

Further Ruminations on Cause-In-Fact

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1 Introduction¹

Causation has been characterised as the “spine of tort law”² and one can safely say that this topic has proven to be a true challenge for the anatomists, the legal scientists. Despite some claims to the contrary, the study of causation is not only a theoretical, academic exercise for the scientists but a subject of profound interest for law in practice. That does not mean that lawyers always rely or need to rely on any theory of causation to deal with causal questions. Most causal questions are dealt with implicitly and unreflecting, the same way many other theoretically complicated legal inquiries often are carried out implicitly and unreflecting. But in complicated cases may the theoretical examinations be valuable tools for the practising lawyer and the judge, and it is those cases that form the background for this essay.

In legal literature the analysis of causation has mostly been carried out within the study of tort or criminal law, even if causation is a tricky problem in many other areas.³ This essay will be restricted to tort law, which only means that the examples will be taken from tort law. The investigations could generally be applied at least also on criminal law. Furthermore, and more importantly, it will be restricted to negligence law, but the same analysis could be applied to strict liability situations as well, albeit with modifications.

¹ The author is grateful for the comments by Marcus Radetzki, Tony Törnqvist, Maria Yanez and Matt Tappsell on an earlier draft of this article.

² Bill Dufwa *Flera skadeståndsskyldiga*, Stockholm 1993, no. 2697 [hereinafter Dufwa].

³ For a Swedish survey on how causal questions enters into different areas of the law, see Jan Hellner *Causality and Causation in Law* in Justice, Morality and Society. A Tribute to Aleksander Peczenik, Lund 1997, p. 159 ff., (reprinted in *Scandinavian Studies in Law*, vol. 40, p. 111 ff) [hereinafter Hellner Causation]. Even if causation has mostly been dealt with in works on tort or criminal law it is not adequate to say that it has *only* been examined in these contexts. For instance, Knut Rodhe had an extensive investigation of causation from the perspective of the law of obligations in his *Obligationsrätt*, Lund 1956, p. 297 ff.

One can generally distinguish between three criteria which all need to be fulfilled for a court to hold a person liable in tort law. The first criterion is that there must have been a tortious conduct of some sort. This is dealt with within the *tortious-conduct inquiry*. Disregarding strict liability, the questions posed in this inquiry are typically if the defendant acted intentionally or negligently in the situation in question. In Swedish law these questions fall under the so-called "culpa-test".⁴ The second criterion is dealt with within what may be called the *actual-causation inquiry*: Did the intentional/negligent act of the defendant actually cause the damages or injuries of the plaintiff? The third criterion is that the act or event⁵ in question must be an adequate cause of the damages or the injuries of the plaintiff. This is in English legal terminology usually referred to as the proximate-cause inquiry, or with reference to such terms as "remoteness" or "foreseeability".⁶ In Sweden we would rather deal with it under the heading of "adequacy", the *adequacy-test*.⁷ According to this trichotomy only the second criterion deals with actual causation while the other two deal with normative questions.

The division between these three different elements is less of a banality than it may appear at first glance. In Sweden the distinction between cause-in-fact (the subject of the actual-causation inquiry) and legal causation (the subject of the adequacy test) sometimes seems a bit blurred, which contrasts with the strict division for instance in English law.⁸ The expression "adequate causation" is actually misleading, as is the similar "proximate-cause", because the inquiry under this heading is not a causal inquiry at all, but a normative evaluation of the

⁴ See Jan Hellner and Svante Johansson *Skadeståndsrätt*, 6 ed., Göteborg 2000, chapter 8 and passim [hereinafter Hellner & Johansson]. The text book of Hellner & Johansson must be considered as a standard work in contemporary Swedish tort law, but innumerable other references could also be given, cf. n. 10 below.

⁵ Whether causation is a link between events, facts or some other entities has been a matter of feverish debate among philosophers. These questions belong to the philosophical study of metaphysics and there is no possibility to deal with them in any meaningful way here, and it is probably not necessary to take a position in this context. See Tony Honoré *Necessary and Sufficient Conditions* in *The Philosophical Foundations of Tort Law*, Oxford 1995, p. 367 f. [hereinafter Honoré]. See for some, rather arbitrarily chosen, philosophical accounts Donald Davidson *Causal Relations* in *Essays on Actions and Events*, Oxford 1980, p. 149 ff., John L. Mackie *The Cement of the Universe*, Oxford 1974, chapter 10 [hereinafter Mackie], D. H. Mellor *The singularly affecting facts of causation* in *Matters of Metaphysics*, Cambridge 1991, p. 201 ff. (originally published in *Metaphysics and Morality: Essays in Honour of J. J. C. Smart*) and D. H. Mellor *The Facts of Causation*, London 1995.

⁶ Cf. B. S. Markesinis and S. F. Deakin *Tort Law*, 4 ed., Oxford 1999, p. 174 [hereinafter Markesinis & Deakin].

⁷ See Hellner & Johansson, op. cit. chapter 12. A thorough investigation is given in Håkan Andersson *Skyddsändamål och adekvans*, Uppsala 1993 [hereinafter Andersson], p. 29 ff.

⁸ Markesinis & Deakin write "It has become customary in the English law of torts to analyse the question of causation in two stages." The first stage concerns "factual causation", 'cause in fact' or 'but-for cause', while the second stage concerns legal causation, in which the judge asks "whether the link between the conduct and the ensuing loss was sufficiently close", op. cit. p. 174. Cf. A. M. Honoré *Causation and Remoteness of Damage* Int. Enc. Comp. L. XI Torts (1983), p. 67 [hereinafter Honoré Causation and Remoteness of Damage]. A clear distinction is made in Dufwa, op. cit. no. 2401.

results of the factual-causation inquiry.⁹ In the modern Swedish discussion on causation most emphasis has been on the adequacy-test and its rival the doctrine of protected interest.¹⁰

This essay will deal only with the question of factual causation and nothing will be said on the question of adequacy.¹¹ More specifically, the essay will account for the view that the criterion of factual causation in legal contexts requires that the prior event was a causally relevant condition of the latter event in which we are interested for the criterion to be fulfilled.¹² If the starting point is that a cause should be interpreted as a “causal condition” the following question is *which* conditions constitute a cause in this meaning. The two main approaches have previously been to focus either on conditions that are thought to be *necessary* for the effect (conditio sine qua non or but-for causes) or those that are thought to be *sufficient* for the effect. Within the Swedish discussion, one can not find any dominant, favoured approach for dealing with actual causation the way the so-called sine qua non test has been used in many other jurisdictions.¹³ This absence of a coherent theoretical approach has resulted in a somewhat sloppy “anything goes” attitude towards the actual-causation inquiry.

Preliminary, it may be said that many scholars also in Sweden (as well as in the other Scandinavian countries) have held that it generally is required that the tortious aspect of the defendant’s conduct is *necessary* for the damages, but few have taken a clear stand against other proposed approaches.¹⁴ When the

⁹ This standpoint will be made more clear through the rest of this essay.

¹⁰ The latter chiefly in Andersson, op. cit. Jan Kleineman discusses the implications of the doctrine of protected interest in so-called pure economic loss cases in *Ren förmögenhetsskada*, Stockholm 1987, p. 287 ff [hereinafter Kleineman]. Aleksander Peczenik deals not only with the normative side of causation but also with actual causation in his *Causes and Damages*, Lund 1979 [hereinafter Peczenik]. Regarding adequacy should also Hans Saxén *Adekvans och skada*, Åbo 1962, be mentioned [hereinafter Saxén Adekvans och skada].

¹¹ It should be stressed that the literature on the subject is immense, both legal and philosophical. Any ambition of completeness in covering even the Scandinavian literature in an essay such as this would therefore be vain. Other Scandinavian literature than Swedish is left out in this article, with some (mainly Finnish) exceptions. The interested reader will find many references to Scandinavian and other literature in Peczenik, op. cit.

¹² See Honoré, op. cit. p. 364. Cf. H. L. A. Hart & Tony Honoré *Causation in the Law*, 2 ed., Oxford 1985, *passim* [hereinafter Hart & Honoré].

¹³ See for comparative accounts on the application of the so-called sine qua non theory in other jurisdictions Honoré *Causation and Remoteness of Damage*, op. cit. p. 7 ff and Christian von Bar *The Common European Law of Torts*, Volume II, Oxford 2000, part 4 [hereinafter von Bar]. In English literature factual causation is sometimes even seen as synonymous with but-for causation, see above, n. 7.

¹⁴ See among the modern Swedish accounts on the subject Hellner & Johansson, op. cit. p. 197ff., Peczenik, op. cit. *passim*, Dufwa, op. cit. chapter 6, Marcus Radetzki *Orsak och skada*, Stockholm 1998, p. 88 ff, Andersson, op. cit. chapter 9, Anders Agell *Orsaksrekvisit och beviskrav i skadeståndsrätten* reprinted in “de lege”, Juridiska fakulteten i Uppsala årsbok 3, Uppsala 1993, p. 159 ff [hereinafter Agell]. Saxén, on the other hand, takes a more clear position for the sine qua non-criterion, Saxén *Adekvans och skada*, op. cit. p. 13 ff. and Hans Saxén *Skadeståndsrätt*, Åbo 1975, p. 53. Karlgrén also seems to equate causation with necessary conditions, what he calls “logical causation”, in *Skadeståndsrätt*, 5 ed., Stockholm 1972, p. 37 ff. [hereinafter Karlgrén]. Hellner also concludes that “[M]ost writers do not

problems of the sine qua non test have arisen, the attitude in Swedish law has been rather pragmatic. Most authors seem to hold that when the sine qua non approach fails, the notion of sufficiency could be used instead, but seldom with any clear information on in which situations this change of causal requirement is warranted. The same attitude is noted in the practice of the courts. Other approaches to the sine qua non test have been to elaborate the test to avoid the difficulties¹⁵, or to disregard of the fallible causal concepts and instead emphasise more concrete solutions.¹⁶ More polemical writers (in Sweden chiefly Lundstedt) have even held that theories of causation are totally irrelevant for the law.¹⁷

From an international point of view a dominant tendency in recent tort theory (among those who still believe in the possibility of a factual causation inquiry, some believe that the idea of factual causation is futile as such¹⁸) seems to be that the traditional focus on the sine qua non approach should be abandoned for other, more sophisticated, theories, often based in philosophical theories.¹⁹ These theories, I will argue, are better suited for dealing with some of the problems that have dominated the Swedish discussion on causation in tort law, namely problems of multiple causation and over determination. These ideas have, as far as I know, been met mostly with silence among Swedish scholars.²⁰ In the first part of the article I will briefly account for the philosophical background for the

seem to take any clear position on this point, or may be that they frame the problems in other terminology”, Hellner Causation, op. cit. p. 184.

¹⁵ See for instance Phillips Hult *Till frågan om konkurrerande skadeorsaker* in *Juridisk debatt*, Uppsala 1952, p. 90 ff., p. 118 [hereinafter Hult].

¹⁶ See for instance the reasoning in Jan Hellner *Skadeståndsrätten. En introduktion*, 2 ed., Göteborg 2000, p. 67, where it is concluded that in a situation of over-determination where two persons each and independently are responsible for actions which would have lead to the death of another person, so that none of these actions are necessary but both are independently sufficient for the effect (=the death of the victim), both of them would be seen as having caused the death of the victim.

¹⁷ See especially Vilhelm Lundstedt's broadside against Scandinavian tort theory *Kritik av nordiska skadeståndsläror* in *Tidskrift for Rettsvitenskap* 1923, p. 55 ff. [the criticism against the theories of causation on p. 150 ff.]. Any kind of knowledge about the “causal doctrines” is according to Lundstedt superfluous and should be altogether avoided in legal literature. “One may on the whole say that an account of the causal doctrines in a legal work is less motivated than an account of, for instance, anatomy, surgery [sic!], medicine, chemistry, the economical rules on the determination of prices, the botanical on the germination of a seed, [...] and so on”, p. 153 (my translation, the spaced-out letters are Lundstedt's). See also Lundstedt's *Några anmärkningar om skadeståndsrättens systematisering och om kausalitetsfrågan i juridiken*, in *Festskrift til professor, dr. juris Henry Ussing* 5. maj 1951, København 1950, p. 328 ff.

¹⁸ This will be more discussed below. An early, influential article should be mentioned already here, Wex S Malone's *Ruminations on Cause-In-Fact* in 9 *Stanford Law Review* 60, to which the title of the present essay alludes. Malone seemingly changed his view after this article, see Richard W. Wright *Causation, Responsibility, Risk, Probability, Naked Statistics, and Proof: Pruning the Bramble Bush by Clarifying the Concepts* in 73 *Iowa Law Review*, p. 1008, n. 32 [hereinafter Wright Pruning].

¹⁹ As with many landmarks in recent theory of causation what I here call “sophisticated” theories were first developed by Hart and Honoré in *Causation in the Law*, op. cit.

²⁰ For an exception, see Peczenik, op. cit.

legal concept of causal conditions, which will be followed by some other preliminary comments regarding the function and legitimacy of causal tests in the law. In the thereafter following part will the previously favoured methods of the factual-causation inquiry – based in the notions of necessary and sufficient conditions – be presented. The essay will hereafter account for an alternative to the predominant sine qua non doctrine, the so-called NESS test. Lastly will follow some preliminary outlines on how the NESS test agrees with the Swedish discussion on causation.

2 The Philosophical Background

The influence from philosophy on legal thinking is unusually apparent on the subject of causation, an influence that despite Lundstedt's attack does not seem to be on the decrease. Causation has been a subject of philosophical investigations from time immemorial, but the starting point of almost any modern account is David Hume's famous analysis in two of his main works, the *Treatise* and the *Enquiries*.²¹ The importance of Hume's writings on the subject can hardly be overestimated. One influential author has called Hume's analysis "[t]he most significant and influential single contribution to the theory of causation."²² It seems therefore suitable to let this essay take off in Hume's account.

2.1 Hume – The Inventor of Modern Philosophy of Causation

According to Hume causation is an indispensable part of our empirical knowledge of the world, which led him to investigate the structure of our causal arguments. Hume rejected the then dominating idea of internal or transcendental understanding of causation. This meant a refutation of the metaphysical idea that causation is attributable to some internal force or quality within the cause itself and that causal judgement should be based on perceptions of these forces or qualities. There are no metaphysical forces or qualities in the "cause" to be perceived: "All events seem entirely loose and separate. One event follows another; but we can never observe any tie between them. They seem *conjoined*, but never *connected*."²³ Within Hume's epistemology, this encompasses that we may never have knowledge of a necessary connection between what we call a cause, and what we call an effect. But Hume did not go so far as to say that our concepts of causal connections are totally void of meaning. *Experience* has a key

²¹ David Hume *Enquiries Concerning the Human Understanding and Concerning the Principles of Morals*, edited by L. A. Selby-Bigge, 2 ed., Oxford 1902 [Hereinafter *Enquiries*], *A Treatise of Human Nature*, edited by L. A. Selby-Bigge, London 1888. I will in this essay restrict the references to the somewhat more accessible account in the *Enquiries*. The account in the *Treatise* is in most (although with some important exceptions) regards similar to that in the *Enquiries*.

²² Mackie, op. cit. p. 3.

²³ *Enquiries*, op. cit. sect. VII, Part II, para. 58 [p. 74 in the Selby-Bigge edition].

role in our understanding of causation. We can never form an absolute general rule or rationally foretell a specific event from particular observations, no matter how many, in any causal relations. (It is this conclusion that leads to Hume's infamous problem of induction²⁴). We may nevertheless draw *some* conclusions from our previous experiences. "[W]hen one particular species of event has always, in all instances, been conjoined with another, we make no longer any scruple of foretelling one upon the appearance of the other, and of employing that reasoning, which can alone assure us of any matter of fact or existence. We then call the one object, *Cause*; the other, *Effect*."²⁵

Furthermore, we attribute a notion of *necessity* to the connection between the cause and the effect. This is a distinguishing feature of our understanding of a causal relation; if there were no necessary connection between the two events we would (probably) not characterise them as causal. How is this idea of necessity, or in other words the idea of causal determinism, to be explained? According to Hume's sceptical empiricism, it cannot be rationally explained at all. We have no rational grounds for thinking that those previous instances of causation will repeat themselves also in the future or that some factors which have previously without exceptions been followed by some certain phenomena will continue to do this also tomorrow. The reason we have for thinking about causation as a necessary link is only to be found in mental habits, which are based on our previous experiences. "This connexion, therefore, which we *feel* in the mind [...], is the sentiment or impression from which we form the idea of power or necessary connexion. Nothing farther is in the case."²⁶ Hume concludes that we "may define a cause to be *an object, followed by another, and where all the objects similar to the first are followed by objects similar to the second*. Or in other words *where, if the first object had not been the second never had existed*."²⁷

This amounts to what is commonly referred to as Hume's regularity theory of causation. Hume's emphasis on constant conjunction encompasses the idea that all singular causal statements imply a general proposition, connecting kinds of events. A singular causal statement, that *a* caused *b*, is thus a claim that the events which it relates are instances of a universal connection between types of events.²⁸ Accordingly, "to say that an event was caused was to say that its occurrence was an instance of some exceptionless generalisation connecting such an event with such antecedents as it occurred in".²⁹ The argument is thus connected with the idea of *causal laws* – the exceptionless generalisations in the

²⁴ There is no need for any account of the problem of induction in this context. An accessible introduction can be found for instance in Karl Popper *Objective Knowledge*, revised edition, Oxford 1979, p. 1 ff.

²⁵ *Enquiries*, op. cit. sect. VII, Part II, para. 59 [p. 74 f. in the Selby-Bigge edition] Hume's italics.

²⁶ *Enquiries*, op. cit. sect. VII, Part II, para. 59 [p. 75 in the Selby-Bigge edition] Hume's italics.

²⁷ *Enquiries*, op. cit. sect. VII, Part II, para. 60 [p. 76 in the Selby-Bigge edition] Hume's italics.

²⁸ See Hart & Honoré, op. cit. p. 15.

²⁹ G. E. M. Anscombe *Causality and Determination*, here quoted from the reprint in *Causation*, edited by Ernest Sosa and Michael Tooley, Oxford 1997, p. 90.

above-mentioned quote are often (but not always) causal, natural laws – and it is thought that we form our beliefs concerning causal processes based on these more or less well-grounded causal laws or generalisations.³⁰ In the language of causal conditions, which is the subject of the rest of this article, this means, as one author puts it, that a “fully described causal law would list all the conditions that together are sufficient for the occurrence of a certain consequence”.³¹

The focus on conditions may seem like a reasonable conclusion from Hume’s analysis, but Hume does not use that terminology himself. From the viewpoint of the later development of the theory of conditions, Hume’s ideas even seem incoherent. In Hume’s above quoted conclusion, the two different definitions do not seem to be compatible from a modern perspective.³² The first sentence, where the regularity theory is laid down, indicates a focus on sufficient conditions. The second sentence, however, is actually a lucid formulation of the *sine qua non* approach. This incongruity is a reflection of Hume’s conceptual apparatus, where particular causes are generally referred to as “events” and “objects”, which has been criticised for not adequately reflecting the complexity involved in causal processes.³³ From the legal perspective we are certainly more interested in singular causation with the focus on particular causal factors, rather than in events taken as a whole.³⁴ This may be a reason why the inventor of the modern philosophy of causation is seldom referred to in works on tort law.

2.2 *Mill and Causal Conditions*

In legal literature, the doctrine of causal conditions, or even the idea that all necessary conditions should be seen as causes, has often been ascribed to John Stuart Mill.³⁵ In fact, Mill is often taken as the starting point for any legal analysis of factual causation. The constant references to Mill have often, at least in Swedish literature, been somewhat dubious. Mill occurs often mentioned by name as the originator of the theory of conditions on which the author in question claims to build upon, but seldom without any clear references to Mill’s works.³⁶ It is therefore no surprise that Mill has been misunderstood in Swedish

³⁰ An account focussing on the nature of causation and the connection with the nature of laws (as in scientific laws) is Michael Tooley’s *Causation*, Oxford 1987.

³¹ Wright Pruning, *op. cit.* p 1019. Cf. Richard W. Wright *Causation in Tort Law* in 73 *California Law Review*, p. 1789 [hereinafter Wright Causation].

³² Cf. (from a different perspective) J. A. Robinson *Hume’s Two Definitions of ‘Cause’* in Hume, edited by V C Chappell, Macmillan, London 1968.

³³ Hart & Honoré write (*op. cit.* p. 16): “[H]ume, and most philosophers who accept the analysis of causation in terms of uniform sequence, take far too simple a view of what it is that is found to recur in the regular sequence of nature.”

³⁴ Cf. Hart & Honoré, *op. cit.* p. 8 ff.

³⁵ The main work is John Stuart Mill *A System of Logic*, 8 ed., London 1872 [hereinafter Mill].

³⁶ See for instance Hult, *op. cit.* pp. 90-92, where Mill’s “doctrines of causation” are thoroughly discussed without any reference to where one can find Mill’s “doctrines”. A reason may be that the reference to Mill in some influential works by Fredrik Stang have propagated to other authors, see Fredrik Stang, *Skade voldt av flera*, Kristiania 1918, p. 8 ff and Fredrik Stang

legal literature, which some authors have noticed.³⁷ (The mistaken interpretation is mainly that Mill is thought to have held that all necessary conditions of an event are equal as causes.) What Mill actually did was to shift emphasis from the simple view of causation as a relation between “events” or “objects” into the idea that causes in fact consist of a complex set of factors, of which we single out one as a cause while the others are “merely Conditions”.³⁸ Even when we aim at accuracy we seldom (if ever) enumerate all the antecedent conditions. Some of the conditions will be understood or taken for granted without any explicit reference, or because of the purpose of the causal statement some conditions may without detriment be overlooked. But this is strictly speaking a simplification of the real state of affairs. Mill concludes: “The cause, then, philosophically speaking, is the sum total of the conditions, positive and negative taken together; the whole of the contingencies of every description, which being realised, the consequent invariably follows.”³⁹

Another contribution of Mill’s is the observation that there may be many different distinct sets of conditions that are each sufficient to bring about the effect, which means that there is no unique sufficient set, the *doctrine of plurality of causes*.⁴⁰ Many (different) causes can produce mechanical motion; many causes can produce death, and so on. Mill’s theories together with Hume’s analysis make up the background for most legal accounts of causation, even if the influence of the philosophers is often indirect. We shall later see that modern, legal elaboration on the simple notions of causation as necessary and sufficient conditions explicitly take the philosophical landmarks of Hume and Mill as the starting-point.

3 Necessary and Sufficient Conditions

It has already been said that the main approach in Swedish literature has been to analyse factual causation with the two notions of necessary and sufficient conditions. This holds not only for tort law, but also for other legal disciplines, most notably criminal law. According to both of these concepts, one singles out one condition among the many conditions that prevail at the time and holds this to be the cause. Mill’s above quoted observation thus holds for the law as well. What we call a cause in legal contexts never amounts to a full description of the factors that actually constitute the cause. What we do, when we point to a certain

Erstatningsansvar, Oslo 1927, p. 67 ff. Cf. Ulf Persson *Skada och värde*, Lund 1953, p. 94 n. 4 [hereinafter Persson].

³⁷ Jan Hellner *Skadeståndsrätt*, 2 ed., Uppsala 1973, p. 143 (previous editions of Hellner’s textbook *Skadeståndsrätt* included a more extensive account on causation) [hereinafter Hellner]. See also Hellner Causation, op. cit. p. 165.

³⁸ Mill, op. cit. bk. III, chapter v, § 3 [p. 378].

³⁹ Mill, op. cit. bk. III, chapter v, § 3 [p. 383].

⁴⁰ Mill, op. cit. chapter x (“Of Plurality of Causes; And of the Intermixture of Effects”). Cf. Wright Pruning, op. cit. p. 1020 and Hart & Honoré, op. cit. p. 19 ff.

factor or behaviour as a cause, is to single out one factor among many⁴¹, which we, for some reason hold to be *the* cause (or, in some situations, one of several causes, which are all singled out from the other conditions). The factor can be defined as a necessary condition, as a sufficient condition, or as something else. Let us first take a closer look at the two previously favoured approaches, before some modern alternatives are considered.⁴²

3.1 *Necessary Conditions*

A *necessary condition* (*conditio sine qua non*) may be described as a condition which, when it is at hand, brings about an effect (let us here say that the effect was an event, without therefore making any ontological commitments⁴³) of some sort, and where the effect would not have happened had it not been for that condition. As was earlier said, the most adhered method of approaching causation in legal works takes necessary conditions as the starting point for the test of causation – the *sine qua non*-formula or the but-for test. Different scholars have formulated the test in different ways, focussing on either epistemological or psychological element, or stressing the use of the test as a tool for exclusion of unwanted cases. One author, emphasising the psychological factors, writes: “[a]ccording to the *conditio sine qua non* doctrine, an event *A* is causative of a subsequent event *B* if *A* is unthinkable unless also *B* occurs”.⁴⁴ Another writer holds: “Event *A* is a necessary condition (*conditio sine qua non*) of *B* if *B* would not have occurred if *A* had not occurred”.⁴⁵ The basic idea is clear, even if the emphasis differs: The second event would not have occurred had it not been for the former.

A more technical formulation of necessary conditions would in accordance with this be, if we ignore the addition of temporal constraints upon the causal relation:⁴⁶

C is a cause of *E* if and only if *C* and *E* are actual and *C* is *ceteris paribus* necessary for *E*.

Philosophers have recognised a logical problem with this definition, namely that it entails that if “some event has a cause, then every actual state of affairs that satisfies certain minimal independence requirements is also a cause of that

⁴¹ Peczenik says that we choose the cause against the *normal background*, which in Mill’s terminology are the “mere conditions”, see Peczenik, *op. cit.*, 10.5 and *passim*.

⁴² The pure logical theories of conditions will hereinafter be touched upon only briefly. See further Knut Erik Tranøy *Vilkårslogikk*, Kristiansand 1970. From the perspective of tort law should also Lennart Åqvist *Kausalitet och culpaansvar inom en logiskt rekonstruerad skadeståndsrätt*, Uppsala 1973, be mentioned.

⁴³ See above n. 5.

⁴⁴ von Bar, *op. cit.* p. 437.

⁴⁵ Hellner *Causation*, *op. cit.* p. 169. My italics.

⁴⁶ This and the following definition is taken from the introduction to *Causation*, edited by Ernest Sosa and Michael Tooley, Oxford 1997, p. 5 ff [hereinafter Sosa & Tooley].

event”.⁴⁷ In legal works another difficulty with this definition has often been noted, namely that it fails in situations of over determination (what in Swedish literature is sometimes dealt with under the heading of “competing causes of damages”). This will be more thoroughly examined in a comparison between the sine qua non test and the alternative NESS test below (5.2).

3.2 *Sufficient Conditions*

A *sufficient condition* (sometimes called, with a more unusual Latin term, *causa causans*⁴⁸) is a condition which brings about the effect (the event) under the other given conditions, but where such an effect did not necessarily depend on the condition at hand but could also have followed from other factors. A sufficient cause is thus an event that according to the laws of nature (and possibly other factors) brings about, necessitates, the second event.⁴⁹ Sufficient conditions could thus be defined as:

C is a cause of *E* if and only if *C* and *E* are actual and *C* is *ceteris paribus* sufficient for *E*.

Logically this definition faces the same problem as the previous one, that is that every actual conditions that satisfies certain minimal independence requirements is also a cause of that event.⁵⁰ From the legal point of view the definition based on sufficient conditions often misses factors that intuitively seem more relevant. This goes especially for the cases when the triggering factor was legally irrelevant or at least was considered subordinate to a previous factor. The courts have not hesitated to disregard of the triggering sufficient factors to instead hold a previous necessary factor as a cause.

3.3 *Other Possibilities*

Two other definitions are of interest here, but will hereinafter not be dealt with separately:

C is a cause of *E* if and only if *C* and *E* are actual and *C* is *ceteris paribus* necessary AND sufficient for *E*.

The above definition is often the starting point for legal writers, who then argue that if the act was both a necessary and a sufficient condition for the effect, the criterion of causation is fulfilled.⁵¹ Since this definition obviously excludes too

⁴⁷ Sosa & Tooley, op. cit. p. 7.

⁴⁸ See Hellner, op. cit. p. 142.

⁴⁹ Hellner & Johansson, op. cit. p. 197.

⁵⁰ Sosa & Tooley, op. cit. p. 6.

⁵¹ Cf. Hellner & Johansson, op. cit. p. 197, Hellner Causation, op. cit p. 183 and Radetzki, op. cit. p. 89.

much, exceptions would then need to be made. Another possibility that goes too far in the other direction and excludes to little is:

C is a cause of *E* if and only if *C* and *E* are actual and *C* is *ceteris paribus* necessary OR sufficient for *E*.

4 Causal Statements in the Law: Functions, Underlying Concepts and the Definition of “Causally Relevant Conditions”

Lawyers have generally argued that, to be held as a cause of an event, a prior event must be shown to be a “causally relevant condition” of the later event.⁵² Most scholars have held that not *all* causally relevant conditions are considered as causes, but only conditions that are sufficient or necessary for the event. The dominant view has been based on necessary conditions, the *conditio sine qua non* theory. The problem with the *sine qua non* theory is that, even if it works splendidly in many situations (in the sense that it provides intuitively correct answers), it does not always do so. It sometimes excludes factors that should not be excluded, and it sometimes fails to exclude factors that should be excluded.

If we want to address the question of different possible definitions of causal conditions we need to know what the definitions will be used for. In other words we need to consider which functions causal statements have in the law. Furthermore we need to consider what we generally think of when we talk of causal conditions. An adequate definition of causation in legal contexts should be based in the way causation is actually perceived. What concept or concepts of causation underlie our common understandings in legal affairs? Before an attempt to answer these questions can be made we need to consider an even more basic question: Does there even exist any shared concept of causation? Some would say no. There is no comprehensive definition of causation, the critics would say, which indicates that there is in fact no shared concept of factual causation. This in its turn shows, the critics continue, that we do not make any policy-independent causal judgements. How could we, when there is no explicit, clear definition?

4.1 The Functions of Causal Statements

It may be useful to distinguish between different functions of causal statements in legal contexts. These different functions should be held in mind when alternative approaches to the *sine qua non* theory are considered. In one attempt to distinguish between different functions it has been said that causal statements are used 1) to explain the occurrence of particular events, 2) to predict future events, 3) to control events, 4) to attribute moral responsibility and legal

⁵² This was stressed by Hart & Honoré, *op. cit. passim*. Cf. Honoré, *op. cit.* p. 364.

liability, and 5) to fulfil certain technical applications of physical theory.⁵³ One can probably boil down these five factors to two central functions of causal statements in the law: To explain certain phenomena and to attribute legal responsibility. These functions are reflected in the way the *sine qua non* theory has been used, and still is used, by lawyers: It is considered both as a *search for the meaning* of “causally relevant condition” and as a *test* by which we can judge whether a condition is causally relevant.⁵⁴ These two different functions should not be considered as separate from each other but are rather interconnected. The following questions are then if necessary conditions adequately reflect what we mean when we talk of causes, and if it is suitable as a test for causal conditions in legal contexts. It will be argued that the answers to both these questions are negative.

4.2 *Factual and Responsible Causes*

This essay is based on the premise that we can and do make factual, causal judgements uninfluenced by policy considerations and that the concept behind those judgements is the basis for our perception of causation also in the law. That is by no means an uncontroversial starting point and the idea that it is possible to make causal judgements unaffected by legal considerations has been criticised by several fractions in modern tort theory.⁵⁵ The criticism against the distinction may be illustrated with an example. When we talk of a recklessly driven car as being the cause of some certain damages, we already deal with legal policy considerations, since the car was only one of many factors relevant for the damages. Other factors, ranging from the trivial (the existence of oxygen and gravity) to factors more difficult to distinguish from the relevant cause (ice on the road and bad tyres), are for some reason disregarded. Are we not here already dealing with legal considerations? In other words: Do we not single out the factor we single out just because it is not in accordance with legal rules? If so, are not all causal questions in the law in fact legal questions, rather than factual questions?

The fault with this conclusion lies in the wrongful emphasis on *the* cause, as opposed to *a* cause. When we talk of *a* cause, also as lawyers, we generally refer to causation *per se*, but when we talk of *the* cause, we have already made a normative judgement. “‘The cause’ is merely an elliptical way of saying ‘the (most significant for our purposes) cause’”.⁵⁶ The purpose may be a legal inquiry, for instance, and the selection of one factor from a set of factors is thus determined by that context. With another terminology we say that we use the

⁵³ See Hellner Causation, op. cit. p. 164, with references to Jaegkwon Kim’s article *Causes and Counterfactuals*, reprinted in Causation, edited by Ernest Sosa and Michael Tooley, Oxford 1997.

⁵⁴ Cf. Honoré, op. cit. p. 367.

⁵⁵ For instance by proponents of the Critical Legal Studies movement, see Kelman *The Necessary Myth of Objective Causation Judgements in Liberal Political Theory* in 63 Chicago-Kent Law Review, p. 579 ff [Hereinafter Kelman]. Cf Dufwa, op. cit. no. 2411.

⁵⁶ Wright Pruning, op. cit. p. 1012.

concepts of tort law to select the *responsible* cause and only tortious causes are responsible (even if we may disregard of the responsibility, for instance on grounds of adequacy).

4.3 *Defining Causation in the Law*

When we focus on the normative selection process we risk conflating the selection of the legally relevant factor with the previous issue of how to identify *a* cause. But how should we then define a cause? There has so far been no consensus on the issue – some focus on necessary conditions, some on sufficient conditions and others argue that causation is a purely normative concept. All these attempts have furthermore been associated with different problems. Does not the lack of a proper definition of causation and the problems the definitions encompass actually show that there is no shared concept to build upon?⁵⁷ Well, not necessarily. One answer is that we do not actually need any explicit definition for an intelligible, shared concept of causation to exist.⁵⁸ A more far-reaching stand is to hold that causation is even indefinable as such.⁵⁹ In my opinion causation is a good example that we *do* share some concepts, even though they are not defined or explicit, and that these concepts form our judgements. In everyday life most of us most of the time tend to make the same assessments of causal processes, even if we seldom motivate these judgements with reference to any explicit concept or causal regularities. This goes for lawyers and judges as well. Courts seem to come to similar conclusions in similar circumstances when they are confronted with questions of causation, at least in uncomplicated cases, without referring to any specific concept or model.⁶⁰

Should we then give up all attempts to define causation in law, and instead rely on these shared, undefined notions of everyday causal judgements? The answer is no, we should not. There may be definitions that better capture the underlying notion of this silent agreement. But we do need to refocus our attempts. The previously dominating views to define causation in terms of necessary and sufficient conditions have (as we shall see more later on) failed. One reaction to the failures, mainly the failure of the *sine qua non* test, is to throw the whole requirement of causation-in-fact out the window. Another answer would be to look for better definitions, more in line with how we actually use the notion of causation.⁶¹

⁵⁷ Cf. Kelman, *op. cit.* p. 581.

⁵⁸ See Michael Moore *Thompson's Preliminaries about Causation and Rights*, 63 *Chicago-Kent Law Review* note 25, at p. 502 f., and nn. 31 and 32 [hereinafter Moore]. Cf. Wright Pruning, *op. cit.* p. 1018.

⁵⁹ See Arno C. Becht and Frank W. Miller *The Test of Factual Causation in Negligence and Strict Liability Cases*, St. Louis 1961, p. 9 f and p. 163 f.

⁶⁰ This proposition is based on a general impression rather than any empirical study, but the assertion seems to be self-evident. Cf. Wright Causation, *op. cit.* p. 1766 ff.

⁶¹ It should be noted that Swedish writers have been sceptical towards the idea of common sense-based notions of causation, see Jan Hellner's review of Hart & Honoré's *Causation in*

4.4 *The Meaning of “Causally Relevant Condition”*

It has above been said that the two previously dominating approaches to define causation in terms of necessary or sufficient conditions improperly correspond to how we treat causal questions, in the law as well as outside. Before we proceed should this point be illustrated a bit more clearly with an example. The example below is substantially taken from Mackie:⁶²

A house has burned down and experts are called to the scene to examine the reason for the fire. After performing an investigation, the experts state that the fire was caused by a short circuit in an electrical device. What are the experts exactly saying, when they say that the short circuit caused the fire? They are not saying that the short circuit was a *necessary* condition for the fire, because they very well know (they are experts after all) that a fire can break out for numerous reasons other than short circuits: a glowing cigarette, a spark from a fireplace and so on. But the experts are not simply saying that the short circuit was a *sufficient* condition either. If the short-circuit had occurred but there were no inflammable material nearby, or if there was no oxygen in the house (however implausible), the fire would not have occurred. In other words: The experts say that the fire was caused by a short circuit, but they do not say that the short-circuit was a necessary or a sufficient condition for the fire.

The example points to the defects of the definitions of causation in simple terms of necessary and sufficient conditions. So how should we interpret what the experts say? Mackie suggests that causation should instead be analysed with concept of so-called *INUS conditions*. The word “INUS” is an abbreviation for “insufficient but necessary part of a condition which is unnecessary but

the Law in Svensk Juristidning 1960, p. 525 f, p 526. See also the opinions by Folke Schmidt, *Orsakspöblemet under debatt* in Svensk Juristidning 1954, p. 209 ff, Dufwa, op. cit. no. 2407 n. 44, and Peczenik, op. cit. p 379 f. It has been said the attempt by tort theorists such as Hart and Honoré to base the concept of causation in the common usage of the terminology could even lead to the among Swedish legal writers so detested ”begriffsjurisprudenz”. Quite frankly I do not understand this criticism. Any attempt of clarifying the concept of factual causation in the law in terms of causal conditions encompass approximations of the real state of affairs. We use the sine qua non definition, as well as the NESS definition, as tests with which we may single out some certain factors from numerous others. We call one factor the cause, and leave the others as mere conditions. These tests have both a semantic as well as a heuristic side (see Honoré, op. cit. p 367). They are attempts both to explain the meaning of a ”causally relevant condition”, but perhaps foremost a suggested tool with which we can test whether a certain factor should be considered as causal or not in a particular case. As far as I understand will any such a test undoubtedly be a better tool for the lawyer if it does not yield results that from a common sense perspective are counterintuitive. That does not mean that a reference to the views or language of ”ordinary people” is a particularly good argument in the analysis of possible formulations of causal conditions in legal science, at least not in itself. In this regard the critics are right (this is clearly formulated in Peczenik, op. cit. p. 379). But it means that we must scrutinize the different attempts also from the perspective of common sense. To use causal concepts that contradict our common sense notions of causation seems to me to pose a much greater risk of leading to ”begriffsjurisprudenz” than the alternative.

⁶² The example is with some modifications taken from John L. Mackie *Causes and Conditions*, here from the reprint in *Causation*, edited by Ernest Sosa and Michael Tooley, Oxford University Press, Oxford 1997, p. 33 f. [Hereinafter Mackie Conditions].

sufficient” for the result in question.⁶³ Mackie’s attempt of reformulation is one example of a more sophisticated view on causal conditions. As we shall later see, Mackie’s reformulation does not really help the lawyer in his search for a more viable tool since its scope is restricted. But there are other approaches, with similarities to Mackie’s view that better serve the lawyer’s purposes, chiefly Richard Wright’s so-called *NESS test*. Mackie’s proposal shares several points of interest with the *NESS test*, and even if Wright has differed from Mackie on crucial issues it seems suitable to present both approaches.

5 Alternative Approaches to Define Causation in the Law

5.1 *INUS-Conditions*

Mackie’s conclusion from the example with the fire investigation is: “In this case, then, the so-called cause is, and is known to be, an *insufficient* but *necessary* part of a condition which is itself *unnecessary* but *sufficient* for the result.”⁶⁴ Mackie holds that this reflects how the experts actually go about to reach the conclusion in a case like this. They will have investigated different possibilities for the event, finding that there had been a short circuit, that there were no traces of, say, matches and gasoline, and also considered the other conditions prevailing at the time, both actual and absent. (It should be noted that just as important as the actual conditions are the conditions that were *not* actual at the time.) As a good analytical philosopher, Mackie then goes on to put the argument in a more formal way, which we need not repeat here.⁶⁵

5.1.1 Mackie and the Indispensability of the Sine Qua Non Test

Mackie’s example is a case of singular causation, which is a bit misleading since Mackie’s thesis is that the idea of *INUS-conditions* indeed applies to causal regularities but not necessarily, or at least not always, to specific events. Causal regularities, Mackie holds, (building on Mill) are constituted of sets of conditions. Ideally, each condition in such a set should be identified as a necessary and non-redundant part of the set, and where all the conditions are at hand the consequence follows with necessity. Mackie concurs furthermore with Mill’s thesis that there may be several different sufficient sets. This means that the set of conditions in this way described may not be *actually* necessary for the consequence since there may be an alternative set, or alternative sets, of

⁶³ Mackie *Conditions*, op. cit. p. 34. This seems to be what Peczenik calls a “weak cause”, see Peczenik, op. cit. p. 14. Indeed these kinds of causes are weaker in the sense that they have a “weaker”, less strict requirement of *necessity*. But on the other hand they have a stronger element of *sufficiency*.

⁶⁴ Mackie *Conditions*, op. cit. p. 34.

⁶⁵ The formal version follows on pages 34-36. Jaegkwon Kim has criticised Mackie’s logical and ontological claims in *Causes and Events: Mackie on Causation*, reprinted in *Causation*, edited by Ernest Sosa and Michael Tooley, Oxford 1997.

conditions that will lead to the same effect. For instance, there may be a causal regularity where the heart attack of an excessively working person together with other conditions is sufficient to bring about the death of an employee at a work place, but there may also be another causal regularity where the lack of proper care for the security arrangements leads to the death of an employee at a work place.

Mackie thus suggests that INUS conditions correspond to how we actually think of causation in the case of *types of events*. When it comes to singular causation, however, Mackie holds that even if the analysis of INUS conditions sometimes applies also to specific events, it does not always do so. In at least some cases of singular causation we can say that some factor caused some effect without therefore committing ourselves to any causal regularity of that type of factors being an INUS condition of that type of effect.⁶⁶ Mackie argues that strong sufficiency centred approaches, such as INUS conditions or the NESS test, rely too heavily on Hume. Any test built on the notion of strong sufficiency encompasses that every singular causal statement is an instantiation of a causal law (or generalisation) – the regularity thesis. This is, so to say, thought to be built into the notion of sufficiency since sufficiency based theories concerning singular causal statements presuppose general propositions (such as a causal law) that sustains a counterfactual proposition. When we ask whether A's beating of B caused B's haemorrhage with a notion of strong sufficiency in mind, we ask "Was the beating of A of such a kind that it necessitated B's injuries under the circumstances?" And the answer to the latter question presupposes inductive reasons concerning some generalisation, according to which some kinds of situations always develop in a certain way.

While it is often true that causal judgements imply causal laws (or lawlike generalisations), Mackie holds that it is not always the case. There are two ways to come up with singular causal statements, Mackie holds. The first one is the criticised approach based on the regularity theory, which Mackie calls the "sophisticated" way.⁶⁷ But according to Mackie we may also come up with causal judgements without relying on causal laws through "a primitive and unsophisticated way of arriving at counterfactuals".⁶⁸ Without going into detail, this method is based on analogy and imagination and is presented as an alternative to the view that singular causal judgements rely on causal generalisations. The essential idea of the argument is that singular causal statements are prior to general ones, contrary to the regularity theory of the meaning of causal statements where the order is the opposite.⁶⁹ Mackie thus holds "that a singular causal statement need not imply even the vaguest generalisation".⁷⁰ As lawyers we are generally more interested in singular causal statements than in general ones when we investigate responsibility in a certain

⁶⁶ Cf. Honoré, op. cit. p. 366.

⁶⁷ Mackie, op. cit. p. 60.

⁶⁸ Mackie, op. cit. p. 77.

⁶⁹ See Mackie, op. cit. p. 80.

⁷⁰ Mackie, op. cit. p. 77 f.

case. If Mackie is right we still need the sine qua non test in those situations, or at least some approach not based on the sufficiency notion.⁷¹

5.1.2 Mackie and Indeterminism

Mackie also presents another argument for the sine qua non test, which has to do with a central question in the theory of causation, namely the possibility of indeterministic processes.

We remember that Hume refuted the idea of internal or *a priori* determinism, but the idea of determinism still plays an important role in the discussion. After Hume determinism is now considered as a *hypothetical* or *conditional* necessity, a necessity under causal laws, different from the obscure, metaphysical type of necessity of ancient times. Determinism is an important feature also in the legal analysis, albeit implicitly; it seems unlikely a court that finds a connection being purely accidental would find the legal requirement of causation fulfilled.⁷² One argument for indeterminism takes its basis in the progress of modern science⁷³, where indeterminism has entered into the science of quantum physics on the micro-level. It has been argued that the indeterminacy on the micro-level may be of relevance for actions between particles, but that does not necessarily have anything to do with the macro-questions with which we are concerned in the law.⁷⁴ Even if this is correct, which I believe, problems undoubtedly arise if we think that indeterministic processes are possible.

Mackie presents an example countering the idea that the requirement of strong sufficiency better reflects our concept of causation than the but-for notion. He hypothesises an indeterministic vending machine *L*, that will not produce a chocolate bar unless a coin is inserted, but sometimes, and for purely indeterministic reasons, the machine does not produce a chocolate bar even when a coin is inserted.⁷⁵ The insertion of the coin is in other words a strongly necessary condition for chocolate bars dropping down in the box of the vending machine, but not strongly sufficient. Nevertheless, Mackie insists we would treat the insertion of the coin as a cause for production of chocolate bars since the chocolate bar would not have been produced had it not been for the insertion of a coin. The conclusion is that the strong sufficiency requirement fails as an explanation of causation.

There are several responses to this argument. The most obvious is the simple denial of the premise; that is to deny that any such machine as *L* exists on the face of the earth. Even if quantum mechanics involve indeterministic processes, this does not entail the existence of indeterministic processes in the world above the level of sub-atomic particles. A closer examination of the machine *L* – in

⁷¹ This is further considered below in 5.2.

⁷² See Hellner Causation, op. cit. p 183.

⁷³ Perhaps this science is not so modern any more. The scientific basis for the view is mainly Heisenberg's indeterminacy thesis in quantum theory.

⁷⁴ See Honoré, op. cit. p 382.

⁷⁵ Mackie's indeterminism examples are presented at Mackie, op. cit. p. 40 ff.

combination with adequate scientific theories – would provide us with an answer why the machine sometimes does not produce the candy the buyer paid for. And on a closer look the very notion of indeterminacy turns out to be very mysterious indeed.⁷⁶

But this does not go to the core of Mackie's argument; Mackie would perhaps even agree that no such indeterministic vending machines actually exists. The central point in Mackie's argument has to do with the meaning of causal statements rather than with the general question of indeterminacy. If it is the case that we *would* say that the insertion of a coin in the machine *L* causes candy to be produced, does this then not mean that the requirement of strong sufficiency is incorrect as a definition of causation?

Wright's answer to Mackie is to introduce another kind of conditions in the set, a certain kind of indeterministic factor.⁷⁷ In Mackie's hypothesis with *L*, the antecedent conditions up until the insertion of the coin were not sufficient for the production of candy, but with the addition of one more condition, the set *is* sufficient. This added condition is the occurrence of one particular "roll of the dice" factor. The introduction of this roll-of-the-dice-factor may seem like a strange addition, but its strangeness is merely a reflection of the strangeness of the hypothesis of a world of indeterministic machines such as *L*. A set that contains the necessary insertion-of-the-coin-condition together with the necessary roll-of-the-dice-condition would thus amount to a sufficient set for the production of chocolate bars from *L*.⁷⁸ It can thus be concluded that indeterminacy is not *per se* inconsistent with the strong-sufficiency requirement of causation, but the implausible elements involved in the notion of indeterminacy will be reflected also in our conception of causation.

5.2 *The NESS Test*

Richard Wright has advocated for another definition, also based on the notion of strong sufficiency and it is in this regard in line with Mackie's theory. Contrary to Mackie, however, Wright holds this to be the correct approach also in cases of singular causation. Mackie argued that there might be ways to arrive at singular causal statements without reliance on the regularity theory. Singular causal statements need not be instantiations of any causal laws (or causal generalisations) if we instead could rely on a primitive method based on analogy and imagination. Wright convincingly refutes Mackie's alternative method:⁷⁹ Under Mackie's method we contrast an actual situation *Y*, where the condition presumed causally relevant *c* and the effect *e* actually occurred, with an analogous actual situation *X*, in which neither the condition nor the effect occurred. This could for instance be made through a comparison between the actual condition-effect situation and the same situation before the candidate

⁷⁶ See Wright Pruning, op. cit. p. 1029.

⁷⁷ Wright Pruning, op. cit. p. 1029 ff.

⁷⁸ Both conditions were, with a terminology later to be presented, NESS causes for the production of chocolate bars from *L*.

⁷⁹ Wright Pruning, op. cit. p. 1031 ff.

condition occurred. Then the non-occurrence of the effect in situation X is transferred to complete the imaginative picture in a counterfactual situation Y^* , which is a hypothetical version of Y but without the occurrence of condition c . But what justifies this imaginative transfer? Wright holds that the answer is nothing but the implicit reliance on causal generalisations, which he also finds apparent in Mackie's own account.⁸⁰ Mackie's rejection of the sufficiency-based definitions of causation is therefore invalid. On this basis Wright goes on to form a general definition that applies for specific cases of causation as well.

The definition Wright proposes, the Necessary Element of a Sufficient Set (NESS) test, stipulates that "*a particular condition was a cause of (contributed to) a specific result if and only if it was a necessary element of a set of antecedent actual conditions that was sufficient for the occurrence of the result.*"⁸¹

Wright says that this definition is in line with the philosophical doctrines of Hume, in that it recognises the importance of causal laws for causal judgements.⁸² As was earlier noted, Wright holds that it is a consequence of Hume's theory that a fully described causal law would list all the conditions that are sufficient for a certain effect and that causal judgements are based on the idea that a certain succession of events instantiates one (or several) causal laws. Irrelevant conditions are sorted out with the requirement that only those antecedent conditions that are necessary for the sufficiency of the set are covered by the definition. The NESS test combines this with Mill's thesis of a plurality of causes, so that there is no unique sufficient set. In accordance with this, the NESS test emphasises the sufficiency of the set of conditions for the effect but still keeps the notion of necessity as a demarcating criterion against irrelevant factors. The NESS test has therefore been called a test of weak necessity or strong sufficiency, to separate it from other possible senses of sufficiency and necessity.⁸³

Wright holds that we do not choose between the NESS test and the sine qua non test, or any other possible definition founded on the notions of necessary or sufficient conditions, on the basis of policy or law. The choice is rather made in accordance with how well the test in question corresponds to our intuitive concept of causation. An important question is then if the NESS test better copes with the problems that have proven insurmountable for the sine qua non test. As the comparisons between the two tests in the next part will show I believe that the answer is unequivocally affirmative.

⁸⁰ Wright holds that Mackie's task of avoiding the reliance on causal regularities and laws become apparent in Mackie's discussion on the ontology of causation, see Wright Pruning, op. cit. p. 1033 and Mackie, op. cit. chapter 10. Cf. above, n. 5.

⁸¹ Wright Pruning, op. cit. p. 1019, Wright's italics.

⁸² See Wright Pruning, op. cit. p. 1019 f.

⁸³ See Wright Pruning, op. cit. p. 1020.

6 The Sine Qua Non Test and the NESS Test – A Comparison

The merits of the NESS test over the sine qua non test are most easily shown through a comparison of the results the two different tests give in some different situations. The main problems of the sine qua non test concern situations of over determination, when there are more than one possible factor or event that may be thought to have caused the damage. The comparison will therefore focus on these situations. Following Honoré⁸⁴, we can divide the situations into three groups: (1) Situations where similar causal processes culminate in harm at the same time; (2) situations where the causal processes are different; and (3) situations where the harm has already occurred when the second causal process culminates.

6.1 Group 1: Similar Causal Processes Culminating at the Same Time

The first group contains the situations one perhaps first identifies with the problematic over determination cases. Here are thus cases such as when *A* and *B* simultaneously fire their guns against *C*, and where each shot is sufficient for the death of *C*. None of the shots are necessary in the strong sense of the sine qua non test but both are necessary as members of the set of conditions together sufficient to kill *C* – both are in other words NESS causes for *C*'s death. According to the NESS test will thus *A* and *B* both be considered to have caused *C*'s death. This type of situations has on the other hand been thought to pose substantial problems for the sine qua non test.⁸⁵ To hold neither *A*'s nor *B*'s actions to be the cause of *C*'s death seems absurd, but why? Is this “absurdity” perhaps only a result of misleading intuitions about legal responsibility or policy that obscures the question of factual causation and that leads us to disregard of the lack of actual, causal link?⁸⁶

Propagating for the sine qua non test, Mackie argues that *A*'s and *B*'s actions in a case like this should be taken as a *cluster*. That would mean that the sine qua non test could still be saved.⁸⁷ According to Mackie it makes no sense to differentiate between the two different actions, both of them must be taken together. But there are no logical or other obstacles to construct causal concepts as we wish to put to use for some special purposes.⁸⁸ This, Mackie continues, means that even if our actual concept of factual causation fails to discriminate between the two shots we may construct *other* concepts to fit our inquiries. Mackie's idea seems thus to mean that we may let legal policy considerations “override” the actual concept of causation so that we in such a situation rely on a

⁸⁴ See Honoré, op. cit. p. 374 ff. These groups of cases may be compared with the examples in Johannes Andenæs *Konkurrerende skadeårsaker* in *Tidskrift for Rettsvittenskap* 1941, p. 241 ff. and Hans Saxén *Konkurrerende skadeorsaker*, in *Tidskrift for Rettsvittenskap* 1987, p. 325 ff [hereinafter Saxén *Konkurrerende skadeorsaker*].

⁸⁵ Cf. Peczenik, op. cit. p. 51, who says that we in these situations need the term “weak cause”.

⁸⁶ Cf. Honoré, op. cit. p. 375.

⁸⁷ Mackie, op. cit. p. 47.

⁸⁸ Mackie, op. cit. p. 58.

special *legal* concept of a cause.⁸⁹ Mackie is brought to this conclusion because he clings to the *sine qua non* definition of a cause, in this case reshaped into what may be called an aggregate but-for test. Instead of changing the focus from *the* cause, which is the central point in the *sine qua non* doctrine, to *a* cause, which is in line with the more sophisticated approaches (such as the INUS- and NESS-approaches) Mackie tries to save the *sine qua non* test with the idea of aggregate causal conditions taken together in clusters.

This reformulation of the *sine qua non* formulation does not only fail to “save” the test, but is in fact invalid.⁹⁰ The reason is that the aggregate but-for test does not distinguish between relevant and irrelevant factors. Which conditions are to be taken into the cluster? May the three conditions that (1) *A* fired a fatal shot against *C*, that (2) *B* fired a fatal shot against *C* and that (3) Mårten Schultz wore a pink shirt at the same time be taken into the cluster? None of conditions 1-3 were by themselves necessary conditions for the death of *C* but the cluster of the three make up a but-for cause for *C*'s death. But here we have introduced a totally irrelevant condition not actually involved in the causal process. Under the aggregate but-for test there is thus a risk that unwanted unessentials seep into the causal concept. The elaboration of the *sine qua non* test in its aggregate form fails to separate actual causes – the two shots – from causally irrelevant factors, such as Mårten Schultz wearing a stylish pink.

If one instead uses the NESS test in these situations the problems, so to say, dissolve. If the two bullets actually simultaneously entered into *C*'s body, the NESS test treats each of the bullets as a duplicate cause of *C*'s death: “Each bullet is necessary for the sufficiency of a set of actual antecedent conditions that does not include the other bullet, and the sufficiency of each set is not affected by the concurrent existence of the other actually sufficient set.”⁹¹ Any further restrictions could thereafter be made within the normative analysis of adequance (or through the doctrine of protected interest).

Hult proposed another way to confront the problem, as he defended the *sine qua non* test, arguing that in a situation such as this, *A*'s shot did not actually bring about *the same effect* as *B*'s shot.⁹² The harm caused by *A* is not identical with the harm caused by *B*, and both actions are thus necessary conditions of separate effects.⁹³ This argument is similar to the “as-it-came-about-argument” that proponents of the *sine qua non* test have used in another group of over determination cases (which will be accounted for in 6.2). Here it may be enough to simply say that this approach is both counterintuitive and incompatible with legal practice.⁹⁴ It also leads to the problem already touched upon, that irrelevant factors enter into the descriptions and fall under the causal heading.

⁸⁹ Honoré, op. cit. p. 375.

⁹⁰ Cf. Wright Pruning, op. cit. p. 1027.

⁹¹ Wright Pruning, op. cit. p. 1027. Cf. Wright Causation, op. cit. 1791 ff.

⁹² See Hult, op. cit. p. 90 ff.

⁹³ Cf. Peczenik, op. cit. p. 51.

⁹⁴ Cf. Hellner, op. cit. p. 163.

If we recollect the main purposes of causal statements in the law⁹⁵ we see that in the situations falling in Group 1 the sine qua non test fails to give results that correspond to what we mean when we search for causally relevant conditions, for example for the death of *C*. The embellishments of the test, as the reformulation of it into an aggregate but-for test or Hult's causal-identity argument fail to save the test. The NESS test, on the other hand, works beautifully in these situations. Furthermore, the NESS test may be equally applied in other but similar situations, such as where two fires merge and together culminate in harm or where several persons independently of each other pollute a lake.⁹⁶

6.2 Group 2: Different Causal Processes

Another group of cases that have puzzled legal scholars concern situations where different sets of conditions, such as dehydration and poisoning, lead to a damage or an injury. An infamous example is the case with the unfortunate desert traveller.⁹⁷ A traveller *C* rides through the desert and has a keg of water with him. *A* has poisoned the water in the keg but before *C* has an opportunity to drink the water, *B* empties the keg and *C* dies of thirst. According to the sine qua non test, *B* did not cause *C*'s death since *C* would have died anyway if he drank the water.

In this case the intuitive result is perhaps not as clear as in the previous example. It is true that *B* emptied the keg and that *C* therefore died of thirst, but with the same action he also saved *C* from being poisoned to death. Is it then accurate to say that *B* caused *C*'s death? In *Causation in the Law*, Hart and Honoré held that *B* could not be said to have caused the death of *C* in a case like this.⁹⁸ Honoré has thereafter changed his position after criticism from Mackie and Wright.⁹⁹

Under the NESS test, the emptying of the keg did cause *C*'s death.¹⁰⁰ In cases such as these, there is only one set actually sufficient for the effect – the set that contains the emptying of the keg. The set that contains the poisoning of the water is not actually sufficient. The set with the poisoning of the water would have been sufficient had it not been for the emptying of the keg, but since the set that contained the poisoning was only hypothetically – not actually – sufficient for *C*'s death it does not fulfil the criteria of the NESS test. *B*'s intervention thus *pre-empted* the occurrence of the set in which the poisoning threatened to kill

⁹⁵ See above 4.1.

⁹⁶ Cf. Honoré, op. cit. p. 377.

⁹⁷ Originally in James A. McLaughlin *Proximate Cause* in 39 Harvard Law Review, p. 149 ff. Cf. Jaako Forsman's similar example in *Bidrag till läran om skadestånd i brottmål enligt finsk rätt*, Helsingfors 1893, p. 282.

⁹⁸ Hart & Honoré, op. cit. p. 240.

⁹⁹ See Honoré, op. cit. p. 378. Cf. Wright Pruning, op. cit. p. 1024 and Mackie, op. cit. p. 44 and 46 f.

¹⁰⁰ Wright Pruning, op. cit. p. 1022 and p.1024.

C.¹⁰¹ Any sufficient set for which the poisoning of the water would be a necessary element would also have to include C's drinking of the water, but in this example that was not one of the actual antecedent conditions.¹⁰²

Under the sine qua non test, in its basic form, neither A's or B's actions would be held as causes. Proponents of the sine qua non doctrine have tried to deal with these situations with the above-mentioned "as-it-came-about-argument". Mackie, for instance, holds that the answer is to be found in the notion of causal stories, where the specific result *as it came about* is the end of the causal story and the conditions leading up to the end are the causes.¹⁰³ The as-it-came-about argument is a classic example of the vicious circles some of the Scandinavian realists so persistently criticised. How the result came about is the very question posed and to include how the result came about in the question itself turns the sine qua non test "into a useless tautology".¹⁰⁴ In the example here we are looking for the answer to the question "What caused the death of C?" and not to the question "What caused C to die by thirst?". With the same kind of argument could any condition be proved to have caused the injury by including it as a necessary part in some causal process and then incorporate the alleged causal process into the description of the result as-it-came-about.

The sine qua non test thus fails also to account for the situations in this group, while the NESS test again explains the difficulties brought about by the sine qua non test.

6.3 *Group 3: Harm that has Already Occurred*

A person who is on the verge of taking his last breath may be killed, and the killer may then be held criminally responsible as well as liable in tort law, for instance against the victim's family. But after the person has taken that last breath nobody can be held responsible for trying to kill him, neither in criminal law nor in tort law (even if the perpetrator of course may be legally responsible on other grounds).¹⁰⁵ A similar reasoning is found in tort law where it is held that one cannot cause a damage that is already "complete".¹⁰⁶ It has been said that the fact that our concept of causation does not allow for causing harm after it has

101 Cf. Wright Causation, op. cit. p. 1794 ff.

102 Wright Pruning, op. cit. p. 1024.

103 Mackie, op. cit. p. 45 f.

104 Wright Pruning, op. cit. p. 1025. Cf. Wright Causation, op. cit. p. 1778.

105 A famous case in Swedish criminal law where the Supreme Court found that the victim was dead already when the accused persons tried to kill her is the so-called "Broby-case", NJA 1956 B. 6. Cf. Edvard Nilsson *Brobyfallet* in Rättsfall att minnas, Stockholm 1997, p. 109 ff. It should be noted in this context that it has been a matter of philosophical concern whether a cause actually needs to precede its effect. For this essay it will be presumed that so is the case; causes will be presumed to necessarily have occurred before the effect.

106 Cf. Saxén *Konkurrerande skadeorsaker*, op. cit. p. 327 ff and Hellner & Johansson, op. cit. p. 215 f.

already occurred may be problematic when the harm consists of depriving someone of future opportunities.¹⁰⁷

Cf. the circumstances in NJA 1950 p. 650¹⁰⁸: A postal worker injured his hand in a traffic accident, so that he was disabled from his work under a period of time. A short time after the accident he developed an ulcer unrelated to the previous injury and was disabled also on that ground. The postal worker received pay from the “General Post Office” (in Swedish: *Generalpoststyrelsen*) during his period of illness and the question was whether the Post Office had a right of recourse also for the period after the ulcer occurred. According to interpretations in legal literature, the Supreme Court based the decision on the notion of sufficient conditions, since damages were not awarded for the time period after the ulcer was a sufficient condition for the loss of income.¹⁰⁹

On a closer look these questions turn out to pose significant problems for any attempt of definition of causation, since our lack of knowledge about the future leads to unanswerable questions. This is illustrated more clearly with a hypothetical case similar to NJA 1950 p. 650. *A* is hit by a car negligently driven by *B* and is therefore disabled from work for 6 months. One month later *A* is hit by another car, negligently driven by another driver *C*, and is also on this ground disabled from work for another 5 months. *A* looks to claim compensation for loss of income for the 6 months, but against whom and with what amount? The injuries are presumed to be independent, so that the second injury was not affected by *A*’s previous injury. Under the but-for test *B* could argue that he should not be obliged to give out damages for the period after the victim would have been disabled anyway due to the second injury. On the other hand *C* could claim that he should not be obliged to pay either, since the victim was actually not caused any harm.

It seems clear that *B* caused the loss of income for the first month, before *A* is also hit by *C*’s car. Thus the problems start with the second accident. Variations of the example show the difficulties involved. Say that *A* instead of being hit by a car at the second time instead died of a heart attack, again unrelated to the previous injury. *A*’s successors would then not be able to claim compensation from *B* for *A*’s loss of income after his death. To paraphrase a famous movie title: Dead men can’t work. There is no reason to impose the risk of *A* dying from natural causes on *B*, if the death had nothing to do with *B*’s wrongful act.¹¹⁰

The sine qua non test, in its simple form, again does not give much advice. Applied in these situations, *B* could in accordance with the sine qua non test argue that he should not be obliged to compensate *A* for the loss of income for the period after the second accident, since *A* would have had that loss of income anyway.¹¹¹ *C* could on the other hand argue that his act was not necessary either,

¹⁰⁷ Honoré, *op. cit.* p. 379.

¹⁰⁸ Regarding this case, see H. Lech *Till debatten om orsakproblemen* in *Svensk juristtidning* 1955, p 1 ff.

¹⁰⁹ See Hellner & Johansson, *op. cit.* p. 217.

¹¹⁰ Cf. Honoré, *op. cit.* p. 380.

¹¹¹ Cf. Julius Lassen’s account in *Haandbog i obligationsretten*, Alm del, 3 ed, København 1917-1920, p. 251 ff.

since *A* was already injured. Again the results of the sine qua non test are untenable – it is unreasonable that *A*, twice harmed by negligent persons, should be excluded from claiming compensation only because he was hurt twice. It is tempting to use the as-it-came-about-argument, but as we have seen, this argument does not hold.

The situation also raises problems for the NESS test, however. The NESS test does not, at least not at first glance, give any advice on how to deal with the fact that we just can not know whether the victim would have died, or fallen sick or something similar, after the first harmful act. The problems are close to those of risk-exposure damages (where the exposure of a risk is seen as a damage in it self) and the lost-chance cases (where the “damage” consists in someone being deprived of a chance).¹¹² This is not the same problem that arises in any legal assessment of what actually happened in a case of possible causation, that is, the problem of correctly examining the evidence and the facts in the events presumed linked. That is rather a problem of observation and correctly valuing evidence that does not affect the theory of causation in itself: “As lawyers, judges, jurors or lay persons, we do the best we can”.¹¹³ But in the group of cases discussed in this group there are no actual events to be assessed.

Honoré suggests ways round the difficulties.¹¹⁴ According to the first and best of Honoré’s suggestions the victim would have a right to claim compensation against the tortfeasor not for the primary damage *per se*, but for *the loss of a tort remedy* that would otherwise have been available to him. If in the example above the accident caused by *C*’s negligence deprived *A* of the possibility to claim compensation from *B* for the period after the second accident, then *A* could receive compensation from *C* for the loss of this possible claim. Honoré points out that this would be a kind of “damage” similar to that when a plaintiff is deprived of a chance. Whether such damages are compensable is a topic outside the scope of this essay. It seems clear that the problems faced in this group, which are related to the difficult questions of whether a risk could be a damage in itself and the questions of lost chance damages, would raise obstacles for any theory of causation. For now it may be sufficient to conclude that the situations in this group would need further considerations.¹¹⁵

7 The Counterfactual Test

One thing both the sine qua non approach and the NESS alternative have in common is that they both rely on a hypothetical test that involves counterfactual propositions. Under the sine qua non test the hypothetical questions are of the kind: Would the car have fallen into the river even if the road barrier had not been defective? We ask whether in the circumstances the consequence would have occurred had the condition not occurred. Under the NESS test the

¹¹² These special problems will here be left aside, cf. Wright Pruning, *op. cit.* p. 1067 ff.

¹¹³ Wright Pruning, *op. cit.* p. 1037.

¹¹⁴ See for the following Honoré, *op. cit.* p. 380.

¹¹⁵ Cf. Hellner & Johansson, *op. cit.* p. 221 f.

hypothetical question is a bit different, but similar. Would the remaining set of conditions, if the condition in question had not been at hand, still have produced the consequence? Both tests thus involve counterfactual propositions concerning the world, which in this context entail two kinds of difficulties. The first is of a philosophical nature and concerns the status of counterfactual propositions. In these complicated philosophical questions I do not even claim to have an opinion, but the issues will nevertheless be briefly touched upon. The second difficulty is more closely linked to the legal discussion and has to do with the division between the normative and the factual inquiries.

7.1 Counterfactual Statements and Truth

Simply defined is a counterfactual a conditional with a false antecedent (or an antecedent known to be false). A characteristic feature of counterfactual propositions is the connection with causal laws and generalisations. Lawlike generalisations support counterfactuals while accidental generalisations typically do not. The lawlike generalisation “Sugar dissolves in water” supports the counterfactual “If this lump of sugar were dropped in water it would dissolve”. But the accidental generalisation “All the men in this room are supporters of the ice hockey team Färjestad” does not yield the counterfactual “If this man were in this room he would be a supporter of the ice hockey team Färjestad”.

Considered as a truth-functional compound, all counterfactual statements are (in the logical sense of the term) true, since the antecedent is false.¹¹⁶ The problem is to define circumstances where a certain counterfactual holds while another counterfactual, with the same antecedent but a contrary consequent does not hold. The problem must be set against the fact that we may never have empirical evidence supporting counterfactuals, since the antecedent is false. This has made some believe that a counterfactual proposition can never be true or false (which does not necessarily entail that it can not be more or less well founded).¹¹⁷ Others argue for the contrary view.¹¹⁸

In tort law we generally (if it is even considered as something that deserves motivation) presume that counterfactuals can be true. This seems to be a necessary assumption for the legitimacy of the hypothetical test. The status of counterfactual propositions entails many difficulties but this is not the proper context for an analysis of these philosophical problems.

7.2 Is the Hypothetical Test in Tort Law a Normative Inquiry?

The other problem of the hypothetical test is more closely linked with the division between the factual and the normative inquiry of causation. Those who

¹¹⁶ See for the following Nelson Goodman *Fact, Fiction, and Forecast*, 4 ed, Cambridge Mass. 1983, p. 4 ff [hereinafter Goodman]. Another classic account is David Lewis’ *Counterfactuals*, Oxford 1973.

¹¹⁷ See Mackie, op. cit. p. 54.

¹¹⁸ See Honoré, op. cit. p. 373 f.

oppose this division could argue that due to the precarious nature of hypothetical opinions the counterfactual causal analysis is “by definition indeterminate”.¹¹⁹ Since the counterfactual analysis is actually an intellectual experiment, any kind of factor can be introduced into the analysis, which may in reality make the test worthless. If the question posed is “Would A have died even if the car had not hit him?” any kind of factor could be introduced, say another imaginary car just after the real one, to answer the question in accordance with the wishes of the person who posed it, the critics argue. This is thus another attempt to undermine the base for the factual causation with the argument that it in fact is a normative inquiry, and not factual at all.

These kinds of arguments evade how the counterfactual analysis is in fact carried out in the court and among lawyers; courts do not fantasise or invent irrelevant imaginary agents. But even so the counterfactual analysis does leave the door open for many alternative answers. Does not this mean that we on normative premises construe a counterfactual world to suit the purpose of our question? If this is the case, the critics may be right in arguing that the factual test of causation is not really a factual test at all.

But there are counterarguments. Wright holds that the judge who carries out the hypothetical test does not, and should not, attempt to construe a possible counterfactual world.¹²⁰ Instead the test is based in the causal processes at work in the real world, those processes that *actually* lead to the consequence in which we are interested. Instead of imagining hypothetical causal scenarios of what *could* happen we ask what *did* happen? We ask, if Wright is right, whether the condition at test was a necessary element of the set of conditions sufficient to bring about the result. The most uncomplicated way of to perform the test is to simply, hypothetically, eliminate the condition in question from the set and consider – against the known applicable causal generalisations – whether the effect would still occur. The alleged indeterminacy would then only be found as a result of our incorrect assumptions about causal generalisations, and that would be an empirical problem rather than a problem of the counterfactual analysis.

This is a simplified picture and has been criticised under the argument that we only have the possibility to simply eliminate a condition in some situations.¹²¹ In other cases we must replace the missing condition with another if we want the test to be carried out in accordance with our knowledge about the world. Say for example that we want to test the assertion that Olof Palme was the reason Sweden did not become a member of the EC in the early 1980’s. Was the fact that Olof Palme was Prime Minister at that time the reason Sweden did not become a member of the European Community much earlier? But had Sweden’s Prime Minister not been Olof Palme at that time, surely someone else would have. We are in this example unable to simply eliminate the factor that Olof Palme was Prime Minister without replacing him with some other, hypothetical

¹¹⁹ See Wright Pruning, op. cit. p. 1039.

¹²⁰ Wright Pruning, op. cit. p. 1041 f.

¹²¹ Cf. Honoré, op. cit. p. 370 ff.

Prime Minister and then consider what the differences would have been if, for instance, Ulf Adelsohn instead had been Prime Minister.

It has been said that this procedure is also the correct way to confront the counterfactual inquiry in tort law. The hypothetical test must be more distinctly based in the real world, which here means the real world of positive tort law.¹²² What we in the law of negligence must do when we perform the hypothetical test is to hypothesise what would have happened had the defendant acted properly, instead of what would have happened had he done nothing. We replace the defendant's wrongful conduct with his rightful conduct. If we are interested in whether the plaintiff would still have been injured at the workplace had the employer (the defendant) been more thorough in making sure that the employees knew about the necessary precautionary measures we can not replace the conduct of the employer with nothing. Instead we must ask what the consequences would have been had the employer adequately informed the working staff. That we in this way introduce such notions as "wrongfulness" does again not make the inquiry into a normative one – to ask what would have happened if the defendant had acted in accordance with the rules is not a normative question, but a factual one. The hypothetical test does not turn the factual causation inquiry into a normative issue.

7.3 *The Doctrine of Difference*

The ephemeral doctrine of difference (in Swedish *differensläran*) has a special position in Swedish law (or perhaps mainly in Swedish legal literature) but its implications are unclear.¹²³ It has perhaps primarily been a tool for establishing the amount of damages, but it is also connected with the issue of factual causation.¹²⁴ For the causal inquiry the doctrine of difference is closely conflated with the hypothetical test and it is not easy to separate between the influence of the doctrine and the hypothetical test as a necessary corollary of the sine qua non test. The doctrine has recently been criticised as vague and it has been said that anyone who sides with the doctrine seems to adapt it to suit his or her own purposes.¹²⁵ The issues that fall under the scope of the doctrine as of interest here have already been discussed.

¹²² See Honoré, *op. cit.* p. 372 ff.

¹²³ Cf. generally Jan Hellner *Metodproblem i rättsvetenskapen*, Stockholm 2001, appendix 2 [hereinafter *Metodproblem*]. Hellner's book was not yet published when this essay was completed.

¹²⁴ See for an account of the doctrine of difference as a basis for the calculation of compensation Ivar Strahl *Expropriationsersättningen. Fyra expropriationsrättsliga uppsatser*, Stockholm 1926, p 149 ff. The doctrine of difference is a main topic in Ulf Persson's *Skada och värde*, *op. cit.* See also Andenæs, *op. cit.* p. 249 ff. (especially on p. 251) and Hult, *op. cit. passim*.

¹²⁵ See Hellner in *Metodproblem*, *op. cit.* p. 238, where he also calls the doctrine a "Proteus-like phenomenon" in Swedish law.

8 Reflections on the NESS Test and Swedish Law

The NESS test is not a method restricted to any particular legal system; in fact it is not even restricted to legal contexts. The account of the NESS test has up until now been fairly theoretical and sometimes on the border of philosophical questions. The pragmatic lawyer might argue that even if the NESS test works in theory and is in accordance with the philosophical observations of Hume and Mill (of which pragmatical lawyers might very well say: “Who cares?”) it does not seem to have anything to do with practical law. It could be said that in legal practice, say a Swedish court dealing with a complicated question of causation in a particular dispute, the decision will be carried out in the same way it has been before, and the decision will be mostly based on the elusive notions of pragmatism and practical concerns. That would be a valid point had the essay ended here. Therefore I will try to give some outlines of how the NESS test fits into the Swedish legal context and I hope to be able to show that the test may indeed be a useful tool also for law in practice. The following account will be nothing more than a sketch on how the NESS test could be used to explain legal phenomena and to attribute legal responsibility in a Swedish context. The merits of the NESS test would be more evident with a more thorough analysis.

Swedish statutory law does not contain any clear provisions of causation, and there is therefore no statutory support for a but-for test in Swedish law. Still it has been considered, as we shall see, that Swedish courts often rely on some sort of but-for test in causal questions, but with important exceptions. The divided view in the Swedish literature has already been mentioned.¹²⁶ Many authors point to the merits of the sine qua non test, albeit with a door open for a view of sufficient conditions in some cases (mainly the over determination cases). An interpretation of the Swedish attitude among scholars is that the sine qua non approach indeed is viewed as a useful tool for reaching intuitively correct answers in cases where question of factual causation has been complicated.¹²⁷ However, the sufficient condition approach has been used as a necessary complement, due to the known failures of the sine qua non test. It seems therefore not far reaching to suggest that the underlying concept of causation corresponds better to the NESS test’s requirement of weak necessity and strong sufficiency, than to the sine qua non doctrine or the simple approach of sufficient conditions. A closer look at some of the most discussed problems of causation in recent literature will illustrate this point more clearly. The basis for the following is some examples of how the courts have dealt with causal questions in a few particular cases.

8.1 *Some Examples of the Causal Inquiry in Swedish Court Practice*

Contrary to the situation in some other countries, the sine qua non test has not dominated the factual-causation inquiry in Swedish court practice; at least not in

¹²⁶ See above, n. 13.

¹²⁷ When the question of causation is intuitively uncomplicated there is no need for any tool at all.

the way that the courts explicitly have identified the factual causation inquiry with a but-for test. In fact it rather seems that Swedish courts have pragmatically focussed on necessary conditions in some cases or sufficient conditions in some other depending on the wanted outcome of the case. It is my opinion that the apparent ambiguity is an illusion. The courts have relied on a concept of causation that does not always fall into the simple categories of necessary or sufficient conditions. When the but-for notion gives unwanted results the courts have not hesitated to focus on notions of sufficiency, or at least that is the interpretation commentators have made of some decisions. It is my opinion that many of these examples show that courts have often identified causation more along the lines of the NESS approach, than with any of its competitors.

The discussion of causation in Swedish tort law has lately circled around the evidence problems surrounding causation. A corollary question to any analysis of causal conditions is what kind of causation the plaintiff needs to prove.¹²⁸ The interpretation in legal writing has been that the plaintiff needs to show that the factor for which the defendant is supposed to be responsible was a necessary condition for the damages.¹²⁹ However, and in line with the discussed weaknesses of the sine qua non approach, in cases of several independently necessary factors must the sine qua non criterion be abandoned and replaced with the sufficiency criterion, which also affects the corresponding rules on evidence. (This will be discussed a bit more in detail in section 8.2.) Both notions have been used not only to establish liability but also to come to negative conclusions. A few decisions illustrate the apparently shifting focus of the courts.

NJA 1963 p. 473: The construction worker R was injured in a traffic accident. Due to back problems after the accident R was unable to work for a period and demanded therefore compensation for loss of income. However, R had other problems with his back unrelated to the accident. The question was whether R's loss of income due to the back injury was compensable in full, or if it should be lowered. The Supreme Court found that the plaintiff R, even though he had back problems unrelated to the accident, should be awarded full damages. The Court concluded: "[T]here is no reason to assume that his [R's] working capacity, even if the accident had not occurred, would have been impaired due to back problems for the time in question in the case". The case has been interpreted to mean that since the Court found no reasons to assume that the back problems unrelated to the accident was a sufficient cause of R's ill-health, it was presumed that it was a result of the accident.¹³⁰

The Supreme Court has not only focussed on the sufficiency notion in cases of over determination, but also in other situations.

¹²⁸ A special rule concerning evidence for causation is laid down for environmental damages in the Environmental Code, chapter 32, section 3, third paragraph. The following account is restricted to principles of general tort law.

¹²⁹ See Agell, *op. cit.* p. 162.

¹³⁰ Agell, *op. cit.* p. 179.

NJA 1983 p. 606: A traffic accident occurred after an elk had come out on a motorway. A dog had followed the elk and the question was whether the owner of the dog was liable for the damages to the cars involved in the accident. The Supreme Court stated that the fact that “the elk in this case was followed by Lars E’s [the defendant] dog does not give a sufficient ground for the conclusion that the dog had such a determining influence on the behaviour of the elk that it can be considered to have caused that the elk came out on the way.” The claims of the plaintiffs were dismissed. An interpretation of the Supreme Court’s formulation is that the plaintiffs needed to have shown that the dog was a sufficient condition for the accident for a successful claim.¹³¹

There are on the hand many decisions where the Supreme Court instead has based the decision more in line with the notion of necessary conditions.

NJA 1940 p. 166: A car broke through a defective crash barrier and into a river. The question was whether there was any ground for holding that the car would have gone through the barrier even if the barrier had been in a proper condition (perhaps as a result of careless driving). The Supreme Court found that there was no ground for assuming that the result would have been the same even if the barrier had not been defective. In this case the Court used the sine qua non test; the defective barrier was a necessary condition but obviously not a sufficient condition for the damages.

From the perspective of a plaintiff may a pragmatic shift of focus between different notions of causation be a problem, especially in regard of his burden of proof. The plaintiff can simply not foresee what kind of causation he needs to prove. Does he need to show that the tortious behaviour of the defendant was a necessary condition of the damages in accordance with the sine qua non doctrine or does he need to show that it was a sufficient condition for the damages? It is not even the case that the plaintiff can presuppose that the starting point is the sine qua non-test, but with exceptions for the types of cases where the test has been known to fail. If the courts normally expects a plaintiff to prove that the factor in question was a *conditio sine qua non* for the damages, but as a rule made exceptions for the over determination cases the plaintiff could adjust the claim accordingly. But as *NJA 1983 p. 606* shows the courts rely on the sufficiency requirement not only in the typical over determination cases.

With another view on causally relevant conditions the alleged ambiguities of the courts vanish. The NESS definition points to a homogeneous concept of causal conditions, and explains the decisions in the examples taken from court practice above. In *NJA 1963 p. 473* the Court evidently found that the traffic accident was a NESS cause for R’s loss of income; it was a sufficient condition for the back injury. The question here was rather if the back problems R had that was not related to the traffic accident affected his disablement. The Court stated that there were no reasons to assume that R would have been unable to work if the accident had not occurred. In other words, the Court found that R’s previous back problem was not a necessary element of the set that was sufficient to bring about his disablement. In *NJA 1983 p. 606* the dog that followed the elk was not

¹³¹ Cf. Hellner & Johansson, *op. cit.* p. 200.

found to have had such a determining effect on the elk that it could be considered to have caused that the elk came out on the motorway. Was not the dog a necessary element of the set that included the elk on the way and which ended with the accident? The court's formulation, that there was not "sufficient ground for the conclusion that the dog had [...] a determining influence", shows that it did not find the dog to have been a NESS factor for the elk's behaviour. In the last case, NJA 1940 p. 166, the defective barrier was clearly a necessary member of the set of conditions that was sufficient for the accident. The Court found that the accident would not have occurred had it not been for the defective barrier. But the defective barrier was not a sufficient cause in itself but only in combination with other elements of the set enough to bring about the accident. In this last case other possible NESS conditions were probably also at hand and scrutinised. But in accordance with what has been said previously, the Court established that the defective road barrier was the *responsible* NESS cause in the case.

The purpose of the cited decisions is not to give any detailed picture of Swedish court practice but merely to illustrate how the NESS test points to a homogenous concept of causation and that it can coherently explain how the courts in some problematic cases of causation have argued. Many other examples could be brought to front. Often the formulation of the court decisions make it difficult to distinguish between the actual-causation inquiry and the adequate-causation inquiry, as well as between the conclusions of the causal inquiry itself and the parts of the judgement that rather deal with questions of evidence. But with these caveats, the decisions seemingly do illustrate that the NESS definition reflects the underlying notion of the courts' view of causation and explains the apparent lack of coherency in their practice. It was said that an appropriate view on causation should help to explain the meaning of the idea of "causally relevant conditions" and also be a test with which we can test whether a certain condition was causally relevant. The examples from the Swedish courts indicate that the NESS test meets these two requirements better than its rivals.

8.2 *"Competing Causes of Damages" – Causation, Evidence and the Burden of Proof*

One issue that has been a matter of discussion in later Swedish court practice is the plaintiff's burden of proof for causation in cases of several different possible causes, and it seems suitable to address this discussion a bit more in detail.¹³² Generally, the plaintiff has to prove the circumstances he refers to for his claim.¹³³ This may be difficult in many cases but has been considered insurmountable in some. If the defendant opposes the claim under the argument that the damages in fact were caused by another causal condition, the main rule is that the plaintiff needs to show that the other causal chain could be

¹³² See for the following Agell, *op. cit.*

¹³³ Per Olof Ekelöf *Rättegång IV*, 6 ed. Stockholm 1992, § 25.

disregarded.¹³⁴ It may thus be a difficulty for the plaintiff to prove not only that the wrongful conduct of defendant caused him damages, but also that some other factor did *not* lead to the damages. This problem seems to be a direct consequence of the sine qua non criterion. The plaintiff must show that the conduct in question was a necessary condition for the effect and this is sometimes only accomplished by proving that other factors would not have led to the damage in question.

With a shift of focus to the sufficiency notion (in some form) the plaintiff would be relieved of the concern of any alternative causal process within the factual-causation inquiry. The implicit adherence to the *conditio sine qua non* doctrine has seemingly produced problems that could have been avoided with a more accurate definition of causation. The debated problems of evidence in these cases of “competing causes” is a direct product of an implicit reliance on the fallible sine qua non concept of causation. The Supreme Court has as a result of this in some cases laid down a special evidence rule on causation.

Cf. *NJA 1981 p. 622*: The plaintiff owned a fish farm in the municipality of Västervik. A sewage station owned by the municipality discharged phenol into a ditch, which thereafter poured into the fish farm. The plaintiff claimed damages from the municipality under the argument that trout in the fish farm died as a result of the phenol discharge. The municipality opposed the claim and argued that the actual cause of the trout’s death was a lack of oxygen in the pond. The Supreme Court found that the parties had presented no other possible causes than the phenol discharge and the lack of oxygen. It was further established that full certainty of what actually caused the death of the trout could not be obtained, but stated that this did not preclude a successful claim. In some claims concerning damages where the issue of causation is disputed between the parties it may be sufficient that the causal connection proposed by the plaintiff appears to be clearly more probable than any other explanation proposed by the defendant and if it seems probable also in regard of the other circumstances of the case. The Court further stated that the lowered threshold for the burden of proof was especially motivated in cases of environmental damages and similar types of damages. After consideration of the evidence in the case the Court found that the plaintiff’s explanation seemed substantially more probable than the defendant’s proposition. The plaintiff was awarded damages.

This lowered threshold of evidence concerning causation in situations of several possible causes is the result of a diffuse and vague concept of causation. Now, it is not necessarily negative to solve practical problems of causation within procedural law rather than tort law.¹³⁵ Why should one then bother with attempts of reformulation when the same material results can be achieved through exceptions to the general principles of evidence law? One reason is that it is often considered intrinsically positive to have clear distinct principles with as

¹³⁴ See the Supreme Court’s formulation in *NJA 1993 p. 764* (p. 775).

¹³⁵ Cf. Håkan Andersson *Kausalitetsproblem – kausalitet eller problem?* in *Festskrift till Anders Agell*, Göteborg 1994, p 32 f.

few exceptions as possible.¹³⁶ Another, and more important, argument is that the exception in evidence law is a symptom of a wrongful concept of causation, which compels the courts to look for pragmatic solutions. A definition that does not require pragmatic exceptions in different cases will presumably lead to more foreseeable results from the courts. With a strict application of the NESS test the plaintiff needs to prove that the wrongful factor was a necessary element of a set sufficient to produce the consequence. This is seemingly easier than to prove that some event was in itself sufficient for the consequence. To prove that the factor was a necessary condition would in a case of “competing causes” be by definition impossible. The other factors of the set need not, and indeed could not, be explicitly stated for the plaintiff to have fulfilled the burden. Say the plaintiff has shown that the dog on the road was a NESS condition for his traffic accident. Other necessary elements of a set sufficient to bring about the accident may, for instance, include such factors as the condition of the tyres, the road conditions, the absence of GPS-brakes, the absence of proper road maintenance or whatever the case may be. It would not be required that the plaintiff proves the causal irrelevancy of all these factors. It should be made clear that this definition holds also if the defendant manages to show that the other causal condition, for which he is not responsible, was *also* a NESS cause for the result. Say that the defendant can show that the pollution of the pond for which he is responsible would not have led to the death of the fish had it not been for the fact that it coincided with some other factor for which he is not responsible. That would mean that both conditions were necessary in the same sufficient set and in that case would the NESS test, correctly, treat both conditions as duplicate causes for the result. Again we must not conflate the causal inquiry with the normative selection of the responsible condition. If a court establishes that two different conditions were NESS causes for the damages it is a normative question to decide which of these causes should result in legal responsibility.

9 Conclusions

The spine of tort law, causation, is a difficult and comprehensive complex of questions. Only a few of these have been examined here. In legal writing significant efforts have been made to establish a working tool for distinguishing between causative and non-causative factors – questions of special value for the tort lawyer. The apparatus of necessary and sufficient conditions taken over from Mill’s elaboration on Hume’s theories has been a valuable contribution also for the legal inquiries. Indeed, many legal writers have to a significant degree used the notion of necessary conditions as a test – the *sine qua non* test – for examining whether causation in the legal sense is at hand. However, the *sine qua non* test has some well-known disadvantages and it gives counterintuitive results in certain situations, which has led several legal writers and philosophers to work out other definitions. A similar feature in these alternative approaches is that the necessity requirement has been subordinated to the

¹³⁶ Cf. concerning the methodological principle of Occam’s razor in legal science Hellner *Metodproblem*, op. cit. p. 57.

sufficiency requirement. One philosopher, John Mackie, argued that the notion of so-called *INUS conditions* better corresponds to what we mean when we talk of causation between types of events. But when we talk of singular causation, causation in a particular case, Mackie held on to the sine qua non test. One legal writer, Richard Wright, has proposed another definition – *the NESS test* – that instead stresses the focus on strong sufficiency at the cost of strong necessity, which he claims is the correct approach also for singular causal statements.

It has been argued in this essay that the NESS test answers many of the question begging problems of the previously favoured sine qua non test. The definition of the NESS test says that to cause a damage or an injury means to complete a set of conditions sufficient to bring the damage or the injury about. Furthermore, it has been argued that this definition seemingly reflects and answers the apparent ambiguity towards causation in Swedish law (in court practice and academic legal writing). A clearer concept of causation can serve as a useful heuristic tool in legal contexts, with which some problems resulting from a diffuse concept of causation may be avoided.

The NESS test is not a lawyer's magic wand and it surely does not solve the practical problems of causation. It is in the second step of the causal inquiry, in Sweden dealt with under the adequacy test, that the real *legal* inquiry starts. One may thus say that in a way the legal analysis starts where the NESS test ends. It is after the facts of the case are established that the judges and the lawyers are able to draw legal conclusions from those facts. The NESS test can no more than the sine qua non test make sure that the Court or the lawyers actually know the *real* facts. What the NESS test can do is to facilitate for lawyers to build legal conclusions on the correct factors – as they are known – and not on unessential or irrelevant elements. This may be accomplished by shifting the focus from the question “Would this have happened had it not been for X's wrongful conduct?” into “Was X's wrongful conduct a necessary element in a set that together with other conditions was sufficient to bring about the result?” That is the question the judges, the academics and the lawyers should really ask themselves.