concerning argument-from-authority (*argumentum ad verecundiam*). Argument-from-authority is (now) not treated as inevitably a mistake in reasoning. In fact, sometimes the presumption almost seems to have been reversed, as when Douglas Walton (1989b: 21) writes: "appeal to expert opinion is, in itself, a legitimate form of argumentation, but one that can be employed wrongly." (For a similar view, see Willard 1990.)

So now, instead of treating reliance on authority as automatically illegitimate, the question has become one of specifying the conditions under which appeal to authority is or isn't fallacious. For example, Walton (1989c: 60) summarizes "six requirements to be met for an appeal to expertise to be reasonable. First, the judgment put forward by the expert must actually fall within his field of competence. Second, the cited expert must be a legitimate expert, and not merely a celebrity, or someone not an expert. A third factor is the question of how authoritative an expert is, even if he is a legitimate expert in a field. Questions of specialization within fields of expertise are relevant here. Fourth, if several qualified experts have been consulted, there should be some way of resolving inconsistencies and disagreements that may arise. Fifth, if objective evidence is also available, this should be taken into account. In particular, an expert should be able to back up his opinion, if queried, by citing evidence in his field. The sixth requirement is that the expert's sayso must be correctly interpreted." (For another effort at identifying conditions for the non-fallacious use of appeal to authority, see Govier 1992: 385.)

But I'm trying to come at this question--the question of when it's sensible to invoke authority--from a slightly different direction. These efforts (at specifying conditions under which appeal-to-authority is or isn't fallacious) indicate the sorts of considerations that ought to be taken up when one is engaged in intensive scrutiny of expert claims ("go see what other experts say," "check the objective evidence," and so on); that is, the concern is with the appropriate conditions for the use of authority-based reasoning in *systematic* processing. My point is a different, and perhaps more extreme one, namely, that the *non*-systematic reliance on expertise (as embodied in the use of the credibility heuristic) is arguably rational.

The very same points can be made with the consensus heuristic. Since it's at least possible that some other people have been able to give some more thought to the matter than one has been able to oneself, the presence of a consensus is at least a plausible guide to belief and action, and hence reliance on the consensus heuristic is (at least sometimes) arguably rational.

Again, one might point to parallels in the recent treatment of the *ad populum* fallacy. Commonly, appeals to the popularity of a belief or product are seen to be a fallacious basis for acceptability. Consider, for example, Govier's (1992: 170-171) characterization: "Many arguments are based on popularity. Someone tries to show that a product is good because many people select it or that a belief is correct because many people hold it. Such arguments are extremely flawed because the merits of something are one matter and its popularity another. The problem is that things can be popular for many reasons, and only one of these is their good quality."[3]

But--paralleling the treating of authority appeals--it is now being recognized that popularity-based reasoning is not inevitably illegitimate. For example, Walton (1989b: 106) writes that forms of reasoning such as "everybody accepts that A is true, therefore A is true" are "weak but sometimes reasonable forms of argument. For example, if a proposition is widely accepted and you have no evidence against it, then if you have to make a decision, it could be much more reasonable to presume that it is true than to presume that it is false."

And so, correspondingly, there has been some effort at distinguishing fallacious ad populum appeals from related but more defensible arguments. For instance, Walton (1989a: 172) notes that "appeals to popular views or presumptions taken to be widely plausible for a given audience or cultural group are a legitimate part of reasoned argument in a democratic political system." And Govier (1992: 181, n. 14) emphasizes that "appeals to the popularity of beliefs should not be confused with the notion of common knowledge [as a basis of argument] ... The difference is that the belief whose popularity is appealed to is not universal in a culture, nor is it basic and elementary. Typically, its content is somewhat controversial, speculative, or normative, but it is claimed to be popular."

Again, though, notice: I want to approach this matter from a slightly different angle. These discussions of *ad populum* are concerned with the appropriate conditions for the rational use of popularity-based reasoning in systematic processing. My point concerns

[3] Now Govier (1992: 181, n. 13) does acknowledge "It can happen that things are popular because they are, in some respect, good. But this is not always the case and, in any event, the point at issue here is whether things can be shown to be good because they are popular." There are two points to be made here. (1) In the present discussion, the point at issue is not whether things can be *shown* to be good because they are popular, but whether--given that one is not inclined or able to engage in systematic argument processing--popularity might not be a useful heuristic basis on which to make a decision. (2) Of *course* it's "not always the case" that things are popular because they're good--but this is only to acknowledge the fallibility of heuristic procedures. However, as discussed below, the fact that heuristic procedures are fallible is not necessarily a reason not to use them.

the rationality of the *non*-systematic reliance on popularity (as embodied in the use of the consensus heuristic).[4]

In a way, then, certain recent developments in the fallacy literature and the point I'm making here (about heuristic use) are coming at related phenomena from different directions.[5] In each case, the idea is that certain reasoning practices, practices that might be condemned as normatively indefensible, are being suggested to be rational practices, at least in some circumstances. But where recent discussions of argument-from-authority and *ad populum* have tried to emphasize their appropriate use under conditions of systematic scrutiny, these dual-process models can be taken to suggest that even the non-systematic use of authority-based and popularity-based reasoning is defensible.

I do want to emphasize that it's no strike against heuristics that sometimes they lead to bad decisions, or to less-than-ideal decisions. After all, even the most carefully constructed and applied systematic argument-evaluation procedure isn't guaranteed to produce good outcomes. All we have are fallible procedures. Some may be more fallible than others, but the fact that a procedure is fallible isn't necessarily a good reason not to use it. The fallibility of heuristics, that is to say, is no strike against their rationality.

And, as a related point, notice: the fact that heuristic-based decisions may be *more* fallible than ones based on systematic processing is also not necessarily a strike against the use of heuristics. True enough, everything else being equal, one will prefer whatever procedure is least fallible. The problem is, everything else *isn't* always equal--and that brings me to the second way in which these dual-process models point to an expanded conception of rationality. (The first way, it will be recalled, is that the use of specific heuristics can be rational.)

Having two processes. These dual-process models suggest a conception of rationality that is broad enough to encompass the general idea of *having both* heuristic and systematic modes of processing. That is, the existence of both central-route processes and peripheral-route processes is an arguably rational arrangement. People have limited capacities for issue-relevant thinking, and hence they need some way of

[4] Walton (1989b) in fact discusses popularity-based reasoning in a way that is similar to the point I'm trying to make out of these dual-process models. Concerning arguments of the form "everybody accepts that A is true, therefore A is true" and "nobody accepts that A is true, therefore A is false," he writes that these "are weak arguments in some cases that nevertheless have some plausibility value in directing a person toward a particular line of action when objective knowledge of the facts is lacking, yet a practical decision must be made. For example, if I am late for my train and do not know where the train platform is located, I may be guided by seeing everybody else in the area heading toward a tunnel." (1989b: 89-90)

[5] Fallacies and heuristics aren't precisely the same thing. Fallacies, as usually conceived, are particular types of arguments; heuristics are cognitive decision-making guides. But there is an underlying commonality here, as can be seen by considering argument-from-authority and the credibility heuristic. An argument-from-authority consists of a speaker S's asserting "expert E says X, therefore X." The credibility heuristic, as applied to a particular case, yields a receiver's reasoning that "this expert E (the speaker) says X, therefore X." That is, the underlying reasoning is the same. (A similar identity underlies *ad populum* and the consensus heuristic.)

allotting attention (allotting processing time)--and some way of handling issues that don't get so much concerted attention. What better (more rational) way than heuristics?

To step to the side for a moment, there's a general point to be made here concerning the relationship of normative and descriptive aspects of the study of communication, namely: a helpful/useful normative model of communication (of any given communication practice) is one that is responsive to the descriptive realities of communication. (The interplay of descriptive and normative aspects of argumentation has recently been explored by van Eemeren, Grootendorst, Jackson, & Jacobs 1993.) The connection to the current discussion is this: since people don't have unlimited capacities for issue-relevant thinking, our normative guides need to respect that limitation. It's easy to construct normative models that begin "assume you have all the resources you need, including unlimited time"--but it's harder to start from more realistic premises.

A similar point has been made by Schellens (1991: 389) in discussing argument-from-authority and *ad hominem* arguments as "acceptable fallacies." Schellens notes that "argument from authority is not acceptable" in an "ideal discussion" (in which "the partners are equal, have maximum opportunities to verify assertions," and so forth), but in circumstances involving "epistemic dependency of the participants amongst themselves or collectively from external sources," then "norms for a reasonable discussion ... cannot exist without the authority and *ad hominem* arguments."

In any case, the point I want to emphasize is that one should not think of peripheral-route persuasion as somehow intrinsically non-rational, or as less rational than central-route persuasion. The general idea of using heuristics (sometimes) is quite sensible (sensible, that is, as decision guides in circumstances in which concerted attention is not possible or desirable). So notice the larger rationality of persuasion here--in some circumstances receivers engage in close scrutiny, in others they (quite sensibly and rationally) don't, but overall they proceed in quite reasonable ways.

Approached in this way, an important question arises: what is a (normatively) *good* basis for distinguishing issues as meriting systematic or heuristic processing? Research on these dual-process models, of course, is simply aimed at describing what *is* the basis of such differentiation--that is, what influences whether one or another route is pursued in any given case. A separate question, of course, is what the basis of choosing *ought* to be.

To make this connection slightly differently: one of argumentation's traditional central concerns is enhancing people's capacities for systematic argument processing. What I'm suggesting here is that it may also be useful to enhance people's capacity to *choose* when to engage in such argument scrutiny. This point, too, can be expressed as a matter of an expanded conception of rationality. Instead of assuming that proceeding rationally inevitably involves extensive issue-relevant thinking, one might alternatively consider that proceeding rationally inevitably involves instead deciding *whether* extensive issue-relevant thinking is appropriate. After all, someone who

devotes just as much thought and attention to every single decision (which candy bar to buy, which career path to follow) is not acting sensibly.

In short, then, these dual-process models of persuasion seem to me to offer argumentation studies both some solace (that normatively good argumentation does matter) and some considerations for reflection (about an expanded conception of rationality).

But now I want to turn to traffic in the other direction, to a consideration of what argumentation studies might offer to these dual-process models.

What argumentation offers dual-process persuasion models

The problem of argument quality

In the earlier description of these dual-process models, I (purposefully) side-stepped an important problem--namely, the *definition* of "argument quality" (argument strength) in this research area. The problem is that in this research, "argument quality" has been defined *empirically*, in terms of observed persuasive effects.

Specifically: to obtain experimental messages containing "strong" or "weak" arguments, these researchers pre-test various messages; a "strong-argument" message is defined as one that elicits predominantly favorable thoughts when receivers think carefully about the message, whereas a "weak-argument" message is one that yields predominantly unfavorable thoughts under such conditions. Thus, as two of the most prominent dual-process researchers have explicitly acknowledged, these researchers "have ignored the specific qualities that render some arguments cogent and others specious" (Petty & Cacioppo 1986a: 32). Obviously, this is not a defensible treatment of argument quality; "argument quality" in this research is not defined by reference to some independent set of normative standards. (For a somewhat amplified discussion of this problem, see O'Keefe 1990: 110-111.)

In fact, however, if one examines the "strong-argument" and "weak-argument" messages, it's apparent that these *do* differ in normative quality--the "strong-argument" messages in fact do make normatively better arguments than do the "weak-argument" messages. These messages differ in (for example) the relevance of the evidence to the conclusions drawn, in the apparent self-interest of cited evidence sources, in the desirability of the benefits claimed to attach to the advocated position, and so on. (For sample messages, see Petty & Cacioppo 1986a: 54-59.)

So, on the one hand, in fact one cannot yet say that (under conditions of systematic processing) normatively-better arguments are more persuasive (than their poorer counterparts). One can't say this, because the research doesn't have some independently-justified normative standard for argument.

But on the other hand, that is certainly the most plausible hypothesis at present (for explaining the observed effects). That is, the most plausible current hypothesis is precisely that what makes those "strong-argument" messages more persuasive is that they have normatively better arguments. But if one is to sustain the belief that what

makes them more persuasive is that they are normatively better, then one will need some independently-motivated account of argument quality--some way of establishing the contrast between high- and low-quality argumentation that does not depend upon the observed effects of the messages under conditions of systematic processing.

The contribution of argumentation studies

And here, obviously, is where argumentation studies is in a position to be helpful. It has become clear that what's needed now, for further advance in this line of work, is analyses of message content that attend to normative considerations. Plainly, the developed message-analytic equipment of argumentation studies may prove very useful.

Indeed, it can be useful in a couple of ways. First, it can be useful in analyzing the messages used in previous research, with an eye to describing their features in ways that are sensitive to normative questions of argument quality. A normatively-guided analysis of these messages may offer some insights into just what aspects of the messages may be contributing to the observed effects.

Second, the conceptual apparatus of argumentation studies can be useful in offering general criteria for normatively good arguments, and correspondingly useful in suggesting message construction principles that might guide the creation of experimental materials for subsequent research. That is to say, once one has an independently-motivated account of argument quality, it is possible to undertake empirical work that directly explores the relationship of argument quality to persuasive effects. ("Directly," that is to say, without the conceptual problems of research to date.)[6]

My suggestions here do not require that there be some grand, far-reaching agreement in argumentation studies about what constitutes *the* correct formulation of normative standards for argument (which is just as well, since there's not such agreement). There is, of course, a rough-and-ready consensus achievable about certain low-level descriptions (agreement, say, that this argument is better than that one), even if there's substantial disagreement about just how to formulate the larger theoretical housing (the higher-level descriptions). But given the current state of dual-process-model research, *any* independently-motivated account of argument quality will represent an advance.

There is an additional complexity to be mentioned. In the dual-process-model research that's been conducted thus far, the strong-versus-weak-argument contrast has

[6] These two different aspects of the usefulness of argumentation studies correspond to what are actually two distinct research questions. One question is: what is it about those "strong-argument" dual-process messages that makes them persuasive under conditions of systematic processing? A second question is: what really *does* make for high-quality arguments, and how do such arguments figure in persuasion? These two questions will be closely related only to the extent that the basis for the effectiveness of the "strong-argument" messages really *is* their normative superiority. Because the basis for that effectiveness might be something else (that is, because the dual-process hypothesis--the hypothesis that it's the normative superiority of the "strong-argument" messages that produces their greater effectiveness under conditions of scrutiny--could be mistaken), it's important to see that these are distinct questions.

been formed in a way that confounds a number of *different* message features (the relevance of evidence to claim, the apparent trustworthiness of cited sources, and so on). That is, the design of the research makes it impossible to disentangle the separate effects of these various elements. Sorting out the roles played by different aspects of normatively-good argument is obviously going to be a substantial puzzle. (A preliminary attempt has been made by Areni & Lutz 1988.)

Distinguishing the effects of different variations is important, because it's surely *not* the case that (under conditions of systematic processing) people *never* make mistakes in reasoning, *never* misapprehend argument quality. On the contrary, it seems plausible to suppose that people might ordinarily be sensitive to some aspects of normatively-good argument, but not to others. Consider, for instance, that it appears that even under conditions of systematic processing, people give the single example (as opposed to statistical summaries of multiple examples) more weight than it is due (Taylor & Thompson 1982 provide a general review). So the question arises: under conditions of systematic processing, just what sorts of argumentative flaws *are* people more or less sensitive to?

Having evidence that bears on this question can be helpful for two reasons. First, it may illuminate why persuasive messages have the effects they do (under conditions of systematic scrutiny). One way of expressing this idea is to say that this research may clarify the implicit normative argument standards that persons ordinarily use--by indicating that people are sensitive to this normatively-significant feature, but not to that other one. And this, in turn, provides a basis for explaining why people react favorable to one message, but unfavorable to another.

Second, it can be used to inform the design of pedagogical interventions, used to adapt instruction so as to maximize the improvement in argument-analytic skills. Instead of starting from the assumption that people have no ability to distinguish good and bad argumentation, one might instead start from the idea that people are (under the right conditions) commonly able to see certain sorts of flaws but are generally unskilled in seeing others. Once one has a better grasp of just which skills need bolstering, one's instruction can be appropriately adapted. (For an example of an effort at addressing such questions, see Ryan & Norris 1991.)

Plainly, then, students of argumentation are well-situated to make useful contributions to dual-process persuasion research. Most of the researchers currently engaged in this work are in no position, because of their professional training, to undertake the relevant work. But students of argumentation will be on familiar ground.

Conclusion

There is plainly much prospect for useful interchange between argumentation studies and persuasion effects research, with benefits both directions. And these interconnections underscore the importance and value of international, interdisciplinary

conferences where persons with differing outlooks and background knowledge can come together to discuss matters of common concern.

After all, the increasing specialization of knowledge is not simply some theoretical problem of interest to analysts of discourse in the public sphere. It is also a real and practical problem we all face in our professional lives. One suspects or knows that there is relevant work out there somewhere, with possibilities for mutual enrichment, and yet our customary disciplinary pathways do not make it easy to exploit such possibilities. The signal value of these quadrennial conferences is precisely that they encourage interfield connections, at a time when such connections are increasingly important.

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