THE REASONABLE MAN

Legal Fiction or Psychosocial Reality?

EDWARD GREEN

Eastern Michigan University

This paper explores the judgmental process involved in the determination of liability in accident cases. The law of negligence, unlike other branches of the civil law and the criminal law, lacks a body of substantive rules by which a jury may determine the legality of conduct. The acts of one person which may result in property loss or physical injury to another are extremely varied. This variety makes it all but impossible to specify, in advance, what kind of behavior constitutes adequate caution or due care in given situations. Hence, the law has devised a general procedure by which to reach a judgment on this matter for any particular case. It directs the members of the jury to consider what precautions a person should take while engaged in some potentially hazardous endeavor in order to minimize the risk of possible harm to others, and offers a model of behavior "... the supposed conduct, under similar circumstances, of a hypothetical person, the reasonable man of ordinary prudence who represents a community ideal of reasonable behavior." 1

The vagueness of this criterion has prompted a few legal essayists to attempt to objectify the concept of reasonableness by specifying its logically necessary components. One such effort distinguished by the parsimony of its formulation is found in an opinion delivered by Judge Learned

AUTHOR'S NOTE: This investigation was supported by a grant from the Social Science Research Council. Phyllis Ullman Kostich, Susan Mieden, and Thomas M. Fuchs assisted in the collection of the data. Diane Allevato assisted in the analysis.

^{1.} W. Prosser, Handbook of the Law of Torts 224 (1941) (emphasis added).

Hand.² Hand defines reasonable conduct in terms of an equation consisting of three factors: (1) the seriousness of the loss suffered by the plaintiff, (2) the probability of the occurrence precipitating the loss, and (3) the adequacy of the precaution taken by the defendant. In applying this formula, the judge should instruct the jury that liability in a given case depends upon the balance between the degree of care exercised by the defendant and the seriousness of the plaintiff's injury discounted by the probability of its occurrence. If the first side of this equation outweighs the second side, judgment should be for the defendant; if the balance tips the other way, then judgment should be for the plaintiff.

Despite the appearance of mathematical precision in the "calculus of risk" ³ equation, Hand's pseudo-operational definition can serve no more than a heuristic function. The undetermined item in such an equation is the juror's decision as to what constitutes the behavior of a reasonable man in any set of concrete circumstances. In a real sense, the jury's verdict acquires the force of an enactment of substantive law for the case at issue. As Leon Green tersely stated, "We may have a process for passing judgment in negligence cases but practically no 'law of negligence' beyond the process itself." ⁴

Jurisprudential concern with the decision-making process in negligence cases has centered on the formal, legalistic definition of such terms as "reasonable man," "risk," and "burden of liability." Very little interest has been shown for the way in which jurors apprehend these concepts or in the psychological validity of the ethico-logical model which articulates them. Accordingly, the general objective of this research is to study empirically the socio-psychological functions of the reasonable man formula by investigating the public's conception of what constitutes reasonable care in a situation wherein the conduct of an individual entails a risk of injury to others. By means of an experimental approach it seeks to determine how stimuli representing the facts of the case and the requirements of the law and the personal characteristics of the subjects influence attitudes toward the type of issues that arise in negligence cases.

It should be noted, at the outset, that the judge's charge to the jury, whether couched in terms of the "reasonable man" criterion or the "calculus of risk" equation, does not constitute, in a psychological sense,

^{2.} United States v. Carrol Towing Co., 159 F.2d 169 (2d Cir. 1947); see also Terry, Negligence, 29 Harv. L. Rev. 40 (1915).

^{3.} C. Gregory & H. Kalven, Cases and Materials on Torts 64 (1959).

^{4.} L. GREEN, JUDGE AND JURY 85 (1930).

a standard or a scale for the judgment of liability. Rather it is an invitation to forge an appropriate standard. A psychological scale consists of a series of points corresponding to varying responses along some particular dimension. It evolves out of the individual's repeated experience in gauging stimuli perceived as similar and provides him with the basis of comparison, implicit or explicit, underlying the judgment of such stimuli.⁵ Considered in these terms the standard enunciated by the "calculus of risk" equation includes three scales of judgment, one for each of the factors of the equation-risk, injury, and precaution. The equation asserts that for any given set of conditions, an individual's judgment of reasonableness on a given scale of precautionary acts is represented by the coordinates of the psychological scales adopted to gauge the degree of risk and the seriousness of the injury. The concrete circumstances of the cases indicate the variables with which to construct these scales. The individual juror's background of experience with similar circumstances along with the facts disclosed by the trial substantially influence the end-points, categories, and the discriminatory power of the emergent scales. To the extent that such scales are clearly defined and broadly diffused throughout a community we should expect that judgments by a representative cross-section of the community concerning the adequacy of the precautions taken by a defendant in a negligence case will vary consistently according to changes in the seriousness of the loss and the probability of its occurrence.

Utilizing survey techniques, we shall inquire into the process of determining liability at three levels of behavioral analysis. First, we shall seek to determine the actuality of a community standard of "due care," a shared frame of reference for determining negligence. Second, we shall attempt to assess the effectiveness of the "reasonable man" formula as embodied in the judge's instructions to the jury for influencing the desired constraint. Finally, we shall inquire into the effect of social status variables upon the respondents' decisions.

METHODS

The medium of investigation consists of a hypothetical negligence case involving a four-year-old child who falls into an untended, private, "backyard" swimming pool. The experiment embodies four dichotomous variables; hence, there are as many versions of the case as there are

^{5.} For an extended discussion of the formation and structure of scales of judgment see M. Sherif & C. Hovland, Social Judgment 1-16 (1961).

possible combinations of the categories of each of the variables, *i.e.*, sixteen in all. The categories of each of the four variables of classification are as follows:

- 1. The probability that the accident will occur:
 - (a) The pool is in the backyard of a house located in a suburban residential development consisting of houses spaced fairly close together on lots 75 feet wide containing a noticeably large proportion of children of preschool and elementary school age in the population. The plaintiff lives three doors away from the defendant.
 - (b) The pool is located in the backyard of a house located in a suburban residential area consisting of houses spaced fairly far apart on lots 250 feet wide and containing a noticeably small proportion of children of preschool or elementary school age in the population. The plaintiff lives a quarter of a mile away from the defendant.
- 2. The degree of injury sustained:
 - (a) Minor
 - (b) Death
- 3. The extent of the precautions taken by the defendant:
 - (a) The pool is enclosed by a fence 6 feet high.
 - (b) The pool is enclosed by a fence 3 feet high.
- 4. The form and content of the instructions to the jury:
 - (a) One version is short and inexplicit, saying in effect, "Decide according to your own sense of fairness."
 - (b) The other version is a more explicit statement defining the standard of care expected of a reasonable man in terms of the categories of the calculus of risk formula.

Twelve copies of each of the 16 versions, 192 copies in all, were distributed to adults in randomly selected households in three spatially distinct, residential areas of a midwestern industrial city with a population of 25,000. Two of the neighborhoods are predominantly middle or uppermiddle class, consisting almost entirely of occupant-owned houses. The third is a university-owned settlement of low rental apartments for married students. Research assistants gave each respondent a packet containing a version of the case, a questionnaire, and a letter soliciting the respondent's cooperation. They also explained the purposes and auspices

^{6.} A composite of the sixteen complete versions of the narrative constituting the experimental stimulus may be obtained from the author.

of the investigation and, if necessary, supplied additional directions for compliance. They did not however, express any position on the issue posed by the case nor interpret the narrative for the reader, even if requested to do so.

The rather restricted character of the sample and the conditions under which the data were obtained limit the generality of the results. The judgments of middle class individuals approached in their homes concerning a hypothetical case cannot be equated directly with their probable conduct under oath and instruction from a judge.

The statistical technique utilized is a non-parametric analysis of variance, which enables us to determine simultaneously the effect of each of the variables singly and interactively upon the verdict.⁷

RESULTS

The Legal Factor

If the calculus of risk formula accurately represents psychological reality, we should find that the proportion of judgments for the plaintiff varies positively with both the seriousness of the injury and the probability of its occurrence, and negatively with the adequacy of the precautions taken by the defendant. Therefore, holding constant the height of the fence erected by the defendant, the highest proportion of verdicts for the plaintiff would occur under the circumstances of fatal injury and high risk. Conversely, the defendant should fare best in cases involving minor injury and low risk. Cases of fatal injury with a low risk and cases of minor injury with a high risk would yield a more evenly balanced distribution of votes for the plaintiff and the defendant.

The results depicted in Table 1 accord in part with the hypothetical expectancies. The most striking confirmation appears in the effect of the *height of the fence* which seeks to represent the burden of adequate precaution. In cases involving a 6-foot fence only 7 out of 96 respondents voted for the plaintiff, indicating an overwhelming consensus on the adequacy of a safeguard of this magnitude as a bar to liability. The vote in cases with three-foot fences is about evenly divided, 49 for the plaintiff and 47 for the defendant.

^{7.} K. Wilson, A Distribution-Free Test of Analysis of Variance Hypotheses, 53 Psychological Bull. 96-101 (1956).

TABLE 1

Distribution of Votes for the Plaintiff and the Defendant by the Form of the Judge's Charge to the Jury, the Seriousness of the Injury Sustained by the Plaintiff, the Degree of Risk of the Accident, and the Adequacy of the Precaution Taken by the Defendant

JUDGE'S CHARGE TO THE JURY

Adequacy of Defendant's Precaution: Height of Fence		FORM	SHORT FORM INJURY					
		URY						
	Death Risk		Minor Risk		Death Risk		Minor Risk	
	Six Feet							
Defendant	12	12	11	11	10	12	11	10
Plaintiff	0	0	1	1	2	0	1	2
Three Feet								
Defendant	5	9	4	6	2	7	4	10
Plaintiff	7	3	8	6	10	5	8	2

				SUMA	ARIES						
	Main Effects					Interaction Effects					
	PI	Def	X2**	P***		PI	Def	χ2	P		
Fence			42.36	<.001	Risk x Instruction	on*		1.03	>.30		
6 Feet	7	89			High-Long	15	9				
3 Feet	49	47			High-Short	18	6				
					Low-Long	9	15				
					Low-Short	7	17				
Injury*			0.0	>.99	Risk x Injury*			0.03	>.80		
Death	25	23			High-Death	17	7				
Minor	24	24			High-Minor	16	8				
					Low-Death	8	16				
					Low-Minor	8	16				
Risk*			10.6	<.01	Instruction x Injury*			3.36	>.05		
High	33	15			Long-Death	10	14				
Low 1	16	32			Long-Minor	14	10				
					Short-Death	15	9				
					Short-Minor	10	14				
Instruction*			0.0	>.99							
Long Form	24	24									
Short Form	25	23									

^{*} Cases with 6-foot fences excluded.

^{**} Corrected for continuity.

^{***} One-tailed test.

Since the circumstance of a 6-foot fence so decisively determines the verdict, the effect of the other variables—the seriousness of the injury, the degree of risk, and the length of the charge—must be sought in cases involving 3-foot fences. The results summarized in Table 2 show that the degree of risk, based on the density and age composition of the population in the neighborhood, significantly affects the verdict. Where the risk is high the plaintiff receives the respondent's vote in a majority of 33 out of 48 responses; where it is low, the ratio is almost the reverse with the defendant winning the case in 32 out of 48 instances. The seriousness of the injury, whether the defendant suffers death or merely a non-disabling injury, does not affect the outcome. The vote for the plaintiff and defendant, respectively, in cases of death is 25 to 23, and in cases of minor injury, 24 to 24.

The length of the judge's charge to the jury does not, by itself, differentiate the proportion of judgments for the plaintiff and the defendant: under the long charge the vote is 24 to 24, and under the short charge it is 25 to 23. It does, however, affect the vote under differing conditions of risk and injury. The effect of the degree of risk on the apportionment of the vote follows the expected trend in cases involving both types of charge, only it is somewhat stronger under the short form than under the long form. Of the respondents instructed by the short form, 75.0 per cent (18 out of 24) find for the plaintiff under conditions of high risk, and only 29.1 per cent (7 out of 24), under conditions of low risk. Those instructed by the long charge award the plaintiff 62.5 per cent (15 out of 24) of the vote in cases of high risk and 37.5 per cent (9 out of 24) of the vote in cases of low risk. The effect of the seriousness of the iniury upon judgment differs noticeably between the respondents instructed by the two different forms of the charge. As hypothesized, death produces a majority of votes for the plaintiff (15 to 9) and minor injury, a majority for the defendant (14 to 10) in cases involving the short form of the charge. However, the pattern of response to the long charge is the reverse of our hypothesis. The plaintiff loses (10 to 14) when the accident victim dies and wins (14 to 10) when he survives.

The functional significance of the charge looms most prominently in the findings which show that within each category of *risk* stratified by the injury the difference between the plaintiff and the defendant in the proportion of votes received is generally greater in cases with the short charge than those with the long charge. The vote in cases of death with high risk under the long form is closely divided between the litigants, 7 for the plaintiff and 5 for the defendant; under the short form

the vote is decisive, 10 for the plaintiff and 2 for the defendant. Likewise, in cases of low risk-minor injury, the vote is even under the long charge, 6 to 6, but preponderantly for the defendant, 10 to 2, under the short charge. In cases of intermediate liability the length of the charge has less of an influence upon the verdict. The vote for the plaintiff and the defendant under the long and short forms, respectively, in cases of low risk-death tallies 3 to 9 and 5 to 7. In cases of high risk-minor injury the results under both forms of instruction are 8 to 4 in favor of the plaintiff. In brief, the amount of variance⁸ in the vote accruing under the short form (Chi-square 12.24) significantly exceeds that accruing under the long form (Chi-square 4.65). This finding indicates that within each subcategory of cases there is a pronounced consensus among the respondents who received the version with the short form and a rather even division among those who received the version with the long form. Hence, we may infer that the extended charge embodying the calculus of risk formula opposes the purpose for which it was designed by inhibiting rather than facilitating shifts in judgment on the intended dimensions.

The Power of Suggestion

The indefiniteness of the instructions, whether the long or the short form, for assessing the burden of risk renders the potential juror highly vulnerable to extrinsic stimuli. This is indicated by the analysis of the answers to the questionnaire item: "Instead of asking you to decide in favor of the plaintiff or the defendant, suppose the judge had asked you to determine the minimum height the fence could be in order to justify a verdict for the defendant (the swimming pool owner). What would be your judgment? Give your answer in feet." The mean of the judgments of the respondents who read cases with 6-foot fences significantly exceeds the mean of those who read cases with 3-foot fences, 5.9 feet to 4.6 feet (C. R. = 5.5; P<.001). The effect is somewhat analogous to the experimental findings of Asch⁹ and Sherif¹⁰ concerning the suggestive influence of the judgments of "planted" subjects or the judgments of subjects ren-

^{8.} The procedure for computing the total chi-square is given in K. Wilson, supra note 7.

^{9.} S. Asch, Social Psychology 450-51 (1952).

^{10.} M. Sherif, A Study of Some Social Factors in Perception, ARCHIVES OF PSYCHOLOGY (1935).

dered in one another's presence. It is also akin to the finding by Green¹¹ that, in the absence of clear and definite criteria for the weight of penalties to be awarded in criminal cases, the severity of the penalty imposed in the immediately preceding case functions as an anchor for the assessment of the penalty in the successive case.

If we may assume that actual jurors are equally suggestible, the implications of these findings for trial strategy are obvious. Since judgment involves a comparison, implictly or explicitly, between two or more stimuli, 12 and since standards of comparison for judgments in negligence cases are likely to be indistinct, victory will reward the side that most effectively defines the situation for the jurors. Counsel would, therefore, be well advised to attempt to insinuate into the minds of the jurors a scale of precautionary standards which throws the best possible light on his client's case. The counsel for the plaintiff should convey in his argument a scale calibrated so that the precaution taken by the defendant will fall below the mid-point of the range. The counsel for the defendant, conversely, will seek to implant a scale the mid-point of which lies considerably below the point representing the care exercised by the defendant.

Social Background Characteristics

There has been considerable discussion of the effect of personal bias in determining the judgment of jurors. ¹³ Few take seriously the legal fiction of the impartiality of jurors. Attitudes expressive of the juror's age, sex, education, ethnic background, or social class presumably color his perception of the issues and the persons involved in the litigation. Strodbeck *et al.* have described the effect of social class upon the interaction patterns among jurors. ¹⁴ How and to what extent such extraneous factors affect judgment remains problematic since legal prohibitions on jury-observation or eavesdropping for the most part effectively screen the jury process from scrutiny by the behavioral scientist, save for the findings of controlled studies of mock juries.

^{11.} E. Green, The Effect of the Penalty Imposed in the Preceding Case on Sentences Meted Out in Criminal Cases, in Proceedings of the First National Symposium on Law Enforcement Science and Technology (1967).

^{12.} SHERIF & HOVLAND, supra note 5, at 8.

^{13.} Legal and Criminal Psychology 55-57, 79-81, 96-119 (H. Toch ed. 1961) for references anent the psychology of the jury and trial tactics directed at swaying the jury.

^{14.} F. Strodtbeck, R. James & C. Hawkins, Social Status in Jury Deliberations, 22 Am. Sociological Rev. 713, 719 (1957).

The hypotheses we shall test stem from the general proposition that the roles enacted by a person in the social system condition his response to the issues in a litigation. In our hypothetical case the values of property rights and personal welfare are in opposition; the former expressing a conservative ideal of individual freedom, the latter reflecting a liberal concern which would limit the individual's unconditional enjoyment of his property in the interest of protecting the public from the risk of personal harm. Since both values represent dominant orientations in American society and are supported to some degree by persons of both conservative and liberal proclivities, the individual's position on the issue will depend, presumably, on how he defines his own interests in relation to the circumstances of the case. Accordingly, it seems likely that a pro-plaintiff response to the issue raised by the case at hand will depend on the extent to which the respondent's life organization incorporates child-oriented roles. Specifically, it is hypothesized that a greater percentage of votes for the plaintiff will be awarded by parents compared with childless persons, women compared with men, and persons in occupations which provide services for children compared with persons in other occupations.

Table 2 conveys the scope of this phase of the analysis showing the separate effects of parental status, sex, age, and occupation on the respondents' judgments and the effects of each of these status variables on the perception of liability under differing conditions of risk, injury, and instructions to the jury (interaction effects). We shall continue to exclude cases involving a 6-foot fence since that degree of precaution, as noted above, tends to overshadow any other consideration which the respondents take into account.

The results confirm the hypotheses. The judgments of parents and non-parents differ significantly (P < .05). Over one-half of the parents, 41 out of 72, voted for the plaintiff whereas two-thirds of the childless respondents, 16 out of 24, voted for the defendant. The interaction between parental status and the calculus of risk variables achieves a level of significance only in respect to the risk. The percentage of votes awarded by the parents to the plaintiff drops from 74.3 (26 out of 35) in cases of high risk to 40.5 (15 out of 37) in cases of low risk. The corresponding drop in the voting of childless respondents is significantly greater, from 53.8 per cent (7 out of 13) to 9.1 per cent (1 out of 11) (P < .02). The difference between parents and non-parents in the allocation of votes is slightly greater in cases of minor injury compared with

TABLE 2

The Effect of Selected Personal Variables on the Percentage of Votes for the Plaintiff, Singly and Under Differing Conditions of Risk, Injury, and Judicial Charge, in Cases With Three-Foot Fences

	INTERACTION EFFECTS								
	Single	RISK		INJURY		CHARGE			
	Effects*	High	Low	Death	Minor	Long	Short		
Parental Status									
Parent	56.9	74.3	40.5	<i>5</i> 5.3	58.8	57.1	56.8		
	(72)	(35)	(37)	(38)	(34)	(35)	(37)		
Childless	33.3	53.8	9.1	40.0	28.6	30.8	36.4		
	(24)	(13)	(11)	(10)	(14)	(13)	(11)		
P	P. < .05	P≪.02		P>.50		P>.99			
Sex	•								
Male	45.9	61.1	31.6	53.3	40.9	38.9	52.6		
	(37)	(18)	(19)	(15)	(22)	(18)	(19)		
Female	54.4	73.3	34.5	51.5	<i>57.</i> 7	56.7	51.7		
	(59)	(30)	(29)	(33)	(26)	(30)	(29)		
P	P>.30	P>.70		₽≫.30		P≫.30			
Age									
Over 44	48.6	64.7	30.0	50.0	42.1	50.0	41.2		
	(37)	(17)	(20)	(18)	(19)	(20)	(17)		
30-44	65.2	0.08	53.8	58.3	72.7	70.0	61.5		
	(23)	(10)	(13)	(12)	(11)	(10)	(13)		
Under 30	47.2	66.7	20.0	50.0	44.4	38.9	55.6		
	(36)	(21)	(15)	(18)	(18)	(18)	(18)		
p**	P>.05	P>.20		P>.30		P≫.50			
Occupation									
Teacher	65.0	64.3	66.7	54.5	77.8	71.4	61.5		
	(20)	(14)	(6)	(11)	(9)	(7)	(13)		
Housewife	58.6	80.0	35.7	58.8	58.3	73.3	42.9		
	(29)	(15)	(14)	(1 <i>7</i>)	(12)	(15)	(14)		
Others	40.4	53.2	25.0	45.0	37.0	30.8	52.4		
* * * * * * * * * * * * * * * * * * *	(47)	(19)	(28)	(20)	(27)	(26)	(21)		
P***	P<.02	P>	.10	P>	.30	P<	<.02		

^{*} P based on one-tailed tests; x2 corrected for continuity where df 1.

^{**} With categories over 44 and under 30 combined.

^{. ***} With categories teacher and housewife combined.

death and is virtually the same under the alternative forms of instructions to the jury.

Since women are more directly involved in child rearing and related tasks than men, it seems reasonable to assume that they will exhibit stronger pro-plaintiff attitudes than the men. The results bear out this supposition, though not to a statistically significant degree; 54.4 per cent of the women and 45.9 of the men decide in favor of the plaintiff. The possibility that the difference between men and women in voting tendency expresses, fundamentally, a difference between the sexes in the proportions of those who are parents or childless is investigated in Table 3. The data show that sex and parental status are independent of one another; the difference between the men and women in the percentage of votes for the plaintiff is about the same for the childless as for the parents, 51.7 to 60.5 in the former instances and 25.0 to 37.5 in the latter instances. Likewise, the observed sex-difference in the distribution of votes is not significantly affected by variation in the conditions of risk, injury, and form of instruction to the jury, respectively (see Table 2).

The data on age in relation to judgment further support the general hypothesis. If we may assume that the 30-44 age period entails a greater involvement with children in the most active period of childhood growth-above the age of close parental supervision, but below the age of mature judgment—than either the under 30 or over 44 age period. the results should occasion no surprise. The respondents age 30-44 compared with the other two age categories combined exhibit a noticeably stronger, though not quite statistically significant, support for the plaintiff; 65.2 per cent of the former compared with only 47.8 per cent of the latter find for the plaintiff (P>.05). The preference of the intermediate age group for the plaintiff's side holds up with parental status held constant: among parents 66.7 per cent of the respondents in the 30-44 age group, but only 55.6 per cent of those under 30 and 51.5 per cent of those over 44 find for the plaintiff (see Table 3). The difference between the age categories in voting tendencies is not significantly affected by variation in the seriousness of the injury or in the length of the charge.

The plaintiff is much more successful than the defendant in eliciting the sympathies of the respondents in child-centered occupations, namely teachers and housewives. He receives 61.2 per cent of the vote of the two categories combined (65.0 per cent of the vote of the teachers and 58.6 per cent of the vote of the housewives) but only 40.4 per cent

TABLE 3

The Effect of Sex, Age, and Occupation on Individual Judgments in Cases
With Three-Foot Fences, With Parental Status Controlled

		PARENT				. •	
		Plaintiff	Defendant	Total	Plaintiff	Defendant	Total
Sex							
Male	N	15	14	29	2	6	8
	Pct.	51.7	48.3	100.0	25.0	75.0	100.0
Female	N	26	17	43	6	10	16
	Pct.	60.5	39.5	100.0	37.5	62.5	100.0
Age							
Over 44	N	17	16	33		4	4
	Pct.	51.5	48.5	100.0	0.0	100.0	100.0
30-44	N	14	7	21	1	1	2
	Pct.	66.7	33.3	100.0	50.0	50.0	100.0
Under 30	N	10	8	18	. 7	11	18
	Pct.	55.6	44.4	100.0	38.9	61.1	100.0
Occupation							
Child Oriented	N	27	13	40	3	6	9
•	Pct.	67.5	32.5	100.0	33.3	66.7	100.0
Other	N	14	18	32	5	10	15
	Pct.	43.8	56.2	100.0	33.3	66.7	100.0

of the vote of those in other occupations, a difference that is statistically significant at the .05 level of probability. The effect of occupation on judgment is independent of parental status; as Table 3 shows, among the parents 67.5 per cent of the teachers and housewives combined, but only 43.8 per cent of those in other occupations cast their votes for the plaintiff. There is no indication, however, that the degree of child-orientedness of one's occupation influences attitudes in the relatively few cases of non-parents. The form of instruction, though not the degree of risk or of injury, significantly interacts with occupation. Under the long form of the charge the difference between the two occupational categories in the percentages of votes awarded the adversaries significantly exceeds the difference observed under the short charge (P<.02).

The amount of interaction between each of the social status variables and the "calculus of risk" variables—risk, injury, and charge to the jury—does not, save for the exceptions noted above (parental status by risk,

and occupation by form of the charge), achieve statistical significance. Nevertheless, the interactions exhibit two trends that are analytically significant in their implications. The first concerns the effect of the social characteristics of the respondents upon judgment. The more plaintiffminded category of respondents in each classification—the parents, the females, the 30-44 age group, and the persons in child-centered occupations-do not differentiate in the hypothesized direction between cases involving death and minor injury. They award as high or a higher percentage of votes to the plaintiff in cases of minor injury as they do in cases of death. The defendant-minded categories of respondents-the childless, the males, the age groups under 30 and over 44, and those in non-child-centered occupations—on the other hand, in every instance award a higher percentage of votes to the plaintiff in cases of death compared with cases of minor injury. The results suggest that the respondents whose social traits conduce to close identification with one of the litigants are less influenced by the circumstances of the case and more empathic in their responses than the other respondents.

The second relates to the presumably didactic function of the instructions to the jury. The long charge with its more explicit rendering of the standard for judgment tends to strengthen the predilections of the respondents in each of the categories of social status variables; the short charge tends to weaken them. Parents, females, the 30-44 age group, and the child-centered occupational group accord the plaintiff proportionately more votes under the long charge than under the short charge. Conversely, the other categories of each social status variable award the defendants a higher proportion of votes under the corresponding forms of the charge. It is as if the long charge provides the respondent with a means of rationalizing his essentially empathic initial response and, thereby, reinforcing his conviction.¹⁵

SUMMARY AND CONCLUSIONS

The results have shown that in the case at hand the calculus of risk model of the process for the determination of reasonable conduct only roughly approximates the psychological reality. They attest to the reality of a community-shared frame of reference concerning the height of the fence required by the hazard inherent in an untended swimming pool,

^{15.} See generally C. W. Mills, Situated Actions and Vocabularies of Motive, 5 Am. Sociological Rev. 904-13 (1940).

and they show that variation in the risk of injury represented by the difference in the character of the neighborhood in which the accident occurred significantly influences the decisions of the respondents. Curiously, the degree of risk exerts a slight effect in the predicted direction upon the verdict in cases involving the long form of the instructions to the jury, but a very decided effect in cases involving the short form. Contrary to the hypothetical expectancy, the long form of the instructions elicits a majority of votes for the defendant in cases involving death and a majority for the plaintiff in cases involving minor injury, whereas the short form providing only vague directions to the respondent induces the predicted results under differing degrees of injury as well as risk. Quite possibly the wording of the long charge confused rather than clarified the issue in the minds of the respondents. Significantly, the form and terminology of the long charge are rather typical of trial usage, following closely examples of sample forms in legal handbooks.

The difference between the respondents who read the cases with 6-foot fences and those who read the cases with 3-foot fences concerning the minimum height of a fence that would justify a verdict for the defendant, forcefully conveys that lacking a clearly articulated scale of judgment the respondent is highly suggestible by cues which function as reference points on an incipient scale of judgment.

The judge's instructions do not prevent the intrusion of personal factors into the respondent's deliberation. The association between the verdict and selected personal characteristics of the respondents show that the social roles which form a prominent component of a person's life organization and self conception, significantly affect the calibration of the scale of liability which evolves in response to the requirements of the role of juror. To the extent that the respondent enacts roles which subject him potentially to the same loss as the plaintiff, he is likely to identify with the plaintiff and to award him the verdict. To the extent that such roles are not a part of the behavioral repertory of the respondent, he is unlikely to support the plaintiff's claims.

The effects of interaction between social status variables and legal variables, although statistically significant in only two instances—parental status by risk and occupation by judicial charge—are, nevertheless, analytically suggestive in indicating that those who are less likely to identify

^{16.} See N. Foote, Identification as the Basis for a Theory of Motivation, 16 Am. SOCIOLOGICAL REV. 14-21 (1951). Foote points out that identification, "commitment to a particular identity," provides the mechanism for the transformation of external norms into motivated behavior.

with the plight of the plaintiff—the non-parents, the men, adult persons older or younger than those of intermediate years, and persons in non-child centered occupations—are, in general, more responsive to changes in the legally relevant circumstances of the case; also that the long form of the charge to the jury with its more explicit standard of judgment tends to reinforce rather than reduce the biases of the respondents.

The personal factor does not loom so large in judgment, however, as to prevail over the requirements of justice embodied in the judicial charge. It functions to locate the mid-point, or region of neutrality, on a scale of adequate precautions. For those who support the plaintiff this mid-point is somewhat higher than for those who support the defendant: but the distance between the two points does not occupy a large segment, proportionately, of the total scale. The limitation on the effect of the personal factor is evident in the finding that the precaution of a 6-foot fence tends to overshadow any other consideration in the mind of the respondent and engenders virtual unanimity on behalf of the defendant. The point at which the defendant's precautions would be perceived as so inadequate as to mobilize a solid support for the plaintiff is problematical. The design of this research is not sufficiently structured to identify that threshold. It is reasonable, however, to suppose that a fence with a height of two feet would elicit a preponderance but not a unanimity of support for the plaintiff since for a few respondents the height of the fence, the instructions of the judge notwithstanding, was a minor consideration. This minority expressed the view, in response to an open-ended question concerning the reason behind their verdicts, that the major burden devolved upon the parents to exercise adequate supervision over their children.

To sum up, the "reasonable man of ordinary prudence" constitutes a vague paragon; certainly he is not a standard of conduct. Indeed, the short form of the charge which does not make use of the "reasonable man" standard, yields results more consistent with the aims of the law than the long charge that does. It is doubtful, however, that the mere inclusion or exclusion of the term significantly affects the outcome. The findings argue more cogently on behalf of simplicity in the wording of the instructions with a minimum of restrictions on the juror's freedom of judgment.

Finally, the full implications of the results can only be assessed through further research of this type involving a variety of situations, more precise measurement of the appropriate variables, and subjects representing a wider range of social backgrounds. Beyond this investi-

gation should be directed at the effect of social interaction¹⁷ within jury-like groups upon the perception of liability. Aside from personality and social background influences, it would be desirable to examine whether the verdict represents the arithmetic mean of the original judgments of the jurors, or whether judgments of varying magnitude on a scale of liability differ in their resistance to change by group pressure or convey relatively more or less moral authority in the give and take of jury deliberations. Helson,18 at the level of the percept, and Preston and Baratta, 19 at the level of the concept, for example, have shown that stimuli do not contribute in direct proportion to their objective magnitude to the development of scales of judgment. Rather, stimuli of relatively low intensity exert a proportionately greater influence on scales of judgment than stimuli of relatively high intensity.20 If the same tendency obtains in the perception of liability in negligence cases we should expect, other things being equal, that in the utterance of individual opinions concerning a standard of due care, judgments of a magnitude moderately lower than the average of the judgments expressed by each of the jurors will, in general, weigh relatively more heavily into the deliberations of the jury. In other words, it seems hypothetically plausible that the defendant enters litigation with a slight advantage over the plaintiff; an advantage which is intrinsic to the dynamic character of the processes of perception and judgment.

^{17.} Strodtbeck et al., supra note 14.

^{18.} H. Helson, Adaptation Level as a Basis for a Quantitative Theory of Frames of Reference, 55 Psychological Bull. 297-313 (1948).

^{19.} M. Preston & P. Baratta, An Experimental Study of the Auction Value of an Uncertain Outcome, 61 Am. J. Psychology 183-93 (1948).

^{20.} Actually the zone of neutrality or the indifference point occurs at about the geometric mean of the magnitudes of the stimulus series.

LSA ANNOUNCES TOPICS FOR MAY MEETING IN CHICAGO

In conjunction with the 1968 Spring Meeting of the Law and Society Association's Board of Trustees, a meeting open to all Association members will be held at the Sheraton-Chicago Hotel, Chicago, Illinois. Two sessions are planned for the meeting: the first, scheduled for the evening of May 3rd, will be devoted to "Legal Problems of the Urban Poor"; the second, to be held (tentatively in the afternoon) on May 4th, will feature "New Frontiers in Research on Criminal Justice." For further information, write:

Herbert Jacob Joint Center for Urban Studies, MIT-Harvard 66 Church Street Cambridge, Massachusetts 02138

SUMMER INSTITUTE ANNOUNCED

The Sociology and Law Program at the University of Wisconsin announces that an Institute in Behavioral Science and the Law will be held at Madison this summer. Sponsored by the National Science Foundation, the Institute will offer graduate courses and seminars on the political, social, economic, and legal aspects of legal systems. The focus will be interdisciplinary, and the faculty will include professors from the disciplines of Sociology, Political Science, Economics, Law, and Anthropology. Students who are admitted will receive a stipend and travel allowance, and may receive graduate credit for courses taken. For further information write to:

Professor Joel B. Grossman, Director Summer Institute in Behavioral Science and Law 216 North Hall University of Wisconsin Madison, Wisconsin 53706