Preface

NEGATIVE DESERVING: BLAME

Blaming—and avoiding blame—are basic social motivations. These two motivations operate in every area of life: family, friendship, school, work, politics. Experimental analysis of these two classes of motivation offers fruitful opportunities for social attitude theory, developmental psychology, motivation theory, and person science. Opportunities to improve the social-moral level of society have exceptional importance.

Blame exhibits algebraic law:

$$Blame = Responsibility + Consequences.$$

Consequences represents the outcome of some action, Responsibility the responsibility of the blamee. This averaging law for blame was first found by Leon (1976, 1977, 1980) and Surber (1977, 1985) with children. This blame law showed that basic claims of Piaget's theory were incorrect. More important, this law went further to show that young children have far higher cognitive capabilities than had previously been recognized. In addition, this law demonstrated a simple, powerful method for further analysis with children (Chapter 5).

The basic blame law discovered with children has been replicated and extended in extensive studies with adults. These blame laws provide new methods for studying this pervasive function of personality.

Responsibility and Consequences are both usually integrals of multiple determinants that require deeper analysis. Many variables deserve study: extenuation, apology, restitution, and personal relationships, as well as associated processes of excuses and counterblaming. Developing science of blame thus depends on capabilities with integration of multiple variables. The algebraic laws of blame reviewed in this chapter are a step in this direction (Note 0).

Chapter 3

NEGATIVE DESERVING: BLAME

Blame is ubiquitous in society; it deserves similar place in social theory. Blame, or threat thereof, is prominent in interpersonal relationships, from family interaction to national politics. In social groups, different members will have conflicting goals and/or ways to pursue them. These differences cause negative feelings that surface as blame when goals are blocked. Blaming—and avoiding blame—are basic motivations that help maintain person and society (see *Psychodynamics of Everyday Life*, Chapter 6 in Anderson, 1991b).

 Blame underlies both criminal and civil law, of course, which are taken up in the next chapter. Everyday blame is the main concern of this chapter (Note 0).

Blame follows algebraic law as early as 4^+ years of age. These laws revealed that moral thought and action differ radically from claims of other moral theories. The very first experiments showed not only that Piaget's developmental theory was fundamentally incorrect but demonstrated a more effective theoretical framework (see further *Two Developmental Integration Theories*, Chapter 5).

These blame laws also have solid advantages over popular moral stage theories. They avoid reliance on verbal reasoning, which lacks validity criteria and which may be badly confounded with post hoc rationalization. They also allow study of children from 4 to 12 years of age, a fundamental period in moral development but one to which popular stage theories are admittedly inapplicable (see *Moral Stage Theories*, Chapter 5).

The blame laws, together with the laws of positive deserving (Chapter 2), are a foundation for moral cognition. These laws are part of an empirically grounded moral algebra with considerable invariance across age and across cultures, a foundation for social-moral science.

This blame algebra is not well known so some detail from early experiments is included to illustrate theory and method. These are simple, illustrated with the parallelism analysis of Figure 3.1 (next page).

LAWS OF BLAME

Blame for a harmful action typically involves integration of two determinants: responsibility of an actor and consequences of the action. This integration is represented in the blame schema:

$$\text{Blame} = \text{Responsibility} * \text{Consequences}, \tag{1}$$

where $*$ represents a symbolic integration operator. Empirically, $*$ is often a mathematical average as the following experiments show.

Responsibility represents the extent to which the actor is held responsible for the consequences. Responsibility is typically, perhaps always, an integral of two kinds of responsibility: causal and social. Causal responsibility may include purposive or careless action as well as failure to take preventive action. Social responsibility includes obligation, social norms of truthfulness and honesty, and behavior in accord with custom or law. The two need not be distinct. Carelessness, for example, may be both causal and social. Responsibility is not in the blamee, of course, but an attribution by the blamer.

Consequences may take many forms, including mental distress and even risk from potential consequences that did not actually happen but could have been nullified by normal prudence. Experimentally, consequences has usually been narrowly manipulated as physical damage. It also may involve some attribution by the blamer (see *Unified Causal Attribution*, pp. 293-301, in Anderson, 2008).

BASIC BLAME LAW

Law of Blame. The basic blame law states that blame is an average of responsibility and consequences (Note 1):

$$\text{Blame} = \text{Responsibility (Intent)} + \text{Consequences (Harm)}. \tag{2}$$

This law was supported by the parallelism of Leon's data in Figure 3.1. His integration graphs were near-parallel across all four age levels, from third grade (8-9 years) to college. This parallelism supported the hypoth-

esis that blame follows the adding-type integration law: Blame = Intent + Harm.

Piaget's doctrine of *centration* (that young children cannot integrate two variables but center on one and judge on that basis alone) was disproven by the separateness of the three Intent curves in Figure 3.1 (see Note 3 in Chapter 5). This failure of centration also holds in Piaget's main field of naïve physics (e.g. Wilkening, 1988, 2007; Wilkening & Anderson, 1982, 1991). Young children have far higher cognitive capabilities than had previously been recognized (see *Two Developmental Integration Theories*, Chapter 5).
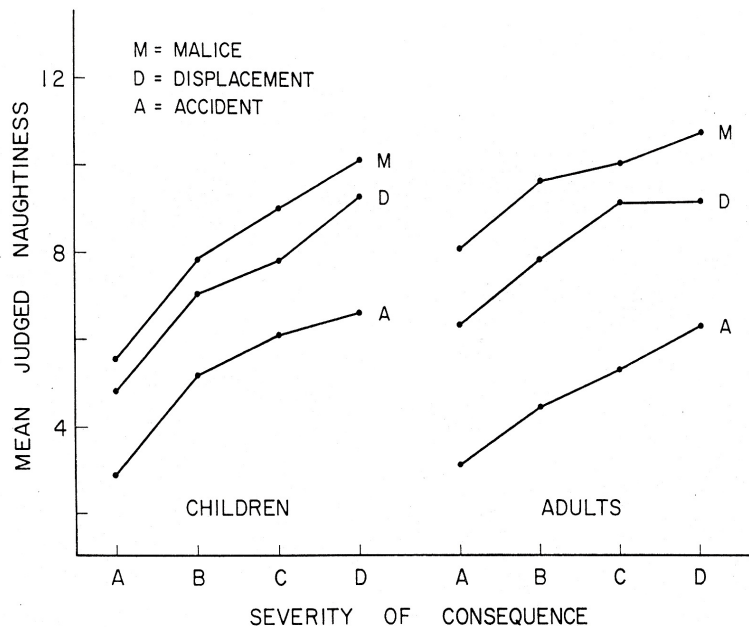

Figure 3.1. Parallellism supports the averaging law: Blame = Intent + Consequences. Graph plots rated naughtiness of a story child who threw a rock with one of three intents (curve parameter) producing one of four levels of harm (horizontal axis). Left panel shows third-, fifth-, and seventh-graders; right panel shows college students. No age trends except perhaps the apparent increase in main effect of Intent. This experiment used Piagetian stories standardized by Crowley (1956). (After Leon, 1976, 1980.)

Explicit Responsibility and Consequences. The Piagetian stories used with the experiment of Figure 3.1 are unsatisfactory. Among other reasons, intent is often poorly defined in the Piagetian stories and has to be inferred from insufficient information, as in the Margaret story quoted in Chapter 5. Indeed, Leon's initial experiment showed that children young-

er than 8 years of age largely failed to understand the intent information in the Piagetian stories.

Accordingly, Leon developed stories in which intent and consequences were both explicitly specified. These were varied in a 3 x 4 integration design and children judged naughtiness of each individual story child, with responses on a graphic rating scale. By virtue of explicit statement of intent and consequences, these stories were usable with first- and second-graders (6– and 7–year-olds, respectively).

Averaging was the modal integration rule with these explicit stories, indicated by parallelism of the integration graphs. Little age trend was found beyond the first grade.

Alternative Integration Rules. The explicit stories used by Leon also showed alternative integration rules in his single-child analyses. Most common was the *accident-configural* rule, used by about a fifth of the children. Their integration graphs showed parallelism except when consequences were accidental, in which case their magnitude had little effect (see also Darby & Schlenker, 1982). This accident-configural rule was more frequent with younger children whose clumsiness gives it appeal. This rule appeared at every age, however, even with a few adults.

Some participants at the younger ages, but a few at all ages, appeared to judge on the basis of intent alone or consequences alone. These are not Piaget's centration rules; young children have shown good integration capabilities in numerous tasks.

The intent-only rule can be rationalized on the ground that what is blamable is the actor's motivation, that is, actor's personal responsibility. The consequences-only rule can be rationalized on the ground that what is blamable is what actually happened. Such one-variable rules have also been reported by Przygotski and Mullet (1993) and by Howe and Loftus (1992). Such rules, however, may be cases of the blame law in which one variable has low weight (Notes 2-4).

Imputations. Leon also discovered a process that has general interest: *imputations* about unspecified information. With stories that presented only responsibility information, some participants imputed a value to the unspecified consequence information and integrated that.

Evidence for imputations came from the intent–consequence integration graphs that included a curve for intent alone. This curve was intermediate between and parallel to the curves for (intent + no harm) and (intent + serious harm). This pattern implies that participants imputed a medium value to unspecified consequences information and added or averaged this imputation with the given information on intent. Without

imputation, the adding rule would require the intent-only and (intent + no harm) curves to lie at the same level. Without imputation, the averaging rule would require the intent-only curve to be steeper than the (intent + no harm) curve (see Anderson, 1991a, p. 74).

Imputations are no surprise in these blame experiments. Most stories included both intent and consequences so participants could readily assume some consequences had occurred even when not specified. Imputations represent information processing capabilities that have general importance; in practice, relevant information is often missing. As yet, however, not a great deal is known about how people deal with missing information (see *Imputations and Schemas*, Anderson, 2008, pp. 335f) Other important work on imputations is given by Ebenbach and Moore (2000), by Singh (1991, 2011), and by Oliveira, *et al* (2014).

Leon's study illustrates how much information can be obtained from a single experiment using Information Integration Theory. Functional measurement methodology revealed high cognitive capabilities of young children repeatedly denied by those who have relied on Piaget's choice methodology. A partial itemization follows.

1. *Moral Law*. The basic blame law is central in moral cognition. This blame law has exact mathematical form already at young ages—an early sign of general moral algebra.

2. *Information Processing*. The basic blame law constitutes a solution to all three operations—valuation, integration, and action—of the Integration Diagram (Figure 1.1 of Chapter 1). One implication is that responsibility and consequences are valuated as independent units; higher damage does not increase responsibility. Another implication is that responsibility and consequences are not just convenience terms from common language; the algebraic law implies they have cognitive reality (see *Cognitive Unitization*, benefit 5 of parallelism theory, Chapter 1).

3. *True Measurement of Feeling of Blame*. Success of the basic blame law supports the method of functional rating as true measurement of psychological feelings of young children. The observable rating of blame is a faithful image of the child's nonobservable feeling; the rationale was given with the parallelism theorem (benefit 2) of Chapter 1.

4. *True Idiographic Measurement of Responsibility and Consequences*. True measurement of responsibility and consequences for each individual becomes possible. This idiographic measurement is simple— benefit 3 of the parallelism theorem.

Idiographic capability is essential for moral theory. The large individual differences in moral values is one reason. Moral cognition of

person A cannot be well understood in terms of moral values of person B or of some group average.

5. *Cognitive Development.* Young children have far higher cognitive capabilities with all three operations of the Integration Diagram—valuation, integration, action—than had previously been realized. Integration experiments offer an analytic base for developmental theory.

AMELIORATING BLAME

Blame involves negative aspects for blamer as well as blamee. Social procedures have evolved to ameliorate negative effects and maintain working social harmony. To understand these negative effects and make healing more effective is socially important. Two social healing procedures, apology and material recompense, are discussed next.

APOLOGY

Apologies can be effective blame reducers. The extended blame law,

$$\text{Blame} = \text{Responsibility} + \text{Consequences} - \text{Apology}, \qquad (3)$$

was supported for children by Leon (1982). Apology had very substantial effects as early as 4+ years of age. What little developmental trend was observed suggested greater relative effect at younger ages. Empirically, this result infirms claims by Piaget and others for a general objective–subjective trend in development. Conceptually, apology and related variables seem terra incognita to moral stage theories.

How can a simple "I'm sorry" be so effective? Where does this large effect of apology originate? Its appearance at young ages argues that home learning is important. This speculation suggests studying apology across diverse sociocultural backgrounds and with multiple blame scenarios that cover realistic situations of everyday life.

For the blamee, apology may have several benefits. It should reduce both ill-will of blamer and self-blame of blamee by Equation 3. Such reduction of self-blame might also reduce blamee's feeling of Responsibility, possibly as a halo effect (see *Halo Theory*, Chapter 1).

The early appearance of large effects of apology also suggests it has a biological base. "I'm sorry" may act as a submission response. This is presumably the case with forced apologies that lack sincerity.

The effectiveness of apology as early as 4+ years of age has special interest as a robust early form of social healing. Blame theory is a wide-open field for study within and between cultures (Note 5).

MATERIAL RECOMPENSE

In his life work on psychology and law, Wilfried Hommers has presented a series of studies of material recompense for harmful consequences. His focus is on legal systems, viewed in psychological perspective.

> The moral rule not to do harm has a corollary moral rule to undo harm that is done. This moral rule of undoing harm is well recognized in everyday life. A child who dirties some object may be required to clean it. A person who insults another may be required to apologize. In married couples, recompense in the forms of gifts or soft words is often part of ``making up'' for distressful acts. So ubiquitous is this moral rule of recompense that at least one philosopher has elevated it to a prima facie duty.
>
> Despite its moral importance, recompense has received little attention from psychologists. One difficulty in studying recompense is that it usually involves other moral variables. Recompense ordinarily involves reference to the harm for which recompense is made, and evaluation of harm may require taking responsibility into account. Various kinds of mitigating circumstances may also be relevant. Hence the study of recompense cannot get very far without capability for handling multiple determination. (Hommers & Anderson, 1991, p. 101.)

Civil law is mainly concerned with material recompense. This concern goes as far back as the Judaic code of the second millennium BCE ("Whom the judges shall condemn, he shall pay double to his neighbor," Exodus, 22.9). The series of four experiments on material recompense from the cited chapter is summarized here.

Stamp Scenario. A ruined stamp scenario was used so consequences (ruined stamps) and recompense (replacement stamps) would be directly comparable. Meaningful comparisons across age levels were similarly possible. This scenario was personalized to each participant by saying that another person had damaged stamps from his/her personal collection. Three variables (three levels of responsibility; small or large damage; and recompense of none, half, or all the ruined stamps) were used in all four experiments. College students judged deserved punishment.

Extended Blame Law. Inclusion of recompense yields the extended blame schema,

Blame = Responsibility $*_1$ Consequences $*_2$ Recompense,   (4)

where $*_1$ and $*_2$ are symbolic integration rules.

The first question is whether $*_1$ is an average, in accord with the basic blame law. This cannot be taken for granted. The third variable of recompense might disrupt the responsibility–consequence integration found in previous experiments. Also, the recompense information might influence the functional values of responsibility or consequences.

Happily, invariance of Responsibility–Consequences integration was supported in all four experiments; the Responsibility–Consequence integration graphs were uniformly parallel. Of special note, one experiment yielded very similar results for three different orders of presentation of the three variables. This outcome adds to the evidence that integration rules are invariant across associated variables.

Paradoxical Recompense Effect. Recompense had much larger effects than the damage for which recompense was made. This paradoxical disproportion was observed in all four experiments. In Experiment 3, complete replacement of the damaged stamps had four times the effect of the damage itself. This comparatively small effect of damage results from its being given lower importance *weight* in the judgment of punishment. Somewhat similar results have been obtained with apology by several investigators, but this paradox remains unexplained (Note 6).

Nonadditive Averaging of Recompense. Recompense is also integrated by averaging, but with greater weight for greater recompense. The symbolic blame schema of Equation 4 followed the algebraic law:

$$\text{Blame} = \text{Responsibility} + \text{Consequences} - \text{Recompense.} \qquad (5)$$

This nonadditive averaging of recompense was signaled by diagnostic patterns of nonparallelism. In the Responsibility–Recompense integration graphs, the responsibility curves were closer together for higher recompense, signifying higher weight for higher levels of recompense, a positivity effect complementary to the well-known negativity effect.

Information Processing. An interesting implication about information processing follows from the two findings of equal weight averaging of Responsibility and Consequences and unequal weight averaging of Recompense. These findings imply that Recompense is processed as an independent unit, that it has no effect on valuation of Responsibility or Consequences.

It might instead be supposed that the information processing begins by integrating the given Recompense information with the damage to obtain an effective value of Consequences, which is then averaged with Responsibility. But averaging such effective values would yield nonparallelism in the Responsibility–Consequences integration graph stemming

from the nonparallelism in the Responsibility–Recompense graphs. Such insight into the flow of information processing hardly seems possible without analytic capabilities of algebraic laws.

Concept of Recompense. Two components of recompense may be distinguished. One is oriented toward undoing the harm, the other toward punishing the harmdoer. *Duplex response*, with separate judgment of material recompense and punishment, may help unravel this distinction (Hommers & Anderson, 1991). Duplex response was used by Hommers (2007), who found that victim's fault had strong effects on judgment of appropriate material recompense but little effect on judged punishment.

GENERALITY OF THE BLAME LAW

Generality of the foregoing blame law needs assessment. Promising support was found with married couples and with criminals (Note 7).

BLAME IN THE FAMILY

Blame is ubiquitous in family life, a primary tool for socialization, both spouse–spouse and parent–child. The following experiment is among the many in Armstrong's (1984) PhD thesis on attitudes in marriage (see also Anderson, 1991c, Chapter 6, *Family Life and Personal Design*).

In one of Armstrong's studies, participants were 20 married couples in student housing on the UCSD campus. Each trial began with a scenario like the following, the same for both spouses.

> Nancy and Sue had been best friends for over two years. One day, Jennifer, a new girl in the neighborhood, came over to play. Pretty soon, Jennifer and Sue were playing together by themselves, ignoring Nancy.
> Nancy was upset with Jennifer so she thought she would give Jennifer a good scare by riding past Jennifer really fast with her bike.
>
> Nancy's bike knocked over Jennifer, who sprained her arm. She had to have it in a sling for a month. (From Armstrong, 1984, Childrearing Study 4, p. 152.)

These three stimulus informers give background scenario, intent, and damage. Four background scenarios were used for generality, each the base for a 3 Intent × 4 Damage integration design. Each spouse first made a private judgment of "deserved discipline" for Nancy, Armstrong's term for avoiding spouse differences in type of discipline.

Next, each spouse received different additional information, mildly negative for one, positive extenuating for the other. They exchanged this

information in mutual discussion, telling how it had changed their own view. Each then privately revised their initial judgment to take account of their own added information and that from their spouse.
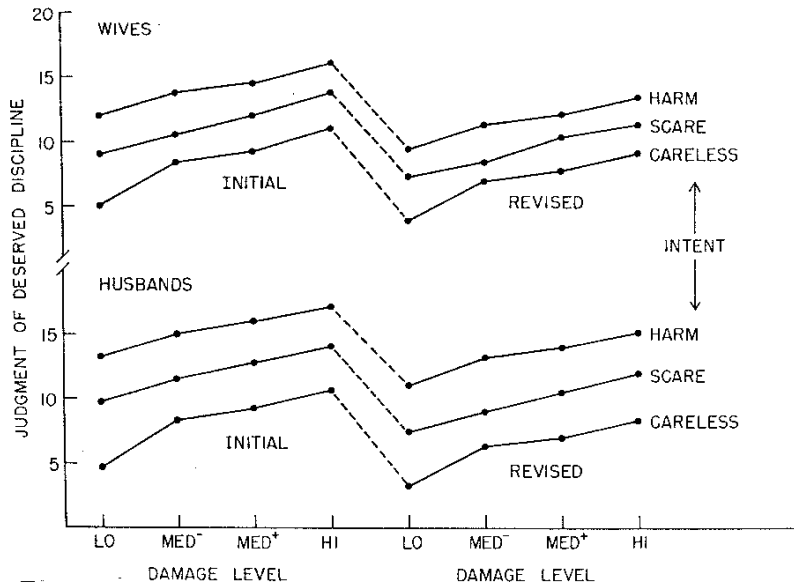

Figure 3.2. Independent judgments of blame by husbands and wives. Initial judgments based on information about intent (curve parameter) and damage (horizontal axis). Revised judgments based on additional information presented by spouse. Lo, Med⁻, Med⁺, and Hi represent graded levels of damage. (After Anderson & Armstrong, 1989.)

Basic Blame Law. The basic blame law, Blame = Intent + Damage, is well supported by the near-parallelism of Figure 3.2. The lowest left-hand point in each panel, which deviates from the parallelism, represents a careless action with no damage. This may reflect Leon's accident-configural rule that was discussed earlier.

Spouse Influence. Effect of spouses' added information is shown by the lower mean elevation of the right-hand graphs. Lower blame results because the added information was mainly extenuating. Hence the near-parallelism supports the extended blame law,

Blame = Intent + Damage − Extenuation.   (6)

Would similar results be obtained if each spouse constructed their own added information which they communicated to their partner? *Yes*, as shown in a devoted follow-up experiment by Armstrong (1984).

PSYCHOSOCIOLOGY OF DEVIANCE

Deviance has long been a major concern in sociology, especially with life styles and behavior that conflict with norms of social conduct. Sociological studies, however, have two limitations. First, heavy reliance is placed on statistics of groups with neglect of individual differences. Second, although specific deviant actions depend on integration of multiple variables, sociological methodology is weak at analyzing such integration (see *Field Science*, Section 15.5, and *Interpretation With Observational Data*, Section 16.2, in *Empirical Direction*).

Functional Sociology. To overcome these two limitations, Yuval Wolf (2001) and his colleagues advocate a functional sociology. They study how individuals in social groups valuate and integrate information and translate this into action. This functional framework focuses on goal-oriented functions of individuals, especially from diverse classes of deviants, including juvenile delinquents and aggressive personalities.

Three advantages come with this functional approach. It recognizes that offender and victim have different perspectives on the same aggressive action. It recognizes and can, in some cases, quantify multiple determinants of specific acts of aggression. Most important, it allows shifting "the definition of aggression from armchair dictates . . . to perceptions of those who experience and practice aggression on a daily basis as perpetrators of harm, victims, or observers" (Wolf, 2001, p. 30).

Anomie Theory. In one application of this functional approach, Hoffman, Wolf, and Addad (1997) used Information Integration Theory to assess sociological anomie theory (Merton, 1967). Anomie theory makes two main predictions: deviants justify their behavior more when they have greater need for important social goals of status and material well-being, and also when they have lesser means to obtain these goals.

These predictions were tested by using offenders' need for money and difficulty of obtaining it legally as variables in an integration design. Participants were from six different social groups: juvenile delinquents, prison inmates convicted of property crimes, prison inmates convicted of white collar crimes, high school students, and male and female college students. They were asked "To what extent it is justified, in your opinion that your friend [or an institutionally dissimilar adolescent] should commit [a specified crime] to obtain the needed money" (p. 184).

Both predictions from anomie theory were supported: the offense was seen as more justified when the offender's need was greater and when it was more difficult to obtain the needed money legally. Surpris-

ingly, all groups showed similar integration graphs. However, the definition of the response (whether the offense should be committed) meant that all responses were near the low end of the scale, which limited discriminative power. One alternative would ask for a blame judgment for actually having committed the response.

The usefulness of Information Integration Theory in sociology is indicated in this experiment. In themselves, the predictions of anomie theory seem rather obvious but the integration-theoretical approach can provide quantitative analysis with analytic power about specific psycho-sociological variables for comparing different social groups. No less important, integration theory can study the individual spectrum within a group (see also Anderson, 1991b, pp. 269f, 1991c, pp. 224ff).

BLAME JUDGMENT BY CRIMINALS

Blame is basic in judgments of antisocial acts. Much work has been done in relation to the legal system (see next chapter). But surprisingly little has been done to elucidate how such judgments are made by accused persons and criminals, both first-time and habitual criminals.

Blame Judgments By Ex-Prisoners. Ex-prisoners followed the same blame law as persons who had never been incarcerated in this innovative study by Przygotski and Mullet (1993) in France. Ex-prisoners were from a halfway house, having recently been released after serving prison terms of 1 to 15 years. Nonprisoners were matched in age and level of education (none had a secondary school diploma).

An Intent × Damage design was used, similar to that of Leon in Figure 3.1. Three different scenarios, all suitable for ex-prisoners, were used to assess generality. Judgments were ratings on a scale with end anchors of "No punishment" and "Very severe punishment."

Individual analyses supported the basic blame law,

Judged Punishment = Intent + Damage,

as the modal pattern. Also fairly common was this same law except that Damage had negligible effect with zero Intent, as with Leon's accident-configural rule. In addition, a substantial number of persons showed statsig main effects only for Intent or only for Damage. These results are similar to those in America cited above, except for a higher frequency of apparent one-variable rules in adults. Ex-prisoners and nonincarcerated exhibited similar integration rules (see Note 3).

Ex-prisoners showed lower levels of deserved punishment than the comparison group, a difference attributed to lesser influence of Intent. Such results, however, are troubled by the dual character of criminal moral systems. One level is that of society, the other their own everyday life. Their responses are some uncertain mixture of these two levels.

Moral systems of criminals have great interest but their dual character makes them difficult to study. One possibility would be to have criminals and ex-criminals role-play judgments of other criminals of several different types (see also *Response Quality*, Chapter 6).

Self-Defense. Self-defense can justify physical violence. Judgments of blame for scenarios that specified Intent, Consequences, and Dangerousness of an intruder shot by a homeowner were obtained by Hermand, Mullet, Tomera, and Touzart (2001). Prisoners (n = 20), police officers (n = 19) and men in the street (n = 40) were participants.

Results supported the Intent + Consequences law. Main effect of Dangerousness was found for only one police officer, but for about a third of the other two groups which were roughly equal. Related work by Howe is discussed in the next chapter on legal psychology.

LOCUS OF CONTROL

Locus of control, whether people tend to attribute events to their own actions (internals) or to outside influence (externals) is a substantial aspect of personality studied by a number of investigators (e.g., Rotter, 1966; Phares, 1979; Lefcourt, 1991), who suggest that external attributions serve as excuses, ego defense against failure, actual or possible.

Sharing Blame. Wang and Anderson (1992) used three realistic scenarios of a bad performance of another person, each with a list of plausible excuses. Participants were UCSD students, 39 internals (I-E scores between 0 and 7) and 30 externals (I-E scores between 16 and 23). First, they rated (0-10) how much they themselves agreed with each excuse by that person. After this, they were instructed to imagine they were that person and rerate each excuse for each scenario.

Externals made higher other-excuse ratings than internals for each scenario. Overall means across three scenarios were 4.74 and 3.74, respectively. The same pattern appeared with self-excuses although with higher overall means of 5.17 and 4.13, respectively. Both differences are statsig and support the hypothesis of ego defense. Curiously, both differences are nearly equal.

In a second experiment, 32 externals and 24 internals received 10 scenarios based on realistic situations from student life. In each scenario, they and another (anonymous) student were both partly responsible for a negative outcome. For each scenario, they divided 100% of the blame into three parts: self, other, and no one.

As expected, externals assigned less blame than internals to themselves than to the other for all 10 scenarios. Self-blame means were 43% for externals, 53% for internals, $F(1, 54) = 12.27$. Externals also assigned more blame to the other than internals, 45% versus 38%, $F(1, 54) = 5.62$. These results support the hypothesis of ego defense.

The slight difference of 3% in "no one" response was unexpected. The externals could have used this response to avoid blaming anyone. Perhaps they have a need to personalize blame.

This blame division task illustrates a general approach to studying personality characteristics as they function in social interaction. Of the numerous locus of control scales reviewed by Lefcourt (1991), even the marriage scale items do not involve much interpersonal interaction. Yet interpersonal interaction is a basic personality domain.

Credit division is a second direction for further work. The hypothesis of ego defense should be supplemented by a hypothesis of ego enhancement. Credit division parallels the fair share divisions of Chapter 2. Perhaps similar integration laws apply.

RESPONSIBILITY AND CONSEQUENCES AS INTEGRALS

Responsibility and Consequences in the blame schema are often integrals over complex fields of stimulus informers. The basic blame law treats each as unitary at the level of judgment. This is justified by the Cognitive Unitization property of the parallelism theorem. Each of these integration processes, however, deserves detailed analysis.

Attribution of Responsibility. In the blame schema, Responsibility is generally an attribution about the actor (see *Attribution*, pp. 157-168, Anderson, 1996a). This attribution process will often involve integration of two forms of responsibility, social and material. Typical social responsibility would involve obligation, as with keeping promises or acting with normal prudence. Also, personal characteristics attributed to the actor may influence judged social responsibility (Pizzaro & Tannenbaum, 2012). Typical material responsibility would be the role of the person's behavior in causing harm, actual or potential (Anderson, 2008, pp. 203f).

How these two components are integrated is unknown. A natural design would vary both kinds of responsibility, expecting the integration graph to reveal the integration process. Such graphs should also shed light on the valuation processes that construct functional values of responsibility from stimulus informers (benefit 3, parallelism theorem).

Social responsibility is itself an integral; it has multiple determinants specific to each situation and context. Conflict of obligation illustrates this issue. A woman may have partially conflicting obligations to her children, husband, job, and self, a prime issue for moral algebra.

One experimental approach would involve division of some good, such as attention or blame, as with *Locus of Control* above. Such division may follow the decision averaging law for fairness of Chapter 2. This approach may be useful in family theory, with opportunities for longitudinal analysis.

A credit schema parallel to Equation 1, as yet untested, holds for praise or credit in place of blame:

$$\text{Credit} = \text{Responsibility} + \text{Consequences}.$$

Consequences as Integral. Rationally, consequences should add, and this rule was supported by Hermand, Mullet, and Prieur (1992). The generality of this result is unknown; averaging laws have been found in most cases in which adding was expected.

Foreseeing consequences has obvious importance. Several consequences may be possible so judgment of their relative likelihood is also important. Such Expectancy × Value judgments may be amenable to the linear fan analysis of functional measurement.

Cognitive Unitization. The Unitization property of the algebraic laws gives leverage on deeper analysis of moral cognition. Responsibility integration has multiple levels. One is the social–material level just noted. The social component in turn is usually itself an integral, as with conflicting obligations. Each obligation in turn may itself be an integral of multiple determinants. Obligation to a friend, for example, may develop over years of interaction, most of which has been integrated into knowledge systems and is unknowable in detail.

Even this simple analysis yields three levels of valuation/integration. At any level, however, values can be treated as units when an algebraic laws holds (benefit 5 of the parallelism theorem). Analysis of deeper levels of processing may thus become feasible.

As one example, levels of responsibility could be specified by a two-variable, Social × Causal integration subdesign. Functional values of re-

sponsibility from a Responsibility × Consequences design would then be a true response measure for the Social × Causal subdesign. This integration graph would be a faithful mirror of underlying process even if it did not follow any algebraic rule (Note 7*).

BLAME AS PERSON SCIENCE

Blaming is a central personality function; so is avoiding blame. Both operate at every social level: self, family, work, and general citizenship. Important particular issues have been discussed by many investigators but these exhibit little interaction or generality. Some suggestions toward a unified approach are given here.

FUNCTIONS OF BLAME

Why is blame so ubiquitous? When something goes wrong, "who's to blame" often seems an automatic reflex. Functional theory begins by looking for what blaming does for the blamer.

Blame has multiple functions. Most obvious are utilitarian functions of influencing others' behavior. Blame is thus a common motivation in family life. Complaining can help develop adjustments needed for working marriages; failures to adjust may intensify blaming. Parents use blame to teach acceptable behavior to their children.

Blame may also stem from more primitive biosocial motivations. Blaming another may embody anger, some frustration–aggression dynamic, or some dominance reaction. Need to preserve self-esteem may lead to laying blame elsewhere (see *Excuses* below).

Even moral blame may have other qualities besides moral right-wrong. Blamers' motivations (e.g., anger) and goals (e.g., instruction, belittlement, self-excuse) may blend into expression of blame. Blaming a child differs from blaming a spouse. It may thus be desirable to use profile measures that measure multiple qualities of blame (see *Response Quality*, Chapter 6).

Blame may be blended with other motivations. Some may be positive, as when a parent corrects a child. Some may be mixed, as when a wife feels that her husband has little recognition or concern with the unending demands of family and housework. Blended motivation is a general problem that deserves systematic study.

Blaming continues outside the family in school, playgrounds, friendships, and ubiquitous factions from university departments to local, state, and national politics. Blame may be used to bolster policies of one fac-

tion by attributing some undesirable state of affairs to policies of an opposing faction—the first law of politics. In short, blame is an invaluable mechanism for maintaining society—with many faults that deserve systematic efforts at amelioration.

Blaming depends heavily on social context: spouse, child, parent, coworker, subordinate, superior, competitor, friend, acquaintance, stranger, foreigner, enemy, and so on. Each context imposes its own goal constraints on how blame is expressed, constraints that depend further on specific interpersonal relations. General blame theory must incorporate these goals, several of which may operate jointly. The basic blame law offers one foothold for further analysis, already illustrated with apology.

Legal systems, including regulatory agencies and courts of law, express blame at societal levels. Child protective agencies may rescue children from their biological parents. In criminal law, prison terms may function as retribution for past crime, preventive of present crime, and deterrent of future crime. In civil law, blame may be expressed as required restitution, one instance of the moral rule to undo harm done.

SOCIAL PSYCHOLOGY

Moral thought and action pervade social dynamics. Applications of ITT are discussed for fairness/equity theory in Chapter 2, for blame in Chapter 3, for legal judgment in Chapter 4, for moral development in Chapter 5, and for 28 issues including gratitude, lying and forgiveness in Chapter 7. Two other areas are noted here.

Moral Attitudes. Moral attitudes function in every aspect of social life. Moral attitudes offer a fruitful alternative to the prevalent focus on "nonattitudes" in attitude research. Construction of a battery of moral actions analogous to the set of 555 trait adjectives would facilitate single person experiments (see *Functional Theory of Attitudes*, Chapter 8).

Group Dynamics. Group interaction is typically complicated, difficult to analyze. The averaging law, however, has done surprisingly well in several issues of group dynamics. These include spouse-spouse influence (e.g., Anderson, 2008, pp. 224-231), marriage satisfaction, attitudes formed in group discussion, and group bargaining (Anderson, 2008, Chapter 8). This success of the averaging law comes from Cognitive Unitization (benefit 5 of the parallelism theorem) which can treat extended interpersonal interaction as a unit, exactly measureable for each person, with an integration law.

Much blame is heavily emotional, originating from social conflicts, notably in family life and every level of politics. This emotion manifests

itself as attitudinal responses (ARs) much of which lies on a moral right-wrong axis. Some blame, of course, lies on a nonmoral dimension associated with failure to attain some goal. Examples include failing grades in school courses and failure to gain promotion at work. However aversive to the blamee, this class of blame need not otherwise be moral.

EXCUSES

Blame or threat of blame often evokes reflex denial—"It's not my fault." Excuses are often subsequent rationalizations or justifications. Even a clearly false excuse may help the blamee preserve self-esteem; silence would seem admission.

Excuses have been discussed by many writers, with heavy emphasis on self-esteem motivation. Most discussions go little further than typologies of common excuses, however, enhanced by catchy phrases such as Goffman's (1971) "self-splitting," in which blame is placed on a temporary, disavowed part of the self ("I had a bad day" or "I wasn't myself"). Self-splitting may act in part as apology and in part to reduce loss of self-esteem (Notes 8-11).

The most common kinds of excuses aim to reduce Responsibility in the blame schema. One way is by reducing causal responsibility. This is often easy because any action or event is an outcome of a chain or lattice of multiple causes. When something goes wrong, it is seldom difficult to blame some material obstacle in this causal lattice, which usually has a measure of truth.

Social responsibility may be even easier to reduce by downplaying own responsibility and/or blaming others: "It's not my fault," "It's her fault," "He started it; I was just defending myself," or even "Now look what you made me do." Such excuses have the dual goal of reducing blame in the minds of both blamer and blamee. Responsibility integration can thus study excuses as a basic function of personality

PERSONALITY

Function is a guiding theme of Information Integration Theory, a basic shift from traditional *trait* theory of personality. This theme is explicit in the valuation and integration operations of Integration Diagram, manifest in the general deserving theory of this and the previous chapter. Integration designs can study joint action of the multiple variables that operate in everyday life, as with diverse determinants and qualities of blame and excuse. This approach can extend trait theory to provide quantitative

analysis previously lacking in Person × Situation formulations (Note 12). Integration designs thus provide an essential extension of the questionnaire method on which traditional trait theory rests.

Person science requires single-person approaches to personality, especially for studying blame. Single-person design and personal design (Chapter 6) provide methods for idiographic theory based on nomothetic laws (*Person Science and Personality*, Chapter 7).

QUALITIES OF BLAME

Blame is so common that its meaning is generally taken for granted. Different experiments use different words—naughtiness, badness, blame, deserved discipline, and punishment. Diverse scenarios have been used, including children's misdeeds, adult's failures of obligation, and criminal acts. These diverse judgments seem to lie on a general right–wrong axis. Quantitative support for this view is given by the blame law which has done well in diverse experiments.

But blame has other qualities besides moral right–wrong. Blamers' motivations (e.g., anger) and goals (e.g., instruction, self-excuse, derogation) may blend into expression of blame. Blaming a child differs from blaming a spouse. Profile measures that measure multiple qualities of blame may thus be desirable (see *Response Quality*, Chapter 6).

SOCIETAL BETTERMENT

The behavior influence function of blame has mixed efficacy in children's learning of social behavior, in marital adjustment, and in legal systems that keep antisocial behavior under some measure of control. The manifest shortcomings of this function should not conceal its roles in developing and maintaining society.

Social formulas to increase effectiveness of blame in interpersonal interaction have been discussed by various writers (e.g., *Nobody's perfect: How to give criticism and get results*, Weisinger & Lobsenz, 1981; *Getting to yes*, Fisher & Ury, 1991; *Getting to 50:50*, Strober & Meers, 2009; see also Benjamin Franklin, 1793/1982, pp. 16f, 84f; Note 13). These exemplify the GOLDEN RULE:

More Praise: Less Blame.

NOTES

Note 0. Blame has important functions throughout social life. Social blaming involves an attribution of shortcoming or fault to some person or group. Blaming may function in several ways. One way is as retribution, an issue discussed in the next chapter on legal psychology. Another way is as expression of blamer's frustration, resentment, or anger. Not least important, blaming may be intended to change blamee's behavior, as with marital adjustment or child rearing.

One typical case of blame arises when some group effort fails owing to inadequate performance by one member. Such blame may be merely causal attribution but more commonly it includes diverse affective components relating to failure to reach the group goal and blamee's personal culpability for this failure.

Blame is generally aversive to blamees, who naturally seek to avoid or reduce it. This aspect of blame has been extensively discussed under the heading of excuses by several writers cited in *Psychodynamics of Everyday Life: Blaming and Avoiding Blame*, Anderson, 1991b, Chapter 6.The integration laws provide unique capability for studying excuses.

Blame has recently attracted attention of philosophers, illustrated in the 15 chapters contributed to *Blame* (Coates & Tognazzini, 2013; see also Sher, 2006; Tilly, 2006). These discussions, however, seem limited to moral blame, whereas most blame is a blend in which nonmoral components such as fault-finding and changing thought and action may predominate. Moreover, these discussions have no conception of experimental analysis. The three algebraic laws help unify moral considerations with a wider social conception of blame that has unique analytical powers.

Blame may have multiple qualities or functions. Some blame is moral, including components of moral right–wrong. Moral blame is attractive for experimental analysis, as in the experiments discussed in the text. It seems more important, however, to focus on making blame more effective at changing thought and action for blamers and blamees.

Social betterment is the most important issue in blame theory. Especially in being married and in child rearing. Three relevant books are cited in the last text paragraph.

Note 1. The blame law, Blame = Responsibility + Consequences, may help clarify the much discussed finding that people feel reluctant to change the path of a train so that it will kill one person rather than let the train continue its ongoing course which would kill several people. Although the Consequences are greater if fate is allowed to take its course, the Responsibility seems greater with the personal action to kill one person.

Blame = Responsibility + Consequences. "Responsibility" is used instead of "Culpa" in previous work (e.g., *Psychodynamics of Everyday Life: Blaming and Avoiding Blame*, Chapter 6, Anderson, 1991b). Although Responsibility can be ambiguous, it is easier to compare with work by others.

Note 2. Weiner (1995) summarizes a wide range of previous work, including much of his own, on judgments of responsibility, with primary emphasis on blame. He comments that most of these results are little more than common knowledge (p. 260), as with more blame for lack of effort than for lack of ability.

Weiner's main concern, however, is to present a theoretical unification of such empirical results. This effort is roadblocked by lack of capability for integration of multiple determinants. Unable to deal with integration, Weiner's theory (Figure 1.8, p. 12; Table 9.1, pp. 260, 268) consists of a sequence of yes-no judgments that end up in one of two

states: responsibility and no responsibility. Thus, Weiner's theory cannot deal with quantity measures, as with the three quantities in the blame law, Blame = Responsibility + Consequences. As one example, the functional value of Responsibility may be an integral of causal and social responsibility as discussed below.

This inadequacy of Weiner's theory is illustrated in Figure 2.2 (p. 33) of his book. Hypothetical students were described by three variables: Ability (Hi, Lo), Effort (Hi, Lo) and Test Performance (5 levels from Excellent to Clear Failure). Participants acted as teacher and graded each student on a -5 to +5 scale. The curves of Weiner's Figure 2.2 show near-parallelism, evidence for an adding-type integration of the three variables, which Weiner failed to recognize, being outside the horizon of his theory.

Note 3. *One-Variable Rules*. Most experiments have not reported one-variable rules, perhaps from lack of single-person analysis. On the other hand, experiments that have reported such rules have had small amounts of single-person data with consequent low power to detect real effects of a less important variable.

True one-variable rules may be important. More extensive study is desirable, which might efficiently begin with short group screening tests to detect likely one-variable persons. Scenarios to cover several social situations are desirable for generality. Most one-variable rules have been found with blame. Leon (personal communication) reported that those he questioned about these one-variable rules were emphatic in their appropriateness (see *Centration* in Chapter 5).

Note 4. *Report of Nonreplication*. That mothers and sons exhibit similar rules of blame integration was reported by Leon (1984). This result was not replicated in the careful PhD thesis by Arlene Young (1990) (see similarly Note 2, p. 211 in Anderson, 1996a; Note 1, p. 220, in Anderson, 2008). More useful indexes of family similarity may be obtained with integration indexes like the Relative Range Index given in Chapter 6.

Note 5. "A fault confessed is half redressed," proverb cited in *Merry Wives of Windsor* (Act I, Scene 1, l. 96, H. J. Oliver, ed.).

Note 6. That recompense has greater effect than the damage might reflect an additional influence on Responsibility. This, however, seems inconsistent with the evidence that these two variables are processed independently cited in the second following subsection, *Information Processing*.

Note 7. Singh (1978) reported that the basic blame law was also supported for male engineering students in India, who judged complaint cases against hypothetical employees. A substantial apparent negativity effect may be seen in his Figure 1, with greater weight for more negative behavior.

Note 7*. Three variable design, as this example illustrates, can allow inference of integration rules and values in each two-variable subdesign. No examples are known.

Note 8. The inductive philosophy of IIT seeks meanings of blame as beginning in everyday usage. In contrast, Shaver and Drown (1976, p. 701; Shaver, 1985) follow a prescriptive approach that rests on an a priori definition of blame. Three differences between these inductive and prescriptive approaches deserve mention. First, a person may be blamed even though, contrary to Shaver and Drown, no justification or excuse is offered by the blamee; most foregoing experiments were of this kind. Of course, justification or

excuse may function in the basic blame law either as an added term or as a determinant of Responsibility. Second, intention is not necessary for blame; ignorance or inattention may be a determinant of Responsibility. Third, judgment of blameworthiness does not require a harmful act; a person may be blamed for inattention or carelessness even though no harm resulted.

   The Attribution of Blame by Shaver (1985) discusses many basic concepts such as intention, causality, responsibility, blame, and excuses, and references discussions by philosophers, legal scholars, and psychologists. To motivational factors, however, Shaver gives only incidental consideration. Instead, he focuses on attribution of blame by a "rational perceiver," which undercuts his discussion for psychological theory. Indeed, his final theory for assignment of blame resorts to a diagrammatic model based on an official diagram of case flow through the criminal justice system (pp. 156ff). In contrast, IIT considers that motivational factors lie at the heart of blame theory; see *Psychodynamics of Everyday Life: Blaming and Avoiding Blame*, Chapter 6 in Anderson, 1991b.

Note 9. Snyder, Higgins, and Stucky (1983) give a wide-ranging discussion of excuses with extensive references to other writers. They also attempt to present a unifying theory but this suffers certain limitations. One is reliance on Kelley's (1972) theory to handle causal attribution. Kelley's theory is irrelevant to excuses because, in particular, it has no place for affect (see *Unified Causal Attribution*, pp. 293-301 in Anderson, 2008).

   A second limitation is definition of excuses in terms of self-esteem (p. 45), neglecting the role of punishment. A third limitation is the claim (p. 57) that "excuses invariably are biased interpretations of events." Persons who fail to foresee some obstacle are certainly not biased in attributing a bad outcome to this obstacle. Whether they should be considered culpable for insufficient foresight may or may not be warranted. Nevertheless, their book contains many interesting observations, a helpful guide to previous work.

Note 10. Self-splitting excuses are not infrequent in literature. One example is Hamlet's (Act V, Scene 2) apology to Laertes for assaulting him in Ophelia's grave:

> Was't Hamlet wronged Laertes? Never Hamlet.
>
> .   .   .
>
> Who does it then? His madness.
> His madness is poor Hamlet's enemy.
> Sir, in this audience,
> Let my disclaiming from a purposed evil
> Free me so far in your most generous thoughts,
> That I have shot my arrow o'er the house
> And hurt my brother.

Note 11. Self-attribution of madness as apology appeared long before in Homer's *Iliad*, which centers on the anger of Achilles, foremost warrior in the coalition of independent Greek states, at Agamemnon, the leader of the expedition against Troy, himself angered by Achilles' strong, insolent support for returning to Chryses, priest of Apollo, his daughter whom Agamemnon had taken as his own as spoil from a previous battle and threateningly denied to return her despite the high ransom offered by Chryses. Chryses departed in fear but prayed to Apollo who accordingly sent a plague to the Greeks that finally compelled Agamemnon to return Chryses' daughter. But in his anger, he high-handedly took from Achilles the woman Achilles received as spoil from a previous siege.

   This was great dishonor to Achilles in a time when honor was a primary virtue, especially of warriors. Savagely angered, Achilles withdrew from the war, together with

his Myrmidon troops. The tide of war then turned entirely against the Greeks and Agamemnon was forced in a public meeting to try to appease Achilles. In the Lattimore translation (Book 9, ll. 115-120) he replies to Nestor:

> Then in turn the lord of men, Agamemnon spoke to him: 'Aged sir, this was no lie when you spoke of my madness. I was mad, I myself will not deny it. Worth many fighters is that man whom Zeus in his heart loves as now he has honored this man and beaten down the Achaian people. But since I was mad, in the persuasion of my heart's evil, I am willing to make all good and give back gifts in abundance.'

Agamemnon goes on to list gifts of unbelievable munificence, including ten talents' weight of gold, twelve race horses, "seven women of Lesbos, the work of whose hands is blameless," and much, much more.

But Achilles' anger is not appeased; he refuses the gifts. He stays out of the battle until his bosom friend, Patroclus, is killed. Then he enters the fighting, slaughtering Trojans without mercy except for 12 young men whom he reserves to sacrifice alive over Patroclus' funeral pyre.

I detected in Homer little criticism of Achilles' withdrawal from the fighting although it "hurled in their multitudes to the house of Hades strong souls of heroes, but gave their bodies to the delicate feasting of dogs . . ." (Book1, ll. 3-5). Homer was a bible in ancient Greece; their moral culture still retained appeal as in Germany and Japan in World Wars I and II (e.g., E. Jünger, *Storm of steel*, memoirs of a German field officer in WWI, M. Hoffman, trans., 2004).

Note 12. The potential of studying blame functions in personality is indicated by the extreme range of forgiveness reported by Girard and Mullet (1997) from "always forgivers" to "never forgivers" (*Algebra of Forgiveness*, Chapter 7).

Note 13. In the deserts of the heart,
      Let the flowing fountain start,
      In the prison of his days,
      Teach the free man how to praise.
      (W. H. Auden.)