

Distributing Intention and Negligence

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Negligence

Let us look to the legal determinants of negligence to form a set of operations which will help us predict an individual or a group of individuals sense of responsibility: Duty: The defendant owed a legal duty to the plaintiff under the circumstances. Breach: The defendant breached that legal duty by acting or failing to act in a certain way. Causation: It was the defendants actions (or inactions) that actually caused the plaintiffs injury. Damages: The plaintiff was harmed or injured as a result of defendants actions. These are the general steps used in the courts to determine negligence. Usually, someone is not intentional xor not negligent. Negligence is distributed amongst all parties of a dispute. Negligence attribution occurs only when damages have been suffered. By looking at court cases, one can get a sense of the language used by judges and lawyers to administer justice. In the insurance industry, many claims go to court. Claims are filed when someone has incurred a loss which they believe will be covered by the conditions of their insurance policy. Insurance companies know, before a person is insured, most of the arguments that may be made in the case of a claim, but each case is unique. The following is a set of logical representations and order of operations to determine negligence. This is an abstract code that is intended to instruct a computer in the process of simulating court cases. Insurance companies, as well as ambitious lawyers and students, simulate court cases before they happen to improve the judicial process. The nice part about court case data is that the defendant either wins or loses (binary) the case, but not necessarily all property at stake. This leaves room for logical and pathological analysis: The beauty of precedence public class:

Negligence(Damages(Causation(Breach(Duty))))

Properly Notated Events:

$\{[Timestamps], [Subjects], [Concepts], [Primes]\}$

$Damages(Causation(Breach(Duty(m, n, h)))) : \forall m, n \in \text{Entities}, \exists h \in \text{Events s.t.}$

$$(m \cap n \cap h) \implies (n_{prior} - n_{latter} \neq \emptyset) \vee (m_{prior} - m_{latter} \neq \emptyset)$$

The data type of Damages() is boolean Interpretation: Where a duty is considered between all entities and one event, there is no differences between each

entity and itself. The order of operations for this determination is one where the attributes of each entity are compared with their prior states and their latter states, with the duty at hand as a point of reference. and

$$Causation(Breach(Duty(a, b, g))) : \forall a, b \in \text{Entities}, \exists g \in \text{Events s.t.}$$

$$P(a \cap b \cap g) \neq P(a) \vee P(a \cap b \cap g) \neq P(b)$$

The data type of Causation() is boolean Interpretation: Where a duty is considered between all entities and one event, there is no differences between each entity and itself. The order of operations for this determination is that of determining Bayesian Independence. and

$$Breach(Duty(j, k, f)) : \forall j, k \in \text{Entities}, \exists f_{\text{horizon}} \in \text{Events s.t. } P(f_{\text{horizon}}) = 0$$

The data type of Breach() is boolean Interpretation: With respect to a duty, if not all the attributes exist of the agreements set forth in the contract ensuring the events of the duty at an event horizon, after the alleged damages occurred. and

$$Duty(x, y, e) : \forall x, y \in \text{Entities}, \exists e \in \text{Events s.t. } E[P(x \cap y \cap e)] = 1$$

The data type of Duty() is boolean Interpretation: There truly is a duty when it is determined that there was an agreed upon set of entities and events. An event, in this context, is an agreed upon set of sets of timestamps, subjects, concepts, and numerical or semantic primes. The following is the reverse engineer of the operations used to determine negligence. The opposite of negligence, in the American insurance industry, is intention (as juxtaposed with diligence in ancient times).

Intention

Determining intention is a complex procedure because, if damages have not been incurred, intention attribution does not occur during the claims process. The intention attribution procedure is basically the inverse of that for determining negligence. Intention must be measured at a preliminary phase in the lifecycle of an insurance policy. Insurers want to nip losses in the bud: Public Class:

$$Intention(NonDamages(NonCausation(NonBreach(NonDuty(b, c, g))))))$$

Non Duty

$$NonDuty(x, y, e) : \exists x, y \in \text{Entities s.t. } \forall e \in \text{Events}, \implies E[P(x \cap y \cap e)] = 0$$

The data type of NonDuty() is boolean Interpretation : All events must first be considered. If there are no duties in a persons life, we set them to the highest

risk level because we cannot know if their behaviors will lead to breach of duty, causation, or damages. or NonBreach

$NonBreach(NonDuty(j, k, f)) : \exists j, k \in \text{Entities s.t. } \forall f_{horizon} \in \text{Events},$

$$P(f_{horizon}) = 1$$

The data type of NonBreach() is boolean Interpretation: Now we consider all events and search for a breach of some duty. Are all attributes present in any arbitrary agreed upon event? If a person has had duties but no breaches, they are at risk level 2 because we cannot know how they deal with having breached duty, and they have duties. We cannot know if they will be the cause of damages. or NonCausation

$NonCausation(NonBreach(NonDuty(a, b, g))) : \exists a, b \text{ Entities s.t. } \forall g \in \text{Events},$

$$P(a \cap b \cap g) = P(a) \wedge P(a \cap b \cap g) = P(b)$$

The data type of NonCausation() is boolean Interp: Does there exist a person, who has a breach of duty, who is not the cause of that breach? If the person has not been the cause of any breaches of duty, they are risk level 3. They know how to get by on the streets and they have roamed arbitrarily. or NonDamages

$NonDamages(NonCausation(NonBreach(NonDuty(m, n, h)))) :$

$\exists m, n \text{ Entities s.t. } \forall h \in \text{Events},$

$$(m \cap n \cap h) \wedge (n_{prior} - n_{latter} = \emptyset) \wedge (m_{prior} - m_{latter} = \emptyset)$$

Interpretation: Are all the attributes present in the plaintiff in the case that the defendant has caused breached of duty? This is a low risk person with respect to intention