University of Richmond Law Review

Volume 36 | Issue 2 Article 6

2002

Meeting by Signals, Playing by Norms: Complementary Accounts of Nonlegal Cooperation in Institutions

Edward Rock

Michael Wachter

MEETING BY SIGNALS, PLAYING BY NORMS: COMPLEMENTARY ACCOUNTS OF NONLEGAL COOPERATION IN INSTITUTIONS

*Edward Rock**
*Michael Wachter***

Professor Eric A. Posner has written a fascinating book about "Law and Social Norms."[1] In it, he uses an informal signaling model (derived from Michael Spence's formal model)[2] to explain a wide range of striking social behavior, and to show underlying connections among apparently disparate phenomena. Looking at topics as dissimilar as gift giving, family law, criminal law, voting and political participation, and commercial practice, he argues that much of observed social behavior can be understood as the result of attempts to signal that one is a good cooperator.

Posner's book stands at the intersection of two literatures: the economics literature on signaling and screening; and the legal literature on "norms." Posner's goal is to use the signaling and screening literature to make a contribution to the "norms" literature, an area in which we have worked as well. His claim is that the signaling model will provide a methodology for understanding the relationship between the law and the nonlegal mechanisms of cooperation, and can explain many or most such mechanisms. This immediately raises a question of "fit." Can signaling provide the basic model for understanding norms? When is it useful? When does it break down? Are other models more promising?

---

* Saul A. Fox Distinguished Professor of Business Law and Co-Director, Institute for Law and Economics, University of Pennsylvania Law School.

** William B. Johnson Professor of Law and Economics and Co-Director, Institute for Law and Economics, University of Pennsylvania Law School.

1. ERIC A. POSNER, LAW AND SOCIAL NORMS (2000).
2. *See* A. MICHAEL SPENCE, MARKET SIGNALING: INFORMATIONAL TRANSFER IN HIRING AND RELATED SCREENING PROCESSES (1974).

One way to get a handle on these questions is to take a discrete issue and see how different models handle it. Although Posner proposes that his model can be applied generally to all areas of nonlegal cooperation, he does acknowledge that some competing models can provide alternative explanations. One of these, the bounded rationality model, is the framework within which we have written. Like Posner's informal signaling model, our approach relies on norms, rather than legal rules, to constrain the parties from defecting from cooperative behavior by acting opportunistically. How do the two analyses match up? Where do they overlap? Where do they differ?

Posner opens Chapter Two, A Model of Cooperation and the Production of Social Norms, with an important example, the employment relationship.[3] The employer has a high wage job vacancy that it can offer to an individual. The job requires a high level of cooperation and skill. Because of its high wage, many individuals may be interested in the job. If the hiring and training of employees were costless there would be no issue. The firm could simply hire individuals and then discharge them as soon as they proved to lack the cooperative spirit.

The problem confronting the employer and the potential employees is that hiring and training are expensive. If the employer pays for the training, it suffers a loss if, after the training period, it determines that the person hired misrepresented her skill and cooperative spirit. If the potential employee bears the cost of training, the employer, if untrustworthy, could renege by paying a lower wage than originally offered, perhaps claiming that the employee turned out to be lower skilled than the employer originally believed. Since the employer and the potential employee will both be aware of these possibilities, a value enhancing employment opportunity will be lost unless the potential for opportunism can be constrained.

How do the employer and the potential employee convince each other to take the gamble, the employer by hiring and training the potential employee and the latter by working with the appropriate work effort and skill? As a descriptive matter, the parties handle this issue, like many others in the employment relation-

3. POSNER *supra* note 1, at 11.

ship, through modes of nonlegal cooperation.[4] The employment example thus provides a fertile context in which to compare Posner's model with competitors.

In this essay, we will first review the signaling model, then compare Posner's treatment of the employment relationship with our own. This will provide a foundation for examining the scope of Posner's inquiry and the contribution of signaling models to the understanding of nonlegal modes of cooperation within institutions like firms.

THE SIGNALING MODEL

Posner's book draws on the economic literature on signaling and screenings.[5] This literature starts from the observation that, in the presence of asymmetric information, and absent the ability to verify needed information directly, parties may use signals based on observable variables to convey information that can serve as a proxy for the needed information. Asymmetric information exists when one actor, the informed party, has private information or access to information at a much lower cost than another actor, the uninformed party, with whom she is dealing.

In this regard, consider a typical employment context. Suppose, for example, that an employer is seeking to hire an employee to a high wage job that requires a cooperative work attitude and considerable skill. A prospective employee is informed as to her own skills and work attitudes. The employer is uninformed as to these traits and since the prospective employee has just applied for the job, there is no way that that the informed employee can provide the information in a manner that is verifiable. Suppose, however, that good social manners and more formal dress and appearance (the signal) are correlated with high skill and good work attitude (the needed information). The uninformed party, unable to verify the desired information directly (the prospective employee's productivity), will screen the signal (manners and dress) and interpret it to determine whether to assume that the informed party will be a cooperative person with whom to deal.

4. *Id.* at 15.
5. *See, e.g.*, SPENCE, *supra* note 2.

In contrast to the "norms" literature, in which there is little agreement even as to what is meant by the term "norms,"[6] much less how it should be modeled,[7] the signaling model works in a very specific manner and through a limited channel.[8] A classic example is college education and employment. It is widely agreed that college graduates are offered better jobs than are high school graduates. Why is this the case? A simple answer is that employers assume that students learn lots of useful things in college that will improve their future productivity. Employers hire college graduates according to this view because college training makes for more productive workers. In this model, education is not a signal of high skill; rather it is a causal factor and one of its component parts.

The signaling model tells an alternative story. Suppose students learn nothing of future relevance, and the import of a college degree is only to sort out those who have high IQs, will complete homework assignments, and are willing to grind out numerous hours fulfilling the irrelevant assignments, from those who fail either on account of lower IQ, unwillingness to do assigned tasks, or a preference not to work long hours. Here education is a signal: it has no intrinsic positive effect on students' productivity as employees. Instead it is positively correlated, but not causally so, with intelligence, cooperativeness and productivity.[9]

Although this identifies education as a potential signal, other factors are required for it to be a successful one. Return again to our employer, who now has two jobs, a low skilled job and a high skilled job. Assume that the productivity of the high skilled job, over a career, is worth $200,000 more than that of the low skilled job. Suppose that high skilled students can graduate from college at a cost of $50,000, while low skilled students would face a cost of $201,000. The higher cost for low skilled students can be explained by the fact that it may take them longer to graduate, they might need to spend additional amounts on remedial training, or

---

6. *See* Marcel Kahan, *The Limited Significance of Norms for Corporate Governance*, 149 U. PA. L. REV. 1869, 1870 (2001).

7. *See* Oliver Hart, *Norms and the Theory of the Firm*, 149 U. PA. L. REV. 1701, 1701 (2001).

8. *See* John G. Riley, *Silver Signals: Twenty-Five Years of Screening and Signaling*, 39 J. ECON. LITERATURE 432 (2001).

9. *See* SPENCE, *supra* note 2, at 358–60.

any number of other factors. In this example, the high skilled student attends college, is subsequently offered the high skilled job and thus receives the additional $200,000 in compensation, with a net gain of $150,000. The low skilled student does not mimic the signal because she would lose $1,000 in doing so. Here, the signal works because the low skilled student does not attend and graduate from college and does not get the job offer.

This example illustrates the conditions that a behavior must exhibit in order to constitute a signal. Using Posner's distinction between cooperative good-types and non-cooperative bad-types, the signal must be costly, and have a higher cost to the non-cooperative type.[10] The benefit of signaling to the non-cooperative type must be lower than the cost of the signal. Both the employer and at least the cooperative-type must understand that the behavior in question is understood to be a signal by all interested parties. Finally, the behavior is undertaken for purposes of signaling and not for other purposes.[11]

This last condition is an important one. If individuals attend college because it increases their productivity, because all their friends do it, or because it is a great place to meet one's future spouse, then education is not a signal. In this case, students are not attending college to send a signal to prospective employers. To be a labor market signal, the behavior has to be motivated (entirely, in the case of a pure signal) by a desire to communicate one's cooperative nature to the employer.

Does this model offer general applicability to problems such as the employment relationship given above? Or is there something very specific about the education problem in terms of the relationship between the parties? In our example, the employer doesn't know the employee or vice versa, other than by reputation. The employee's signals are thus important in the employer's initial screening of potential employees. But does signaling remain important or as important once the employee is hired?

Generally, signaling and screening are most important when the parties are unable to verify claimed skills and behavioral traits. The signals are not better than information about the required traits, but they are the best mechanism for learning about

10. POSNER, *supra* note 1, at 26.
11. *Id.*

them. Because of this feature, the signaling and screening literatures have been prominent in a few distinctive areas of economics.

In industrial organization, for example, Antitrust laws impose legal restrictions on the ability of competing firms to cooperate and coordinate behavior. In such a setting, competitors can observe each other's *public* behavior, but much goes on privately. Private behavior, by contrast, can only be observed at great cost and with significant legal risk. Signaling in this context is of great importance, and its importance is not reduced over time: no matter how long the competitors interact, they still cannot legally coordinate their behavior. Consequently, in the industrial organization literature, particularly in modeling the behavior among competitors or a potential entrant and an established firm, signaling models play a major role.[12]

The same is true, but to a lesser extent, in the firm's dealings with customers and suppliers. In first establishing a relationship, the parties have little directly relevant information upon which to base decisions. Signals, based on irrelevant factors that are correlated with the relevant information are a good substitute. In this setting, signaling plays a critical communication role.

A key feature of the situations in which signaling models are important is that the flow of observable information does not significantly improve over time. Returning to the industrial organization examples, competitors, because of both competitive and legal reasons, continue to need signals to coordinate and communicate otherwise unobservable information.[13]

But in a host of situations, the shortage of verifiable information is resolved within a relevant time period. In the employment relationship, once the employee is on the job, the employer has the option of tracking actual performance, since now productivity becomes observable. While it is true that monitoring performance is costly and perfect monitoring is even more costly, the alternative is to continue to rely entirely on signals. Even if the employee

---

12. *See, e.g.*, George J. Mailaith, *Simultaneous Signaling in an Oligopoly Mode*, 104 Q.J. ECON. 417, 417–27 (1989); Paul Milgrom & John Roberts, *Limit Pricing and Entry Under Incomplete Information: An Equilibrium Analysis*, 50 ECONOMETRICA 443, 443–59 (1982).

13. *See* Milgrom & Roberts, *supra* note 12, at 443–59.

reports to work well-suited in their dress, showing easy use of the best manners, it is always better to check the work product from time to time. In an ongoing relationship, those using the signaling model must be able to show that it is more costly to monitor the required traits, or productivity (even episodically) than to use signals that are causally irrelevant to the required traits, or productivity. While signaling is likely to continue as relationships become more established, performance more observable, and communications more established, in such cases, signals are likely to play a peripheral rather than a primary role.

POSNER'S MODEL

One of Posner's contributions is to link the signaling model described above to the norms literature. In Posner's model, norms are behavioral regularities that serve as "nonlegal mechanisms of cooperation."[14] So defined, norms are equivalent to the signals of the signaling model.

The behavioral regularities or norms of interest to Posner are those that involve social behavior and thus are most usefully labeled "social norms."[15] In Posner's view, gift-giving, wearing appropriate clothes and engaging in appropriate speech are primarily used to signal to another individual or to a group that the signaler is a cooperative person who can be trusted.[16] The signals convey private information to other actors who can then better predict whether the individual signaler is cooperative or noncooperative.[17]

Posner's focus on "social norms" or signals is different from the economic literature where the signals generally involve behavior affecting economic or business actions. For example, in the job interview setting, the potential employee's level of education is not the signal of interest to Posner. Instead, Posner's potential employee will dress well, speak politely, express mainstream opinions, and avoid mentioning any idiosyncratic groups to which he belongs.[18] On this account, the employee shows up for the inter-

14. POSNER, supra note 1, at 4.
15. *Id.* at 5.
16. *Id.* at 22.
17. *Id.* at 22–23.
18. *Id.* at 13.

view in a Brioni suit, the mark of a person well-suited for the position, and makes all the expected signals, some of which have very low cost. The interviewer understands that the suit costs $1,500 and that the young employee would just as soon wear jeans. He also recognizes the polite speech for what it is intended to show. The interviewer understands that the employee is of the cooperative tribe. The non-cooperative type, who was not hired, did all the wrong things, including dressing in jeans and speaking informally.

In defining norms, there are two components. One is the fact that they are behavioral regularities.[19] A second component is also necessary: there must be a mechanism for its nonlegal enforcement.[20] What makes a particular behavioral regularity a norm is that individuals adopt the behavior because it is costly to them if they do not. In Posner's model, within the group of cooperative-types, the primary enforcement mechanism is the fear that one's reputation will be harmed if one defects from the norm.[21]

Having laid out these elements, one encounters a certain ambiguity in Posner's analysis. It could be that a signaling theory can explain the observed social norms highlighted by Posner, such as gift giving, wearing ties, etc. Or, it could be that the signaling behavior that manifests itself in social norms can explain the patterns of nonlegally enforced cooperation that we observe in numerous economic relationships. On one level, Posner appears to have the more modest goal of explaining why people conform to social norms.[22] But he also holds out hope that his approach develops a general model of nonlegal cooperation.[23]

In the case of the employment relationship, one can formulate the issue as follows. Is the goal of Posner's inquiry to understand some particular elements of the employment relationship, like the

---

19. *Id.* at 26.

20. *Id.* at 12.

21. *Id.*

22. *Id.* at 4. "The question left unanswered by law and economics is why people conform to social norms. Without an answer to that question, one cannot understand the effect of laws on people's behavior." *Id.*

23. *Id.* at 5. "Scholars need a methodology that enables a systematic analysis of the relationship between the law and nonlegal mechanisms of cooperation. This book proposes such a methodology." *Id.*

fact that people wear suits to job interviews? Or is the goal broader, namely, to explain the pervasive features of the employment relationship, a relationship that is primarily one of nonlegally enforced cooperation? In other words, is Posner's claim that the signaling model can provide a theory of the use of "social norms" or a theory of the "employment relationship"?

A lot depends on this. If the goal and use of the model is to understand "social norms," such as why people dress up for job interviews, weddings, funerals and (sometimes) academic conferences, then the analysis is important and interesting for those people who care about such phenomena and their relation to the law. Moreover, it can be evaluated by how well it explains when people dress up and when they do not. However, if this is the goal of the inquiry, even if successful, it may be of relatively marginal significance to those whose main interest is in understanding the employment relationship, or other economic relationships that involve nonlegal cooperation.

If, on the other hand, the claim is that a signaling model can explain nonlegal cooperation, then one would expect it to be able to provide an explanation for the stylized facts of the employment relationship. One would, for example, want to know why and when "structural" features are used in place of relying entirely on signaling behavior.[24] Posner does not examine these features, so we postpone a discussion of them for the next section.

Posner's example of the use of signals—the decision to interview and hire a potential employee—is perhaps the most favorable case for signaling in the employment relationship. For an initial encounter, when the interviewer has no other information to use, signals using social norms can provide critical initial information, as explained by Posner.[25] However, once employed, actual performance can be measured. The well-suited potential employee with the perfect manners may be offered the job, but once on the job even further refinements in the employee's dress and manners are unlikely to offset poor performance. Moreover, while an employer may signal its intent to be a "good" employer by ex-

24. Examples of such "structural" features include joint investment in the cost of training or following a practice of laying off workers during economic downturns instead of reducing wage rates. In Posner's analysis, these practices fall outside his definition of "social norm." *See id.* at 11–35.

25. *Id.* at 13.

tending signing bonuses, this type of "gift giving" will likely give way to rewards based on performance. As noted above, this is not to say that an employee who continues to signal cooperative behavior, and an employer, who occasionally gives gifts, will not strengthen an ongoing relationship. Rather, the point that we will develop in the next section is that the behavioral regularities of the employment relationship do not seem to be well explained by the social signaling emphasized by Posner.[26]

If Posner's project is to explain social regularities, the relevant question is whether those social regularities are norms. Is there a penalty for not following the norm. Take, for example, showing up for a job interview in a suit and tie (or, equivalently, in torn jeans). If a good suit gets a prospective employee the higher wage job, what prevents all prospective employees, whether cooperative types or not, from buying the needed suit? Remember that for a signal to provide accurate information to the employer, it must be more costly for the non-cooperative types to use the signal compared to the cooperative types. In addition, the costs to the non-cooperative types have to be higher than the potential benefits.

If the benefits of signaling are greater than the cost of signaling, the opportunistic non-cooperative type will arbitrage the spread by buying the cheap signals and then cashing in the benefit. In other words, the ill-suited potential employee will dress-the-part to get the job, reap the benefits, and then enjoy life by slacking off and being uncooperative. Our guess—which is just that, a guess—is that most social norms can be copied at relatively low cost, if the spread between the high and low wage job is great enough. This is not to say that Pagan bikers can duplicate the signal of Brioni suits and good manners, only that there are enough non-cooperative individuals on the margin who can do so. If that condition is satisfied, then the signal is likely to prove inaccurate as norm arbitrageurs trade the signal.

There is, however, yet another possibility. Wearing a suit and exhibiting other good social manners may not be a signal at all. Other explanations may provide just as compelling an explanation. Two alternatives are worth mentioning.

26. *See id.* at 18–27.

A close cousin to the signaling model as used by Posner is the matching model.[27] Remember that in the signaling model, the ill-suited employee shows bad manners because he does not know any better. In the matching model, the same basic facts are given an entirely different explanation. In this model the ill-suited person is looking for a relaxed informal working environment where casual dress is the norm. The well-mannered person is looking for a more formal environment. The signaling here does not indicate differences between good and bad cooperators. Both the well-suited and ill-suited actors are good apples and are simply matching their traits with those of the job. Neither is acting opportunistically and there are no arbitrage opportunities.

Another explanation is that employers use dress and manners to screen potential employees when those traits indicate a cultural competence that is intrinsically related to the ability to perform on the job. Alternatively, dressing properly might indicate awareness that breaching a firm's standards will trigger sanctions, a sensitivity that is also related to one's ability to thrive in a firm. In either case, the interviewer is screening by using traits that are directly correlated with needed job traits. Consequently, these traits are not a signal since to be a signal, the traits must not only be costly and observable, but must also be irrelevant to performance.[28]

As the basis for a theory of the full employment relationship, the signaling approach does not seem particularly promising. First, the signaling model is most useful in cases of initial contact, when the parties have little observable information to rely on and are forced to substitute information obtained from signals. This fits with Posner's use of the signaling model to explain the decision to interview and hire prospective employees. But the hiring decision itself, although not trivial, is comparatively small change. Second, many of the features that seem to characterize the employment relationship may not be signals in Posner's sense. The stylized facts include many things that, while costly and observable, are not arbitrary, but have a "necessary or in-

---

27. *See* Barbara Petrongolo & Christoper A. Pissarides, *Looking in the Black Box: A Survey of the Matching Function*, 39 J. ECON. LITERATURE 390, 390 (2001).

28. *See* POSNER, *supra* note 1, at 24.

trinsic connection to the beliefs that they provoke."[29] Other behaviors, like the wearing of a suit, are muddy.

This is not a criticism of the signaling model or of Posner's use of that model. Rather, it is evidence that the *goal* of Posner's inquiry is to understand "social norms" and not to understand the employment relationship, or the details of any other economic relationship. If Posner's primary task is to understand the functioning of social norms as a way of developing nonlegal cooperation, then one can also better understand his quick dismissal of competing theories. If, however, his goal is to understand the regularities of underlying economic relationships, such as the employment relationship, then other models are needed.

THE ROCK & WACHTER APPROACH

One of the models that Posner credits as having the power to explain nonlegal cooperation, even in the social domain of primary interest to him, is bounded rationality.[30] In the signaling model, the primary problem is for the informed party to convey inherently unverifiable information to an uninformed party. Posner's cooperative types develop signals that distinguish them from uncooperative types. In the bounded rationality framework, the informational problem facing individuals is a very different one, as is the role played by norms. It is to this topic that we now turn.

Posner's book, as we noted in the prior section, is in the intersection of the legal literature dealing with nonlegal norms of behavior and the economic literature of the signaling model.[31] Our work is also in the intersection of two literatures, with nonlegal norms serving as one of the anchors and the economic literature on bounded rationality and self-enforcing agreements as the other.[32]

---

29. *Id.* at 22–23.

30. *See id.* at 44.

31. *See supra* note 2 and accompanying text.

32. The term bounded rationality was coined by Simon in the following manner: "The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solutions is required for objectively rational behavior in the real world . . . ." *See* HERBERT A. SIMON, MODELS OF MAN 198 (1957).

In our work, we define "norms" to be "nonlegally enforced rules and standards" (what we have inelegantly labeled as NLERS).[33] As such, these "norms" or NLERS reflect two principal conceptual features of norms. First, they are more than mere behavioral regularities: they are obligatory.[34] Second, they are not legally enforced, but are enforced through self-help, reputational sanctions, or other nonlegal means.[35]

The underpinnings of self-enforcing contracts and signaling models, particularly of the kind adopted by Posner, are quite different from each other. As described above, the signaling model is at its best when the parties are first establishing a relationship and there is little observed data to use. The signaling model assumes that the informed party fully understands her own skills and cooperative nature and that the problem she faces is to convince the uninformed party that she has those qualities she claims to have. The signals used are correlated, but not causally so, to the information to be conveyed. Uncertainty as to future states of the world does not play a role.

In contrast to the signaling model, the self-enforcing agreements model is most relevant when the parties are in an ongoing relationship. While the signaling model assumes that the informational asymmetry involves the traits that are known to the informed party, the informational problems in our setting involve contractual incompleteness when unanticipated future states of the world develop. The problem to be solved in the signaling model is to convince the uninformed party that the informed party is cooperative. The problem to be solved in our context is the development of a governance structure to prevent the informationally informed party from using her advantage opportunistically when an unanticipated state of the world occurs.

In earlier work, we have applied findings from the self-enforcing economic literature to a number of settings, including the employment relationship.[36] We continue to use that example in this section. In the NLERS model, the employee is hired and

---

33. Edward B. Rock & Michael L. Wachter, *Islands of Conscious Power: Law, Norms and the Self-Governing Corporation*, 149 U. PA. L. REV. 1619, 1641 (2001).

34. *See id.*

35. *See id.*

36. *See, e.g.*, Edward B. Rock & Michael L. Wachter, *The Enforceability of Norms and the Employment Relationship*, 144 U. PA. L. REV. 1913, 1916–17 (1996).

asked to be cooperative by extending high work effort regardless of which future state of the world occurs. The decision to hire a particular employee, however, is not determined by dress and speech, but by whether the prospective employee is willing to take a low wage for the training period. The training costs are thereby shared. In the ongoing relationship, the employee's work effort or cooperative nature remains unobservable, but either the employee's output or some aspect of it is observable. As long as his or her output remains satisfactory, the employee's wage is increased with seniority. Thus, an employee's pay is tied to some aspect of output rather than conditioned on some unrelated signal. In this model, the uncooperative employee does not profit by taking the high wage job since, initially, the wage is not high.[37] Thereafter, the uncooperative employee is unmasked when observable benchmarks are not met, and discharged. The goal of the NLERS analysis is to identify the governance structure, in this example the wage setting policy, that links wages to observable benchmarks.

To make the problem more realistic, assume that the employee's output is not directly observable at low cost. In cases where output is observable, it is also possible that output is a result of factors other than worker effort, say, for example, it could be due to random variation in the productivity of the capital used by the employee. Consequently, high output may occur when effort is low, and low output might occur if employee effort is high. As long as the probability distribution of the random element is known, an incentive based contract (that is, the governance structure) can be designed so that it is always in the interests of the employee to extend high work effort. Since the employer commits to follow the incentive-based contract, it suffers a clear reputational loss if it does not.[38]

---

37. Notice how joint investments make the signaling model work more effectively. Suppose a low cooperative type were able to learn the signals of the high cooperative type. By using the appropriate social norms, the uncooperative type might be incorrectly hired. If training costs were shared, however, the gains from arbitraging across signals would be reduced. To make the model entirely self-enforcing, the employee's share of the training cost would need to be greater than the difference between the entry wage for the high wage job minus the non-cooperative type's opportunity wage.

38. ROBERT S. PINDYCK & DANIEL L. RUBINFELD, MACROECONOMICS 612 (5th ed. 2001).

In our approach, these incentive-based devices, designed to encourage high work effort, constitute NLERS. They are behavioral regularities that are followed because deviation is penalized, namely, the low cooperative employee is discharged and the opportunistic employer suffers a loss in reputation. They are self-enforcing in that the penalties cannot be, and do not need to be, enforced or challenged in court.

Another example, which we develop in our article on the employment relationship, is the striking "stylized fact" of the non-union workplace that employers and employees rarely avail themselves of a straightforward legally enforceable contractual solution, either through explicit individual employment contracts or through collective bargaining agreements.[39] This pattern, we argued, is best understood as a component of a self-enforcing governance structure.[40] The collection of these self-enforcing arrangements or NLERS constitutes the governance structure of the employment relationship.

First, opportunism is constrained by the structure of the relationship. The sharing of training costs is one example. Joint investments provide protection against opportunism.[41] It can even help the signaling model work better. Take, for example, the case of an opportunistic signaler who signaled that he would be a high productivity employee when in fact he would not. The joint investments make it difficult for an opportunistic signaler to gain because it removes much of the gain from arbitrage. Although the non-cooperative type might have a lower opportunity wage, the ability to cash in on high initial wage payments is removed.

Second, beyond the training period, the employer and employee continue to make joint investments in their match. An array of interesting practices emerges that protect against opportunism in many different states of the world. For example, a stylized fact of the non-union workplace is the widespread practice of responding to economic downturn by laying off employees rather than reducing wages and the related practice of laying off cheaper more recently trained employees before laying off more senior more expensive employees.[42] Both practices may initially seem odd.

39. Rock & Wachter, *supra* note 36, at 1921–27.

40. *Id.* at 1927.

41. *See id.* at 1923–24.

pensive employees.[42] Both practices may initially seem odd. Nonunion employers are legally entitled to reduce wages and legally entitled to discharge the more senior employee before the more junior employee.[43] Moreover, such employers would save on wage costs by doing so.

But this (legal) ability creates a danger that the employer will behave opportunistically by misrepresenting a downturn in the firm's business (as to which the employer knows more than the employee) as a way of lowering wage costs and avoiding paying the more senior employee for his or her investment in training. By following the above practices, the employer makes credible its claim of economic hardship (by incurring the reduction in output that comes from reducing the number of employees) and protects the employees' investments in training. The fact that firms often buy out senior employees' investments by making severance payments that are not legally required can be understood similarly. The (nonlegally required) practice of "discharge only for cause" is another such example.[44]

Third, behaving inconsistently with these practices opens employees and firms to criticism and sanctions. Thus, if an employer unilaterally reduces wage rates, discharges a senior employee before a junior employee, or discharges an employee without cause, the other employees can utilize a variety of "self help" measures to sanction the employer directly. These measures include, for example, "working to rule" (doing the bare minimum required) or calling in sick. If necessary, market-based reputational effects provide additional enforcement power. An employer with a reputation for untrustworthiness will have more difficulty recruiting employees.

Fourth, we argue that prominent legal doctrines, such as the employment-at-will doctrine, are best understood as jurisdictional doctrines rather than substantive standards.[45] In other words, the employment-at-will doctrine is the court's way of telling the parties that they need to work things out themselves, that it will not intervene. The importance of such doctrines, we argue, is that they render the relationship self-governing by preventing either

---

42. *Id.* at 1921.
43. *Id.*
44. *Id.* at 1930–32.
45. *See* Rock & Wachter, *supra* note 33, at 1666.

party from appealing to an outsider instead of working through the self-governing structures of the relationship.[46]

We conclude that the employment relationship is best understood as a self-governing relationship governed by nonlegally enforced rules and standards. In our analysis, the employment relationship is largely "norm-governed."

Our analysis achieves the following. We provide an explanation for some striking observed regularities of the employment relationship and an account of the very limited role of legal rules in rendering that relationship incentive compatible. As a replacement for legal enforcement, we provide an explanation for why the parties can rely on NLERS. That is, despite the legal rule that an employer can discharge an employee for a bad reason or no reason at all, the employer follows the NLERS of discharging employees only for cause.[47] Finally, we explain why it is not in the interests of the parties to replace the legal doctrine of "employment-at-will" with a legally enforced rule of "discharge for cause."[48]

In pursuing this analysis, we are examining how a particular relationship, the employment relationship, is structured in a particular institutional context, the firm. As such, the legal analysis is linked to fundamental features of the economic theory of the firm pioneered by Williamson, Hart and others. On this theory, "norms" or NLERS are an outcome of the attempts by parties to maximize their joint surplus and are, to that degree, endogenous.

We have expanded our intra-firm analysis beyond the employment relationship in a series of articles explaining key features of corporate law. On our analysis, important features of corporate law, such as the business judgment rule[49] and the lock-in of minority shareholders,[50] play important roles in facilitating and protecting the self-governance of firms through NLERS. Even when legal enforceability is present, as in self-dealing transactions un-

46. *See id.* at 1667.

47. Rock & Wachter, *supra* note 36, at 1930.

48. *See id.* at 1932–38.

49. *See* Rock & Wachter, *supra* note 33, at 1666–70.

50. Edward B. Rock & Michael L. Wachter, *Waiting for the Omelet to Set: Match-Specific Assets and Minority Oppression in the Close Corporation*, *in* CONCENTRATED CORPORATE OWNERSHIP 201, 209–14 (Randall K. Morck ed., 2000).

der the duty of loyalty, the courts lean heavily on the self-governing features of the corporation to make legal enforceability workable.[51]

Because the norms that develop inside the firm are endogenous to that institutional context, there is no particular expectation that they should emerge elsewhere. They might develop because of their self-enforcing properties, but other contexts might require greater or lesser sanctions than those available through norm governance. A good counter-example is the law of contracts. Whereas the employment relationship and much of corporate law is intra-firm, contracts are market relationships and are thus inter-firm. Contracting parties obviously prefer to avoid disputes, and will therefore rely to whatever extent is possible on self-enforcing norms. One major difference is that the contracting parties rarely use norms that serve as a jurisdictional boundary that would make their norms entirely self-enforcing.[52]

DO THE ANALYSES MEET?

Is there a link between our concern with NLERS and Posner's concern with the behavioral regularities that emerge from signaling behavior? Does our "norms" analysis link up with Posner's "norms" analysis? Are we talking about the same phenomena or overlapping phenomena?

At first glance, the answer might seem to be no. Many of the NLERS that we discuss, both in the employment relationship and in the corporate context, cannot be understood as behavioral regularities that emerge from a signaling game. From another direction, many of them are not the same sort of conduct Posner groups under the heading "social norms." So, perhaps we are just interested in different problems and once the pervasive (and perhaps disabling) ambiguity of the term "norm" is cleared away, the lack of connection becomes manifest.

But this seems too quick for a number of reasons. First, we all consider nonlegal mechanisms of cooperation to play a central role. We are all interested in the subtle and sometimes counterin-

51. Rock & Wachter, *supra* note 33, at 1661–62.

52. *See* Rock and Wachter, *supra* note 36, at 1944–45.

tuitive relationship between the law and nonlegal mechanisms of cooperation. In both cases, reputation plays an important role in enforcing norm adherence. Recall that, on our account, reputational sanctions are part of what renders the employment relationship incentive compatible.[53] For example, part (but only part) of what makes the NLERS of "no discharge except for cause" sufficiently binding on the employer to protect the employee from employer opportunism is that failure to abide by that practice impairs the employer's reputation in the external labor market, thereby making it more costly to hire employees.[54] Consequently, we view norms in a similar way: behavioral regularities that are enforced by the parties themselves or through reputational effects.

Moreover, by tying his framework to the signaling model, Posner can explain phenomena that we do not: the function of distinctively *social* norms. While others might believe that dress, manners, and a large set of other similar social behavioral regularities are largely that, regularities, Posner shows that they fall under the rubric of norms because they are enforced by nonlegal actors. Signaling models play a role in areas where our type of norms, self-enforcing economic arrangements, do not: initial meetings or informal contacts between actors who are unable, because of legal prohibitions or other factors, to cooperate with each other formally. In such cases, the actors are unable to meet and set arrangements that allow for the more formal, but still self-enforcing, economic behavior that we describe.

But once the actors are able to fix arrangements, as in intra-firm dealing or in contracting, we argue that most of these economic relationships will be guided by economic arrangements that make opportunism unprofitable, rather than by social norms that signal whether an actor is a cooperative or non-cooperative type. Our economic norms are arguably more binding and robust than are Posner's social norms because the opportunistic actor will either suffer a clear financial loss by acting opportunistically or will suffer a reputational loss when the breach of the norm becomes known to other actors. Posner's social norms, operating in an intra-firm or contracting relationship, generate softer sanctions. In particular, to the extent that the parties adhere to their

53. *Id.* at 1931.
54. *Id.* at 1948

informal working arrangements, failure to give gifts, to dress appropriately, or to act with the requisite manners does not trigger a financial loss between the actors. Any reputational loss will be muted by the actor's otherwise cooperative behavior.

Posner might question whether the business-related self-enforcing agreements that we cite should be described as norms. After all, because adherence is driven by economic self-interest, what is added by using the term norm to describe these arrangements? Why not reserve the term norm for the softer, less self-interested social behavior described by Posner? The reason is that some of Posner's social norms, indeed all those that affect economic relationships, work the same way. The prospective employee suits up for an interview in the hope of financial reward: she is maximizing a profit or utility function given a cost constraint. In Spence's original signaling model, the signaler signaled to gain a monetary reward.[55] The social norms that are not enforced through the hope of profit are enforced through the hope of utility improvement. That is, the decision to adhere or to defect from the cooperative mode, involving a purely social norm, is made by maximizing utility given to reputational cost constraint, which itself may be expressed in utility terms.

If norms are behavioral regularities that are obligatory because of nonlegal sanctions, then, in both models norms are followed only when it is in the interest of the affected parties to adhere to them. This is no less true of economic arrangements than it is of social arrangements. The calculus of adherence or defection is the same. The key distinction between obligatory behavioral regularities is not whether the penalty is economic or social, but whether the penalty is legally enforced or nonlegally enforced. In the end, both models use the concept of norms in the same manner: to explain nonlegal cooperation in institutions. By explaining different pieces of the puzzle, our theories are complementary rather than competitive.

55. SPENCE, *supra* note 2, at 355.