

Everyday judgmental schemes for punishment and recompense

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The present paper examines the joint use of punishment and recompense in judgments about a harmful action. Most psychological research has assumed that a univariate response is sufficient for understanding everyday moral judgments (Berscheid & Walster, 1967; Leon 1984; Piaget, 1965; Thomas & Parpal, 1987). But the law does not treat harmful acts in that simple way. Instead, recompense and punishment can both be applied. Moreover, jurisprudence treats the duality of perpetrator and aggrieved separately in civil and criminal law and the prescriptive rules for punishment and recompense vary within these two legal domains. Thus, the combination of punishment and recompense in a special duplex response mode is of interest.

The present experiment incorporates two methodological improvements. First, the subjects should know from instruction that recompense and punishment can affect the perpetrator and that they can express this duality in their responses. For this purpose, a novel duplex response task was given. Recompense would go to the aggrieved whereas amounts of punishment would instead go elsewhere. This keeps the material aspect of both responses similar and varies only their meaning. However, although this duplex response offers the subjects two scales, one for recompense and one for punishment, the subject could decide to use either or both of them.

Second, multiple circumstances of the harmful act should be represented in the stimuli to allow the study of the ways by which various moral informers are integrated. Legal philosophy within the German civil and criminal code even provides specific schemes, one for civil law, one for criminal (Hommers, 1988). In civil law, a fractionizing rule awards damages depending on the relative causation and faults of both the perpetrator and the aggrieved. Thus, recompense judgments may integrate the moral informers of perpetrator's fault and the contributory fault of the aggrieved by a fractionizing model.

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Criminal law is different. In contrast to civil law, an apology by the defendant may influence the sentencing and the judges' ruling. Also many forms of harmdoing are only punished when done deliberately. Therefore, punishment judgments may follow a different model for the integration of the mentioned three moral informers.

Thus, the questions of the present study were: (1) do the judgmental schemes for punishment and recompense differ at all, and (2) do specific integration patterns resemble those found in legal context? These questions were examined by methods of information integration theory (Anderson, 1996; Hommers & Anderson, 1991).

Method

Task

The novel task of the duplex response allowed subjects to use either punishment or recompense or both, as they desired. The background scenario told the subject that a damage of DM 500 occurred under varied circumstances in a used car purchase because of engine trouble during the first journey due to loss of engine oil. The subjects should imagine that they went to the seller complaining. They were instructed to rate from the buyer's perspective how much the seller should give to the buyer (*recompense*) and how much, if considered appropriate, the seller should give in addition as donation to a charity organization (*punishment*). The amounts of money were written on sheets of paper, on which the combined moral informers of the stimuli were presented.

Stimuli

After the background story, the specific moral informers were added. The moral informers presented two levels of the seller's apology, two levels of contributory fault of the buyer, or three levels of the seller's fault. These three variables were combined according to factorial design.

Perpetrator fault was varied in three levels:

Inadvertent: "Mistakenly, the seller had not seen the rip in the gasket. Over the years, a gasket of the lubricating system had cracked without the seller's knowledge, which is common given the age of the vehicle";

Careless: "The seller had acted carelessly when performing the oil change. He made a mistake when he poured the wrong oil into the engine. The unprofessional oil change caused the engine trouble during the journey";

Deliberate: “The seller had deceived with intention. He wanted to get rid of the car. He knew about the possible engine trouble and that there was a good chance of making DM 500 in repairs. Questioned whether he knew about possible greater damage to the car, he lied in order to obtain a high price”.

The contributory fault informer was *Yes* “If you had taken the warning sign into account in time, you would have been able to prevent the damage to the engine” or *No* “Even if you had taken the warning sign into account in time, you could not have prevented the damage to the engine”.

The apology informer was varied as *Yes* “The seller apologized” or *No* “The seller did not apologize”.

One complete three-variable stimulus was: “The seller wanted to get rid of the car. He knew about the possible engine trouble and that there was a good chance of making DM 500 in repairs. Questioned about whether he knew about greater damages to the car, he lied in order to obtain a high price. If you had taken the warning sign into account on time, you would have been able to prevent the damage to the engine. The seller did not apologize”.

Procedure

Thirty-five stimulus combinations were constructed: seven stimuli presented only one moral informer (one-variable stimuli), 16 presented combinations of two of the three moral informers (two-variable stimuli), and 12 presented the combinations of all three moral informers (three-variable stimuli). The one-variable stimuli were given first followed by the two-variable and finally by the three-variable stimuli. Within this order the stimuli were presented to the subjects ($N = 87$, 47 female) in six different sequences.

Results

Two main results were obtained. First, there were large individual differences in the amounts awarded for recompense and especially for punishment. Second, there were systematic differences in the patterns of means for recompense and punishment.

Individual differences

Large individual differences appeared with the duplex response. More than half (59%) of the subjects used both scales, recompense and punishment (Punish+Recompensers). However, almost half (41%) used only the

recompense scale (Recompensers-Only). These *between task* individual differences are shown in Table 1 where two groups of Punish+Recompensers were combined. Most of them (32 of 51) used punishment only for the deliberate fault condition. The remaining 19 Punish+Recompensers used the punishment scale at least once. Note that no Punish+Recompenser punished without using the recompense scale in any of the 35 stimuli.

Several aspects of Table 1 deserve comment. First, recompense seems to act in part as punishment. This is indicated by the fact that the Recompensers-Only gave higher recompense than the actual damages. This is also consistent with the finding that they also gave more recompense than the Punish+Recompensers.

	Punish+Recompensers ($N = 51$)			Recompensers-Only ($N = 36$)		
	Inadvertent	Careless	Deliberate	Inadvertent	Careless	Deliberate
Recompense	387	460	535	428	502	605
Punishment	42	78	551	0	0	0

Table 1. Mean recompense and punishment in DM for two groups averaged over levels of contributory fault and apology in three conditions of perpetrator's fault.

Second, overcompensation for deliberate damage was frequent for both groups. Note that overcompensation is greatest for the combination of deliberate perpetrator's fault, no contributory fault and no apology: DM 574 for the Punish+Recompensers and DM 658 for the Recompensers-Only. Moreover, considerable punishment was allocated for deliberate damage independently from overcompensation. In contrast to the Recompensers-Only who awarded an average of DM 605 as recompense, the Punish+Recompensers awarded amounts of loss to the perpetrator that totalled to DM 1086, considerably more than the original damage of DM 500.

Third, of special interest is the huge difference between Careless and Deliberate: DM 78 and DM 551. This huge difference was not present for recompense. As just deliberate fault elicits punishment in a quite unique increase, this huge difference may indicate a trigger function of deliberate harm for punishment which deserves further study.

Individual differences also were visible in the allocated amounts of recompense as well as punishment. For recompense, the subjects factor was highly significant when tested against the apology by subjects mean square as (conservative) error term [$F(35, 35) = 26.3$ for Recompensers-Only and $F(50, 50) = 29.3$ for Punish+Recompensers]. For punishment, very extreme ranges from DM 0 to DM 5,000 in the deliberate conditions were obtained.

Integration of moral informers: Punish+Recompensers

The integration graphs of the Punish+Recompensers are of main interest, because they used the duplex response and may allow identification of differences in the integration processes for recompense and punishment.

Recompense response. Five results on the integration of moral informers in recompense are shown in Figure 1. First, contributory fault has substantial effects on judgments of deserved recompense as shown by the vertical distances between the curves which represent contributory fault. Similarly, perpetrator's fault has substantial effects as shown by the slopes of the curves.

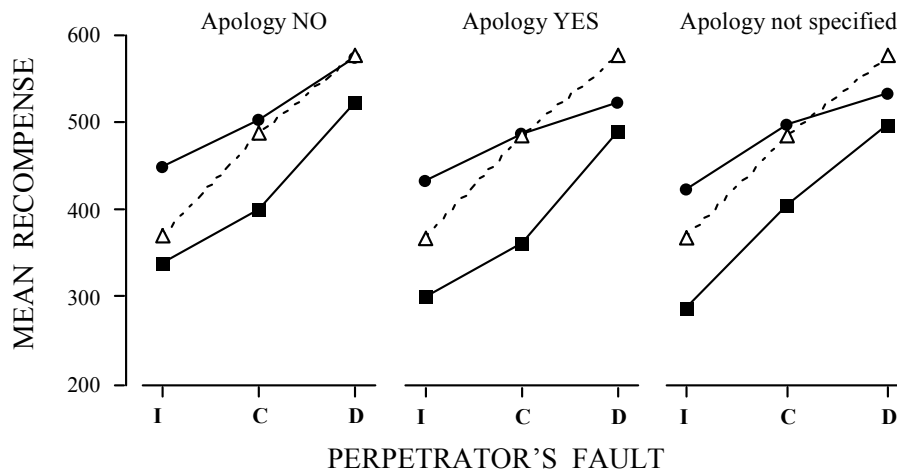


Figure 1. Mean recompense in DM by Punish+Recompensers as a function of inadvertent (I), careless (C), or deliberate (D) perpetrator's fault, for Yes (●) and No (■) contributory fault and for information on only perpetrator's fault (△).

Second, the two fault variables are integrated in a nonadditive manner. This nonadditivity is shown by the convergence of the two solid curves in each graph.

Third, the similarity of the three graphs indicates that the converging pattern is independent from apology.

Fourth, apology had a very small effect (DM 452 versus DM 476 for apology Yes and No) in comparison to the two fault informers.

Fifth, the dashed curves, which represent judgments for three cases in which only perpetrator's fault was specified, are steeper than the solid curves.

This slope difference supports the averaging model of information integration theory. Indeed, for two of the three curves, the dashed curve crosses over the upper solid curve which clearly eliminates any additive model.

As expected, subjects gave larger recompense for contributory fault No than Yes (DM 492 versus DM 401 with errors of the means DM 24 versus DM 30). Similarly, larger recompense was given for deliberate perpetrator's fault than for careless or inadvertent fault (DM 535, DM 460, and DM 387 with standard errors of DM 32, DM 22, and DM 27, respectively).

The meaning of the convergence pattern in Figure 1 can be understood as an interaction of buyer's contributory fault and seller's fault. Contributory fault decreased recompense most at the inadvertent level (from DM 436 to 310), moderately at the careless level (from DM 496 to 390), and least at the deliberate level (from DM 544 to 504), each averaged across the three apology conditions. This convergence can be interpreted as differential weighting in an averaging rule with higher weight for greater perpetrator's fault.

The nonadditive patterns of Figure 1 were statistically highly significant [$F(2, 100) = 11.7$ for the complete stimuli and $F(2, 100) = 9.3$ for the two-variable stimuli]. The similarity of the converging pattern across the levels of apology was statistically supported by a nonsignificant triple interaction [$F(2, 100) = 1.19, p = 0.31$] whereas the effect of apology itself was not significant. The crossover of the dashed and solid curves in Figure 1 also was statistically supported [$F(2, 100) = 3.33$ and $F(2, 100) = 4.88$] for complete and two-variable stimuli.

Punishment response. A deliberate-only rule appeared in the majority of Punish+Recompensers. Apology as well as contributory fault had substantial effects on punishment judgments in the deliberate fault condition only. In contrast to Figure 1 for the recompense judgments, the effect of contributory fault was large with deliberate fault (DM 478 for contributory fault Yes and DM 597 for No). To give apology reduced the punishment judgments at the deliberate level from DM 655 to DM 475. Thus, the effect of apology on punishment differed sharply from its negligible effect on recompense judgments.

The triple interactions of the response variable with the moral informers were statistically highly significant [$F(2, 100) = 13.59$ for the two fault informers, $F(2, 100) = 10.76$ for seller's fault and apology, and $F(1, 50) = 11.36$ for contributory fault and apology].

Note that the total loss of the seller (sum of recompense and punishment) showed a slightly diverging, near parallel pattern for the integration of the two fault informers which would have hidden the nonadditive averaging pattern with recompense and the near deliberate-only rule with punishment.

Integration of moral informers: Recompensers-Only

The results of the Recompensers-Only were similar to those reported in Figure 1, although their recompense judgments were larger than those of the Punish+Recompensers as shown in Table 1. First, the effect of apology was again very small (DM 502 and DM 521 for Yes and No) showing again practically no effect of apology on recompense. Second, the averaging model of information integration theory was supported again, as the curves that represent judgments for those three cases, in which only perpetrator's fault was specified, were again steeper than the solid curves. Minor differences were that their crossovers were smaller than with Punish+Recompensers, that the convergence of the effect of contributory fault was a little smaller than with Punish+Recompensers, and that contributory fault had greater effect (DM 176) than with the Punish+Recompensers (DM 91).

Discussion*Individual differences*

The large individual differences that appeared in the punishment/recompense judgments may represent a general tendency in moral and moral-legal judgment. Several examples can be found in the literature. With recompense available the choices of prison sentence or fine dropped from 65% to 45% for criminal acts like breaking into a summer house or stealing tools valued at DM 1000 (Pfeiffer, 1993). As another example, Shea Adams & Bourgeois (2006) found means for punitive damages that varied from 1.57 to 2.69 millions of dollars with standard deviations of 1.20 and 5.13 millions of dollars, respectively, in a simulated product liability trial. Similar results were obtained by Robbenolt (2002) with trial court judges, by Robbenolt & Studebaker (1999) and by Saks, Hollinger, Wissler, Evans & Hart (1997) in mock jury studies, as well as by Hommers & Endres (1989a, 1989b) with different scenarios using the duplex response.

Large individual differences have also been reported in a few other studies of moral judgments. As one example, Leon (1980) found several different integration rules for blame as a function of damage and intent of harmdoer, which may reflect individual differences in weighting intent and damage. Anderson (1991) reported large individual differences in similarity of moral ratios between husband and wife. A spectacular result from France showed wide differences in willingness to forgive that ranged from Always Forgive to Never Forgive (Girard & Mullet, 1997).

Although these scattered findings have been incidental to other purposes and were not directly focused on individual differences, they indicate the potential of systematic study of individual differences in moral judgment. Single subject design is needed to obtain adequate data on individuals. In the used car scenario, for example, the set of fault and apology informer combinations could be given more than once to allow single subject analysis of functional values of the informer variables. Additionally, multiple scenarios are desirable to assess generality. Finally, the present duplex response method seems necessary to reveal the multidimensional character of much moral judgment.

Overcompensation

The present overcompensation confirms Hommers (1986) and Hommers & Endres (1989a) who used a ruined-stamp scenario, and Hommers & Endres (1989b) who used a soccer scenario. Overcompensation was also reported by Shea Adams & Bourgeois (2006) in a US mock juror study. For example, when the plaintiff requested around 83 thousand dollars the mock jurors awarded 207 thousand compensatory damages against a negligent employer.

In everyday morality, therefore, overcompensation may not be restricted to deliberate fault, as was the case here. Also, the need for overcompensation may cause punishment responses even when full recompense had been given (Hommers & Anderson, 1985). It is interesting to note that rules for overcompensation were present in ancient legal systems, most often for thefts by stating multiples (double, four times, etc.) of the damage as recompense (see e.g. *furtum in manifestum* in Roman law, multiple compensation rules in the Book of the Covenant of Exodus or in Hamurabi's law, and the principle of multiple restitution in medieval Anglo-Saxon law). However, the cognitive processes that underlie overcompensation are unknown and deserve systematic experimental analysis.

Moral algebra

The moral informers of perpetrator's and contributory fault follow a moral algebra of recompense independently from the level of apology and from individual differences in the additional use of punishment. This supports a differential weight averaging rule for recompense, and augments prior non-additive results with German adults and juveniles (Hommers & Endres, 1989a; Hommers, 1990). The convergence of curves in Figure 1 is like the well-known negativity effect with greater weight for more negative informers like deliberate fault (Anderson, 1991, 1996).

The integration of moral informers in punishment may differ from the moral algebra of recompense. The results suggest that the everyday moral structure of punishment may operate on deliberate acts only and may depend on the availability of recompense.

Axiom of Purposiveness

The present results with the duplex response demonstrate the Axiom of Purposiveness in moral cognition (Anderson, 2007). As recompense is directed at a goal different from punishment either a total avoidance of the punishment scale or applying different integration schemes for recompense and punishment may be elicited. The traditional univariate response mode for the subjects' reactions to moral informers may obscure the individual differences in moral cognition and purposiveness.

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Abstract

Harmdoers may be punished or required to give recompense for the harm. These modes of treatment may be used concurrently in the legal system and in everyday morality. In contrast, most psychological research on morality has studied these modes of treatment separately. Therefore, levels of three moral informers (buyer's as well as seller's fault and his apology) about a car damage after a used car sale were to be rated from the buyer's perspective with regard to how much money the seller should give to the buyer as recompense and how much to donate to a charity organization as punishment. The results were that nearly half the subjects used only recompense while the others used both recompense and punishment, that some subjects required overcompensation, and that the meaningful patterns of information integration differed for punishment and for recompense.

Riassunto

I danneggiatori possono essere puniti o si può richiedere loro che ricompensino il danno. Questi modi di trattamento possono essere usati simultaneamente nel sistema legale e nella moralità sociale quotidiana. In contrasto, tali modi di trattamento vengono studiati separatamente nella maggior parte delle ricerche psicologiche sulla moralità. In questo studio, ai soggetti è stato chiesto di immaginare una situazione in cui un venditore ha causato un danno ad un'auto usata che poi ha venduto. Le valutazioni venivano date per combinazioni di livelli di tre informatori morali circa il danno (colpa e scuse sia del compratore che del venditore). Il soggetto aveva il compito di valutare dal punto di vista del compratore quanto denaro il venditore doveva dare al compratore per ricompensa e quanto donare ad una organizzazione caritatevole per punizione. I risultati furono che quasi la metà dei soggetti usò soltanto la ricompensa mentre gli altri usarono sia la ricompensa che la punizione, che alcuni soggetti ricompensavano in eccesso, e che le configurazioni significative di integrazione delle informazioni differivano per la punizione e la ricompensa.

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