THREE CATEGORIES OF CAUSATION IN TORT LAW

JOHANNES HYGEN MEYER*

I INTRODUCTION

In this article I examine a claim by the Norwegian scholar Nils Nygaard (1932-2015) that there are three categories of causation in tort law. According to Nygaard, the *first* category is "the general requirement of a factual chain of causation", which is the "chain of events that really happened"; the *second* is "a hypothetical connection in cases where liability is based on fault or error", which "supposes a specific course of action that would have satisfied the requirement of proper conduct at the critical moment"; and the *third* "the extent of the damage" deduced as "the difference between the situation as it is with the existing damage and the situation as it would be without such damage". Nygaard claimed that, for each of these categories of causation, different tests would apply. Nygaard's claim has not yet been widely accepted in Norwegian courts or scholarship,3 but represents an intellectual observation worthy of further examination.

I will explain and expand on this claim and argue that Nygaard's three categories of causation represent three fundamentally different forms of inquiries, depending on whether and to what extent the inquiry refers to counterfactual scenarios. Building upon insights from research methodology in history, cognitive science and psychology, I propose that Nygaard's three categories correspond to (a) causal explanations of actual courses of events, (b) negative counterfactual hypotheses and (c) positive counterfactual hypotheses. I will argue that separating between these different types of inquiries adds clarity to reasoning about causation in tort law. My interest in presenting Nygaard's three categories of causation is primarily to underline the main point about the differences between these forms of inquiry, and supply my own take on the problem. The aim of the article is in other words to present a theoretical framework inspired by Nygaard rather than a precise exposition of Nygaard's own doctrine.⁴

^{*} Advokat (Norway), Master of laws (Uni. Oslo), LL.M. (Cantab.) PhD (Uni. Oslo). I would like to thank the anonymous referees for helpful and thoughtful comments. I would also like to thank prof. Mads Andenæs, Uni. Oslo, for comments on the final draft.

¹ N. Nygaard, 'Placing the Burden of Proof of a Hypothetical Cause' (2001) 41 Scandinavian Studies in Law 422, 422-3.

² See Part IV below.

³ As e.g the leading text book by V. Hagstrøm and A. Stenvik, *Erstatningsrett* (Universitetsforlaget, 2nd ed, 2019) 393-4.

⁴ I will not here present Nygaard's views on each of the categories in more detail. The ideas in this article are discussed at further length in my PhD thesis defended in February 2021 at the University

Causation has, at least since the nineteenth century, been a central condition for tort liability around the world.⁵ It has long been the subject of a transnational legal discussion, often at a conceptual level.⁶ This article is concerned with these underlying conceptual problems, and the aim is to treat the subject as it is faced by courts.⁷ I assume that the conceptual or methodological problems faced by courts when applying the concept of causation are to a large degree the same across jurisdictions. I will therefore refer to sources from both Norway and other jurisdictions, highlighting similarities in the problems faced. The focal point of the article is in other words the form of *reasoning* required to arrive at a conclusion on causation, "the approach in reaching [the] outcome",⁸ not the particular legal outcomes themselves. The aim is to say something about general methodological problems, and to provide a fairly neutral conceptual framework for describing those problems, that can be relevant across jurisdictions and their established national legal concepts.

The article will show and detail the three aforementioned categories of causation, first theoretically, and then present some practical consequences. As it will transpire, the article defends an approach to causation that focuses on the *process* by which we reach a conclusion on causation. Hence, its primary concern is with its epistemological and psychological aspects rather than its ontology or metaphysics.

The article is structured as follows. In the first two chapters of this article, I will propose a theoretical framework for understanding causation and counterfactuals, in II and III respectively. Chapter II concerns causation in actual courses of events. Chapter III concerns counterfactual hypotheses, which come

of Oslo titled Fra årsak til ansvar. En analyse av erstatningsrettens årsakskrav i historisk, komparativt og teoretisk perspektiv [From cause to responsibility. An analysis of tort law's causation requirement in historical, comparative and theoretical perspective] (printed at Uni. Oslo 2021). The book is set to be published end of 2021 at Universitetsforlaget under the title Erstatningsrettens årsakskrav [Causation in tort law].

⁵ For comparative studies in English, see *inter alia* T. Honoré, 'Causation and remoteness of damage', in A. Tunc (ed), *International Encyclopedia of Comparative Law - Volume XI: Torts* (Mohr, 1971); M. Infantino and E. Zervogianni (eds), *Causation in European Tort Law* (Cambridge University Press, 2017).

⁶ In the vast literature on the subject, a seminal work in English is H.L.A. Hart and T. Honoré, *Causation in the Law* (Oxford University Press, 2nd ed, 1985).

 $^{^{7}}$ I am here inspired by practical experience as a litigator and previously as deputy judge.

⁸ Cf Lord Bingham's judgment in the causation case of Fairchild v Glenhaven Funeral Services Ltd, [2002] UKHL 22, where he stated that "in a shrinking world, there must be some virtue in uniformity of outcome whatever the diversity of approach in reaching that outcome" (my emphasis). It is precisely the approach in reaching the outcome that I will be concentrating on in this article. Incidentally, Nygaard is cited by Bingham at para 28 in the same judgment, where Lord Bingham concludes that a Norwegian case he refers to, "bears strong resemblance" to cases from English common law.

in two forms – negative and positive. In the final chapter, IV, I will illustrate how this theoretical framework can be operationalised in practical tort law cases.

II CAUSATION IN ACTUAL COURSES OF EVENTS

A Introduction

In the following, I will expand on Nygaard's first category, namely causation in actual courses of events. Causation in actual courses of events is the most typical category of causation, and hence a fruitful point of departure. The exposition in the following is theoretical, and more so than in Nygaard's exposition himself. I will return briefly to Nygaard's own test in chapter IV below. In the following, I will first underline the importance of clarifying the causal relata in order to have clearer and more unambiguous references to the facts in the case, in between which we are establishing causal relationships, see B below. Then I will offer some thoughts on how causation in actual courses of events is contingent upon the existence of a *causal explanation*, see C below.

B The Causal Relata

Before establishing a causal relationship, it is first necessary to be clear about what the candidate 'effect' is and what the candidate 'cause' is, i.e. the so-called 'causal relata'. This is particularly pertinent for tort law, where abstract language can get in the way of providing clear and unambiguous reference to the facts in the case. For instance, the 'effect' which is to be caused is typically understood as 'damage'. But the concept for 'damage' in tort law, or 'Schade' in Austrian law, 'o 'dommage' in French law¹¹ and 'skade' in Norwegian law¹² is very abstract. It typically does not refer to mere facts, such as an injury or a wrecked car, but to

⁹ There is a vast literature on 'causal relata' in philosophy and legal theory. See e.g M. Moore, Causation and Responsibility: An Essay on Law, Morals, and Metaphysics (Oxford University Press, 2009) pt V ("The metaphysics of causal relata"). For the purposes of this article, I do not intend to take a philosophical stand on the metaphysics of causal relata. I propose a practical approach to defining the kinds of facts from which we typically establish causal relationships in actual courses of events.

¹⁰ Cf Allgemeines Bürgerliches Gesetzbuch § 1293.

¹¹ Cf Code civil 1804 art. 1240 (previously 1384).

¹² An exposition (in Norwegian) and comparison with German law is given in S. Koch, 'Det erstatningsrettslige skadebegrepet – en sammenligning mellom tysk og norsk rett' (2010) 7(4) *Tidsskrift for erstatningsrett, forsikringsrett og velferdsrett* 250-81.

the *loss* suffered by the plaintiff.¹³ This loss can not be observed in the same way as a physical damage. As I will return to below, it also presupposes a counterfactual hypothesis, e.g. as a comparison between the actual physical condition of the plaintiff with a hypothetical one.¹⁴ Equally abstract is the concept that typically figures as 'cause', i.e. the concept of negligence, 'Schuld' in German, 'faute' in French, and 'skyld' in Norwegian law. This is a moral concept. It not only denotes certain observable actions (or lack thereof), but a normative evaluation and qualification of the defendant's behaviour. Again, as I will return to below, establishing causation will require a counterfactual hypothesis, insofar as the conclusion on negligence or fault was justified by reference to a hypothetical non-negligent behavior.¹⁵ Even the nature of the causal relationship itself may be clouded by abstract langauge, such as in a statement that causation may become too 'remote' if it 'passes through' another legal entity, e.g. if a loss arises on the hands of a shareholder through the company owning a damaged property.¹⁶

In order to obtain greater clarity it is fruitful for practical purposes to get around this abstract use of language, and to define the causal relata in more concrete terms, providing them with a context of place and time. By doing so, it will be possible to hold still the actual facts of the case, so that we first can investigate causal relationships in the *actual* sequence of events, before moving on to counterfactual hypotheses and normative evaluations. For the sake of clarity and simplicity, I suggest that the causal relata typically can be defined as coming in three forms, as physical *events*, *states*, or *thought processes*. By *event* I mean something that happens at a given time and place, such as a car accident, and by *state* something that stretches over a longer period of time, such as a medical condition.¹⁷ *Thought processes* are the reasons preceding actions, and are more particular. We cannot observe them directly, and there is philosophical disagreement on whether humans have free will, our actions and preceding thought processes thereby eschewing normal causation.¹⁸ Yet for practical

¹³ Note that some object to this parlance in English law of torts, see eg D. Nolan, 'Rights, Damage and Loss' (2017) 37 Oxford Journal of Legal Studies 255, 270-4. In Norwegian law, a distinction is often drawn between 'skade' ('damage') and 'tap' ('loss').

¹⁴ See below on the 'positive counterfactual hypothesis' in III D and IV D.

¹⁵ See below on the 'negative counterfactual hypothesis' in III D and IV C.

¹⁶ See e.g B. Thorson, Erstatningsrettslig vern for rene formuestap (Gyldendal, 2011) 277.

¹⁷ The distinction between *events* and *states* presented here is a granular one. There are more sophisticated philosophical views on the definition of events and states, see inter alia J. Kim, *Supervenience and Mind: Selected Philosophical Essays* (Cambridge University Press, 1993), esp 33 ff. ¹⁸ In some European civil law jurisdictions a distinction is still made between mechanical causation in nature and the processes of the rational mind, inspired by Continental philosophers such as Immanuel Kant. See e.g the previous president of the Belgian Cour de Cassation / Hof van Cassatie,

purposes, there is nothing strange or unfamiliar in considering human thought as a *cause* for something, just as human thought can be *caused by* something else. For instance, many jurisdictions accept liability for suicides caused by previous actions, ¹⁹ just as for (rational) market actors' response to incorrect information.

In actual courses of events, we may imagine longer causal chains happening throughout time, or events with multiple causes or multiple effects, or events where the cause first materialises much later.²⁰ Each event may comprise causal connections of their own, for example the event of a murder.²¹ It should be noted that the causal relata, according to the suggested definition here, are not something clearly delimitated in time and space, such as objects. They are not necessarily more than figments of the imagination. They can be long (the First World War), or short (the shots in Sarajevo in Aug 1914), leaving the definition of what constitutes a single event, versus several events, contentious – and therefore equally so the partition of the facts of the case into a particular 'causal chain'. The point to be retained here is that the imagination is centered around a single narrative, presumed to be the *actual* course of events.

C Causation as Causal Explanation

The next step is to establish a causal relationship between the candidate 'cause' and the candidate 'effect'. In practice, this link is contingent upon the possibility to understand and *explain* the events by reference to each other: we must be able to explain the 'effect' by the 'cause'.²² Very often, this relationship is established

Jean de Codt, in 'L'appréciation de la causalité dans le jugement des actions publique et civile' F Roggen, J De Codt, G Schamps, and P Mandoux (eds), *Actualités de droit pénale et de procédure pénale* (Jeune Barreau, 2001) 41.

¹⁹ This is not the case in Norway, where even causing mental illness can be considered too remote, see the supreme court judgment in Rt. 2007, 172. But see the discussion for Danish law in A. Bloch Ehlers, *Om adækvanslæren i erstatningsretten* (Karnov, 2011) ch 10. See also UK House of Lords in *Corr v. IBC Vehicles* [2008] 1 AC 884. The question has been found interesting since Antiquity. In the Heroides of Ovid, Aenas provides Dido with a sword and a reason to die – and thereby a cause of Dido's death, see Nörr D, 'Causam mortis praebere' in MacCormick and P. Birks (eds), *The Legal Mind: Essays for Tony Honoré* (Oxford University Press, 1989) 207.

²⁰ See further, F. C. Keil, 'Explanation and understanding' (2006) 57 Annual Review of Psychology 227.

²¹ See for a philosophical treatment on events and causation, J. Bennett, *Events and Their Names* (Clarendon Press Oxford, 1988).

²² By 'cause' and 'effect' I mean here causal relata as defined above in II B. In this sense, a causal explanation is typically an explanation of one particular event (or state, or inner thought process) by reference to another and preceding event (or state, or inner thought process). Defined in this manner, causal explanations are different from mathematical explanations, which consist in computing abstract quantities, they are different from moral explanations, which can make reference to norms,

on the basis of common knowledge and intuition, arising from normal human experiences in the world, and from which there is rarely much disagreement – such as when a blow to the face causes an injury. The contentious matters typically involve more scientifically based explanations.²³ And in this respect, it is typically the tenacity of the explanation itself that becomes the point of contention, not the concept of causation. After having discussed causation with lawyers and scientists, Jane Stapleton observed that "If a scientist knows all the facts of how a transition came about, he or she would not consider that there was any room for a dispute labelled as one about the "causation"."²⁴ Some methodological issues may still arise, such as for epidemiological (statistical) studies in medical cases.²⁵ For such cases, the court may find inspiration in relevant philosophy of science,²⁶ if it is not primarily occupied with the rules governing the use of scientific experts or rules on burdens of proof.²⁷

The question of what it "really" means that there is causation in such cases,²⁸ is in general of lesser interest in actual courses of events. Tort law is not the place to litigate issues on the ontological nature of causation,²⁹ or whether we can "penetrate into the reason of the conjunction" of cause and effect,³⁰ or even its metaphysical nature. For practical purposes, a Humean concept is therefore a useful starting point, as per Prosser and Keeton in their textbook on US tort law: "Proof of what we call the relation of cause and effect ... can be nothing more than 'the projection of our habit of expecting certain consequences to follow

Oxford University Press 1888, from 1965) 93.

normative statements, values – and they are different from purely logical explanations which can e.g. consist in showing equivalences between abstract meanings of concepts.

²³ Se e.g J.P. Borghetti, 'Litigation on hepatitis B vaccination and demyelinating diseases in France. Breaking through scientific uncertainty?' in M. Martín-Casals and D. M. Papayannis (eds), *Uncertain Causation in Tort Law* (Cambridge University Press, 2016) 11-42; J. Stapleton, 'Factual causation, mesothelioma and statistical validity' (2012) 128 *Law Quarterly Review* 221; L. Khoury, *Uncertain Causation in Medical Liability* (Oxford University Press, 2006).

²⁴ J. Stapleton, 'Scientific and legal approaches to causation' in I. Freckleton and D. Mendelson (eds), *Causation in Law and Medicine* (Ashgate, 2002) 15.

²⁵ See e.g. P. Dawid 'The Role of Scientific and Statistical Evidence in Assessing Causality' in R. Goldberg (ed), *Perspectives on Causation* (Hart, 2011) 133-147.

²⁶ A much-cited study in this respect is Austin Bradford Hill's criteria for causation A. Bradford Hill, 'The Environment and Disease: Association or Causation?' (1965) 58 *Proceedings of the Royal Society of Medicine* 295.

²⁷ See e.g the discussion in C. F. Cranor, *Toxic Torts. Science, Law and the Possibility of Justice* (Cambridge University Press, 2nd ed, 2016).

²⁸ "It is this concept of something having to be *really* a cause according to criteria lying outside the law which puzzles lawyers. On what basis are academic writers entitled to say that judges should take into account a philosophically privileged form of causation which satisfies criteria not required by the law?". See Lord Hoffmann, 'Causation' in R. Goldberg (ed), *Perspectives on Causation* (Hart, 2011) 5. ²⁹ There are many theories, e.g. regularity theories, counterfactual theories, probabilistic theories. See L. A Paul and N. Hall, *Causation: A User's Guide* (Oxford University Press, 2013) 13-24. ³⁰ D. Hume, *A Treatise of Human Nature* (John Noon 1739, reprint by L. A. Selby Bigge, M. A.

certain antecedents merely because we had observed these sequences on previous occasions".³¹ Admittedly, this definition makes causation more ambiguous than attempts at a coherent ontological definition of causation. But at least it does not promise more than it can deliver.

It should be noted that a causal explanation of actual events is not necessarily non-counterfactual: Because explanation is contingent upon imagination and speculation, it is often necessary to imagine numerous scenarios where the candidate 'cause' occurs before deciding whether there is causation with the candidate 'effect'. And in a certain sense, this act of imagination is counterfactual, as it does not necessarily correspond to the facts in the case.³² This sort of 'counterfactual' reasoning enables us to mobilise available knowledge in order to interpret the facts at hand. However, the point is that the course of events that is in focus is still an actual course of events. The causal relata are actual events. They are facts. This is different from the situation in which either the 'cause' or the 'effect' are hypothetical scenarios, which I will turn to in the next chapter.

III COUNTERFACTUAL HYPOTHESES

A Introduction

I will now turn to counterfactual hypotheses. In this chapter, I will present Nygaard's other two categories of causation. I return briefly to more practical problems in each of these categories later, in chapter IV. In this chapter, the aim is to present a wider and more theoretical point: it is necessary to distinguish between different forms of inquiries, namely the causal explanations mentioned

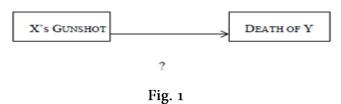
³¹ W. P. Keeton et al, *Prosser and Keeton on the Law of Torts* (West Publishing, 1984) 270.

³² See for instance, A. Rosenberg, *Philosophy of Ccience – A Contemporary Introduction* (Routledge, 3rd ed, 2011) 63 ff. Cf D. Lewis, 'Causation' (1973) 70 The Journal of Philosophy 556-7. Here, Lewis, gives a famous, if convoluted theory where causation depends on us imagining an indefinite number of other, possible worlds that must be compared to the actual world in order to find out to what extent they are similar to our actual world. The analysis entails defining the events c (cause) and e(effect) that occur in the actual world as well as in the possible worlds. For every event there is a proposition O (c) and O (e) that "holds at all and only those worlds" where c and e occurs, p. 562. Conversely, the proposition O(c) and O(e) holds in the worlds where c and e are not occurring. Very roughly speaking, whether e is causally dependent on c is then expressed as a probability statement, dependent on the propositions O (c) and O (e), and the opposite propositions O (c) and O (e)'. Lewis has offered some important insights and the theory has attracted some philosophers. But it does not seem to have found much practical usage, apart from the core idea embodied in the but for test - and which is somewhat older than Lewis' theory. At least for the practical usage of tort law, the need for a leap into imagined possible worlds, and the indeterminacy this seems to produce with respect to how such worlds must be constructed, does not seem to provide for actual feasibility in courts.

above, and counterfactual hypotheses, and to distinguish between 'negative' counterfactual hypotheses and 'positive' counterfactual hypotheses. The latter two correspond to Nygaard's other categories of causation. In the following, I will first explain the distinction between causation in actual courses of events and counterfactual hypotheses, in B below, then why they should not be conflated, in C below, and finally present the two types of counterfactual hypotheses, in D below.

B Causation in Actual Sequences of Events vs Counterfactual Hypotheses

In the following, I will explain the difference between causation in actual courses of events and counterfactual hypotheses. In order to explain this difference, I will start out with an example of causation in an *actual* course of events. For the sake of clarity and simplicity, I have chosen a very simple example. Let us assume that person Y, a hunter, is dead from excessive bleeding. Just prior to his death, person X, another hunter, had shot him in his back. A question on causation in the actual sequence of events is whether the gunshot is the cause of the death of person Y, i.e. whether the death of Y can be explained with reference to X's gunshot.



This causal relationship is instantly recogniseable. It can even be made intuitively on the basis of common knowledge based on our shared experiences in the world. And it can be conveyed in simple terms with the statement "X killed Y". The cognitive scientist Ruth Byrne calls this a 'strong causal relation'.³³ It is characterised by being formed spontaneously in the mind, and without having to imagine alternative and counterfactual scenarios. The prior knowledge which is required to make such a connection is easily accessible, as it depends upon prior experience. Yet, even though it is not necessary to actively imagine scenarios in order to make a connection here between cause and effect, it will have helped to have done it previously. Studies show that inferences on causation are in fact faster if one has been asked to imagine the counterfactual alternative previously.³⁴ Furthermore, insofar as there is doubt on whether the injury actually was caused

³³ R. Byrne, *The Rational Imagination* (MIT Press, 2005) 119-21.

³⁴ Ibid 121.

by the bullet from Xs gun, it may be relevant to rely on more scientifically based explanations, typically on the basis of expert reports. But even in such situations, the causal relationship will still be sought to be established in an *actual* course of events.

A counterfactual hypothesis is different, however, in that it explicitly hypothesises about something that *did not happen*. Let us assume that the ambulance that fetched the hunter was late, and by late we mean that it arrived after the mandated response time. The inquiry could be: would Y still have died if the ambulance had arrived within the mandated response time? This inquiry intentionally refers to a hypothetical scenario, which contrasts with the actual scenario. It can be pictured in this way:

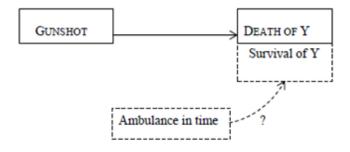


Fig. 2

The cognitive scientist Ruth Byrne calls such counterfactual hypotheses 'enabling conditions'.³⁵ The difference between them, and 'strong causal relations', is that they actively involve an imagination of another hypothetical reality:

[p]eople mentally represent the strong causal relation by thinking initially about just one possibility, the co-occurrence of the cause and its outcome, whereas they mentally represent the enabling relation by thinking about the enabler and its outcome, and they can readily think about the absence of both.³⁶

The crucial difference is that counterfactual hypotheses, contrary to causation in actual sequences of events, can be changed: "[c]auses can seem immutable because people keep in mind just a single possibility", while "enablers seem mutable because people readily think about two possibilities".³⁷ Contrary to bare

³⁵ Ibid 117. The examples here are not Byrne's, but my own.

³⁶ Ibid 118-9.

³⁷ Ibid 119.

inferences from actual sequences of events, counterfactual hypotheses are "goal directed to focus on possibilities that undo the outcome".³⁸

The task of imagining alternatives to reality represents a greater cognitive burden. According to Byrne it is *normal* to retain only two – the actual and the conterfactual.³⁹ Clearly, it is *possible* to imagine more than two scenarios. We may for instance ask: would person Y still have died if he had worn an orange hunter's vest? Would he still have died if both hunters had properly followed the recommended regulations for communication? Would he still have died if person X had not panicked and fled, so that the ambulance first was contacted half an hour later by another hunter casually nearby? Would he still have died if the operation had not been delayed, due to a temporary closure of one of the operation halls after a flooding the day before?

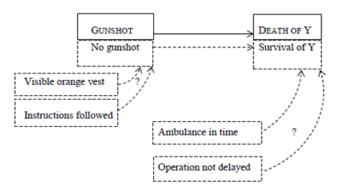


Fig. 3

The difference between causation in actual courses of events and counterfactual hypotheses can also be illustrated with cases concerning the alleged negligent failure from local authorities to act when a child had suffered from lack of decent care from parents. The cases are typically brought by persons in their early adulthood, alleging that their psychological, or even physiological problems, are caused by the authority's negligence.⁴⁰ Here, the assessment of causation must necessarily come in two stages: first, the question of whether the parents' behavior was a cause – in the actual sequences of events – of the child's condition. Other explanations for the plaintiff's condition – in the child's environment or genetical factors – must be pitted against what general knowledge there is about how parents' neglect can cause later problems in life.

³⁸ Ibid.

³⁹ Ibid 121

⁴⁰ It is well established in Norwegian law that municipalities may become liable for failures to act and take children into care. The case will often turn on whether the failure to act was negligent, see e.g the Supreme Court case in Rt. 2003, 1468, or whether there is causation.

Only when this assessment is concluded in the affirmative, will the next question, of whether the authorities would have prevented the damage to the plaintiff, be relevant to ask. Again, the assessment may be quite difficult, as there is little clear conclusive empirical evidence – on a group level – for the efficacy of the authorities' means, such as placements out of the family.

The distinction between causation in actual courses of events and counterfactual hypotheses is often not clearly conveyed in language. It is often necessary to get around certain words and expressions in order to clarify the counterfactual hypothesis. This is already the case for the word 'damage', 'Schaden' in German, 'dommage' in French, 'skade' in Norwegian. This concept is often so abstract as to denote more generally the contrast between the actual state of events and the hypothetical state of events where the negligent acts did not happen. There are also other examples. Take, for instance, the situation when the 'cause' denotes a failure, the lack of something, an unforeseen circumstance, counter to what we otherwise would expect. Take this example: "the ice on the road caused the auto accident because the road failed to transmit its usual frictional force to the tires".41 Another example is that a train crash was caused by a lack of signals.⁴² These statements presuppose counterfactual inquiries in order to make sense of the causal statement. This is also the case for situations where the events are described in relative terms, such as the speed of a car on the highway. Was the car driving at 100 km/h a cause of the accident? We see that the answer requires reference to alternative scenarios, where the speed has been reduced. In these situations we are not solely faced with an actual 'cause' as defined above in II B, as the description of the event depends on a contrast with other, hypothetical events.

The reason why the distinction between the actual and the hypothetical can be so hard to convey clearly in language, is presumably that the boundary between fact and fiction is not always an obvious one, as the mind works in the same way when it tries to understand actual events as when it tries to understand fictional ones: there is no red light coming on each time we imagine alternatives to reality. The distinction between facts and hypotheticals is something that we actively must make, and that we can only make after we have settled what the actual facts are.

⁴¹ D. Fair, 'Causation and the flow of energy' (1979) 14 *Erkenntnis* 219, 248, also cited in R. W. Wright, 'The NESS Account: Response to Criticisms' in R. Goldberg (ed), *Perspectives on Causation* (Hart 2011) 314.

⁴² H.L.A. Hart and T. Honoré, Causation in the Law (Oxford University Press, 2nd ed, 1985) 131.

C Why Causation in Actual Courses of Events Should Not Be Conflated With Counterfactuals

Causation in a actual courses of events should not be conflated with counterfactual hypotheses. Psychological studies of jury members show that asking the question counterfactually, influences the way in which the jurors think about the case. Instead of looking for co-variating patterns of cause and effect, they will be looking for how the events could have been different, e.g. how an injury could have been avoided.⁴³

Why this is a problem can be illustrated with the example above: would person Y have died *but for* the gunshot? It is plainly obvious that Y died from the gunshot. Instead of interpreting this as a stilted way to check that we got the causal explanation right, we may start looking for something else. Now, the 'effect', "death", is no longer understood as referring to the one event whereby Y actually died – but to "death" in the abstract:

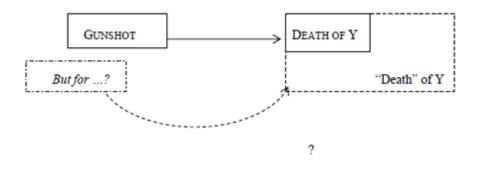


Fig. 4

The reformulation of the original statement has altered its meaning. This may have the side effect of making the inquiry concentrate on all sorts of alternative hypothetical ways the hunter *could have* died instead. Let us assume that a third hunter had spotted Y too, thought he had seen the movement of an animal, had raised his gun, but fired his shot just milliseconds after Y was shot, so that the bullet slightly dodged Y just as this one jolted while being hit by X, and hit a tree just behind Y. Let us also assume that Y was seriously ill with cancer, a malignant melanoma that had spread too far for his life to be saved within the year. When

⁴³ B. Spellman and A. Kincannon, 'The relation between counterfactual ('but for') and causal reasoning: Experimental findings and implications for jurors' decisions' (2001) 64 *Law and Contemporary Problems* 241; J. A. Cantone, 'Counterfactual thinking, causation and covariation in mock juror assessments of negligence' (2020) 123 *Psychological Reports* 371.

the statement about the death of Y by gunshot is reformulated with the but for test, it suddenly starts referring to those other risk factors as well:

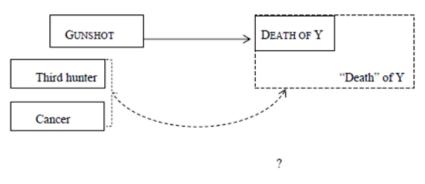


Fig. 5

To what extent are these risk factors relevant? This seems to be dependent on how the hypothetical scenario – 'death of Y' in the abstract – is defined. But this definition is notoriously unclear. If anything is certain, it is that Y at some point will pass away. The hypothetical situation is therefore, by necessity, defined in a narrow manner, it does not include any and all conditions that would have led to the death of Y. It suffers from the usual lack of clarity that follows with anything implicit, it will not say anything clear about the relevance of hypothetical risk factors. In other words, we started out with a statement that asserted causation, but the reformulation of the statement can lead us to exclude causation. And it is not possible to fully escape this ambiguity by attempting to qualify the definition of 'death of Y', for instance by clarifying that we mean 'death of Y at that time'. So long as we are insisting on asking a counterfactual question, and therefore not merely asking what caused the actual death of Y, this ambiguity has a tendency to persist.

D The Two Types of Counterfactual Hypotheses

A counterfactual hypothesis is not pure fiction; as it is counterfactual, it runs 'counter' to 'facts'. There are two types of counterfactual hypotheses, depending on how the hypothesis is grounded in facts. The first can, according to terminology from research methodology in history, be called a 'negative counterfactual hypothesis'.⁴⁴

⁴⁴ See R. N Strassfeld, 'If . . . Counterfactuals in the law' (1992) 60 *George Washington Law Review* 339, 388, with reference to Professor Jarle Simensen of University of Oslo. See further (in Norwegian)

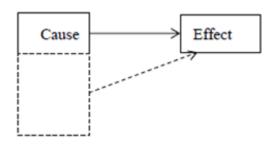


Fig. 6

The negative counterfactual hypothesis asks whether a certain event – here the 'effect' – would *not* have happened if we alter the prior events, here the facts on the 'cause' side. This type of counterfactual hypothesis is employed in the law whenever we ask if the defendant would have avoided the damage had he or she acted in a non-negligent manner. For example, the question may be whether the driver could have avoided a car crash and subsequent injury to passengers if she had driven in a non-negligent manner. This type of counterfactual hypothesis is used to establish what the Norwegian scholar Nils Nygaard has called a "hindingssammenheng", or "avoidance relation". I will elaborate on this further below in IV C.

The second type of counterfactual hypothesis is the 'positive counterfactual hypothesis'.

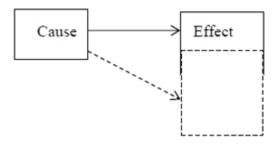


Fig. 7

According to historian Tor Egil Førland, this is "much bolder" than the previous one, as it asks what would have happened after a certain event – now and possibly in to the future. It therefore requires greater caution.⁴⁵ This type of

O. Dahl, Om årsaksproblemer i historisk forskning (Universitetsforlaget, 1956); T. E. Førland

^{&#}x27;Årsaksproblemer i historisk forskning' (2012) 54 Tidsskrift for samfunssforskning 355.

⁴⁵ T. E. Førland 'Årsaksproblemer i historisk forskning' (2012) 54 *Tidsskrift for samfunssforskning* 355, 357.

counterfactual hypothesis is used in tort law to arrive at the extent of the damage, and consequently the *economic loss*. For example, the question may be what income the injured passenger would have had in the period since the car accident, and into the future, had she not been injured so gravely in the accident that she can no longer occupy the same profession as before. This type of counterfactual hypothesis does not proceed from an 'effect' in order to ask *why* this effect happened. To the contrary, the 'effect', i.e. the assessment of extent of the damage and the loss, is what the inquiry itself is meant to uncover. This type of counterfactual hypothesis is used to establish what in Norwegian law has been called an "omfangssammenheng" or "extent relation". I will elaborate on this further below in IV D.

It should be noted that the counterfactual hypotheses presented here are meant as a suggestion for a primarily theoretical framework, not necessarily dependent upon the meaning conferred upon the legal concepts within the tort law rule, such as e.g. 'damage', 'initial harm', 'violation of the plaintiff's interest'. The defining feature of a negative counterfactual hypothesis, as presented here, is merely that it asks whether *some actual event* (an 'effect') could have been avoided if preceding circumstances were different. In tort law cases, this event is typically an injury or other event where physical damage has occurred. But it need not be, as I will return to below,⁴⁶ for instance in cases of pure economic loss. Furthermore, the defining feature of a positive counterfactual hypothesis is merely that it requires us to alter *some actual event* (a 'cause') and then speculate as to how reality would have unfolded now and into the future given that alteration. In tort law cases, this event is also typically an injury or other event where physical damage has occurred, but it need not be as I will return to below.⁴⁷

Finally, it should be added that general statements on 'causation' often requires a combination of these two types of counterfactual hypotheses, typically also in combination with a presupposition of causation in an actual course of events. For instance, if we broadly claim that the driver's *negligence* caused the passenger's economic *loss* following an injury, we might simultaneously be presupposing a *negative* counterfactual hypothesis – that non-negligent driving would have avoided the injury – and a *positive* counterfactual hypothesis – that without the injury the passenger would have had a higher income (and lower expenses). Upon closer inspection, it can therefore become clear that a broad

⁴⁶ See IV C below.

⁴⁷ See IV D below.

statement on 'causation' between abstract concepts applied to the facts at hand, such as *negligence* and *loss*, can require both types of counterfactual hypotheses. Futhermore, both hypotheses will be centered around a particular event – typically an injury or other event where physical damage has occurred – that forms a starting point for both a negative and a positive counterfactual hypothesis. Added to this is the often equally important presupposition of causation in the *actual* course of events – for instance that the car crash actually led to the injury in question, and that the current state of the plaintiff was actually caused by this injury. A broad statement on 'causation' in a tort law case, will therefore, upon closer inspection, often presuppose the existence of all *three* categories of causation.

IV THE THREE CATEGORIES OF CAUSATION IN TORT LAW

A Introduction

I have presented a theoretical background for understanding causation in tort law, and the role played by counterfactual assessments. Within the format of this article, I will now superficially show how this can be operationalised in practical tort law. Here, I will draw inspiration from the writings of the aforementioned scholar Nils Nygaard.⁴⁸ As presented in the introduction to this article, Nygaard clearly formulated the difference between the different types of causation in tort law. Nygaard described these categories as "rules".⁴⁹ In my opinion, the three categories correspond to fundamentally different intellectual inquiries, as mentioned above. In this respect, a lack of attention to the difference between them creates not so much a risk of not formulating existing rules properly, but a risk of not expressing oneself clearly.

Nygaard devised a test for causation in actual courses of events that he called 'realiseringslæren'. It can be translated as the 'doctrine of materialisation'. I will present this below in B. Furthermore, he called the relationship established through a negative counterfactual hypothesis 'hindringssammenheng'. It can be translated as 'avoidance relation'. I will present this below in C. Finally, his

⁴⁸ His ideas have been expounded in numerous articles and books, almost all in Norwegian, inter alia in his PhD thesis on negligence in Norwegian tort law, *Aktløysevurderinga i norsk rettspraksis* (Universitetsforlaget, 1974), in a book on causation and evidence assessment co-written with O. Hagen and S. Nome Årsak, og bevis (Tano, 1986) and the textbook in tort law *Skade og ansvar* (Universitetsforlaget, 2007). Perhaps as a consequence of Nygaard's place of work in the relatively young law faculty in Bergen, his views remained less influential in the capital, Oslo, and consequently on the development of tort law in general.

⁴⁹ N. Nygaard, 'Placing the Burden of Proof of a Hypothetical Cause' (2001) 41 Scandinavian Studies in Law 421, 422-3.

student and later professor Magne Strandberg has labelled the relationship established through positive counterfactual hypotheses 'omfangssammenheng'. This can be translated as 'extent relation'. I will present that below in D.

B Causation in Actual Sequences of Events - 'Realiseringslæren'

For actual sequences of events, Nygaard formulated a doctrine he called 'realiseringslæren', which can be translated as the 'doctrine of materialisation'. Nygaard wrote that the test to be met was first that a candidate 'cause' had occurred ('forekomme'), second that it had a capacity to cause ('årsaksevne') and third that this had materialised in the effect at hand ('realisert seg'). ⁵⁰ The first is a question of evidence. The latter two criteria are relevant here. The distinction they establish, between the assessment of a 'capacity to cause' and an assessment of whether this had 'materialised' in the actual damage, is found in numerous different forms. It has been called a distinction between 'general causation' and 'specific causation', ⁵¹ or a distinction between 'causality' and 'causation'. ⁵² More generally, it corresponds to the distinction between the *general*, prior knowledge we employ when we are about to explain a sequence of events, and the task of employing this knowledge in order to provide an explanation in the *particular* case at hand. ⁵³

The requirement of causation has usually not been formulated explicitly with reference to Nygaard's terminology in Norwegian court cases. But judges often formulate the causation requirement along these lines when assessing the evidence at hand. An example is the seminal Norwegian Supreme Court case where the 'but for' test was accepted as the official formulation of the causation requirement.⁵⁴ This case concerned the liability of a pharmaceutical company for the arterial thrombosis and subsequent death of a woman following the intake of contraceptives. In this case, the Supreme Court judge Steinar Tjomsland started by announcing the 'but for' test as his starting point.⁵⁵ This part of the judgment has been cited extensively later. But when the same judge was reviewing the

⁵⁰ See inter alia Nils Nygaard, *Skade og ansvar* (Universitetsforlaget 2007) 324-5.

⁵¹ See e.g C. F. Cranor, *Toxic Torts. Science, Law and the Possibility of Justice* (Cambridge University Press, 2nd ed, 2016) 8.

⁵² J. Hellner, 'Causality and causation in the law' (2000) 40 Scandinavian Studies in Law 111, 115.

⁵³ Note that a similar and metaphysical distinction has been drawn between so-called type and token causation. This is not necessarily the same as the distinction between capacity to cause and the materialisation of this capacity to cause explained here.

⁵⁴ Rt. 1992, 64.

⁵⁵ Rt. 1992, 62, 69.

evidence, the questions were first whether contraceptives generally create an increased risk of arterial thrombosis, and then whether this had materialised itself in the case at hand.56

C Negative Counterfactual Hypotheses – 'Hindringssammenheng'

As part of his doctoral thesis on negligence in Norwegian tort law, Nygaard devised the test of 'hindringssammenheng'57 for the counterfactual inquiries that have been called 'negative counterfactual hypotheses' here. This translates as 'avoidance relation', and consists in asking the question of whether the damage would have been avoided if the plaintiff had acted in a non-negligent way. The test is relevant insofar as the negligence standard is purely objective, i.e. if it requires contrasting the defendant's acts with an objective norm of how the defendant should have acted. Conversely, if the defendant is found to have acted intentionally, i.e. points his gun at the defendant's leg and shot with a view to cause damage, there is less need for a counterfactual analysis of how the defendant should have acted in order to conclude that there is causation. Here it will often be sufficient to establish causation in the actual course of events. without recourse to a counterfactual hypothesis. In the following, I will present some general features of this inquiry, focusing on the questions that are necessary to ask, and the criteria that can be used to establish the tenacity of the counterfactual hypothesis.

In order to get at an 'avoidance relation', it is *first* necessary to define the event which is to be avoided, and second, it is necessary to meet some criterion of sufficient 'avoidance'. The *first* step is often obvious. Typically it can be an injury event such as a car accident.⁵⁸ For other types of loss than those ensuing from physical damage, it will be another type of event. For expenses that have become necessary to prevent likely damage, it will be an event that makes it necessary to incur such expenses; for lost years of life, the one reducing life expectancy.⁵⁹ In cases of pure economic loss, liability often typically depends upon certain facts constituting e.g. a transgression of a statutory rule, or an abuse of a trust, a legitimate expectation, or similar quasi-contractual situation, and in such

⁵⁶ Rt. 1992, 64, 71: "Først vil jeg behandle spørsmålet om p-pillebruk generelt medfører økt risiko for arterielle tromboser. Deretter skal jeg se på om denne risikoen har realisert seg i dette tilfellet" ["First I will assess the question of whether the use of contraceptives generally creates an increased risk of arterial tromboses. Then I will assess whether this risk had materialised in this case"].

⁵⁷ See N. Nygaard, Aktløysevurderinga i norsk rettspraksis (Universitetsforlaget, 1974).

⁵⁸ See here the example above, in III D.

⁵⁹ Yet, in Gregg v Scott [2005] UKHL 2 at 226 the House of Lords concluded against liability in such a case, as the "adverse outcome" had "happily [...] not so far manifested". A different conclusion was reached by the Supreme Court of Washington in Herskovits v. Group Health Corp., 664 P.2d 474.

situations it may be less relevant to look for an 'avoidance relation'. Some exceptions exist, for instance, in cases in which public authorities are sued for not having avoided private parties' losses. ⁶⁰ In any case, it is adviseable to define this event clearly in order to formulate the counterfactual hypothesis precisely.

The second step consists in meeting a threshold of 'avoidance' in the hypothetical. The question here is what this means. Nygaard formulated this broadly, as a question of whether avoidance would have been "effective", and "would have prevented" the damage. For all practical purposes, the question will invariably be whether the risk of damage would have been sufficiently decreased in the hypothetical. In this respect, it does not really matter if the question is asked in the inverse – i.e. as a question of whether the defendant's conduct in the actual courses of events increased the risk of damage. This is a common test for causation in English negligence law, where the question is whether there was a "material increase in risk". In my opinion, it is still clearer to perform the counterfactual analysis by starting with the actual events, i.e. to ask whether a hypothetical non-negligent situation would have decreased the risk.

The question of 'avoidance' may somewhat superficially be understood as one of evidence. In many situations such cases are solved in Norwegian law with reference to the burden of proof or standard of proof. In Norway, it must have been more probable than not that the damage would have been avoided in the hypothetical, and although the plaintiff has the burden of proof for his claim for damages, the burden of proof for the contention that damage would not have

⁶⁰ See e.g Three Rivers District Council v Governor and Company of The Bank of England [2000] 3 CMLR 205. Here the question was whether regulatory authorities should have revoked a banking license and probably would have contributed to avoiding economic loss with the bank's depositors. The crown was acquitted. The example is perhaps not the best, as the causation requirement was not central to the conclusion. Another example is the Norwegian Supreme court case reported in Rt. 1991, 952 Here, the state was sued in negligence for not having controlled the statuory duty of a charter company to provide a financial guarantee to customers. The customers who had pre-payed their travels, lost their money when the company went bankrupt. The state was acquitted. But as in Three Rivers, the causation requirement was not decisive.

⁶¹ N. Nygaard, *Aktløysevurderinga i norsk rettspraksis* (Universitetsforlaget, 1974) 245. It has been argued that Nygaard was unclear as to whether the damage should have been avoided, or if it was sufficient just to reduce the risk of damage, cf M. Strandberg, 'Teorien om hindringssammenheng som vilkår for erstatningsansvar' (2012) 9(4) *Tidsskrift for erstatningsrett, velferdsrett og forsikringsrett* 240, 252-4. In my opinion, it is in any case not advisable to require avoidance as a matter of certainty. The question concerns a hypothetical situation, and certainty cannot logically be had

⁶² See McGhee v National Coal Board [1972] WLR 1; S. Green, Causation in negligence (Hart, 2015)123-30.

been avoided in the hypothetical is often put on the defendant.⁶³ Rules on degree of probability and burden of proof are however notoriously difficult to apply clearly in practice. The hypothetical nature of the inquiry leaves open the question of how much guidance can be found in the rules on the evidence assessment. It is almost impossible to assess how important those rules have been in the judge's own decision making process. Comparisons with other jurisdictions underline this point. For example, Belgian law requires something close to certainty, just as in French law,⁶⁴ but it is debatable whether Belgian and French courts are more restrictive on the whole than courts from other countries. In a notorious Belgian case, a woman spent over 20 years arguing she would not have been assaulted but for the negligence of the police. After several rounds in the higher *Cassation court*, she was first awarded damages stipulating her probability of not being assaulted to 50 %, then 80 %, and, finally, 100 % - only then meeting the formal probability requirement in Belgian law.⁶⁵

In fact, the question of whether the injury or other relevant event could be avoided, cannot only be understood as one of evidence. The counterfactual hypothesis cannot be verified by reference to evidence alone, as opposed to the situation in which we are asking for the most likely actual scenario and its most likely causal explanation. Therefore, the choice between different hypothetical scenarios is to a large degree guided by normative assumptions, e.g. concerning normative standards of conduct of the defendant as well as the plaintiff. ⁶⁶ As mentioned above, counterfactual hypotheses are "goal directed". ⁶⁷

An example of how normative assumptions may play a decisive role, is the way in which courts treat negligent lack of information about risk of complications prior to an operation. The case arises when complication then occurs and the plaintiff sues for damages. Here, the judge is arguably faced with a choice between different ways to construct the facts and hypotheticals in the case. On the one hand, the judge, may proceed from the starting point that "the crucial issue for liability for negligence [is] that the doctor carried out the

⁶³ See the supreme court cases reported in Rt. 1962, 416; Rt. 1984, 466. See further N. Nygaard,

^{&#}x27;Placing the Burden of Proof of a Hypothetical Cause' (2001) 41 Scandinavian Studies in Law 421, 434-8.

⁶⁴ S. Steel, *Proof of Causation in Tort Law* (Cambridge University Press, 2015) 59-61.

⁶⁵ See J. L. Fagnart, 'Petite navigation dans les méandres de la causalité' (2006) Revue génerale des assurances et des responsabilités 14.080 n 36.

⁶⁶ See inter alia J. Schaffer, 'Contrastive causation in the law' (2010) 16 *Legal Theory* 259, who claims law's concept of causation depends on a *contrast* with a hypothetical situation in which defendant acted *lawfully* – i.e. a normative assumption.

⁶⁷ R. Byrne, *The Rational Imagination* (MIT Press, 2005) 121.

treatment without consent and thereby caused the injury",⁶⁸ thereby disregarding the counterfactual "since the treatment undoubtedly caused the injury".⁶⁹ In the same vein, the judge may, perhaps less convincingly, construct a hypothetical by stipulating that *this* particular treatment would not have happened, and that low probability of complications at the outset means that such injury is improbable – meaning that complications would not have occurred in the hypothetical.⁷⁰ On the other hand, the judge may uphold that the "injury would have been as liable to occur whenever the surgery was performed and whoever performed it", and that "the risk would have been precisely the same whether it was done then or later or by that competent surgeon or by another" – meaning that complications would have occurred in the hypothetical as well.⁷¹ Underpinning the different constructions of the hypothetical scenarios are competing normative assumptions.⁷²

The role of normative assumptions is also well illustrated with the situation in which there are *several* and *mutually contradicting hypothetical* 'causes'. A famous example is this:

Suppose A is entering a desert. B secretly empties A's water keg and weights it with salt. A takes the keg into the desert where C steals it, both A and C thinking it contains water. A dies of thirst. Who killed him?.⁷³

Another example is the facts from the case of *Saunders v System Birmingham Co. v. Adams.*⁷⁴ Here, a driver negligently omitted to apply the brakes, but the brakes did not function. The question of what the causation requirement means in such cases, have lit numerous theoretical discussions.⁷⁵ But in both situations,

⁶⁸ A. Agell, 'The conceptual relationship between medical malpractice and the lack of informed consent' in L. Westerhall and C. Phillips (eds), *Patient's Rights* (Nerenius & Santérus Publishers, 1994) 96-7, cited in H. Sinding-Aasen, 'Kravet om årsakssammenheng ved pasientskadeerstatning for informasjonss-vikt', in K. Krüger, K. Lilleholt and G. Holgersen (eds), *Nybrott og odling: Festskrift til Nils Nygaard på 70 årsdagen* (Fagbokforlaget, 2002) 232.

⁷⁰ Chester v Afshar [2002] UKHL 41, 11 (Lord Steyn).

⁷¹ Chester v Afshar [2002] UKHL 41, 8-9 (Lord Bingham), 31 (Lord Hoffman).

⁷² In the case of *Chester v Afshar* the issue was resolved by making explicit reference to normative assumptions – the "autonomy and dignity" of the patient: ibid 29 (Lord Steyn).

⁷³ J. A. McLaughlin, 'Proximate cause' (1925) 39 Harvard Law Review 149, 155 fn 25.

⁷⁴ Alabama Supreme Court 31. May 1928, 117 So. 72 (Ala. 1928).

⁷⁵ See notably I. Puppe and R. W. Wright, 'Causation in the Law: Philosophy, Doctrine and Practice' in M Infantino and E Zervogianni (eds), *Causation in European Tort Law* (Cambridge University Press, 2017) 17-59, 51-4. See for an earlier discussion where Wright expounds a different view, R. W. Wright, 'The NESS Account: Response to criticisms' in R. Goldberg (ed), *Perspectives on Causation* (Hart 2011) 317-21.

the problem we are facing is first and foremost a choice between mutually exclusive negative counterfactual hypotheses. Courts cannot settle the veracity of these competing counterfactual hypotheses as a question of evidence, i.e. in the same way as they can settle the facts of the case on the balance of probabilitites and their most likely causal explanation. And there is no other objective way, in my opinion, to choose between either counterfactual: it is debatable which results can be deduced from the concept of causation,⁷⁶ and courts are probably not the proper arena to settle this debate, i.e. by devising a concept of causation from which sufficiently incontestable results can be deduced. We are therefore primarily left with a normative question, of whether either act should entail liability.

D Positive Counterfactual Hypotheses – 'Omfangssammenheng'

As mentioned previously, Nygaard acknowledged a third form of causation, which has been labelled 'omfangssammenheng' by his student and later colleague, Professor Magne Strandberg at the University of Bergen.⁷⁷ This can be translated to 'extent relationship'. It corresponds to the German 'haftungsausfüllende Kausalität' and the English 'loss causation'. It consists in creating what historians would call a 'positive counterfactual hypothesis', where the question is what would have happened now and in the future in the absence of a certain event – e.g. an injury event. It is a "much bolder" form of inquiry and should be treated with caution.⁷⁸

The language of tort law obscures the specificities of this assessment. 'Damage' is held in the abstract to include physical as well as economic damage. This has been so since the very first civil law cases in tort law. For instance, on the basis of the French Code Civil from 1804 art. 1382 (now art. 1240) compensation was awarded to competitors of an unlicensed pharmacist as early as in 1833, in the arrêt Baget, albeit as a part of so-called 'dommage moral'.⁷⁹ Later, in 1855, the German scholar Friedrich Mommsen, defined 'damage' in general as the difference between the actual situation and a hypothetical situation in the so-

⁷⁶ But see I. Puppe and R. W. Wright, 'Causation in the Law: Philosophy, Doctrine and Practice' in M Infantino and E Zervogianni (eds), *Causation in European Tort Law* (Cambridge University Press, 2017) 17-59, 51-4 with suggestions for objective criteria here.

⁷⁷ See M. Strandberg, *Skadelidtes hypotetiske inntekt – om erstatningsutmåling og bevis* (Fagbokforlaget, 2005).

⁷⁸ T. E. Førland 'Årsaksproblemer i historisk forskning' (2012) 54 *Tidsskrift for samfunnsforskning* 355, 357.

⁷⁹ Cour de Cassation, Journal du Palais 25 (1833) s. 574.

called 'Differenzhypothese'.⁸⁰ This resulted in a clear distinction in the German civil code between causation for ground for liability, the 'haftungsbegründende Kausalität', and causation pertaining to the assessment of damages, the 'haftungsausfüllende Kausalität'. This is a distinction that is quite specific in German law. It is rarely formulated clearly in Norwegian law, except in scholarship on 'omfangssammenheng' or 'extent relation'.

As with the negative counterfactual hypothesis, it is first necessary to define the event from which the counterfactual analysis will be performed, and second it is necessary to devise how the extent assessment should be made. Again, the first step may in many situations be quite obvious: the injury event, i.e. a car crash, will typically represent the starting point for the counterfactual analysis. From there, the court will proceed to constructing an actual and hypothetical accounting and budget. For pure economic loss, the starting point will typically be the breach of proper conduct, either as a transgression of a statutory rule, or as an abuse of trust, a legitimate expectation, or similar quasi-contractual situation. In many situations, it is the very existence of such standards of conduct that constitute the economic loss. This is for instance the case when plaintiff sues for damages over the breach of a competitive privilege such as an intellectual property; barring intellectual property, the suffering of loss of income through competition is not an economic loss relevant to tort law. In general, the economic loss will typically consist in lower net income over a certain period, or a loss on a particular transaction, either deduced by comparing to a situation in which a correct price was given, or a situation in which the transaction did not occur at all. For pure economic loss, further consequences are often difficult to envisage beyond the price of not having money one should have had - which can expressed by means of a reasonable interest rate.

The *second* step is to settle the right counterfactual. Just as for the negative counterfactual hypotheses mentioned above, this step may superficially be likened to that of an evidence assessment. At the outset, Norwegian law places the burden of proof for the loss on the plaintiff, but the burden of proof for the claim that loss would have occurred in the counterfactual as well, with the defendant. An example is the claim from public authorities, that barring the illegal interference in the plaintiff's rights, there would still have been a legal basis

⁸⁰ F. Mommsen, Beiträge zum Obligationenrecht. Zweite Abtheilung: Zur Lehre von dem Interesse (Braunschweig, 1855) 3, cited in S. Koch, 'Det erstatningsrettslige skadebegrepet – en sammenligning mellom tysk og norsk rett' (2010) 7(4) Tidsskrift for erstatningsrett, forsikringsrett og velferdsrett 250, 261.

for the interference, and the authorities would have performed it regardless.⁸¹ In principle, the mere occurrence of later events are in themselves irrelevant to the construction of the counterfactual scenario. The question must be whether this event was probable at the outset. For instance, if a house is torn down by the fire brigade in order to avoid the further spread of fire, it can safely be assumed that the house most certainly would have burnt down had it not been for the fire brigades' actions.⁸² Conversely, the later occurrence of an unrelated disease is less acceptable to include in the counterfactual scenario.⁸³ More difficult are weather events, such as the later occurrence of a storm, which at the outset may seem more or less probable. There are several earlier cases in Norwegian law where such weather events have led to the reduction of the plaintiff's claim.⁸⁴

As is the case for the 'avoidance relation', or 'negative counterfactual hypothesis' depicted above, normative considerations are paramount. Consider e.g the situation, which has seemed to stir a particular amount of disagreement and discussions amongst legal theorists, where damage would have occurred anyways due to another negligent or intented act (or other act entailing liability). In the classical example from Roman law, a slave is first poisoned, but before the poison takes his life, he is killed by the sword of another person.⁸⁵ Should the second assailant be free of liability with reference to the first assailant's poisoning? From the standpoint of the plaintiff, it seems rather harsh to award no compensation at all because the plaintiff has been the victim of not one, but two, murderous acts. We are therefore again faced with a choice of policy, for the concept of causation itself does not clearly solve the issue of what compensation should be awarded. Admittedly, this must be contrasted with the question of whether also the *first* assailant, the one responsible for the poisoning, should be held liable. The Roman jurist Julian would hold this assailant responsible as well under the Lex Aquilia, albeit with different calculations of the value of the lost slave as a consequence of the different time of death.86 Yet this person has not

⁸² See the Norwegian supreme court case reported in Rt. 1888, 712. Consider also the facts in the case from New Hampshire Supreme Court 5 April 1932 *Dillon v Twin State Gas & Electric Co.* 163 A 111. A boy fell from a tall bridge but died when he hit electric wires over the ground. The question of whether the boy would have died from the fall without the wiring, and if not, what the boy's quality of life would have been, was put the jury for the purposes of calculating the damages.

⁸¹ See the Rt. 1997, 343.

⁸³ Baker v Willoughby [1970] AC 467. Contrast with Jobling v Associated Dairies [1982] AC 794 where the condition was held to be "dormant, at the date of the original injury".

⁸⁴ Supreme court cases reported in Rt. 1881, 33 and 1939, 736.

⁸⁵ Digests [D 9.2.51]; H Scott, 'Killing and causing harm in Roman law' (2013) 129 Law Quarterly Review 101.

⁸⁶ He wrote in D. 9.2.51: "[I]n case anyone thinks that we have reached an absurd conclusion, let him ponder carefully how much more absurd it would be to hold that neither should be liable under the lex Aquilia, or that one should be held liable rather than the other. Misdeeds should not escape

caused the death of the slave in the actual course of event. For this person, liability would solely depend upon a counterfactual hypothesis, that the slave *would have* died if the second assailant did not kill the slave. Consequently, it is less convincing to claim this person has *caused* the death. In criminal law, there is typically a separate legal basis for liability for suchs attempts, which is lacking in tort law.

In general, the normative assumptions seem to be of even greater importance for the positive counterfactual hypothesis than for the negative counterfactual hypothesis. Arguably, there is a greater scope for different counterfactual hypotheses when the question is what generally would have happened in the past and into the future in the absence of a certain event, as opposed to the question of whether one particular event could have been avoided under altered prior circumstances. Consequently, the 'goal directedness' can become even more important as the guideline for devising the counterfactual scenario. For instance, there is a discussion in Norwegian law on whether compensation for income loss should be assessed against a backdrop of median salaries⁸⁷ – and that might become more important with rising income disparities. This could be said to underscore the importance of a normative demand for some distributive justice in tort law. In previous case law in many countries, and in international tribunals such as the European Court of Human Rights (ECHR), the assessment may even morph into a general opinion about what constitutes a 'just satisfaction'.⁸⁸

unpunished, and it is not easy to decide which one should rather be held liable under the lex", quoted in H Scott, 'Killing and causing harm in Roman law' (2013) 129 Law Quarterly Review 101, 104, 108. However, he represented a minority view, as Celsus, Marcellus and Ulpian all agreed that only the second assailant could be said to have "killed" ("occidere") the slave according the wording of the Lex Aquilia ch. 1, whereas the first only would have "wounded" him under ch. 3, see H Scott, 'Killing and causing harm in Roman law' (2013) 129 Law Quarterly Review 101, 107.

https://www.echr.coe.int/Documents/PD_satisfaction_claims_ENG.pdf (last visited 14 12 2021).

⁸⁷ Cf. the case reported in Rt. 2003, 338. The supreme court rejected to compensate income loss directly on the basis of median salaries. But plaintiff was required to meet a higher burden of proof when he claimed that he would have had a significant increase in salary barring the accident.
88 See the ECHR's practice directions on "just satisfaction", second paragraph: "regard will be had to the particular features of each case. The Court may decide that for some heads of alleged prejudice the finding of vio-lation constitutes in itself sufficient just satisfaction, without there be-ing any call to afford financial compensation. It may also find reasons of equity to award less than the value of the actual damage sustained or the costs and expenses actually incurred, or even not to make any award at all. This may be the case, for example, if the situation complained of, the amount of damage or the level of the costs is due to the applicant's own fault. In setting the amount of an award, the Court may also consider the respective positions of the applicant as the party injured by a violation and the Contracting Party as responsible for the public interest. Finally, the Court will normally take into account the local economic circumstances" available at

V CONCLUSION

In this article, I have shown that there are three distinct forms of causal inquiry in tort law, a) causation in actual sequences of events, b) negative counterfactual hypotheses and c) positive counterfactual hypotheses. I have attempted to explain this theoretically, before illustrating how these inquiries may be formulated in practical tort law, inspired by the works of Norwegian scholar Nils Nygaard. It has not been my intention to provide answers to particular cases, but to highlight to process by which we get there. These conceptual issues are, in my opinion, essentially the same across jurisdictions.