

TOWARD A THEORY OF *STARE DECISIS*

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I shall propose in this article a new theory of *stare decisis* (a term I use loosely to mean the practice of courts in deciding new cases in accordance with precedents) that draws upon the insights of communications theory as well as upon some previous work of my own on the decision-making process in tort law. The attempt to apply communications theory to the law is not new,¹ or—given that judicial decision-making is a species of verbal behavior—unexpected. Previous efforts to apply communications theory to problems of judicial decision-making have foundered, however, on a lack of clear conception as to what that theory means and can tell us about the judicial process, and it is with an attempt at clarification of the relevant concepts that I begin.

Communications theory is not a unified body of thought. It has three quite distinct branches. The first, “syntactics,” is concerned with the logical arrangement, transmission, and receipt of signals or signs. It is the domain of the electrical engineer; its concern is with the transmission of signals, whatever their meaning. The second is “semantics,” which is concerned with the meaning of the signals to people. The third is “pragmatics,” which is the study of the impact of signal transmission on human behavior.² This tripartite division is not wholly satisfactory; we shall return to that point.

The key concepts of syntactics, for our purposes, are “information,” “redundancy,” and “feedback,” of which the first two are best discussed together. For the telegraphic engineer, information is the content of a signal that could not have been predicted by the receiver; it is a probability concept. The more probable the transmission of a given sign, the less information its actual transmission conveys. “Redundancy” is the opposite of information.

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¹ For some suggestions from the standpoint of semantics and related approaches, see Walter Probert, *Law Through the Looking Glass of Language and Communicative Behavior*, 20 J. Legal Ed. 253 (1968). Feedback loops are sometimes added to the standard Eastonian Model as applied to legal systems: see Walter F. Murphy, *Elements of Judicial Strategy* (1964); Jay A. Sigler, *An Introduction to the Legal System* (1968). Sigler presents a more highly elaborated cybernetics model in *Cybernetics Model of the Judicial System*, 41 Temple L.Q. 398 (1968).

² See Colin Cherry, *On Human Communications: A Review, a Survey, and a Criticism* (1957).

It is the introduction of repetition or pattern into the message. If the telegrapher sends each message twice, his second sending is redundant and contains less information than his first. If we establish the convention, rule, or pattern that two dashes will always be followed by a dot, then the actual transmission of the dot after the two dashes will be redundant and contain no information because the dot placement in the sequence could always be predicted without actual transmission.

The ideal transmission, then, in terms of pure "information," would contain absolutely no repetition and no pattern. The engineer finds it wise, however, to introduce redundancy at the cost of reducing the information content of a message, because otherwise any loss of information due to malfunctions in the transmission system would be undetectable and irremediable. It is only when we can predict, at least partially, what message we are going to receive that we can spot an erroneous omission or substitution in the message and call for its correction. The ideal message, then, will contain the highest proportion of information and the lowest proportion of redundancy necessary to identify and correct errors in transmission.

Thus it will be seen that redundancy and information, in syntactic terms, are reciprocals of each other, but the situation is more complex when we consider the semantic dimension of communication, for both information and redundancy convey meaning. And the line is even more blurred when we consider the pragmatics of communication. Writing on the "New Communication," John H. Weakland has said ". . . there is no 'redundancy' . . .,"³ his point being, of course, that repetition and patterns in messages do have behavioral significance to the participants in the communications process. Such redundancies carry a freight of meaning, knowledge and/or stimuli to the receiver and in this important sense are not redundant.

Redundancy may be introduced into messages to facilitate the diagnosis of information-transmission errors and the transmission back to the sender of messages enabling him to correct his errors. This identification and transmission back is feedback. It is important to distinguish syntactic from cybernetic feedback. The former involves transmission back concerning error in the sense of incorrect transmission or receipt of information between sender and receiver within the system; the latter involves transmission concerning error in the sense of incorrect adjustment by the system to the outside world. Thus high levels of syntactic feedback indicate trouble in the transmission facilities of the system, rather than the sensitivity and learning that are typically imputed where high levels of cybernetic feedback are present. Simply to speak of feedback in general is quite misleading.

As I said at the outset most attempts to apply communications theory to

³ *Communications and Behavior—An Introduction*, 10 *Amer. Behav. Sci.* 1, 2 (1967).

legal processes have foundered on a failure to keep clear these important distinctions among the relevant concepts of communications theory. It would appear a worthwhile undertaking to attempt an application of such concepts as information, redundancy, and feedback that paid due regard to their origins in syntactics and clearly labeled all shifts from syntactic to cybernetic or semantic or pragmatic levels of analysis. The remainder of this article is devoted to that endeavor, beginning with some general remarks on legal communication.

So long as it can be argued—and in view of the long tradition of Anglo-American legal thought it can be argued fairly persuasively—that the opinions of American and British courts embody an original and peculiar mode of thought that can be analyzed and understood only within the very scheme of analysis presented within the opinions themselves, the only scientific mode of legal analysis is ethnographic. I have tried elsewhere to indicate that judicial logic can be viewed as a species of the incremental mode of decision-making that is common to many political organizations.⁴ The concept of redundancy seems to me promising as a further tool in integrating legal discourse into more general discourse.

At the most superficial level, it is obvious that legal discourse organized by the rules of *stare decisis* emphasizes, and itself insists that its success rests upon, high levels of redundancy and, therefore, remembering our original theoretical formulation, low levels of information. The strongest legal argument is that the current case, on its facts, is “on all fours” with a previous case and that the decision in that case is deeply imbedded in a long line of decisions enunciating (repeating) a single legal principle. In other words, the strongest argument is that the current case, treated as an input, is totally redundant, and under the rules of *stare decisis* the duty of the judge is to transmit a message that is equally redundant. Of course the facts of a new case are never exactly on all fours with an old, and no line of precedents is ever totally clear and consistent. The point is that the rules of legal discourse seem to require each attorney to suppress as much information and transmit as much redundancy as possible.

At the semantic level, legal discourse is conducted in terms of highly redundant symbols. The string citation comes to mind in which authorities are piled up endlessly in support of a statement of the law in the opinion, brief, or text. The normal mode of criticizing such citations is to show that they actually contain information: either that (1) the cases in the citation do not say the same thing as the statement in the text or that (2) some of the cases cited do not say the same thing as the other cases cited. If the statement and

⁴ Martin Shapiro, *Stability and Change in Judicial Decision-Making: Incrementalism or Stare Decisis*, 2 *Law in Transition Q.* 134 (1965).

the cases do not all say exactly the same thing—if the message is not totally redundant after the first bit of information—then a technical error or a violation of the rules of legal craftsmanship has been committed. The rules of the craft are only obeyed to the extent that, having received any portion of the craft message, a second craftsman could have predicted all the remaining portions.

Legal communication is also replete with highly redundant synonym use. In what has come to be referred to as the “noisy marble” experiment,⁵ subjects isolated from one another had to communicate to each other, by written message, the color of marbles. At first, plain, solid color marbles were used. Then cloudy, mottled and indistinct marbles, still quite different from one another, were supplied. Those subjects who succeeded with the more difficult (noisy) marbles did so by markedly increasing the number of synonyms they used in describing their marble rather than by seeking the single “best” descriptive word. When they finally had induced the receiver to understand which of the array of noisy marbles their synonyms were aimed at designating, they could in future communications use any single one of the synonymous words to designate that marble accurately. As the experimenters pointed out: “Once the redundant coding has been used, and the errors reduced thereby, we may assume that the receiver remembers the synonyms used for a given symbol in the redundant code, and that in future messages these synonyms or alternate codes are understood even though not physically present.”⁶

In the “craftsmanlike” appellate opinion or brief, the argument is built sentence by sentence, with each sentence—often many of the phrases within each sentence—supported by a citation. A skilled lawyer, seeing the sequence of citations alone, could predict the argument, or, seeing the argument alone, could predict the citations. Thus, either the argument or the citations are—and are supposed to be—redundant. Furthermore, the optimum situation for authoritative appellate decision-making is one where each citation is to a “leading” case that is “leading” precisely because its reasoning has been repeated (and it itself cited) in many other cases. The citation of a leading case name incorporates, in effect, other synonymous cases so that, as in the noisy-marble experiment, we may assume that the receiver remembers the synonyms used for a given symbol in the redundant code, and that in future messages these synonyms or alternate codes are understood even though not physically present. Furthermore, recognition of a case as leading assures the lawyer and judge that the issues involved were worked through not once but many times before the system settled on this particular case name as the

⁵ See Josiah Macy, Jr., et al, Coding Noise in a Task-Oriented Group, 48 J. Abnor. Psychol. 401 (1953).

⁶ *Id.* at 403.

symbol for its many synonymous treatments of the question. It is significant, too, that a well-constructed legal opinion is likely to make the same point many different ways—in canvassing the issues, in meeting the counterarguments, etc. When a later judicial craftsman cites the previous opinion, he imports the previous internal redundancy of that case into his own well-constructed—that is to say, internally redundant—opinion. Finally, the very practice of citation is the assertion that “I am not saying anything new; I am only repeating what has already been said.”

Legal discourse in the style of *stare decisis*, then, is not a unique phenomenon, but an instance of communication with extremely high levels of redundancy. Indeed, what we think of as the “taught tradition” (and thus the peculiar tradition) of the law is largely a set of coding rules for introducing redundancy into legal messages. It remains to consider why the legal system tolerates or requires such high levels of redundancy.

“Redundancy may be said to be due to an additional set of rules, whereby it becomes increasingly difficult to make an undetectable mistake.”⁷ When we speak of *stare decisis*, we are speaking of such a set of rules. The importance of redundancy in error correction has been overshadowed by the somewhat imprecise adoption in political science of cybernetic models, with their emphasis on feedback. As noted earlier, cybernetic feedback involves messages to the organism correcting errors in its adjustment to the environment. It thus draws attention away from the problem whether the receiver within the organism has received correctly the message from the sender within the organism. Here I wish to stick to the sender-receiver problem and thus view redundancy and feedback as two sides of the coin of correcting message errors. The question why there are high levels of redundancy in the legal system thus inescapably entails the question, are there—and if so why—high levels of communication error?

It seems a reasonable hypothesis that complex organizations are necessarily involved in high levels of signaling. High levels of signaling will lead to high levels of syntactic noise (the larger the number of signals, the more likely they are to interfere with one another), and even higher levels of semantic noise will occur since the subjects of the messages of our complex organization will themselves be complex and ambiguous—noisy in the sense the mottled marbles were. High levels of noise should invite the deliberate introduction of high levels of redundancy to counteract the noise, but the high levels of redundancy, by reducing the information content of the organization’s messages, will handicap the organization’s ability to meet changing circumstances unless some strong countervailing mechanism is present.⁸

⁷ Colin Cherry, *supra* note 2, at 185.

⁸ See Mervyn L. Cadwallader, *Cybernetic Analysis of Change in Complex Social Organizations*, 65 *Am. J. Sociol.* 154 (1959). For a slightly different formulation in terms

This reasoning seems plausible—but does it apply to the legal system? The answer, I believe, is that it does. I have been engaged recently in studying the evolution of policy formulation in tort law *as if* the fifty state supreme courts, the United States Supreme Court and the British courts constituted a single organization marked by decentralized, non-hierarchical and yet coordinated decision-making.⁹ I stress the “as if,” because I am working by analogy and assuming what is to be proved—that there are sufficient inter-connections between my 52 decision-makers to justify treating them as an organization. On the side of my assumption is a massive and visible flow of messages among them and a policy product sufficiently unified to suggest something more than totally independent action and sufficiently diversified to suggest more than multiple, independent but highly determined responses to a single overriding cause. Against my assumption is the suspicion that tort policy is so socially determined that 52 totally independent decision-makers would arrive at almost the same policy outputs, given the similarities between the communities in which they operate, even if there were no links between them. At the very least I think it is possible to ask how these courts managed to arrive at relatively unified *forms* of legal doctrine even if the general social environment independently, and without the aid of coordinating mechanisms, dictated the unified *substance* of policy.

Viewed in organizational terms a central problem quickly emerges in the tort area. How do a large number of decision-makers manage to arrive at well-coordinated policy decisions (policy decisions are the output of this organization) when the organization is bereft of all the mechanisms of hierarchical control that we associate with classical organizational structures? None of the state supreme courts is legally subordinated to any of the others, nor, in the tort field, are they collectively subordinated to the Supreme Court, which, due to the sparseness of its tort docket, is far from being even *primus inter pares*.

of polycentric organizations and multiplexing, see Yehezkel Dror, Public Policy Making Reexamined 211 (1968), and his note to John Von Neumann, Probabilistic Logic and the Synthesis of Reliable Organisms from Unreliable Components, in Automata Studies 211, n.8 (C.E. Shannon & J. McCarthy eds. 1950). The most significant statement by Dror is, “[a]s elaborated in modern cybernetics, the basic idea of redundancy is one of ‘multiplexing,’ that is, of having many units perform the same operation and passing their outputs through a threshold level that ignores mistakes made by some of the parallel units.” *Id.* at 211. In law the “threshold level” may be provided by the litigation market—i.e., by the lawyers who, on the basis of professional skill, seize upon the “thrust” or “principle” or “true doctrine” and cast off the “aberrant” cases. See Dror’s description of the Rand Delphi projects in which panels of experts are asked to predict the future and then to predict again after seeing one another’s first predictions. *Id.* at 182. See also Martin Landau, Redundancy, Rationality, and the Problem of Duplication and Overlap, 29 Pub. Admin. Rev. 346 (1969).

⁹ See Martin Shapiro, Decentralized Decision-Making in the Law of Torts, in Political Decision Making (S. Sidney Ulmer ed. 1970).

Once the problem is stated in this way, our attention is immediately drawn to communications phenomena. A logical first guess would be that the organization has developed some set of special communications techniques that allow its decision-makers to cooperate—to substitute, somehow, mutual influence for command from above. Because of the large number of decision-makers, and the very large volume of decisions necessary to keep tort policy attuned to a changing society, we would expect these communications techniques to absorb a disproportionately large share of the organization's resources.

In fact we discover that most of the participants in the organization have spent much of their educational and subsequent professional lives learning coding rules. More important, we find a vast body of communications personnel. The litigational market assures that thousands of lawyers will devote their energies to carrying messages from one court to the next, keeping each informed of what the others are doing. This flow of communications is not controlled by conscious plan or carefully structured communications networks, but rather by hundreds of thousands of individual decisions guided by the desire for personal profit. I use the term litigational market precisely because I wish to suggest an "invisible hand."

For this market, like Adam Smith's, has many rules and conventions that harness individual greed to a higher cause. Under the rules of the game, the lawyer-communicator has the highest chance of winning if he can show a court that his client must prevail if the court keeps doing exactly what it has been doing; the next highest chance if he can persuade the court that it should do exactly what some other court has been doing; the next highest chance if he can convince it to do something slightly different from what it or some other court has been doing; and the worst prospect if he must argue that the court should do something markedly different from what it and other courts have done in the past.

It will be seen that the litigation market encourages the flow of a very large number of *confirmation* messages between independent decision-makers, reassuring each that the others have been agreeing with it. From the standpoint of syntactics, these messages are redundant, and they are *not* feedback, since they are neither occasioned by, nor do they report, error.¹⁰ When messages indicating *differences* between decision-makers are introduced, they are

¹⁰ To the outside observer, using a cybernetic approach, they might appear to be positive feedback, *if* he had made the quite independent determination that what the organization had been doing was an "error" vis-à-vis its environment. Then such supportive messages would have the effect of making the organization persist in its past behavior and thus make more and more errors. It is necessary to keep "error" in the syntactic sense clearly separated from error in the broader cybernetic sense of failure to adjust to the environment.

added in small numbers to the stream of reassurances, they emphasize the smallness of the differences, and they tend to suppress or conceal larger ones. Often they are syntactic feedback in the sense of exposing minor errors in understanding or phrasing rather than real policy differences.

In an earlier analysis of this material, basing myself on incremental theories of decision-making, I argued that this form of communication was the substitute for the rational-hierarchical control structures that play a major role in coordinating policy in other organizations. In other words, the tort organization goes to an extreme form of incremental decision-making in which there is a very strong bias against any change at all, only very small changes are ever considered, and differences between organizational units are deemphasized, suppressed, or quickly mediated by requesting each unit to make small step changes in the direction of the other. Faced with a conflict between the authoritative cases in State *A* and State *B*, the lawyer is not likely to state the conflict clearly and ask the judge in State *C* to take his choice. Instead the lawyer will seek to "harmonize" the authorities by bending each a little. If the judge in State *C* will accept the harmonization, then the new mediate position of State *C* will be used in future litigation to lever States *A* and *B* off their initial positions. The potential for conflict among 52 decision-makers is high and the style of decision-making I have described seems designed to create an atmosphere of mutual reassurance, support, and compromise and to avoid the emergence of rationally stated major policy differences, particularly differences stated as matters of principle.

But I now see that this analysis is incomplete. An important activity of the tort organization and its litigational market operating under the rules of *stare decisis* is to ensure extremely high levels of redundancy in the communications linking the decision-making units. A system that inevitably generates a great deal of noise, and one in which high levels of random error would jeopardize coordination, fully employs the standard techniques for the reduction of noise-caused transmission error. What appears in one light as an incremental (and thus non-rational) technique of decision-making appears in another as the most orthodox and rational solution to the noise problem.

It is well to recall at this point the argument that redundancies at the syntactic level are not redundant at the semantic level, because they transmit the knowledge that the sender is repeating or patterning his message. The rules of legal discourse create redundancy in the first sense in that they make it easier for the receiver to spot unintentional errors in transmission and, more important, to spot intentional ones—for remember that the transmission channels here are lawyers with their own interests. In the same sense, redundancy in tort discourse reduces noise-caused errors in a net with many overlapping signals, and reduces receiving errors by decreasing the work-

load of each receiver—the amount of information he must process—to manageable proportions.

In the broader semantic sense the redundancy of tort communication, precisely because it conveys the additional knowledge that senders are repeating their messages, provides supportive reassurance to each of the communicator decision-makers that his fellows are with him. The adding of new information (requests for changes) only in very small quantities not only ensures the ability of the receiver to process the information but his willingness to accept and retransmit that information. Redundancy in this sense is a major solution to the problem of coordinating output in non-hierarchical organizations.

In this light we can begin to explain the survival of *stare decisis*, particularly in “common law” areas of law, as the dominant mode of legal discourse. Its strength lies in its dual and mutually supporting contents of syntactic and semantic redundancy. *Stare decisis* viewed as redundancy is a fully rational, probably indispensable, method of solving the problem of syntactic noise in a system with very high message loads—which any system that proceeds case by case inevitably is. At the same time, the redundancy introduced for this syntactic purpose automatically and simultaneously becomes, at the semantic level, a heavy stream of the kind of information necessary to operate an incremental system of decision-making—information about mutual support and agreement in the form of constant repetition of previous agreement.

Of course the danger to an organization that relies very heavily on redundancy is that it may process so little information that it cannot learn. It is routinely argued, in the broader cybernetic context, that such organizations, if they are to survive, must have high levels of feedback to counterbalance redundancy. Such an argument illustrates the danger of failing to differentiate clearly between syntactic and cybernetic feedback. Cybernetic feedback is itself information. If the system employs high levels of syntactic redundancy, it does not have the “space” to transmit much cybernetic feedback information to its receiving parts. To say high redundancy with high feedback is to say low information with high information.

The tort organization does have a partial solution to this paradox. The content of the litigational market’s communications is highly redundant although some level of cybernetic feedback is maintained in the form of requests for small changes. Here the virtue of *stare decisis* lies in the peculiar nexus it provides for syntactic and cybernetic phenomena. Following the rules of *stare decisis*, requests for legal changes, which are actually inspired by the failure of law to adjust correctly to the environment, and are thus cybernetic feedback, are put in the form of syntactic feedback, statements that some judge or lawyer has not correctly received the real message that

was transmitted by the previous cases (their "true principles"). In this way much cybernetic feedback information can be squeezed into a communications system that demands very high levels of redundancy, and it can be squeezed in without interfering with that sense of mutual support necessary to the coordination of non-hierarchical organizations.

In recent years political science has focused not on judicial opinions but on judicial decisions (who won and lost) as keys to understanding judicial attitudes. In legal theory, and legal commentary more generally, there has been much attention to judicial opinions as justifications or explanations, and to what modes of justification and explanation are appropriate to legal discourse. But nearly all the commentators concerned with these problems treat the opinion *in vacuo*, asking whether it meets certain general standards and thus turning the problem into one of logic or philosophy.

Somehow we ignored the fact that appellate courts and the lawyers that serve them spend an overwhelming proportion of their energies in communicating with one another, and that the judicial opinion, itself conforming to the style of *stare decisis*, and then manipulated along with others according to the rules of *stare decisis*, is the principal mode of communication. This massive pattern of communicative behavior has persisted in the face of our insistence that it is what judges do, not what they say, that counts, in spite of repeated demonstrations that *stare decisis* does not yield single correct solutions, and despite the failure of theorists to provide clear-cut descriptions of what a correct judicial opinion would look like.

It would seem appropriate, therefore, to examine the opinion-writing activity of courts in the context of communication, and once we do, a striking finding emerges. The style of legal discourse that we summarize in the expression *stare decisis* is not a unique phenomenon peculiar to the Anglo-American legal system, not a unique method or form of reasoning or logic, but an instance of redundancy, the standard solution predicted by communications theory for any acute noise problem. And there is a further finding: the characteristic style of Anglo-American legal discourse persists because its rather standard and routine solution to the noise problem of a non-hierarchical organization like the courts yields at the very same time a pattern of redundant communication that is extremely useful, perhaps essential, to the incremental mode of decision-making that organizations of this sort typically adopt. If this suggestion has any merit, it should be possible for social scientists to treat the phenomenon of *stare decisis* as a problem in human communications rather than as exclusively one of logic and/or obfuscation.