
TOWARD A UNIVERSAL MODEL OF JUDGING WRONGDOING:

JAPANESE AND AMERICAN DATA*

by

V. Lee Hamilton
University of Michigan

Joseph Sanders
APTECH Imaging, Inc.

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Ann Arbor, Michigan 48109

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Joseph Sanders
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with

Yoko Hosoi, Zensuke Ishimura, Nozomu Matsubara, Haruo Nishimura,
Nobuho Tomita, and Kazuhiko Tokoro

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Address all communications to: V. Lee Hamilton, Sociology Department, University of Michigan, Ann Arbor, Michigan 48109.

TOWARD A UNIVERSAL MODEL OF JUDGING WRONGDOING:
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We judge each other every day. Whether formally or informally, humans are constantly meting out judgments of responsibility and punishment. Despite the ubiquitous and socially important nature of these decisions, current models of how humans judge wrongdoing are not fully adequate to the task. Such models take two ideal-typical forms: those asserting some cross-culturally applicable, even universal pattern (e.g. Piaget, 1932 , 1965); and those asserting some sharp, even qualitative cleavage between social groups or cultures (e.g., Benedict, 1946). Broadly speaking, such models have also tended to emphasize one of two types of input to moral decisions: the acts of the person being judged versus the person's duties or obligations. The present paper outlines a proposed overarching model of how humans judge misdeeds and presents preliminary data from a cross-cultural test of the model.¹ The empirical focus is the determination of responsibility, although theoretical linkages to punishment decisions will be indicated. Structurally, the model asserts that human differences in the judgment of wrongdoing are continuous rather than categorical, and can be operationalized in terms of differential weights placed on a common set of variables when making judgments. Conceptually, the model asserts that a complete account of such decisions must include consideration of both actors' deeds and their social obligations. The approach can be seen as simultaneously a fusion and a modification of prior models exemplified by Piaget (1965) and Benedict (1946).

The psychological approach to how humans judge wrongdoing has consistently emphasized the deeds of an actor as determinants of responsibility and punishment.

The seminal research of Piaget (1965) stressed developmental progression from judgment focused on the objective consequences of action to judgment focused on the actor's subjective intent. Piaget's attempt to outline a broad two-stage or two-level moral development process--of which the shift from consequences to intent is an important component--was later expanded into a six-stage purportedly universal model by Kohlberg and associates (e.g. Kohlberg, 1969, 1976). Piaget's influence was felt in social psychology indirectly through the work of Heider (1958). Heider proposed five levels in the attribution of responsibility, frequently interpreted by subsequent researchers as developmental levels, incorporating a broad shift from objective to subjective factors. In Heider's levels responsibility judgments shift from bases of global association with an effect through increasingly finer consideration of the actor's subjective state to, finally, consideration of possible justifications or excuses as well as the actor's intent.

The initial individualistic focus has been maintained in both developmental and social psychological critiques of this moral judgment model. Within developmental psychology, critiques of the Piagetian/Kohlbergian position have frequently been either methodological or specific to certain theoretical predictions (see, e.g., reviews in Lickona, 1976). Critics representing social learning theory, in contrast, have emphasized the specificity of actual moral behavior and its links to situational determinants (e.g., Mischel and Mischel, 1976); but the social learning theory picture of the situation is both particularistic and theoretically linked to individual learning histories. Certain recent attacks have begun to focus more broadly on what is asserted to be an ideological bias toward individualism within psychology (Hogan, 1973; Pepitone, 1981; Sampson, 1978) or abstract rather than contextual modes of reasoning in moral judgment models (Gilligan, 1977).

In social psychology, research following Heider has generally emphasized either

exploration of responsibility judgments as a developmental issue (e.g., Shaw and Sulzer, 1964; Harris, 1977) or examination of responsibility for accidents as an interesting ambiguous stimulus (e.g., Shaver, 1970; Walster, 1966). A variety of conceptual and methodological critiques have only tangentially questioned whether responsibility judgments involve anything beyond evaluating actors' deeds (e.g., Brewer, 1977; Fishbein and Ajzen, 1973; Harvey and Rule, 1978; Vidmar and Crinklaw, 1974).

That responsibility and punishment for wrongdoing may be more than a matter of intents, deeds and consequences is suggested by sociological and anthropological approaches. Legal sociologists studying related questions have focused on variables like status differences between actors or effects of bureaucratic organization on dispute settlement (e.g. Black, 1976; Emerson, 1969; Nonet, 1969; Ross, 1970). Similarly, legal anthropologists have concentrated on the social organization of groups to explain responsibility attribution (e.g., Gluckman, 1967, Llewellyn and Hoebel, 1949; Nader, 1969). Thus a more sociological—or anthropological—approach would argue that understanding responsibility judgments and attendant punishment requires consideration of at least two distinct issues: what the actor did, and the social expectations of others for what the actor should have done. "Should have done" can take either general or specific forms. Their general form is that of undifferentiated norms for behavior; but these can be relatively invisible in the judgment process even when crucial to it, precisely because they are held in common across actors. In specific form, however, we find socially differentiated norms for what should be done: social roles. Such role-based expectations for action provide an opportunity to observe empirical effects of "shoulds" on moral judgments. Role expectation can serve both as direct inputs to judging wrongdoing and as normative contexts within which action will be judged. Thus sociological or anthropological concerns suggest the need for a two-factor model of judging wrongdoing: a model in which role

expectations, deeds, and the interaction between them each represent important elements.

The contribution of anthropology in emphasizing role factors in moral decisions is somewhat offset—at least to a sociological audience—by disciplinary tendencies to emphasize cultural divergence. At the extreme, such divergences become categorical or qualitative differences. Thus one of the most famous anthropological distinctions in the moral judgment area, frequently viewed as a qualitative distinction, is that between "shame" and "guilt" cultures. In what may yet remain the popularly best-known Western work about Japan, Benedict's (1946) The Chrysanthemum and the Sword, the moral cultures of the U.S. and Japan are treated as exemplars of, respectively, "guilt" versus "shame" processes. In a guilt culture, the individual responds to internalized demands from the self, avoiding misdeeds because of their internalized psychological costs; in a shame culture, in contrast, the individual responds to the anticipated reactions of others, avoiding misdeeds because of their social ramifications. This dichotomy can be seen as one between moral self-evaluations based on acts and evaluations based on social expectations. Although Benedict's argument alerts us to the possibility that deed-based judgment may be an American (or, more broadly, Western) style or ideology of judgment rather than a cultural universal, it leaves instead a categorical gulf between East and West. Both American and Japanese writers since Benedict, even when criticizing such sharp distinctions, have consistently painted an image of Japanese moral judgment (and personality) as more group-, role-, or obligation-oriented than its Western counterparts (see, e.g., DeVos, 1973; Doi, 1973; Nakamura, 1960; Nakane, 1970). If American life is dominated by an ideology of individualism, as commentators from de Toqueville (1951) to Lasch (1979) have seen it, Japanese life is depicted as similarly dominated by an ideology of "groupism."

There are two reasons to be suspicious of such sweeping differences. A first, of course, is that ideologies oversimplify; behavior across cultures may be much more similar than ideological statements about behavior, and even statements of moral (or other) ideals by members of general publics more similar than would be true of "spokesmen." Secondly, societies are not unifocal with respect to ideology itself, given that they are not uniform regarding the life chances of their participants. Thus even a cursory search can locate pronouncements of a duty-oriented morality by prominent Americans, or an individual action-oriented morality by prominent Japanese.² To speak of "the" ideology of either country involves ignoring other sides of complex historical and social questions. Nevertheless, for those who seek cultural differences, the U.S. and Japan have repeatedly been presented as vastly different, even qualitatively so, in their moral judgments.

From the present perspective, a complete model of how humans judge wrongdoing would include both actors' deeds and attendant social expectations. From the prior literatures we glean two key ingredients: from psychology, a purportedly universal model focused on actors' deeds; and from anthropology, a purportedly sharp or categorical gap between the moral models of Americans and Japanese. These can only be combined by showing both to be partial truths. The specific strategy is to look across the purported qualitative gap between Japan and the U.S. for evidence of two kinds. First, if the proposed two-factor model is a universal one, members of both cultures should use a common general model for judgment. Second, if ideology at all captures realities of thought and deed among common citizens, all accounts suggest that Japanese show more emphasis on role factors; and Americans, deed factors. The predicted difference, however, is one of degree rather than kind.

Since considerations of brevity demanded focusing the present comparison on a single moral judgment issue, analysis here concerns responsibility decisions. These are

theoretically prior to punishment judgments, indeed a key input to them, and hence represent the initial step in a complete model. Here it may be useful, however, to indicate briefly the predicted theoretical link between models of responsibility and attendant punishment decisions. Models of just punishment should vary with the weight placed on actions abstracted from their context versus role obligations of the actors. A person (or a whole society) can place greater emphasis on deeds—or roles—in determining punishment, as a function of their model of responsibility. We argue that a focus on role obligations should be accompanied by a restitutive approach to punishment, because it is seen as valuable to restore role relations if possible; the actor is seen as embedded in a series of role obligations and situational constraints, including with a victim, rather than as a perpetrator to be viewed in terms of a deed alone (e.g. Griffiths, 1970). Emphasis on abstracted action should make more likely a retributive approach, for the cause and cure of the situation are both seen as residing in the person (see, e.g., Rothman, 1971, regarding foundations of American penology). Thus if Japanese prove to emphasize role considerations in judging responsibility, they should show accompanying restitutive (and light) punishments; if Americans emphasize actors' deeds, they should show accompanying retributive (and harsh) punishments. Sanctioning decisions should follow from differential emphasis within what is argued to be a cross-culturally general moral model.

Again for brevity, the present paper reports hypotheses and results from Japanese data, testing for the model used by Japanese respondents; and presents results from Japanese-American comparisons, testing for whether differential weights are placed on given variables as predicted. A more detailed report of the American responsibility data per se can be found in Hamilton and Sanders (1981), which will be drawn from here in statements of hypotheses, in describing methods, and in organizing results.

In the study of Japanese judgments of wrongdoing, as in its American predecessor, certain key features of action and of role relationships were selectively focused upon. The general research strategy was to present vignettes describing incidents primarily drawn from everyday life, and within which certain features of the action or situation were experimentally varied. To evaluate the impact of the intent and outcome of an actor's deeds upon responsibility, the key traditional psychological variables of the actor's mental state and the deed's consequence severity were manipulated.³ Two contextual features of the event were also varied in order to capture specific situational constraints that alter meanings of deeds: the actor's (good or bad) past pattern of behavior, and the presence or absence of influence from another leading to the deed. The former contextual feature was expected to hold greater importance in a deed-oriented responsibility model, as a past pattern of behavior is carried by the individual actor into a situation; the latter feature was expected to hold greater importance in a role-oriented model, as influence from another provides a social context, obligation, and possible excuse for action.

To capture as broadly as possible the predicted impact of role obligations, two dimensions of role relationships were identified in sociological, linguistic, and legal sources. The vertical dimension of hierarchy reflects whether the parties are tied in a relationship of authority-subordination at one extreme, or equality at the other. The horizontal dimension of solidarity encompasses the distinction between relationships of status, in which parties are bonded and engaged in intrinsic exchange, and those of contract, where ties are relatively temporary, interchangeable, and extrinsic (cf. Maine, 1963).⁴ Differences between role dyads such as parent-child and boss-worker on the one hand, and brother-sister or co-workers on the other, exemplify the vertical dimension of social life. The cross-cutting differentiation between parent-child or sibling dyads versus boss-worker or co-worker dyads then captures the

horizontal dimension.

In summary, general expectations for the Japanese data and Japanese-American comparisons were threefold. First, we expected the Japanese data to replicate American results with regard to basic ("main effect") impacts of deed and role variables on responsibility; these and other hypotheses are presented in detail below following description of the study's methods. Second, we expected that role relationships would serve as normative contexts for deeds in the Japanese data as they had in the American, in that roles theoretically serve to alter the meaning of information about deeds; this implies empirical interactions of role and deed variables. Third, we anticipated that Japanese would show a heavier emphasis on role relationships in judging responsibility—essentially, that they would reveal a pattern of different weights in a common model for judging wrongdoing.

Methods and Hypotheses

The Studies

To assess the impact of roles and deeds on responsibility assessments, respondents' judgments of hypothetical stories concerning wrongdoing were obtained, a strategy commonly used in the investigation of moral judgments since Piaget. Embedded in the stories, which were administered to sample of adults, were experimental variations in the deed-related (including contextual) variables. This tactic combines the experiment's advantage of clear causal inference with the survey's advantage of wide generalizability.

The original study from which the Japanese replication and extension followed was the 1977 Detroit Area Study (D.A.S.), a probability sample survey of the Detroit S.M.S.A. (N=678). Description of the methods, stimuli, and hypotheses therefore are

drawn partly from the original report on the Detroit data (Hamilton and Sanders, 1981). Detroit respondents judged six vignettes concerning wrongdoing, four of which represented ideal-typical combinations of the role dimensions of hierarchy and solidarity. The remaining two vignettes, one a crime story and the other one of a pair of experimentally alternated civil offenses (auto accidents), will be omitted from the present report because of its focus on types of role relations.

The first Japanese replication/extension, prepared and conducted by our Japanese collaborators, was a 1978 probability sample of Yokohama (N=600). Yokohama was selected because it is of comparable size and industrial role to Detroit (see, e.g., Cole, 1979). Because the Japanese researchers also became interested in comparing relatively more traditional versus modern areas of Japan, they then conducted a further follow-up study in 1979 in Kanazawa, a considerably smaller city than either Detroit or Yokohama and one with a long history as a traditional feudal provincial capital. This latter survey (also a probability sample with N=600) will be treated briefly here as a follow-up to the Yokohama analyses. While results cannot directly be generalized to the U.S. and Japan as a whole, they can be taken as likely to be representative of large urban areas in either country.

The Yokohama survey included ten vignettes: the four core ones representing the types of role relationship, plus the crime and both auto accidents, plus three additional vignettes exploring topics of particular interest to the Japanese research group. Here, as noted, we concentrate on cross-national comparison for the core role stories. The Kanazawa survey again included the four role stories, plus one story originally in a Detroit mailback questionnaire and a final story written by the Japanese group; Kanazawa will also be examined briefly for the core stories only.

Each core story was intended to represent one of the ideal-typical combinations of hierarchy and solidarity of role relations. Within each story we dichotomously

manipulated mental state, seriousness of consequence, past pattern, and other's influence. The 16 versions of each story were randomly assigned to respondents, and the order of presentation of stories was varied according to a Latin Square design to control for possible order effects. (Each Japanese survey presented the Latin Squared translated American stimuli prior to the additional stimuli used only in the Japanese study.) Each respondent was asked a series of questions after hearing one version of a given story. These included judgments of the responsibility of the actor for what happened (on a scale from 0=not at all responsible to 10=fully responsible); the appropriate sanction; and manipulation checks on the experimentally manipulated variables. Below we briefly describe each story.

In the equal/status story two twin brothers are playing baseball with a friend. Either Billy, the protagonist, or the friend (when other's influence was introduced) decides that it is Billy's turn to bat. Billy grabs the bat and the brothers begin fighting.⁵ The brother is then hit with the bat; the hit is described as accidental in the low mental state condition, and done out of anger in the high condition. Billy has either often or rarely gotten into fights before (past pattern). The consequence is a head injury or a large bump on the head.

In the authority/status story, a four-year-old child is crying and will not sleep. The child's mother either goes to quiet him or is told to do so by the father (when other's influence was introduced). The child either struggles in her arms and slips, hitting a chair (low mental state), or is shoved into the chair (high mental state). The injury is a sprained ankle (low consequence) or a head injury (high consequence). The mother is described as either frequently or rarely getting angry at her child (past pattern).

In the equal/contract story a salesman, Dave, sells a customer a used car which he either thinks has not been inspected (low mental state) or knows to have a hidden

defect (high mental state).⁶ It turns out that the car needs \$50 or \$500 worth of repairs (consequence manipulation). Dave is described as honest or sometimes dishonest with his customers in the past (past pattern). He either sells the car on his own initiative or at the urging of another salesman (when other's influence was introduced).

In the authority/contract story, Joe is a foreman on an assembly line. The company is trying to fill a large order and Joe either does not want to stop the line, or is told by his supervisor not to let the line stop (when other's influence was present). Joe is described as always being careful about safety procedure in the past or sometimes being careless (past pattern). Either he becomes busy and does not notice a safety guard is improperly attached (low mental state) or he notices the safety guard but decides to do nothing until the end of the day (high mental state). As a consequence a worker suffers a bruised hand or loses two fingers (consequence manipulation).

Expected Effects

Two broad categories of hypotheses can be identified within the Yokohama data set, in addition to hypotheses regarding Japanese-American differences. These categories are simple main effects of deed variables or role dimensions, versus the interactions of the two that might yield evidence that roles serve as normative contexts for interpreting deeds. Below we indicate briefly what is expected for the Yokohama data set in terms of main effects and interactions of variables, followed by predictions for Yokohama-Detroit differences.

Deed variables. Given supposed universal trends in human moral judgment, we predicted that Japanese respondents, like their American counterparts, would use information about an actor's mental state in determining responsibility for wrongdoing but would make little, if any, use of information about consequence severity. The

attribution literature within social psychology also suggested that an actor's bad past pattern of behavior leads to greater responsibility than a good past pattern (e.g., Kelley, 1967, 1973) and that influence from another decreases responsibility for misdeeds (e.g., Heider, 1958).

Role variables. The theoretically anticipated main effect of hierarchy is that authorities are held more responsible for acts of a given degree of purposiveness than are equals. This follows from the nature of moral and legal rules for superiors, where authority carries with it greater obligations (see Hamilton, 1978). Authorities may be held responsible for events when intentionality is completely absent, or according to more strict interpretations of a given set of rules. Superiors generally are judged according to a combination of their adjudged mental state and diffuse role obligations—theoretically yielding higher overall responsibility.

A corollary of this hypothesized difference, however, is that the "same" levels of manipulated mental state would not yield the same outcome when authoritative versus equal relationships are judged. Pilots for the original Detroit study indeed showed that mental state for authority stories had to be varied around lower levels than for equals in order to obtain appreciable variance in responsibility attributions. Variations for equals represented negligence versus intentionality, while those for authorities represented accident (with possible implication of negligence) versus recklessness. Therefore, tests for differences between authorities and equals in responsibility assignment must employ statistical controls for differences in perceived mental state.

A second design difference between authority and equal stories concerned the variable of other's influence. To simplify the design, the influencing other was always in the same type of relation already being depicted in the vignette; for example, in the equal/status story, the other is a friend of Billy and thus equal/status

just as Billy is with his brother. Since actors in authority stories are thus simultaneously authorities and subordinates when other's influence is introduced, their intermediate position might confound the impact of authority on responsibility. Thus hypothesized authority-equal differences should appear most sharply for vignette versions where other's influence was absent.

The anticipated main effect of solidarity is that more responsibility be assigned to wrongdoing in contract relations than to that in status relations. This prediction is contingent rather than theoretically general as in the case of hierarchy variations, and rested on what we hoped was successful depiction of typical wrongdoing in status versus contract situations. We felt that victims are typically involved in some way in status relations, even if merely presumptively, based on the extended interaction and generalized exchanges that characterize such relationships; an actor's responsibility would thus be reduced. Our incidents followed this pattern. Clearly unprovoked wrongdoing might instead yield greater assignment of responsibility for those with status rather than contract ties, but would be unrepresentative of how such ties are normally viewed. Thus the expectation regarding status-contract differences is empirically contingent on victim involvement/provocation, but the prediction captures what we see as the most common perception of status relationships.

Role-deed interactions. We anticipated interactions for the role variables with mental state, past pattern, and other's influence information, but not for consequence information, as we suspected the seriousness of consequences would not be important in any setting (e.g. Fishbein and Ajzen, 1973; Vidmar and Crinklaw, 1974).

Mental state and hierarchy were predicted to interact, producing two differences between the model of responsibility adjudged for authorities and that adjudged for equals. First, because of the special obligations of authorities, we hypothesize that information about mental state has a different meaning, in that it can be used to

assess the nature of a superior's unfulfilled role obligations as well as to assess subjective involvement per se. Thus for superiors mental state information can alter responsibility either directly by affecting the actor's perceived mental involvement or indirectly through affecting judgment of unmet obligations. For equals, in contrast, the only impact of mental state information is through perceptions of mental state.

A second hypothesis about hierarchy is then implied by this model of an authority's responsibility. We hypothesize that differences between authorities and equals are greatest at lower levels of mental state involvement. Authorities are held responsible at quite low levels of adjudged mental state involvement, even for misdeeds of a vicarious or strict liability type—where adult moral judgment would not hold other sorts of actors liable. Thus the responsibility of authorities and equals is most different where mere association with an act or commission of it is involved; more similar where questions of negligence arise; and converge toward full responsibility for both authorities and equal actors where action becomes clearly intentional.

Regarding a possible mental state by solidarity interaction, we hypothesize that mental state plays a greater role in status relationships than in contract relations. This follows from the fact that in status relationships the parties have greater knowledge of each other's past, greater concern with the relationship's future, and hence a tendency to take a more subjective orientation to each other's deeds. Even outside observers (such as survey respondents) should weigh mental state more heavily in status relations because of their social knowledge of the content of ties.

Past pattern and solidarity should also interact, given the greater emphasis on and awareness of past patterns of behavior in status relations as opposed to contract relations. Thus we hypothesize that variations in past pattern of behavior, like variations in mental state, have greater impact in status than in contract stories.

Given that other's influence is a diverse category, we expected the identity of the influencing other to determine the impact of that variable on responsibility. Other's influence and hierarchy were predicted to interact, given that the influencing other in authority stories was an authority and that other in equal stories an equal. Initiative from a superior is hypothesized to reduce an actor's responsibility more than persuasion from an equal; and any main effect of other's influence is expected to reflect the influence of superiors.

Other's influence, hierarchy, and solidarity should then show further evidence of the differential impact of influence on responsibility. Because status relations involve an ongoing tie of mutual obligation, a superior in a status relationship has less coercive control than a superior in a contract relationship. Thus the impact of another's influence is predicted to be strongest in authority/contract settings, weaker in authority/status settings, and weakest in a setting of equality between actor and other. Influence from another person should not have a unitary effect on an actor's responsibility for wrongdoing.

Cultural differences. We have thus far predicted precisely the same effects for the Japanese data as were predicted for the American counterpart study (Hamilton and Sanders, 1981). This is one side of the theoretical argument regarding human judgment of wrongdoing: that the same model should hold in both cultures. But the second side is that members of the cultures should place different weights on certain variables as a function of their differences in ideology and praxis. A stringent test of the "different weights" argument is provided by analyses with country as a variable, where different weights should yield statistically significant interactions. Less stringently, coefficients can also be examined for whether the direction of difference is as theoretically predicted.

In expecting certain differences between Japanese and American judgments of

wrongdoing, we do not anticipate qualitative evidences of "shame" versus "guilt," but instead signs that in the one culture responsibility tends to be viewed from a framework of role obligations and group memberships, while in the other it is often seen as a matter of individual actors carrying out deeds. Such differences of emphasis imply differences in response to deed variables and to role variables.

Japanese response to deed variables should reflect the extent to which each is actor-oriented. Although we anticipated that significant cultural differences might not emerge in the use of mental state information, given its long-argued centrality in adult moral judgment, any differences found were expected to show less use of mental state information by Japanese judging responsibility (see Shaw and Iwawaki, 1972). Similarly, any use at all of consequence information was originally predicted to be found in the American rather than the Japanese data; and the American data failed to reveal any stable impact of consequence severity on responsibility judgments (Hamilton and Sanders, 1981). Although past pattern of behavior is a contextual variable, it is carried by the actor into the situation; we thus predicted less use of past pattern information by Japanese respondents. The companion contextual variable of other's influence, in contrast, captures the impact of another role partner in a situation; thus we predicted greater impact of other's influence on responsibility among Japanese.

The differential response to role variables, straightforwardly, was expected to reveal a stronger Japanese tendency to consider the relationship between parties in judging an actor's responsibility. Thus we hypothesized that Japanese respondents show greater sensitivity to both the hierarchy and the solidarity of relationships in adjudicating wrongdoing.

The implication of these predictions for cultural differences in role-deed interactions were less clear. What the combination of greater sensitivity on one

dimension and less on another implies for the interaction of those dimensions is difficult to predict. In general, we expected that the robustness of interactions across cultures would be a function of the expected size of impact of the component variables.

Data Analysis and Results

Procedures

The basic Yokohama analysis of the core stories calls for an unusual analysis of variance. The design consists of four between-subjects factors (mental state, consequence, past pattern, and other's influence) and two within-subjects factors (hierarchy and solidarity of the role relationship), all varied dichotomously. Each respondent thus heard four sixty-fourths (or one-sixteenth) of a fully repeated design. In such a design, observed differences across stories for a given respondent can be due either to differences between the stories themselves or to differences in versions of story heard, since versions were randomly assigned (and therefore not typically the same across stories for a given respondent). Thus instead of using a conventional mixed model ANOVA, we first created an extended data file that used the person-story as the unit of analysis, and was therefore four times as large as the number of respondents. We then created four artificial between-subjects data sets using this extended file. The four stories for each respondent were randomly assigned to one of the four data sets such that one and only one story for each respondent appeared in each data set, but each sub-data set included approximately equal numbers of each of the four vignettes. This produced four quasi-independent replications of the study as a fully between-subjects design. Then we used a 2⁶ design to analyze the extended file plus the four replications, examining the coefficients for consistency across analyses. For stable effects we then dispense with reporting all coefficients in follow-up analyses relating to these effects and simply use results from the extended

file. Subsequent analysis for country differences in the proposed model then use a parallel extended file design described below.

Such a strategy is important in analyzing vignette-type data sets since the true N for these data sets is not the number of persons times vignettes, although it is sometimes treated as such in the sociological literature. The designs are also generally some variety of fractional replication or an analogue to it, as ours is, making conventional mixed model analyses inappropriate as discussed above. Use of artificial between-subjects data sets sacrifices the power that can be obtained by repeated measures analyses, but provides further confidence by giving some indication of what results would look like across several (in this case four) discrete replications of the overall design.

Since the experiment was conducted in the field and respondents were given simple random assignments to versions of stories, cell n's were slightly unequal. All analyses of variance reported used effect coded regression to produce a true least squares solution (see Kerlinger and Pedhazur, 1973).

Manipulation Checks

Manipulation checks were designed to determine whether the experimental manipulations were in fact perceived as intended. For checking the distinctions among mental states, two such items were needed for all stories, as the difference between accidental and negligent acts is not the same as that between negligent and purposive acts. An eleven-point item asked the extent to which the actor "didn't mean to" (0) or did "on purpose" (10) the act in question.⁷ A dichotomous item asked whether the actor "could have avoided" the act or not.⁸ The first item is an intention check, the second a negligence check. The manipulation of consequences was checked with an eleven-point item ranging from 0=not at all serious to 10=extremely serious. The past pattern manipulation was checked with a dichotomous

item asking whether the actor's deed was or was not predictable based on the information given. The final manipulated variable, influence from another, had no appropriate manipulation check since influence was missing in half of the versions of each story and present in the other half.

Manipulations were generally successful. In all but one case, the effects of a given manipulation were significant on the relevant manipulation check and almost always stronger than the effects of any other manipulation on that item. The sole apparent failed manipulation in the Yokohama data was that for past pattern in the authority/status story (mother harming child), which did not relate significantly to the predictability item. However, two considerations lead us to believe that this represented a failure of the manipulation check itself rather than the past pattern variations. First, the Japanese researchers reported that asking about the predictability of behavior seemed odd in Japanese (and in fact eliminated the item in the Kanazawa follow-up); in particular they noted that emotional behavior--such as was represented in the mother/child incident--might seem inherently unpredictable to a Japanese. Yokohama respondents indeed overwhelmingly indicated that this incident was not predictable. Second, despite the failure of the manipulation to relate to its supposed check, the past pattern variable still proved significantly related to responsibility in this story. Thus we provisionally conclude that the manipulations were all successful, and that the predictability item exemplified the difficulty of literal carry-over of wordings across a large linguistic and cultural gulf.

Patterns for Japanese responses to the mental state manipulation checks showed the opposite phenomenon with regard to linguistic issues. Although wordings for each of these items were modified from Detroit wordings to accommodate common Japanese usage (see footnotes seven and eight above), the two checks for mental state were apparently effective and were differentially linked to the mental state manipulation

for equal versus authority stories in a pattern similar to that found in Detroit (see Hamilton and Sanders, 1981). In Yokohama, mental state variation significantly affected purposiveness in all stories but affected avoidability more strongly in the authority stories. This provides preliminary evidence of the differences noted above between the mental state manipulations in the two types of stories, suggesting that Yokohama respondents also saw the equal relationship stories as issues of negligence versus intent rather than accident versus negligence. Thus a linguistic functional equivalence appears to have been attained for these mental state items, in contrast to a flawed literal equivalence in the case of the predictability item.

Main Analyses of Yokohama

Overall analysis of variance. Results for the Yokohama extended file analysis and the four artificial between-subjects replications are presented in Table 1. For the extended file analysis, the F-tests, significance levels, and unstandardized coefficients are reported for all results significant at the conventional $p=.05$ level in the saturated model; results are also reported for consequence severity, despite its nonsignificance, because it is a core variable in the design. For the replications, corresponding coefficients are presented.

(Insert Table 1 about here)

Since the four between-subjects data sets give some indication of what results would look like across replications of the overall design, these were examined for stability of effects found in the extended file analysis. Criteria for rejection were a sign change on coefficients or two extremely small coefficients (less than .20 absolute value). On these grounds the four-way interaction is rejected as not a real effect—i.e., unreplicable. Two others, one between consequences and past pattern and the three-way interaction of these two with mental state, appear suspect. Since these were also unpredicted and the main effect of consequences itself nil, they will be

Main effects of deeds. As Table 1 indicates, the main effects of deed variables were both straightforward and consistent with hypotheses. Variation in the actor's mental state greatly increased the responsibility assigned. Among the contextual features of action, a bad past pattern of action increased responsibility over a good pattern, as expected; presence of influence from another party reduced responsibility in comparison with the absence of such influence, again as expected. The sole deed variable not showing a significant relationship to responsibility judgments, consequence severity, had been predicted not to do so on the basis of prior developmental and social psychological findings; this variable had also failed to show a stable impact in the Detroit data (Hamilton and Sanders, 1981). Overall, Japanese respondents thus corroborated expectations for the general cross-cultural model for the use of information about actors' deeds in judging wrongdoing.

Main effects of roles. Table 1 shows a substantial effect of hierarchy on responsibility judgments and an overwhelming effect of solidarity. These main effects indicate, as predicted, that authorities were judged more responsible than equals and those in contract relations more responsible than those linked by status ties. Examining the true impact of hierarchy, however, requires taking account of the presence versus absence of another's influence, as well as differences in levels of mental state manipulation in the stories presented.

Controlling for other's influence simply involves looking at the effect of roles in those cells where other is absent, but controlling for differences in levels of the mental state manipulation is more difficult. We used the two manipulation checks, "on purpose" and "avoidability", as controls for perceived mental state. They were entered into a regression equation with mental state, hierarchy, and solidarity, in order to examine the effects of solidarity and hierarchy net of these mental state elements.¹⁰

Table 2a then shows the net effect of the role variables in the situation where other's influence is absent. Solidarity's substantial impact on responsibility judgments remains large with controls included for manipulated and perceived mental state, and shows more responsibility assigned to actors in contract situations than in status situations. The effect of hierarchy, although still smaller than that of solidarity, is markedly larger when other's influence is absent and mental state controlled; as predicted, authorities are held more responsible than equals.

(Insert Table 2 about here)

Table 2b presents the same equation with other's influence present. The solidarity direct effect is again large, although slightly reduced over the previous results. But the impact of other's influence on the hierarchy effect is striking; although the effect is still significant in the predicted direction, the coefficient is cut in half. This is itself predictable from the hypotheses, given that the other in authority stories is superordinate to the actor, while the other in equal stories is equal to the actor.

Main effects of role variations in the Yokohama data set proved sizeable and consistent with predictions even without the controls for other's influence and mental state needed to produce "pure" versions of the role effects. Such controls, however, revealed the differential impact of other's influence in authority versus equal stories as well as indicating how confounded variations in the mental state manipulation, as suspected, act to dampen the apparent effect of hierarchy in the basic analysis of variance results.

Interactions of roles with deed variables. Only some of the predictions concerning these interactions were upheld, as is partly evident from the overall analysis of Table 1. We shall discuss the outcomes in the order hypothesized, corresponding to expectations concerning the size of impact of variables, by treating

mental state-role interactions first, followed by those involving past pattern and other's influence.

Two hypotheses about the interrelationship of hierarchy and mental state information were implied by the model of responsibility for authorities versus equals. A first hypothesis indicated that mental state information can have two uses. It can directly affect judgments of an actor's mental involvement, but it can also be relevant to assessing an actor's obligations. Table 3 therefore presents models for effects of mental state separately for authorities and equals. (Results are collapsed across the other's influence variable because it did not significantly alter these patterns). Results in 3a indicate that for equal actors, mental state information was information about purposiveness or avoidability; with these controlled, mental state had no effect on responsibility. Table 3b shows that for authorities, in contrast, there was a significant effect of mental state on responsibility even with purposiveness and avoidability controlled. We interpret this effect as indicative of authorities' obligations of attention and foresight. Thus the initial interaction hypothesis is confirmed in Yokohama, in that use of mental state information in judging authorities is something "more" than prior psychological models suggest. We argue that the "more" reflects the diffuse obligations of the authority's role.

(Insert Table 3 about here)

A second hypothesis implied by the authority's role was that differences between authorities and other actors are greatest at lower mental state levels, and that the responsibilities of authorities and equals tend to converge when action is fully intentional. Given the differences in manipulations of mental state for authorities and equals, this hypothesis must again be tested using respondents' own perceptions of how purposive the actions were. Table 4 therefore shows the effects of hierarchy and mental state on responsibility stratified by levels of perceived purposiveness.

Because Japanese respondents tended to rate action as relatively non-purposive, the most balanced break in that variable lay between attributions of no purposiveness at all and attribution of some purposiveness, rendering the test relatively crude for the highest levels of purposiveness.¹¹ Results are presented separately for conditions where other's influence was absent and present to clarify interpretations.

(Insert Table 4 about here)⁵

Irrespective of the confounding variable of other's influence, results show a clear trend in the predicted direction. With other's influence absent, a large effect of hierarchy is visible when action is perceived as non-purposive, with authorities more responsible than equals; that effect is sharply smaller, albeit still significant, when any purposiveness is perceived. With other's influence present, the hierarchy effect is (predictably) dampened where no purposiveness is perceived and eliminated where there is any purposiveness, but a parallel pattern is observable. Thus the models of responsibility for authorities and equals differ dramatically, as predicted, with low perceived mental state involvement; and nearly converge when any purposiveness is perceived. While the distribution of responses precludes a reliable test of the prediction that the models fully converge for intentional acts, the direction of effect is consistent with that prediction. The second hypothesis regarding hierarchy and mental state appears confirmed.

A third interaction hypothesis, concerning the differential impact of mental state information in status versus contract relationships, argued that mental state is more important in judging responsibility for status relationships. Table 1 indicated the presence of a significant Mental State-Solidarity interaction; Table 5a, showing the cell means for the interaction, then demonstrates that the predicted pattern was obtained. Variation in mental state from low to high made a substantially larger impact on responsibility judgments in status relations than in contract relations.

(Insert Table 5 about here)

After confirming this basic hypothesis, we became curious about what accounted for the larger impact of mental state in status relations. By analogy to the successful prediction concerning hierarchy and mental state, mental state might be informative regarding diffuse obligations held by those in status ties, as it had apparently been regarding the diffuse obligations of authorities.¹² Therefore we conducted exploratory regressions paralleling those shown in Table 3, regressing responsibility on the mental state manipulation and the two manipulation checks (as controls for perceived mental state), separately for status and contract relations. If controls for perceived mental state remove its effect on responsibility, this provides evidence that the variable is acting simply through those perceptions; if these controls fail to remove the mental state effect, this indicates something "more" in the use of mental state information--such as the diffuse obligations that might characterize status ties.

Table 5b presents results from exploring the meaning of mental state variation in status versus contract situations. As appeared plausible from the analogy with predictions for hierarchy, results show no effect of mental state on responsibility in contract situations when controls have been added that supposedly embody the direct meaning of that variable--i.e., the manipulation checks. But in status situations, a highly significant effect of the mental state manipulation remains even with those controls. We interpret this as reflecting broad obligations that persons in status relations have toward one another. A mother is expected--obligated--to avoid intentional harm to her child, as well as careless harm to that child; similar expectations hold for friends, lovers, siblings. Evidence of more-than-accidental harm in such settings is therefore, in this view, evidence of a failed role obligation in addition to having the literal meaning such information has in all incidents of

wrongdoing. Although this notion of status tie obligations remains an interpretation of the results, the further analysis in 5b serves to clarify the effect shown in 5a, and the interpretation is consistent with theoretical properties of such role ties.

A fourth hypothesis predicting an interaction between past pattern and solidarity was disconfirmed, as evidenced in Table 1. In contrast, although an interaction of past pattern and hierarchy was not among the initial predictions for the study, exploratory Detroit analyses had revealed an interactive pattern paralleling that for hierarchy and mental state. With equal actors, past pattern had no effect on responsibility with controls for perceived mental state included; with authoritative actors, however, past pattern retained significance with those controls introduced (Hamilton and Sanders, 1981). This unanticipated result was interpreted in the Detroit data as possible further evidence that authority roles are characterized by diffuse obligations. Thus in the face of the disconfirming evidence regarding the initial prediction (also disconfirmed in Detroit), it seemed appropriate to explore the Yokohama data for indications of the serendipitous Detroit result. Table 6 presents results for the effect of past pattern on responsibility, with purposiveness and avoidability controlled, separately for equals and authorities. As in Detroit, for equal actors there was no effect of past pattern of behavior on responsibility net of the the actor's perceived mental state; but for authorities, a significant effect of past pattern on responsibility remained with purposiveness and avoidability controlled. Thus again normative models of responsibility for authorities and equals differ, and again possibly reflecting the diffuse obligations of authoritative roles. Overall, roles do alter the meaning (or use) of past pattern information in Yokohama, but the key dimension is unexpectedly the hierarchy rather than the solidarity of the role relationship.

(Insert Table 6 about here)

The fifth interaction hypothesis concerned other's influence and hierarchy. Table 1 showed that the interaction was in fact significant, and Tables 2 and 4 have already indicated that the pattern was as predicted. Influence from another had a greater impact on responsibility in authority-subordinate relations than in those involving equals. However, these results only apply to situations where the other-actor and other-victim relationships are the same. Other combinations remain to be examined.

In addition, despite the significance of the interaction of other's influence and hierarchy, it should be emphasized that the observed relationship was in fact of small size. An unpredicted interaction of other's influence with solidarity, in contrast, proved more substantial, as indicated in Table 1. Examination of means for this interaction showed that other's influence reduced an actor's responsibility much more dramatically in contract relationships than in status ones. We in fact anticipated such a gap in making the three-variable hypothesis discussed below; but we did not anticipate that sensitivity to the solidarity of relationships would be great enough to yield a significant two-way interaction with other's influence.

The final interaction hypothesis argued that other's influence is particularly strong in authority/contract settings, and that the order of strength of other's influence should be predictable across the four combinations. Specifically, it was anticipated that authority/contract settings would show the most impact of other's influence, followed by authority/status, followed by equal relationship settings (with the latter showing little or no impact of other's influence on responsibility). This prediction was partially disconfirmed. First, no three-way interaction was observed, as would have occurred with a strong pattern of this type. Second, Japanese respondents did not reproduce the theoretically predicted order of size of effects for other's influence, showing instead a powerful impact of such influence in both

contractual stories, albeit slightly larger in the authority/contract relation, followed by a significant impact of the other on responsibility in the authority/status relation, and finally by no impact in the equal/status vignette. This pattern may be explicable at least partly in terms of the already-demonstrated sensitivity of Japanese respondents to the status/contract distinction among relationships.¹³ Thus other's influence had a substantial impact on responsibility in the Yokohama data; and the overall difference between equal and authority relations was as predicted. But Japanese respondents reacted to the two dimensions of social roles such that solidarity differences outweighed hierarchy differences, leaving this final prediction regarding other's influence disconfirmed.

Cross-cultural Comparison

Certain similarities and differences and differences between the Yokohama and Detroit findings have been alluded to in reporting the Yokohama data. To assess formally whether the proposed model holds in each culture, we first briefly summarize how the general hypotheses fared in each data set, after which we turn to predicted differences between the data sets. The deed variables of mental state, past pattern, and other's influence were significant in both. Both dimensions of roles were initially significant in Yokohama, as we have seen; in Detroit, solidarity was initially significant in the predicted direction and hierarchy was so with appropriate controls introduced (for perceived mental state and other's influence). Patterns for the predicted role-deed interactions were also similar across the countries. The two mental state-hierarchy predictions held similarly in both data sets, although the Detroit data additionally showed an interactive greater effect of the mental state manipulation in authority stories with perceived purposiveness levels low (on top of the hierarchy main effect itself being larger, as predicted). The mental state-solidarity prediction did show a divergence, in that it succeeded in the Yokohama

data where it had failed in the Detroit data. The past pattern-solidarity prediction failed in both data sets; but, as noted above, an unexpected past pattern-hierarchy effect noted in Detroit was replicated in Yokohama. The other's influence-hierarchy interaction was significant in both surveys, but in both the more elaborated other's influence-hierarchy-solidarity prediction partly failed; however, the predicted order of effect sizes was obtained in the Detroit tests. Overall, then, there are good grounds for asserting that the same general model holds for Detroit and Yokohama. Predictions generally held in both; once they failed in both; and once an unpredicted but theoretically consistent effect emerged in both.

The question then arising is whether Yokohama and Detroit also differ in the ways predicted given the supposed Japanese emphasis on role obligation versus the American emphasis on actors' deeds. Testing predictions of differential weights on variables in the two cultures required, first, constructing a common data set in a person-vignette (extended file) format to parallel those used for each data set separately. Because of limitations on the capacity of the available computer programs, a completely saturated 2^7 model could not be tested. It was therefore decided to eliminate one variable from the original 2^6 model so that country could replace it instead of, for example, deleting higher order interactions that might reveal informative country differences. The decision was simplified here by the fact that consequence severity had failed to reach stable significance in either data set and had further failed to produce important interactions in either. Thus the final model for the country comparison consisted of three rather than four deed variables (deleting consequences), plus two role variables, the country variable, and all interactions for a saturated 2^6 model using effect coded regression. A stringent test of predicted country differences is then found in the coefficients for the appropriate interactions by country in this model. Follow-up analyses requiring controls for

perceived mental state and the like can then also be performed in the two-country extended file or, as desired, in quasi-independent replications.

Table 7a presents significance tests and unstandardized coefficients for all predicted country differences. No unpredicted interactions with country survived tests for stability and spuriousness.¹⁴ For a convenient summary of what these interactive results mean, the corresponding coefficients from the separate Yokohama and Detroit extended file analyses are shown in Table 7b. One additional effect appearing in 7a, a main effect of country, is explicated in 7b by showing the grand means for each data set. This main effect reveals lower average responsibility attributed by Japanese respondents. This effect could itself be considered consistent with the general predictions regarding Japanese-American differences, in that it could indicate greater Japanese unwillingness to assign blame to an individual actor. However, as it could also reflect a number of methodological issues such as differential use of scale end points, we prefer to view it as interesting but uninformative regarding cultural differences (see Przeworski and Teune, 1970).

(Insert Table 7 about here)

Overall, three predictions were strongly confirmed and two weakly confirmed. Concerning deed variables, we expected that any difference in use of mental state information would show less use by Japanese respondents; this expectation was significantly confirmed. The two other predictions for deed variables were only weakly confirmed. Past pattern, as an actor-carried variable, was more strongly related to responsibility judgments among American respondents, as indicated in Table 7b, but not significantly so. Other's influence, a contextual variable that provides another role obligation or excuse, was significantly more predictive of responsibility in Yokohama. The country difference was not large, however, and the interaction of other's influence with country was not stable across quasi-independent replications.

Finally, both role dimensions strongly interacted with country as predicted. Japanese differentiated more strongly between status and contract relations, yielding a significant solidarity-country interaction. Hierarchy showed a similarly strong interaction, given the previously noted fact that the Japanese results show the predicted pattern even before necessary controls are introduced (which then enlarge the effect), while American results show an effect in the opposite direction before introducing controls. Thus within a general model shared by respondents in each country, differential weights emerge that are consistent with prior social scientific observations of the two cultures.

Replicating the Model and Cross-cultural Comparison

Aside from the general virtues of replication, particularly in a study containing multiple interactive hypotheses and hypotheses involving various controls, the difficulty of producing an instrument comparable across such different languages makes replication especially valuable here. We have previously noted certain points on which the Detroit and Yokohama surveys were not literal equivalents, but where we feel linguistic functional equivalence was attained (see footnotes seven and eight). But we have also noted two divergences between stimulus stories, where the impact of translation changes would be indeterminate without a third survey to clarify interpretations (see footnotes five and six). In other words, one plausible counter-argument to the present interpretation might be that Yokohama findings differed from Detroit where they did as a function of stimulus changes rather than cultural differences (or, for that matter, that the findings spuriously resembled Detroit's where they did for the same reason). With stimulus differences, even as slight as these appear to have been, effects can definitively be attributed neither to country differences nor to country similarities.

Thus we are fortunate to have just such a third survey. Because of

demographic and historical differences previously noted between Kanazawa, the site of this third survey, and Yokohama, Kanazawa makes an unlikely candidate for direct comparison with Detroit—just as Muncie, Indiana, or Charleston, South Carolina, would yield rather odd "country" comparisons with Tokyo. Thus here we concentrate chiefly on testing for replication in Kanazawa of the general two-factor model; for the general model, clear inference can be obtained regarding whether apparent corroborations in Yokohama were actually due to translation. Secondly, we touch on country comparisons using Kanazawa data, with a caveat concerning the interpretation of direct Detroit-Kanazawa tests. In general, treatment of Kanazawa will be brief for reasons of space.

The general model. Tests for the within-country general hypotheses were made for Kanazawa using a parallel extended file of person-stories and the same 2⁶ analysis of variance design, plus quasi-independent replications. Table 8 presents results for predicted effects whether or not they attained significance, with notation provided for instability across replications. Only one unpredicted effect, the interaction of other's influence with solidarity, survives tests for stability and spuriousness.¹⁵ Certain predictions succeed, or fail, in very similar fashion to their performances in the earlier data sets. Among deed variables, mental state, past pattern, and other's influence were again highly predictive of responsibility judgments. A small effect of consequence severity also appeared that was not observed in Yokohama; but, as in the Detroit data, it was unstable across replications (see Hamilton and Sanders, 1981). Role variables show again a potent effect of solidarity, with more responsibility assigned in contract than in status relations. Unlike in Yokohama, however, the apparent effect of hierarchy is nil in the absence of controls. Therefore we will first turn to exploring Kanazawa responses to hierarchy, followed by the predicted and obtained interaction effects.

(Insert Table 8 about here)

Controls for both influence from another party and the actor's perceived mental state were initially posited as necessary for observing any pure effect of hierarchy on responsibility judgments. In Yokohama, as shown above in Table 2, these controls did magnify the impact of hierarchy and reveal the dampening effect of influence from another on the hierarchy effect. In Kanazawa, as Table 9 reveals, a significant hierarchy effect is present in the predicted direction when controls are introduced. The raw effect size is simply intermediate between those of Yokohama and Detroit.

(Insert Table 9 about here)

Hypotheses about the differential impact of mental state as a function of both role dimensions were also upheld in the Kanazawa data. Table 10a shows the differing impact of mental state information in equal versus authority relations when perceived mental state is controlled. As in both prior surveys, a significant mental state direct effect is obtained in authority settings, one that was previously argued to reflect the obligations of the authority role.¹⁶ Table 8 already revealed a significant interaction of mental state and solidarity, an effect predicted for both prior surveys but previously found only for Yokohama. As the interaction followed the same pattern in Kanazawa, for brevity we present in Table 10b only the coefficients for status versus contract settings with mental state controls introduced, paralleling the exploratory analysis of this type reported in Table 5b for Yokohama. Again, a significant direct impact of mental state on responsibility is found in status relations, but not in contract relations, with perceived mental state controlled. This pattern was interpreted previously as reflecting the diffuse obligations of status as opposed to contract ties.

(Insert Table 10 about here)

Prior results for the interactive impact of past pattern were again closely

replicated in Kanazawa. As in the other surveys, a predicted interaction of past pattern with solidarity of the relationship was not obtained. Following the model of an exploratory analysis in Detroit, replicated in Yokohama (see Table 6), we therefore checked for whether past pattern showed different direct impacts in equal versus authority relations in Kanazawa with perceived mental state controlled. Results again revealed a significant impact of past pattern on responsibility with perceived mental state controlled in authority relations (unstandardized coefficient = .34, $p = .04$), but no remaining impact in equal relations (unstandardized coefficient = .21, n.s.).

Final interactive hypotheses concerning other's influence were not upheld in Kanazawa. As Table 8 showed, the predicted interaction of other's influence and hierarchy was insignificant; instead, an unpredicted interaction with solidarity was obtained, as in Yokohama, such that other's influence had a greater impact in contract relations than in status relations. As noted above, this effect is not inconsistent with the original reasoning regarding this set of variables, in that we had argued that the impact of other's influence should be less in status ties. Yet the theoretical primacy of hierarchy in conditioning the impact of another, upheld in Detroit, was not evident in either Japanese data set. The further three-way interaction hypothesis involving both role dimensions plus other's influence was also not upheld in Kanazawa; but support for it had been limited even in the Detroit data, where the theoretically predicted pattern was strongest. Thus, it appears that predictions were correct about the differential impact of other per se, and roles per se, across the two cultures; but that the interplay between these variables in each culture is not yet adequately captured in the model.

Cross-cultural tests. The general model appears to hold in both Japanese settings, irrespective of the issue of translation. Generally the same hypotheses were confirmed as in Detroit; the same hypothesis (regarding past pattern and solidarity)

disconfirmed; the same originally unanticipated result (regarding past pattern and hierarchy) obtained. The chief unpredicted divergence between Japanese and American data, involving interactive hypotheses for impact of other's influence, appeared in both Japanese cities and hence cannot be attributed to translation. Inspection of coefficients from Tables 7 and 8 will indicate, however, one important area in which we suspect translation to have played a part: in the size of effect of role variations on responsibility judgments. For both dimensions, the Kanazawa effect is less different from the American results. It could plausibly be argued that this move in judgments toward the American results reflects the increased accuracy of translation in Kanazawa. An alternative--or, more accurately, supplemental--interpretation is that the results reflect regression toward the "true" effect from extreme scores. In any case, it is important to ask whether such shifts alter the conclusions previously drawn regarding cross-cultural hypotheses. To do so necessitates a Detroit-Kanazawa comparison, keeping in mind the previously noted caveats regarding differences between these survey sites.

A Kanazawa-Detroit comparison was conducted using a 2⁶ analysis of variance design on an extended file plus quasi-independent replications as for Yokohama. Consequence severity was again replaced by country in the model, as consequences had an unstable impact in both individual data sets. These results will be reported textually for brevity, as they strongly parallel those previously observed. The predicted interaction of mental state with country was again confirmed ($F=10.6$, $d.f.=1,5022$, $p .001$), with less use of mental state information by Japanese respondents. Predicted past pattern differences by country were again insignificant; although the direction of difference was again the correct one, the coefficient for Kanazawa respondents was quite trivially lower than that for Detroiters (.55 versus .60, unstandardized). The predicted country difference in use of other's influence

information, upheld only as a trend in Yokohama, was substantial in Kanazawa-Detroit comparison ($F=13.3$, $d.f.=1,5022$, $p .001$); the impact of other's influence upon responsibility was larger among Japanese. For the role dimensions, another difference in results emerged in considering Kanazawa versus Detroit. As in the Yokohama comparison, there remained a significant country difference for use of hierarchy information in determining responsibility ($F=49.5$, $d.f.=1,5022$, $p .0001$), with the predicted greater impact among Japanese confirmed. For solidarity information, however, the country difference was unstable, albeit significant ($F=4.1$, $d.f.=1,5022$, $p .05$); as predicted, Japanese respondents differentiated responsibility more on the basis of this dimension. Again, no unpredicted country differences survived tests for stability and spuriousness.¹⁷

Taking a "scorecard" approach to these results provides substantial comfort. In Yokohama, three predictions had been clearly confirmed and two weakly confirmed, although the past pattern effect direction represented extremely weak "confirmation." In Kanazawa, three predictions were clearly confirmed and one weakly confirmed, with the past pattern effect direction virtually disappearing. The major difference between the two sets of comparisons is the weaker impact of other's influence in Yokohama, relative to Kanazawa; and the reciprocally weaker impact of solidarity in Kanazawa. From the series of similarities between these data sets in the way the two variables interact with other variables—as well as the pattern of interaction between them revealed in both—it seems reasonable to conclude that Japanese respondents, as predicted, made greater use of information about both the solidarity of role ties and influence from another person. While the difference between Japanese and American respondents on these issues may be overestimated in Yokohama, with respect to solidarity, or in Kanazawa, with respect to other's influence, cultural differences on each apparently exist.

Conclusions

Human judgment of wrongdoing is an important issue lying at the heart of social control. Thus in one guise or another, it has excited attention from sociologists, anthropologists, and psychologists. The model proposed here argues that judgments of responsibility and punishment entail considering what the other person did and what the person was supposed to do. The model incorporates and modifies psychological approaches exemplified by Piaget (1965) and anthropological approaches exemplified by Benedict (1946). We argue that a universal model of how humans judge wrongs should encompass both the actions and obligations of the wrongdoer and should allow for cultural differences that are a matter of degree rather than kind. Variations in actors' deeds are readily studied in terms of commonly investigated psychological constructs; variations in actors' obligations are conveniently captured in the socially differentiated expectations embodied in different social roles. Thus the model argues that variations in roles and deeds each affect judgment of wrongdoing, and further that roles serve as normative contexts altering the meaning or impact of deeds (hence yielding role-deed interactions). Japan and the U.S. have frequently been characterized as quite different--even categorically so--in their ways of judging wrongdoing, with Japan characterized by emphasis on obligation and the U.S. by emphasis on action isolated from context. Thus, in addition to expecting this general model to hold across cultures, we anticipated different relative weights between cultures.

Tests of the proposed universal model were presented from surveys of Yokohama and Kanazawa, Japan; additional tests compared each to results from Detroit, to assess predicted cultural differences within the common model. As predicted, certain features of actors' deeds affected responsibility judgments in all three surveys--such that more intentional mental states or bad past patterns of behavior increase an

actor's responsibility, while influence from another party decreases it. Similarly, horizontal and vertical dimensions of actors' social roles--what we have called hierarchy and solidarity of relationships--also altered responsibility judgments in all studies, with authorities consistently more responsible than equals and actors in contract relations more responsible than actors in status ties.

The theoretically important expectation that roles serve as normative contexts for action was strongly confirmed in both Japanese studies, with generally close replications of a series of American findings. As predicted, it appears that neither an actor's mental state, nor the actor's past pattern of behavior, nor the impact of another can be considered in isolation from the role relationship involved when wrongdoing is assessed. Normative models of wrongdoing for authorities proved distinctive in all three studies, suggesting that authorities are judged according to a more diffuse or stringent set of obligations. Japanese results diverged from American ones in revealing greater emphasis on the solidarity of role ties. Mental state was used more heavily in assessing responsibility where actors were in status ties (a finding predicted but not observed in Detroit); additionally, influence from another had less effect on the responsibility of status-tied actors, a result consistent with arguments in the Detroit study but neither formally predicted nor observed there.

Initially hypothesized differences between Japanese and American judgments of wrongdoing were well-supported. Japanese respondents confirmed their hypothesized focus on obligation, in that they made significantly less use of mental state information than Americans in both surveys; made more use of information regarding the hierarchy of roles; more regarding solidarity; and more regarding influence from another. Although both Japanese data sets showed the further interactions noted above involving status-contract differences, neither pattern further significantly interacted with country. Again as expected, American emerged as reciprocally more

sensitive to actors' deeds. A predicted greater tendency for Americans to use information about past pattern more was, however, observed only as a weak trend in coefficients.

Although the major emphasis here was on data from Yokohama and its comparison to Detroit, the Kanazawa data were important because of two differences between Yokohama and Detroit stimuli that were then changed in Kanazawa translation. The overall effect of the changes appears to have been to render Japanese responses more similar to American, chiefly in reducing the Japanese-American difference in use of role information. An offsetting shift in which Kanazawa-Detroit comparison showed a larger difference in use of other's influence information, however, leaves the overall predictions of cultural difference well-supported in either survey.

A number of important issues have not been addressed in the current research. Within the available data sets, for example, punishment choices remain to be examined and demographic cleavages to be explored; these may be important concerns for other investigators as well. In general, the limitations of any one set of stimuli, even across two cultures and three surveys, should be obvious. Additional examples of role dimensions focused upon here--or additional ways of conceptualizing and categorizing role obligations--are called for. The vignette method employed here, although characteristic of moral judgment research, also remains hypothetical and "bloodless" relative to expressions of moral judgment in naturalistic settings or to sanction themselves. Antecedents and consequences of at least some responsibility decisions, for example, are readily observable in legal systems.

In summary, a universal model of how humans judge wrongdoing is incomplete if it focuses on actors' deeds alone. It is intemperate if it paints categorical gulfs rather than continuous differences between cultures. Instead it may be fruitful to

represent such judgments as an interplay between, and a relative emphasis or de-emphasis upon, obligation and action: roles and deeds. Thus far a roles-and-deeds model appeared to capture significant similarities and differences in Japanese and American responsibility judgments. Yet much of the business of testing the proposed model remains undone, as does all of the business of applying it.

Footnotes

1. Moral judgment for the positive value or goodness of deeds and assigning of attendant rewards should theoretically follow the same two-factor model to be outlined below. In general, any judgment of justice that is based on desert -- the positive or negative valuation of an input being matched with an outcome -- would fall under the model's scope; assignment of rewards according to the parties' need or their rights to certain goods, in contrast, would not (see Heath, 1976). Discussion here is restricted to wrongdoing because the cross-cultural study reported focused solely on wrongdoing.

2. For example, such a cursory search quickly located the following pronouncements regarding duty, on the one hand, and individual achievement, on the other:

Duty: Duty is the sublimest word in our language. Do your duty in all things. You cannot do more. You should never wish to do less.

Achievement: All human ability rises from the difficulties of life. The part of one's body a person habitually uses becomes strong. If he uses his hands, they become powerful; if he walks much, his legs become sturdy. If he practices with a bow or gun, his eyes become sharp; if he uses his mind, it grows penetrating. Every difficulty and hardship refines and strengthens. This is the rule of nature, and is why Mencius said that when Heaven would entrust men with great responsibilities, it first sends them troubles. Talent therefore develops below, and hence it is essential for government to be informed of affairs below. It is the way of the sage in recruiting talent to raise it up from below: the wise and talented men of history rose from low rank: it is exceedingly rare for wisdom and talent to carry over from one generation to another in families of high rank.

The first statement, rather reminiscent of the Japanese Imperial Army, is found under the bust of Robert E. Lee in the Hall of Fame. The second, rather antiquated but Jeffersonian in its sound, was by Sorai, a pre-Meiji reformer who was pushing for merit-based reward for the lower samurai (quoted in Smith, 1967, p. 82). The life conditions and social position of a disgruntled intellectual on the eve of a bizarre "bourgeois revolution" from above fostered a viewpoint Jefferson or Lincoln could hardly have faulted (see, e.g., Genovese, 1971, 1974, on conditions in South versus North pre-Civil War: and Sansom, 1949, 1962; Smith, 1959; Patrick, 1976; Moore,

1966 for Japanese industrialization, reform, and comparisons with the U.S.). Such viewpoints are certainly not antithetical, for that matter, in that either man might well have agreed with the other.

3. Throughout we use the term "mental state" rather than the more common "intention" to describe the actor's cognitive state. "Mental state" is a more generic term, incorporating not only whether one "meant to do" something, but also whether one was careless, negligent, or disregarding of the consequences of one's acts (see Fishbein and Ajzen, 1973). Since our manipulation of actor cognition was not in fact solely a matter of intention, "mental state" seemed the better term.

4. Various linguistic, legal, and sociological sources suggest that hierarchy is a key dimension of social life (e.g., Blau, 1964; Brown, 1965; Dahrendorf, 1959; Green, 1930; Weber, 1947). A host of overlapping distinctions also point to the importance of what we have termed the solidarity of a role relationship (e.g., gemeinschaft-gesellschaft, Tonnies, 1957; intrinsic-extrinsic exchange, Blau, 1964; status-contract, Maine, 1963; multiplex-simplex relations, Nader, 1969).

5. The first of two problems in comparability between Japanese and American versions of vignettes occurred for the equal/status story. In all versions of this story, the Japanese researchers added in a phrase indicating that Billy's (Yasuhiko's) brother had held onto the bat, an addition that potentially reduces Billy's responsibility for the outcome. This phrase was eliminated in the Kanazawa survey, to produce (as closely as possible across such different languages) exact equivalence between stories. Therefore Kanazawa results are important to the present report to provide a check that results found for Yokohama-Detroit comparisons are not a function of translation.

6. Similarly to the equal/status story, there was one difference here between American and Japanese stories that might have some impact on results. The term used in Japanese to describe the car retranslates into English more accurately as

"broken down" rather than "defective". Again, in the Kanazawa survey this was altered; and thus the Kanazawa results can again provide an important clarification of observed country differences.

7. Here a linguistic non-equivalence between the languages occurs. We have referred throughout the report to "on purpose" versus "didn't mean to" because these were the English terms used. However, the common antonym for "on purpose" in Japanese means essentially "nature did it/happened naturally" -- clearly not the desired distinction. Since we had actually used those English terms as simpler synonyms for intentional versus unintentional (which was felt too difficult for an American sample survey), the best solution for the Yokohama translation appeared to be use of Japanese terms for intentional versus unintentional. We received no evidence that these terms were not understood by their Japanese audience; further, as will be illustrated below, the parallel behavior of the variables in the two data sets suggests that a somewhat different wording adequately captured the same distinction in meaning.

8. Again, the term used is not literally "avoid" in Japanese, in this case because its negative usage is uncommon. The Japanese retranslates into could/could not have "helped" or "prevented" what happened -- quite close to "avoid".

9. These "suspect" interactions are not without substantive interest. The consequences-past pattern interaction shows that the presence of a "high" condition on either variable enhances the effect of the other -- i.e., variations in consequences affect responsibility more strongly in the presence of a bad past pattern, and the actor's past pattern has more effect in the presence of severe consequences. The three-way interaction with mental state then indicated that this consequences-past pattern interaction was a function of the high mental state conditions, producing a consistent overall three-variable relationship. High mental state involvement apparently sensitized respondents such that high past pattern then further sensitized

to consequences, or high consequences to past pattern.

In contrast to these other unpredicted effects, the interaction noted between the hierarchy and solidarity dimensions was substantial in size and stable across replications. (A significant hierarchy-solidarity interaction in Detroit, in contrast, had proved unstable.) The confounding impact of mental state across the dimensions, however, indicated that this effect be evaluated with controls introduced for perceived mental state of the actor. With controls introduced, either for purposiveness alone or for purposiveness and avoidability, the interaction was insignificant in Yokohama. Although this control strategy could remove true differences in perceived mental state resulting from combinations of the role dimensions themselves, we provisionally conclude that the hierarchy-solidarity interaction was a spurious one.

10. For the present test this represents a conservative control strategy given that controls also remove from the role direct effects any aspect of the "roles themselves" that leads to differences in inferred mental state, as well as removing confounding due to different mental state manipulation across stories. We do not, however, postulate any such impacts of roles per se on inferred mental state.

11. Distribution of responses concerning purposiveness in Detroit, in contrast, made it feasible to test this hypothesis with a more finely graded trichotomy among low, medium, and high levels of perceived purposiveness. Thus the tests are not precisely comparable across the studies, with the resulting expectation that predicted patterns would show more crudely for higher mental state levels in Yokohama.

12. Thanks to Richard Hogan for suggesting this analogy between solidarity and hierarchy effects, as well as for performing the tests necessary to show that the analogy held.

13. It is also possible that particularistic features of the roles actually presented to exemplify the dimensions may affect results here. Japanese society is sharply sex role-differentiated, with the status of wife subordinate to that of husband; but her

spheres of influence are seen as distinctly "hers." Thus our Japanese collaborators have suggested that other's influence in this authority/status story might emerge as relatively low in Japan because the wife is seen as having responsibility for childrearing, and the husband essentially not an "authority" in this realm. It is nevertheless true that the effect of other's influence in the authority/status story for Yokohama was more highly significant than the counterpart effect in Detroit, even though it did not emerge in the anticipated order of strength relative to other stimuli. Here we are not able to evaluate the differing implications of sexual stratification, but wish to note its potentially contextual impact for the benefit of other researchers investigating such questions.

14. Country effects that proved unstable across replications in the Yokohama-Detroit comparison were a three-way interaction of mental state, hierarchy and country and a five-way interaction among past pattern, other's influence, the two role dimensions, and country. A further three-way interaction of hierarchy, solidarity, and country was unstable with controls for perceived mental state introduced; hence we conclude that the effect was spurious.

15. One unstable effect, an interaction of mental state and hierarchy, did mirror more weakly an effect from the Detroit analysis, indicating a greater overall impact of mental state variation in authority settings than in equal settings; our hypotheses, however, had to do with the meaning of mental state information for the two types of roles and with role differences in responsibility given different degrees of purposiveness. Stability or instability of this interaction per se neither confirms nor refutes the points of theoretical interest. Two higher-order interactions were also small and unstable: one three-way relationship among past pattern, other's influence, and hierarchy; and one four-way relationship among these three variables plus mental state. Finally, as had been true in Yokohama, a stable hierarchy-solidarity interaction was also observed; with controls for perceived mental state introduced,

the relationship was also again insignificant.

16. Analyses were also run paralleling those reported in Table 4 for Yokohama. Purposiveness in Kanazawa, as in Yokohama, had to be treated as a dichotomy between "none" and "any" perceived. Results in some respects combined those of Yokohama and Detroit, with all three patterns similar. With other absent, the more "pure" pattern was observed, with a shift from a highly significant impact of hierarchy with no perceived purposiveness ($F=52.7$, $d.f.=1,544$, $p=.0001$) to a marginal impact when any purposiveness was perceived ($F=3.3$, $d.f.=1,550$, $p=.10$ $p=.05$). In the other absent conditions no significant impact of mental state was observed, although its effect was marginal with no perceived purposiveness. A small but significant interaction of hierarchy and mental state also appeared with no purposiveness, following the pattern observed in Detroit and noted above in footnote 15. As before, when other's influence was present, hierarchy's impact was dampened; yet it was still differentiated. The hierarchy effect was highly significant with no purposiveness ($F=9.96$, $d.f.=1,662$, $p=.002$), but was eliminated when any purposiveness was perceived. An effect of mental state was also evident in other present conditions, but only with no perceived purposiveness. Finally, a small interaction of hierarchy and mental state that followed the same pattern as above was also observed with other present and some purposiveness. The overall pattern of results was consistent with predictions; and the three data sets generally consistent with one another.

17. As before, several interactions with country proved unstable or spurious. Unstable interactions included country in three-way interactions with mental state and solidarity, with other's influence and hierarchy, and with other's influence and solidarity. Country also appeared in an unstable five-way interaction with mental state, past pattern, other's influence, and hierarchy. Finally a stable interaction among country, hierarchy, and solidarity was again observed; but it was unstable after introducing controls for perceived mental state, and hence is adjudged spurious.

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