

OF HUMANS AND SQUIRRELS: THE ORIGIN OF RIGHTS AND DUTIES

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In 1829 a farmer named Menlove, by his own account a person of very limited intelligence, built a hay rick to dry his freshly mown hay.² Several neighbors warned him that, while the rick was properly built, the way he was stacking the hay in it was wrong, creating the risk of a fire ignited by spontaneous combustion. Menlove thought the warning foolish and said he'd take his chances. When the resulting fire destroyed his neighbor's barn as well as his own, the neighbor sued him alleging that he had failed to use the level of care ordinarily exercised by other farmers. Menlove argued that he could not be held to the standard of ordinary care because he was, as a matter of fact, of very much less than ordinary intelligence.

Generations of law students in English-speaking law schools throughout the world have accepted as self-evident Chief Justice Tindal's conclusion that, whatever his or her individual characteristics, everyone who acts will be held to the standard of the "reasonable person."³ If Menlove could not perform as safely as a reasonable farmer, he would simply have to earn his living in some other, less risky, way. The reasonable person standard demands of every person that they act with due care, regardless of their personal characteristics.

But why should that be the case? Neither Tindal's opinion nor any case that applies the standard explains the basis for the universal duty of care in human nature. What are the qualities that the duty of care depends upon and how did they arise? Where does this duty of care, so self-evident as to need no explanation, come from?

In his seminal article Wesley Newcomb Hohfeld addressed the same question and provided this illustration.⁴

If X commits an assault on Y by putting the latter in fear of bodily harm,
this particular group of facts immediately create in Y the privilege of

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² *Vaughan v. Menlove*, 132 Eng. Rep. 490 (Q.B., 1837).

³ Chief Justice Tindal rejected the subjective standard of care, in which the person's own level of understanding would be the measure of his or her duty. "Instead, therefore, of saying that the liability for negligence should be co-extensive with the judgment of each individual, we ought rather to adhere to the rule which requires in all cases a regard to caution such as a man of ordinary prudence would observe." *Vaughan v. Menlove*, *supra* note 2, at 491.

⁴ Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions As Applied In Judicial Reasoning*, 23 Yale L.J. 16, 24 (1913-1914).

self-defense,—that is, the privilege of using sufficient force to repel X’s attack; or, correlatively, the otherwise existing duty to Y to refrain from the application of force to the person of X is, by virtue of the special operative facts, immediately terminated or extinguished.⁵

Like X, Y is at all times under a duty to act with care. But when X breaches his duty to Y, Y’s duty is extinguished, and he is free to treat X in ways that would ordinarily breach his duty to X. He is free, in other words, to visit on X whatever force is necessary to protect himself. Looked at another way, when X threatens Y, Y’s inchoate right to be free of threats is violated and Y now has the right to act without the constraint of his ordinary duty to X. It was this symmetry between rights and duties that fascinated Hohfeld. They were, to Hohfeld, correlative, they only existed relative to one another. To say that one person had a right, inescapably meant that one or more others had a duty to respect that right. Correlatively, to say that one person had a duty meant that at least one other person had a right to have that duty carried out. Failure to perform the duty changed the right from inchoate or theoretical, to actual or actionable. A right that was not actionable at law was no right at all but simply a sentiment.

But, as Hohfeld’s example clearly illustrates, duties and rights are more than correlative. They are causative: X’s breach of his duty to Y *caused* there to emerge in Y the right to use force against X. This was no happy coincidence. X’s breach *made it the case that* Y was justified in his use of force. Y’s use of force would be accompanied by a feeling of righteousness, a feeling likely shared by his friends, family, and those who identified with his plight. Were X to sue Y for Y’s use of force, a court would feel justified in throwing out X’s case.⁶ The legal reasoning involved is no naked computation, a logical deduction based upon clear premises. The feeling of justification is a passion. We might explanation for that passion by saying that Y’s right has been violated by X’s breach of duty. But that explanation fails to connect with its source, with the emotion upon which it is based. To find the origins of rights and duties we must understand where the sense of duty and the sense of right comes from.

ARE LEGAL DUTIES A FORM OF ALTRUISM?

⁵ Hohfeld, *supra* note 4, at 26.

⁶ Unless, of course, Y had breached his duty of care in his use of force on X.

On the face of it, duties appear to be a form of altruism.⁷ An altruistic act is one in which an actor expends effort in a way that benefits someone else.⁸ By this standard contractual duties do not appear to be altruistic; one is clearly doing something for someone else, but is getting something directly in return for himself. But the duty of care, in which one does something as simple as looking in the rear view mirror when backing the car out of the driveway, or something as costly as eliminating an entire product line when a safer product design becomes feasible, appears to fit the definition of altruism. One is willingly benefiting others—most usually, complete strangers—with no expectation of a *quid pro quo* from doing so.

How would any species have developed such a characteristic? Biologists have identified a number of forms that altruism takes.⁹ One is kin selection, in which adults expend effort on behalf of offspring and other blood relatives as part of a process that makes it more likely that their genes will prosper.¹⁰ The other is reciprocal altruism, in which members of the species will expend effort on behalf of others as part of a reciprocal process in which they will, in the

⁷ “In evolutionary biology, an organism is said to behave altruistically when its behavior benefits other organisms, at a cost to itself. The costs and benefits are measured in terms of *reproductive fitness*, or expected number of offspring. So by behaving altruistically, an organism reduces the number of offspring it is likely to produce itself, but boosts the number that other organisms are likely to produce. This biological notion of altruism is not identical to the everyday concept. In everyday parlance, an action would only be called ‘altruistic’ if it was done with the conscious intention of helping another. But in the biological sense there is no such requirement. Indeed, some of the most interesting examples of biological altruism are found among creatures that are (presumably) not capable of conscious thought at all, e.g. insects. For the biologist, it is the consequences of an action for reproductive fitness that determine whether the action counts as altruistic, not the intentions, if any, with which the action is performed.” STANFORD ENCYCLOPEDIA OF PHILOSOPHY *available at* <http://plato.stanford.edu/entries/altruism-biological/> (*last modified* June 3, 2003).

⁸ “Our genes made use. We animals exist for their preservation and are nothing more than their throwaway survival machines. The world of the selfish gene is one of savage competition, ruthless exploitation, and deceit. But what of the acts of apparent altruism found in nature - the bees who commit suicide when they sting to protect the hive, or the birds who warn the flock of an approaching hawk? Do they contravene the fundamental law of gene selfishness? By no means: Dawkins shows that the selfish gene is also the subtle gene. And he holds out the hope that our species - alone on earth - has the power to rebel against the designs of the selfish gene.” From the book jacket of RICHARD DAWKINS, *THE SELFISH GENE*, Oxford University Press (1976). Dawkins triggered an enormous debate in evolutionary science that has not been fully settled. It is generally, though not universally, accepted that all behavior, including that which appears to be completely altruistic, must be explained in terms of self-interest under the argument that is set out in this paper.

⁹ See generally STANFORD ENCYCLOPEDIA OF PHILOSOPHY *supra* note 7, and Owen Jones, *Evolutionary Analysis in Law: An Introduction and Application to Child Abuse*, 75 N.C.L. Rev. 1117 (1997).

¹⁰ “The evolution of altruism toward kin is more intuitively obvious, because improving the prospects of kin can contribute to reproductive success. Examples include providing resources to offspring ..., sharing resources with other relatives, and giving alarm calls to relatives about approaching predators. A kin selection model predicts that in each case natural selection will have favored those who provide relatives with such benefits in greater abundance, or more frequently, than non-relatives.” Jones, *supra* note 6, at 1149.

ordinary course of events, benefit, much as one might ask another to dinner on the unstated expectation that the favor will be reciprocated.¹¹

While kin selection and reciprocal altruism clearly fit the definition of altruism, they are also consistent with individual self-interest. In the case of kin selection, one's actions favor the prosperity of one's genes; in the case of reciprocal altruism, one acts with the expectation of benefiting from a reciprocal act of altruism by the one who was benefited. The self-interest interpretation of kin selection and reciprocal altruism has caused considerable debate, irritating those who take a more lofty view of human motivation. But that debate appears to be settled—altruism is firmly grounded in individual self-interest.

The same argument does not, however, explain the duty of care. The person who is careful, who expends effort to protect others from his actions or perhaps to abandon those actions altogether if they are just too risky, cannot be expecting a reciprocal benefit. Others may behave with care toward him, but that care is not reciprocal, it is not *caused* by any care he directed toward them, at least if, as is the usual case, they are all strangers. One may benefit from living in a society in which the duty of care is lively, as we all do, but we will enjoy that benefit whether or not we act with care ourselves.

In reciprocal altruism, one's beneficent acts *bring about* the reciprocal acts of another. With due care, one will be treated with due care, generally, whether one is careful oneself or not.¹² It is difficult to imagine how such a process could possibly have emerged. I'm not questioning the fact that the duty of care does exist. The fact that it is a lively part of every culture that has ever been studied¹³ and the fact that in the forty years since I first read the case I have not heard a

¹¹ "The other model is known as reciprocal altruism, and it applies in contexts in which there is a deferred reproductive gain for the helper, providing a net reproductive gain to the helper over not helping the first instance." Owen Jones, *supra* note 9, at 1150.

¹² It is not difficult to imagine situations in which a person who is not careful is not treated with care by others, but these are all situations that involve only a few actors in a very stable relationship to one another, such as the situation that might apply in a family. The child who carelessly injures her brother may not be treated with care by her brother, but we would quickly expect kin selection to take of this situation as the parents forced the children to take care for each other.

¹³ DONALD E. BROWN, HUMAN UNIVERSALS (McGraw-Hill, 1991) listed more than 400 characteristics that are present in all of the cultures represented in the anthropological literature, leading to the inference that they are all in some way emergent features of human nature. Dozens of them are characteristics that are essential to the legal process and to legal analysis, for example, all cultures: distinguish between willed actions and actions that are not under the individual's control; classify mental states; have a social system for dealing with conflict; distinguish between right and wrong, and between good and bad; overestimate the objectivity of thought (perhaps a quality evinced by the court in *Vaughan v. Menlove*, *supra* note 2); recognize property; provide redress of wrongs; hold the individual responsible for his or her actions; and, significantly, have systems of negative, as well as positive, reciprocity.

cogent argument against the court's enunciation of the duty of care in *Vaughan v. Menlove*, satisfies me that it really is part of human nature. But how could that characteristic have prospered in the species? Why wouldn't the first people who had that trait not have lost out in competition with those who didn't have the trait, as they expended effort that benefited perfect strangers, while the perfect strangers expended no such effort to benefit them? How could the duty of care have become a universal feature of human beings?

THE LESSON OF THE RATIONAL SQUIRREL

During very bad winters my wife and I feed the neighborhood squirrels by scattering a half pound of peanuts on our back deck every morning. This behavior might raise serious questions about maladaptive altruism on our part, were it not for the fact that watching them as they sweep the peanuts off the deck provides considerable entertainment, not to mention insights into human nature. Watching them one morning revealed to me that I had been laboring under a misapprehension about the genesis of the duty of care in human beings.

Squirrels are highly aware of the risk of predators, which makes good sense in evolutionary terms. When one of the neighborhood cats is in the area, they keep careful track of it. They do not appear to fear it, nor do any of the cats seem to want to tangle with a squirrel, but they do avoid directly provoking the cat. They behave the same way toward other squirrels. As they target a particular peanut from the sprawl of peanuts on the deck, they are aware of any other squirrels in the area. Before making a dash for a peanut they carefully pause and consider, just as a human driver might when pulling out onto a busy street. Where are the other cars? How fast are they moving? Can I accelerate fast enough to get out of their way?

Being careful is in the squirrel's immediate best interest, for it is after a peanut, not a peanut and a fight with another squirrel. The squirrel is keenly "other-regarding," intensely aware of the well-being of other squirrels, of their interest in getting their own peanuts. And it is careful to defer to that interest. Occasionally a squirrel will miscalculate or will fail to see another who is about to leap, and will accidentally jump onto its back or interfere in its dash for the peanut. In that event there is a furious battle that lasts no more than two seconds, as both free themselves and, within a very short time, return to their peanut pursuits showing great composure and no ill effects from the battle.

The squirrels' behavior is what an economist might call "rational"—in its attempt to satisfy one desire, the squirrel acts to minimize the "cost," measured by the desires it must give up in order to satisfy that desire.¹⁴ If a squirrel who acts with care for fellow squirrels can eat two peanuts a minute, while one that ignores the presence of other squirrels will be able to eat only one because it spends half of its effort sorting out conflicts, the careful squirrel has a huge competitive advantage over the heedless one. Acting with care is smart, or rational. Squirrels that are good at taking care not to needlessly interfere with other squirrels will have a "fitness advantage" in evolutionary terms, having a competitive edge in the competition for mates and in supporting their offspring. Their descendants will ultimately replace the offspring of the heedless.¹⁵

Homo economicus, the economist's model of the rational actor, is sometimes regarded as a mad dog of self-interest, the mindless consumer who is intent upon getting his own way at any cost. But *Scuirus economicus*, the rational squirrel, makes it clear that rationality requires that an actor be other-regarding. Other members of the same species are an omnipresent source of potential costs. Any purposive actor must take their responses into account in order to achieve its own purposes most effectively. Being other-regarding, to put it crassly, is good for business.

When the court in *Vaughan v. Menlove* devised the reasonable person standard for judging whether one had acted with due care it was simply attributing a trait to humans that is universal in all purposive beings: the ability to act with care for other members of the same species. The court felt no need to explore that assumption, for it is entirely self-evident. The legal duty of care rides atop a biological imperative that purposive beings act with care. In humans, the fact that being careful is rational is reinforced by the fact that it is normative: it is *smart* to act with care, and furthermore it is one's *duty* to act with care. Squirrels don't have the duty, but from the care they demonstrated on my back deck they do not seem to need one.

¹⁴ This is, of course, the process that economists refer to as "opportunity cost." See *Opportunity Cost*, Wikipedia Encyclopedia, available at http://en.wikipedia.org/wiki/Opportunity_cost (last visited June 25, 2004).

¹⁵ This answers the question that began this section of the paper: How could the trait of acting with care for others have survived in evolutionary competition with individuals who did not have the trait. Care is, after all, expensive. The careful squirrels I saw had to pause, look around for other squirrels, make some judgments about their behavior, just as humans must when they are being careful. Why aren't those added costs a crushing burden in the competition for resources? Because they are lower, a lot lower, than the costs the individual would incur if it did not take care. A few moments spent checking for on-coming traffic as one backs out of the driveway is far less costly than the accident that might occur if one didn't (depending, of course, upon the level of traffic at the time). It is the careful being, then, who has a competitive edge upon its careless competitor.

WHERE DO RIGHTS COME FROM?

As helpful as they were on the subject of duties, squirrels provide no help in understanding the source of rights. Hohfeld pointed out that in law neither rights nor duties can exist without the other.¹⁶ They are conjoined twins. But there is no evidence that such is the case with squirrels. Squirrels are no more perfect than humans at taking care. One squirrel might fail to see another dashing for a peanut and jump into him as he started his own dash. A brief tussle would ensue, but the squirrels would quickly separate and be back after the peanuts, showing no ill effects of the conflict. I claim no expertise as a naturalist, but if there was any vindictive or retributive behavior going on, or any other behavior indicative of retribution for a wrong, it escaped me. And there was surely no involvement of third parties in the process. The parties to the conflict sorted themselves out without any intervention from others and got back to work as quickly as they could. Of course, the conflict had cost them an opportunity to get a peanut, so in the competition for food they were a little worse off, but they got right back to work. There were no squirrel plaintiff's lawyers handing out cards and promising big compensation awards.

It appears that while the *process* of acting with care for others is an irreducible part of purposive action, the *duty* of care and its correlative right are not. To say that duties arise because of rights, so that when a right exists it creates a duty in someone else to respect it, restates the conclusion, but offers no explanation for the cause of either one.¹⁷ Perhaps we have rights because we're humans, entitled to dignity. Or perhaps a Supreme Being simply made it so. Law long ago lost much interest in the source of rights, comfortable, like Chief Justice Tindal in *Menlove* and Wesley Newcomb Hohfeld, to conclude that the mystery was unfathomable, but the matter unarguable.

Biology has provided us with a new approach to the answer to this question. Where philosophers looked for the key to rights in reason, the biologists have made more headway by investigating the emotional processes underlying the human response to the breach of duty. It appears that breach of a duty causes a direct emotional response, an emotional response that is characterized cognitively as a "wrong" or an "injustice." But however it is characterized, the

¹⁶ Hohfeld, *supra* note 4, at 32. "A duty or a legal obligation is that which one ought or ought not to do. 'Duty' and 'right' are correlative terms." *Lake Shore & M.S.R. Co. v. Kurtz*, 10 Ind. App. 60, 37 N.E. 303, 304 (1894).

¹⁷ Hohfeld, *supra* note 4, at 32. "When a right is invaded, a duty is violated."

emotion itself is anger, and it is well described in a case reported by an 18th century French physician, Jean Itard.¹⁸

Itard found a feral child in the woods and took it upon himself to care for and educate the child. He had very limited success; the child was unable to acquire more than a few words. Itard undertook to discover whether the child had nonetheless acquired a moral sense. Itard had established a pattern of reward and punishment for the child which he violated by punishing the child on occasion for behavior that he had previously rewarded. Where the child had taken his punishment meekly before, when it was meted out for behavior that he had come to expect would be rewarded, the child reacted with rage, from which Itard concluded the child had, despite his lack of language, developed a sense of morality, a sense of justified expectations.¹⁹

It appears that the emotional response to the breach of a duty, or to the breach of an expectation, is pre-linguistic, suggesting that the sense of justice is, at a basic level, universal among humans and not culture dependent. Culture surely shapes the expectations and the response to their violation, but it is not the source of the emotions that drive them. That interpretation has been confirmed by a body of experiments conducted by Herbert Gintis and others in fifteen societies using the ultimatum game.²⁰ In that game the experimenter presents one person, the “proposer” with a sum of money, let’s say \$100. The proposer then presents some portion of that amount to a second person, the “responder,” who is free to accept or reject the offer. If the responder accepts it, both the responder and the proposer keep their money and the game is over. If the responder rejects the offer—the “ultimatum”—neither keeps the money; they go home with nothing. The responder knows the rules of the game and knows to expect some part of the \$100. He has no idea who the proposer is, and the game is conducted as a single event.

The economics of the game are clear. The responder is better off financially—even if it is only by one dollar—if he accepts whatever the proposer offers. Knowing that, the proposer should be confident that if she offers \$1 it will be accepted and she will pocket the \$99 balance.

¹⁸ Ronald de Sousa, *Moral Emotions*, 4 Ethical Theory and Moral Practice 109 (2001), available at <http://www.chass.utoronto.ca/~sousa/moralemotions.html>.

¹⁹ But how could Itard assess the emotional response as rage since the child, lacking language, was unable to explain what bothered him? “For about half a dozen emotions, including anger and fear, the relevant facial expressions are clearly identifiable across cultures.” *Id.* at 111. Recent research indicates that Itard’s assessment of the child’s emotional state was likely correct.

²⁰ Samuel Bowles and Herbert Gintis, *The Evolution of Reciprocity: Cooperation in Heterogeneous Populations*, 65 Theoretical Population Biology 17 (2004), available at <http://www-unix.oit.umass.edu/~gintis/>.

In no society that has been studied is that the way the game plays out. In most of them the most common offer by the proposer was around \$50, fifty times the amount that reason would suggest. That sum was almost always accepted by the responders, who almost always rejected offers of less than \$20—better to go home with nothing, apparently, than to accept that kind of treatment.²¹

These results have been confirmed in hundreds of studies conducted in large and small-scale societies around the world?²² How are we to explain them? The proposer's offer triggers both an intellectual and an emotional process in the responder. The cognitive process identifies the sum offered and places it in the context of the rules of the game—"She offered \$20 out of \$100 that she was given, but if I don't agree to it neither of us will get anything." The emotional process is very different, it colors the event—a generous offer, in a sense, has one color, a particular emotional value. A stingy offer has a very different color.

The emotional process clearly gets in the way of a purely cognitive response. Most people are no doubt capable of realizing that they are financially better off if they accept any amount at all, since it is quite clear that otherwise they will get nothing. But for no one does that settle the matter. The emotional coloration takes over, for the responder has a way of getting back at the stingy proposer; the responder can teach the proposer a good lesson. Stingy proposers are punished, even though that exacts a cost on the responder as well. There is clearly something more valuable to the responders than the money they are giving up.

The ultimatum game gives us a different perspective on rights. It appears that everyone who plays the game has a clear expectation of what the proposer should do. That expectation differs some from culture to culture, but in none of them do people expect to be offered a pittance. Knowing that, proposers offer far more than simple economic rationality would suggest. How much more? That is left to the proposer to figure out. The one who cuts it too close goes home with nothing. It's not that the chiseling proposer has violated a legal right, for the responder has

²¹ The emotional content of the responder's decision to reject the offer was clearly demonstrated in an experiment by Sally Blount, *When Social Outcomes Aren't Fair: The Effects of Causal Attributions on Preferences*, 63 *Organizational Behavior and Human Decision Processes* 131 (1995). Blount substituted a computer for the human proposer in the ultimatum game. The responder knew that it was a computer rather than a person who had chosen the amount to present. In this situation, even very low offers were almost always accepted by the responder. The computer did not trigger the emotional response that a human proposer would have triggered. The computer was incapable of doing wrong.

²² Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, and Richard McElreath, *Cooperation, Reciprocity and Punishment in Fifteen Small-scale Societies*, Santa Fe Institute working paper 01-01-007 (2001), available at <http://www.santafe.edu/sfi/publications/Working-Papers/01-01-007.ps.gz>.

done nothing to deserve a fair share of the pot, nor does he have any other basis for a claim on it. But it nonetheless appears to be an general expectation, across cultures, that, other things being equal, windfalls will be shared equally since no one has a superior claim to them.²³

The ultimatum game gives us a clue to the dynamic relationship between duties and rights. Imagine a world populated by humans in which there was no recognized duty of care. Humans would nonetheless take care that their actions did not interfere gratuitously with the interests of each other, as we have seen with squirrels. That pattern would create an expectation that one will be free from gratuitous interference from others. Interference would violate those expectations. But now what to do? We might suspect that most people would take the squirrel's way out, resorting to self-help. But self-help is costly and larded with risk. What if the one who interfered did, in fact, act carefully, but because of matters beyond her control she couldn't help interfering? In that case, it is the one who has taken a self-help remedy who would be the wrongdoer. What if the one who interfered is vindictive and is backed by a group of vindictive friends and relatives, so that one who tries self-help brings catastrophe on her head? What if self-help triggers a battle that leaves one permanently injured?

Self-help appears to work well in squirrels, who spat for a moment, then get over it. It seems far less useful in humans, where memories are long and rage can apparently endure forever. Where even small conflict can bloom into serious trouble, perfectly illustrated by the road rage cases in which a rude gesture by one driver results in his murder at the hands of another driver,²⁴ one would like the assistance of others, rather than risk seeking one's own remedy. Involving others helps to assure that there really was a breach of duty and brings the victim assistance with the remedy, making it less likely that wrongdoers can overwhelm the victim who seeks recourse.

Those are the functions of law. The value of regularizing conflict through law is entirely obvious, but it is difficult to see from an evolutionary perspective how law could ever have developed. The difficulty lies in the same problem of self-extinguishing altruism that we ran into

²³ The moral neutrality of windfalls is one of the common tenets of distributive justice. See STANFORD ENCYCLOPEDIA OF PHILOSOPHY, available at <http://plato.stanford.edu/entries/justice-distributive/> (last visited June 25, 2004). Claims of distributive justice have generally not been effective juridically, but they are clearly an important part of the policy-making process. We could say that they are "near rights," widely shared expectations that do not become actionable unless they are made part of an entitlement system, as that is discussed later in the paper.

²⁴ On May 21, 2004, Michael Ramiro Vergara was sentenced to life without parole for shooting Frank Mosqueda on Highway 60 in California, after Mosqueda had flashed him an obscene gesture as they jockeyed for position. *Driver Charged with Murder*, The Press-Enterprise, available at http://www.pe.com/localnews/riverside/stories/PE_News_Local_roadrage22.fe18.html (last visited June 10, 2004).

in the case of duties, where we wondered how it was that other-regarding people who go out of their way to act with care could not have been extinguished from the gene pool by self-seeking people who spent no resources looking out for others. There, the squirrels provided the answer, for they revealed that acting with care could be explained on a completely self-interested, if other-regarding basis. Can that same argument explain how rights and the rule of law come to emerge in a society?

Rights, as Hohfeld demonstrated, emerge from the breach of duties²⁵. The key to understanding how that could have happened is understanding how it is that others, not party to a breach of duty, undertake to come to the aid of the victims. It is the response of others, not parties to the conflict, that turns the victim's outraged expectation into a wrong, into the violation of a right.

WHY DOES ANYONE JOIN A POSSE?

The scene is a staple of cowboy movies. Someone has done something awful and is high-tailing it out of town. The sheriff needs some men to chase the varmint down before he gets out of the territory. The real men saddle up while the ninnies and free riders skulk in the shadows as the posse heads out of town. This scene resonates at a base emotional level with audiences around the world. But how does it make sense? The desperado is not coming back. Why would any self-interested person invest time and expose oneself to risk for no payback, particularly when the free riders who stay at home will enjoy whatever benefit the posse creates without any of the cost or risk? There is no doubt that the impulse to join the posse is real and widely distributed in the population, as evinced by the general response of the movie audience who vicariously saddle up with the posse, intent on setting matters to rights. Why would such an impulse not have been eliminated by the genetic prosperity of the free riders, who gain an edge in reproductive fitness by staying out of harms way?

The impulse to join the posse is what Samuel Bowles and Herbert Gintis have called "strong reciprocity."²⁶ The members of the posse are surely not animated, by kin selection, for most of

²⁵ That is a proximate, not an ultimate, explanation of the source of rights. To explain rights at an ultimate level we must understand how they could have evolved as features of human nature.

²⁶ Samuel Bowles and Herbert Gintis, *Origins of Human Cooperation* (Chapter 22) in *GENETIC AND CULTURAL EVOLUTION OF COOPERATION* (Peter Hammerstein, ed., MIT Press, 2003).

those who stand to benefit by the posse's action—like the people in the area toward which the wrongdoer is headed—are not related to the posse members by blood. Nor is it explained by reciprocal altruism, because the posse members do not expect to receive a *quid pro quo* for their efforts. In the posse, reciprocity is “strong,” it exists without any expectation of specific benefits. The posse is responding, as Bowles and Gintis explain it, not to any hope for specific benefit but rather they are acting in accordance with the dictates of their emotions, most notably, the “prosocial emotions.”²⁷ In their experiments with the ultimatum game, Bowles and Gintis documented the existence across societies of an impulse to punish.²⁸ They identified that impulse as an essential component of social behavior. The person who turns the other cheek when he is injured by a breach of the duty of care is, under their view, the enemy of society almost as much as the one who breached the duty. It is the punisher, the one who spends her energy and shoulders the risk to visit costs upon wrongdoers, who enforces social cooperation.

The impulse to join the posse is a real benefit to the group. The larger the percentage of willing posse members, the lower the likelihood that the group will be attacked by outsiders and the greater the likelihood that they will effectively defend themselves. But the fact that joining the posse is good for the group does not explain how the impulse could have prospered. If those who join the posse suffer a fitness disadvantage, due to the time and effort they spend away from their kin and to the added risk of injury and death, the impulse will be eradicated from the group as those who lack it produce more, and more well-supported, offspring.²⁹ If, however, strong reciprocity conveyed a compensating fitness advantage it would have survived the evolutionary pressure and prospered in human groups. The fact that the impulse to punish, even at personal cost, is a ubiquitous part of human societies suggests that it has advantages, perhaps in giving

²⁷ “Prosocial emotions are physiological and psychological reactions that induce agents to engage in cooperative behaviors as we have defined them above. Some prosocial emotions, including shame, guilt, empathy, and sensitivity to social sanctions, induce agents to undertake constructive social interactions; others, such as the desire to punish norm violators, reduce free riding when the prosocial emotions fail to induce sufficiently cooperative behavior in some fraction of members of the social group.” Bowles and Gintis, *supra* note 26, at 432.

²⁸ “Here long-run *evolutionary* processes governing the distribution of genes and cultural practices could well have resulted in a substantial fraction of each population being predisposed in certain situations to forgo material payoffs in order to share with others, or to punish unfair actions, as our experimental subjects did.” Bowles and Gintis, *supra* note 20, at 7.

²⁹ But this may not be an accurate picture of the evolution of strong reciprocity. “Thus an altruistic trait that confers fitness advantages on other members of a group while imposing fitness costs on the bearer could evolve if the positive between-group selection effects are sufficiently strong to outweigh the negative within-group selection effects. Group selection works by exactly the same process as kin selection: altruism may evolve if the level of assortative pairing is sufficiently high.” Samuel Bowles, Ernst Fehr, and Herbert Gintis, *Strong Reciprocity May Evolve With or Without Group Selection* (2003), available at <http://www.iew.unizh.ch/home/fehr/papers/TheoreticalPrimateology.pdf> (last visited June 10, 2004).

those who join the posse an advantage in the competition for mates. Willing reciprocators, after all, are likely to have the qualities that will make them aggressive protectors of their offspring and therefore attractive candidates as fathers.

Most importantly, if that is the source of the fitness advantage of the strong reciprocators, it is essential that the punishment they mete out be perceived by the group as justified. A posse member who punishes innocent people is a mad dog, himself the violator of his duties. He is a bad candidate for fatherhood, bringing down on his children the punishment for his own breaches of duty or at least wasting effort that would otherwise support his children. Evolutionary pressures mean that it is not enough to be a punisher; to make up for the costs spent in punishing, the punisher must have improved prospects as a mate, and that requires that his behavior be perceived as justified.

What is it that provides the justification? The fact that the one who is punished brought it upon himself through a breach of duty.

These are the phenomena that provide the deep structure of all law.

THE EMERGENCE OF DUTIES AND RIGHTS

To recapitulate, I suggest that what today we recognize as rights and duties emerged in the following way.

First, *Homo sapiens* inherited from its genetic forebears the impulse to act with care. Humans were other-regarding, not as a matter of choice but simply as a necessary result of the fact that they are purposive and imaginative. The fact that they are imaginative meant that they could formulate more purposes than they had the resources to satisfy. Deciding to satisfy one meant that others had to be foregone. Any person who failed to choose wisely suffered in competition with those who were wiser. And any person who failed to use care to see that her actions didn't harm others wasted unnecessary resources on the resulting conflict.

Second, acting with care created expectations in others that each person's behavior would put them at a certain level of risk, just as one expects that others will keep their cars on their side of the street and, expecting that, makes the effort to stay on the right side of the street. The rational person shaped her behavior according to reasonable expectations of the behavior of others.

These expectations are characterized as “rights,” or more accurately as “inchoate rights.” They are, until they are violated, simply expectations. Inchoate rights are highly mutable. People appear to feel that they “have a right” to expect whatever they have come to expect. Their expectations can expand categorically with abstractions like “human dignity” or “karma.”³⁰ This process drives change as it systematically broadens expectations and generates discussions between people that give the expanded expectations political force.

Third, the inchoate rights put the duty in the “duty of care,” for they legitimate the expectations that the members of a group have formed, declaring to all that the patterns of expectation that have formed will be enforced if they are breached.

Fourth, duties are from time to time breached. A small percentage of any population is composed of sociopaths who act with care only when the likely punishment makes the present value of the action negative.³¹ Most people act “responsibly,” violating expectations only when it becomes intolerable to conform to them.³² But even responsible people make mistakes.

Fifth, the breach of duties causes inchoate rights to crystallize as actionable rights. That action may take many forms. In a modern society, law is the preferred vehicle of action, while in traditional societies it may take the form of self-help or informal social processes, like the posse. Whatever form it takes, the critical action empowered by the breach of a duty is the relaxation of the duty of care on the part of the victim and on those who would enforce her right.³³

³⁰ The thirty articles of the Universal Declaration of Human Rights set out an impressive list of expectations that have been deemed justified for all human beings, including, but not limited to, a right to a job, to choose one’s spouse, to equal pay for equal work, to own property, and “to the economic, social and cultural rights indispensable for his dignity and the free development of his personality.” Much of this Declaration sets forth expectations that are still in the formative, rather than the legally enforceable, stage. *Available at* <http://www.un.org/Overview/rights.html> (*last visited* June 10, 2004).

³¹ Research suggests that between three and four percent of the male population of the United States is composed of sociopaths. Linda Mealey, *The Sociobiology of Sociopathy*, 18 *Behav. Brain Sci.* 523 (1995).

³² The “Learned Hand Formula” sets out a useful conception of the terrain of risks for which a person will be held responsible in negligence. *United States v. Carroll Towing Co.*, 159 F.2d 169 (2d Cir.1947). In doing so it simultaneously defines the duty of care for the strong reciprocator—the judge or jury—that is holding the actor responsible. To say that a person is negligent if, in an action that places another person at risk, he fails to take loss avoidance behavior that is less costly than the expected loss from the action, is to say simultaneously that a judge and jury who hold such a person responsible have shouldered their duty of care. Where through inattention or favoritism they fail to hold such a person responsible, they have failed to perform the duty of care they accepted with the role they played.

³³ This is clear from Hohfeld’s illustration quoted above. “...this particular group of facts immediately create in Y the privilege of self-defense,—that is, the privilege of using sufficient force to repel X’s attack; or, correlatively, the otherwise existing duty to Y to refrain from the application of force to the person of X is, by virtue of the special operative facts, immediately terminated or extinguished.” Putting it yet another way, by his breach of duty X has removed from Y the duty to use care on his behalf.

Sixth, the enforcement of rights is itself limited by the duty of care, which subjects rights enforcers to the principle of proportionality: Violators may justifiably be subjected to consequences that are proportional to the level of their fault in the breach of their duties. Much discussion has been devoted to the principle of proportionality, to the principle of formal equality, due process, and to all the other variants on the rights enforcer's duty of care, but, as I explained above, the answer to the puzzle—the reason why humans are limited by a sense of justice—is to be found in the evolutionary process, not in reason. To repeat the point, the existence of punishment, of the process by which one who is not damaged by a breach of duty will come to the aid of one who is—the “punisher”—teeters crucially on the evolutionary cusp provided by the fact that enforcement is costly to the enforcer.

The cost of enforcement is a commonplace of current popular culture. The police officer killed in the line of duty, the whistle-blower who destroys his own career, the judge whose life is threatened, are all evidence of the cost of rights enforcement. In contemporary society some part of that cost is compensated for by salaries, rewards, and social acclaim. But most of those costs must be more than compensated for by increases in reproductive fitness or the impulse would have been eliminated from the population long ago. It seems most likely that compensation took the form of mate attraction. Crucially, mate attraction rested upon the perception by potential mates that the punisher had not himself breached the duty of care. For if he had, if he was a careless posse member who accidentally shot bystanders or strung up people before he was sure they were the wrongdoers, the mate could expect the punisher to be distracted from his mately and fatherly duties to defend himself against the enforcement measures of those whom he had victimized.

Just as the inchoate right arises automatically in conjunction with the duty of care, so too the duty of care arises automatically with strong reciprocity, so the person who enforces rights is herself constrained by duty.

THE ARTIFICIAL CREATION OF NATURAL DUTIES

The duties/rights process is essential to building a cooperative large scale society.³⁴ Unlike kin selection and reciprocal altruism, duties and rights are completely general, providing the mechanism for spreading cooperation far beyond the bounds of family and friends. The impulse to take care is present in all humans and is active at all times, so the duty of care automatically expands to any scale, from neighborhoods, to members of the same cast, to fellow citizens, to customers in another country, to humans generally, and eventually, perhaps, beyond humans to all sentient beings.³⁵ Where kin selection is limited to a tiny group, and reciprocal altruism extends only to those from whom one can realistically expect reciprocity, the duty of care can cover an unlimited number of people at any distance. If your action can affect 10,000 perfect strangers, the 10,000 automatically gain an inchoate right to your care.

The duty/rights mechanism is easily extended by type of action as well as by scale of action. The duty of care applies to any action by one that place another at risk. While we generally think of physical actions as the basis for the duty, words are also actions that create risks and are easily included in the duty/rights process. When I promise that if you give me your car I will pay you \$400 a month, those words put you at risk, the risk that I will not make the payment. Duties spring into life conjoined to inchoate rights—the right to breach the duty of care in case the duty is breached. The enforcement of contract duties is, therefore, every bit as biologically inevitable as the duty of care, at least among groups that have developed language and words to express their expectations. The person who agrees to sound a warning if the enemy shows up, or to register voters for the coming election, or to test fish for freshness has, in that instant, undertaken a duty and created sets of inchoate rights.

The duties/rights mechanism is even more powerful than that. Entirely new categories of rights and duties can be created by convention, a process that can be considered the artificial creation of natural duties. That is precisely what entitlement systems do. Property systems provide the simplest example.

There is a territorial aspect to human nature. One who approaches another puts the other at risk, so, as the squirrels clearly revealed, one takes great pains to avoid invading another's

³⁴ I don't mean that it is sufficient to that task. Just that without it humans would be limited, like squirrels, to small scale, face-to-face interaction.

³⁵ The impulse is present in sociopaths, but it is not backed by a feeling of duty. They are fully capable of acting in an other-regarding way, but only when it is in their best interests to do so.

“space.”³⁶ But there does not appear to be a biological process that would trigger the duty of care in the absence of a clear indication that it is the space of another. It is the concept of property that expands the biological sense of another’s space to the social sense of another’s property. Defining space as an abstraction—as a place on the globe that is memorialized by social recognition—swings the entire duty/rights psychology into place to enforce it. One must now gain the owner’s willing acquiescence to enter her land or to use her car in every bit as real and immediate a sense as he would need it before throwing his arms around her.

Entitlement systems operate by defining a state of affairs and creating in others a duty to accept that state. As with any other duty, the creation of the duty generates an inchoate right in those who are put at risk that their entitlement will be defeated. The handicap parking entitlement created by the Americans With Disabilities Act³⁷ provides an excellent illustration. As the designated spots began to appear in the early 1990’s they took a great many prime parking spots out of general use which provoked widespread irritation and grudging compliance. For many, the duty to avoid parking in a handicap spot was simply *malum prohibitum*³⁸—wrong only because the law said it was wrong. The law created a threat that violation would result in a fine, but it did not, for many people, create a duty.

The duty emerged later as the result of countless discussions. One by one people accepted the parking regulation as a duty, recognizing its legitimacy. Violation of the regulation became *malum in se*³⁹, a wrong in and of itself. The difference between the two lies in the emotional response triggered by the action. A person who felt that parking in a handicap spot was *malum prohibitum* might feel apprehension at the prospect of receiving a parking ticket or of having a strong reciprocator show up to dress him down, but would feel no guilt if he parked in one. The person who accepted the parking ban as a duty, who felt that parking in the spot was wrong in and of itself, would experience a pang of guilt. He might still park there, just as he might roll through a stop sign without stopping his car, but in doing so he would experience a feeling of wrong.

³⁶ The extent of personal space is the subject of the study of proxemics, a field founded by EDWARD T. HALL, *THE HIDDEN DIMENSION* (Anchor Books, 1992).

³⁷ 42 U.S.C.A. § 12182.

³⁸ An act which is immoral because it is illegal; not necessarily illegal because it is immoral. *See, e.g.* United States v. Bajakajian, 524 U.S. 321 (1998).

³⁹ An innately immoral act, regardless of whether it is forbidden by law. Examples include adultery, theft, and murder. *Id.*

The handicapped parking ban illustrates the *formative* process of law, the process by which legal mandates are accepted as new duties, fully weighted with the emotional power wielded by organic duties. Law that has become formative is self-enforced. Law that is simply instrumental must be enforced through fear of punishment. To the sociopath, all law is simply a matter of prohibition, to be obeyed if the expected cost of violating it eliminates its expected benefit. To the other ninety-seven percent of the population, enforcement is a matter of avoiding doing wrong. Law is a guide, not a threat.

Law is an extension of deep emotional and cognitive processes, the roots of which are visible in squirrels. But there is at least one aspect of modern law that does not fit very well its biological roots.

THE RED QUEEN PROBLEM

As Chief Justice Tindal made clear, every person whose actions create a risk for another will be judged by the same standard, the objective standard of the reasonable person. Like all biological characteristics, however, the capacity to act with care varies enormously across the members of the species. Some, hypercautious, will go to great lengths to avoid placing themselves or others at risk. They will perform their contracts whatever the cost, refusing to violate another's expectations even in the face of financial ruin. And there are public officeholders who will refuse to lie to their constituents, even when the truth will put them out of office.

At the opposite end of the spectrum are the sociopaths, who appear to lack the sense of duty altogether. Here lies *Homo economicus*, the maximally self-interested person who acts at all times to maximize the present value of his satisfactions. Short of the sociopath lie those upon whom duties rest very lightly. They are moral actors, as we understand that term, capable of denying themselves actions simply because doing them would be wrong. But they tend to play fast and loose with their duties. Where the hypercautious take a death grip on their duties, conforming to them even when doing so appears silly or unnecessary, the loosely moral spend considerable effort resisting, often unsuccessfully, the impulse to play a practical joke on a friend, even though it could cause harm, or take credit for another's work, or cheat on an expense account.

Between the hypercautious and the sociopath lies a broad spectrum of varying moral people. Variation of this sort exists with all biological characteristics. Everyone, for example, has a nose. But the shape and efficiency of noses varies enormously. The explanation for this variation is called the Red Queen Principle.⁴⁰ Like the Red Queen in Lewis Carroll's *Through the Looking Glass*, who ran continuously, but never got any place, evolution is a constant race by each species to stay ahead of its predators and competitors. Peacocks provide a good illustration of the process. Peahens apparently find the huge tail feathers of the peacock irresistible, probably because tail size is a good indicator of genetic fitness.⁴¹ This has created a sort of arms race in which peacocks with the most extraordinary plumage sire the most offspring, who in turn have the most outstanding tails. In spite of this, there is considerable range in the size of peacock tails, with a respectable minority showing far less in the way of plumage. This is explained by the fact that the tails, while irresistible to peahens, are debilitating when it comes to escaping predators. In a benign environment, the large display is advantageous, but as soon as foxes and other predators show up the evolutionary advantage becomes a liability. By maintaining a range of plumages in the population the evolutionary process provides for survival in the face of changed circumstances.

The range in the strength of the prosocial emotions is part of the same process. In a highly stable, benign environment, a very strong sense of duty will promote social cohesion, reducing the need for policing and enforcement. But in a violent environment people with such a strong sense of duty would be reluctant to defend themselves by doing harm to others. Those with a weak sense of outrage would be slow to deliver strong reciprocity to those who threatened the group. Those who are quick to anger are as important to the survival of the species as those who are unfailingly agreeable; and those who can place others at risk are as important as the cautious. Under the Red Queen Principle a species doesn't move forward in any sense, but, like the Red Queen, adapts to a constantly changing environment of challenges. A species that allows itself to become locked into one set of solutions puts itself at risk of extinction when those circumstances change.

⁴⁰ "For an evolutionary system, continuing development is needed just in order to maintain its fitness relative to the systems it is co-evolving with." Leigh Van Valen, *A New Evolutionary Law*, 1 Evolutionary Theory 1 (1973).

⁴¹ "The peahen, for example, is for some reason attracted to peacocks with large, colorful displays of tail feathers—the larger the better. This preference may have originated because large displays are a useful signal of overall robustness, a good trait for her to pass along to her offspring. But whatever its source, once the preference exists, it will tend to be self-perpetuating." ROBERT H. FRANK, *PASSIONS WITHIN REASON* 23 (W. W. Norton & Co, 1988).

Given this, it is easier to feel a little sympathy for Menlove as he tried to avoid a judgment in Vaughan's favor. After countless generations, evolution left him lightly endowed in the intelligence department, with its concomitant limitation upon his ability to foresee risk and to take proper loss avoidance. It's not clear what advantage lay in preserving low intelligence in the spectrum of human qualities, but it is clear that it was, if anything, the Red Queen, not Menlove, who did it. Yet Menlove would be judged by the standard of the reasonable person, persons who are well endowed with foresight and the ability to reduce risk.

The reasonable person standard makes great sense from several perspectives, but it raises serious questions of fairness. The rule does, for example, avoid a weakness in the adjudicatory process itself. How can a court determine the cognitive capabilities of the parties with any degree of accuracy? If incompetence were a defense to a negligence claim, everyone could escape responsibility with little ability by the court to distinguish the truly challenged from the fakers. Worse, the formative effect of such a rule would be disastrous, for it would mute the message that each individual must act with due care, turning it into a relativistic standard that each person would establish for himself, with a notable tendency among those weak in the duty of care to favor themselves with any number of self-protecting weaknesses.

But these are instrumental justifications: if we use a subjective standard to establish the duty of care, we will be letting escape many who have violated the duty of care. The fact is that the objective standard exacts a high cost on those who can ill-afford to shoulder those costs. One can sympathize with Menlove who, learning that he is incompetent to run the little farm that he once owned, may well wonder what it is, exactly, that he is competent to do.

We have discovered no systemic solution to the Red Queen Problem. The Principle of Formal Equality is bedrock in most judicial systems and it would seem to back up Menlove. If we are to treat similar cases similarly, but dissimilar cases dissimilarly, how are we to justify ignoring real differences between Menlove and the reasonable person? Why are those differences to be ignored and not others?

A number of schemes have been advanced for distinguishing differences that should be ignored from those that should be protected, but there exists within law a question of fairness that simply will not go away. It bubbles beneath every case in which the parties can make a plausible case that, through no fault of their own, they are incapable of conforming to reasonable standards of behavior. Some grounds for relaxing the standard, such as mental disease, have

been effective, others, such as those based upon the consumption of Twinkies or on an unfavorable upbringing, have not. But all is probably not that stark, in practice. Juries probably relax the reasonable person standard when they apply it to the least advantaged, and voters probably give elected officials who have trouble resisting the attractions of the flesh some slack.

However the desire for fairness works out, the duties/rights system for the most part supplies the ideal mechanism upon which a cooperative society is based.

THE CURIOUS PARALLEL BETWEEN INDIVIDUAL MORAL DEVELOPMENT AND THE EVOLUTION OF DUTIES AND RIGHTS

With the “ontogeny recapitulates phylogeny” debacle⁴² in mind, it is risky to find parallels between the process of individual development and the evolution of the species as a whole. But Lawrence Kohlberg’s six stages of individual moral development⁴³ provides a very tempting, and potentially illuminating, parallel to the six steps outlined above in the emergence of duties and rights. Kohlberg argued that morality emerged in individuals along a path that was common to all people, though individuals did vary in the pace along the path and in how far along it they got.

	Kohlberg’s stages of moral development ⁴⁴	Emergence of rights and duties
Stage 1: Fear of Punishment	The young child constrains his behavior to avoid punishment. Immediate physical consequences of an action determine whether it is good or bad.	Humans, like pre-humans, are other-regarding. They avoid needlessly irritating others to avoid the costs that others would place upon them.

⁴² The phrase “ontogeny recapitulates phylogeny,” coined by Ernst Haeckel, a German biologist in 1866 argued that the embryo of every species develops along a path—recapitulates—that traces the evolutionary development of that species. Haeckel provided a series of drawings of the fetus to prove his point, though it later turned out that the drawing were not accurate and did not support his argument. The failure of the theory supported the beliefs of those who thought the theory of evolution itself was nonsense. Ironically, recent research has indicated that Haeckel’s idea was not wholly nonsensical. See STEPHEN J. GOULD, ONTOGENY AND PHYLOGENY (Harvard Univ. Press, 1977).

⁴³ LAWRENCE KOHLBERG, PSYCHOLOGY OF MORAL DEVELOPMENT: THE NATURE AND VALIDITY OF MORAL STAGES: ESSAYS ON MORAL DEVELOPMENT (Addison-Wesley, 1984).

⁴⁴ Drawn from W. C. CRAIN, THEORIES OF DEVELOPMENT: CONCEPTS AND APPLICATIONS (Pearson Education, 1999).

Stage 2: Instrumental Exchange	Behavior is reciprocal—“You scratch my back and I’ll scratch yours.” Words and actions create expectations in others that the person must live up to.	People develop expectations that others will act with deference to their well-being. The idea that one has a right to due care emerges.
Stage 3: Interpersonal Conformity	The individual, now a teenager, is strongly bound up in group norms. Good behavior is what pleases others. Approval requires being “nice,” conforming to group standards.	Expectations of due care become social, shared by the members of the group. Due care is now a duty, a moral obligation upon the members of the group.
Stage 4: Maintaining Social Order	Right behavior consists of doing one’s duty as that is laid down in official codes of conduct. The social order is maintained for its own sake.	Most conform to their duties, but breach of duty calls for enforcement. The immediate group metes out sanctions. The strong reciprocator emerges to enforce group norms.
Stage 5: Individual Rights	Right action is defined in terms of general individual rights and standards. The emphasis is upon procedural rules for reaching consensus.	Individual rights become actionable in the form of self-help or in socially maintained conflict resolution procedures.
Stage 6: Universal Principles	Right is defined by the decision of conscience in accord with self-chosen ethical principles. Concrete rules are seen to exist within the context of general principles.	The duty of care is applied to rights enforcers. The principle of proportionality emerges to govern rights enforcement.

Why might there be a parallel between individual moral development and the emergence of duties and rights as moral phenomena in the species as a whole? The two realms share an interesting common feature. In a species, there is clearly a level, say, the squirrel, where ideas of morality, insofar as we can understand squirrel mentation, do not exist. The same is true of human newborns. But in both cases the emotional component of rights and duties—fear of the actions of others; anger at breached expectations—are present, at least at a primitive level. In both cases it is the emergence of language that turns expectations, which are subjective, individual phenomena, into rights, which are socially-constructed concepts.⁴⁵ In the species, that process is subject to cultural evolution, but that evolution is done within the context of the human emotions. A culture can, if it devotes enough energy to it, convince its members that a leader who violates every expectation that they might have for their own security, dignity, and well-being, is blameless because he is, for example, a god. In doing so, however, it is up against the universal response of rage at dashed expectations. Sooner or later that leader will be

⁴⁵ “In the child’s moral development it is through language that the child acquires knowledge of moral norms and becomes capable of reasoning about morality.” Eugene Sabbotsky, *The Narrative Function of Language and Children’s Moral Development* 1, available at <http://www.lanccs.ac.uk/staff/subbotsk/LanguageAndMoralDev.pdf> (last visited June 10, 2004).

beheaded and the notion that citizens have rights and even kings are under a duty to deliver will emerge.

In his paper on rights and duties, Wesley Newcomb Hohfeld was concerned that readers would consider the paper simply an end in itself with no important consequences.⁴⁶ He assured the reader that the question had concrete consequences. What, then, are the concrete consequences of the biological origins of rights and duties?

Hohfeld thought that understanding it would change legal doctrine, but I think that the most profound effect will be upon the process of law itself, particularly in the self-confidence that it could engender in the adjudicatory process. The issues that judges deal with every day are a primordial part of the human condition. But the litigants are frequently at Stage 2 or 3 in moral development, where any law appears to be either the unilateral ruling of someone in a position of power or the dictates of the group. The litigants' sense of guilt and rage, triggered by the event in controversy, are fully developed, but the cognitive dimension, their understanding of rights and duties, tends to be poorly developed. Powerful primordial emotions mix with little or no conscious understanding, requiring that the judge explain her actions and conclusions at a very basic level if those affected are to understand that justice was done. But that basic level of explanation does not exist. Conclusions are given a proximate explanation, which confirms the party's expectation that law is simply a matter of power.

There is within the biological explanation for the source of rights and duties the possibility of explaining what the law is doing at a level that elevates the understanding of, and expectation of, the operation of law to a level consistent with its excellence at delivering justice.

⁴⁶ "If, therefore, the title of this article suggests a merely philosophical inquiry as to the nature of law and legal relations,--a discussion regarded more or less as an end in itself,--the writer may be pardoned for repudiating such a connotation in advance. On the contrary, in response to the invitation of the editor of this journal, the main purpose of the writer is to emphasize certain oft-neglected matters that may aid in the understanding and in the solution of practical, every-day problems of the law." Hohfeld, *supra*, note 4, at 20.