Igor Vuković

APPLYING THE EQUIVALENCE THEORY IN CRIMINAL LAW – SOME ISSUES OF INTEREST

The present article is an elaboration of certain questions of equivalence theory – as the most important theory of causation in contemporary continental criminal law. The starting point of equivalence theory includes the principle according to which all conditions related to a given consequence that may not be rationally excluded, without, if they were, the ensuing consequence being materialized – are equivalent and, consequently, each one of these conditions represents a condition of the relevant consequence (so-called condicio sine qua non). The author considers hypothetical, cumulative and alternative causalities as well as other forms that are instrumental in the implementation of the theory.

Key words: *Causation – Equivalence theory – Hypothetical causation – Alternative causation – Cumulative causation*.

According to statutory descriptions of the consequential criminal offences, in addition to act committed by perpetrator, it is necessary that specific consequences specified by law take place which affect the object of the act. Since statutory descriptions relating only to particular criminal offences specify the consequence as their statutory characteristic, the causal connexion between the act and such consequence, and/or causation in terms of criminal law in general, represent a category to be examined, both in jurisprudential systematics and in considering a particular case, within the framework of elements provided for in the statute, and prior to considering the issue of wrongfulness and guilt. Such inquiry is to be done by establishing whether specific consequence that has taken place in the outside world is, in terms of *time, space* and *mode*, connected with the perpetrator's act. The ground of that finding is positioned in the empirical comprehension of the operation of natural laws.[1] One should, however,

1 What is causation – is not accessible to human knowledge. „If A pours into B's drink the cyanic acid and B dies after taking the drink, the very knowledge from experience speaks to us that B's death was a result of cyanic acid effect. In other words,

consider that causation, in terms of its criminal law meaning, has to be distinguished from its philosophical roots since it amounts to the ground of criminal liability. Causation is not viewed through the sum of all the conditions of consequence – the cause of a consequence is every single condition, although the observed outcome takes place through joint operation of causes.[2]

In Serbian criminal law, like in many other continental criminal law systems, considered as causal is such a condition (criminal law act) without which there would be no specific consequence at all, i.e. the one representing a *condicio sine qua non* of its materialization.[3] More precisely, according to an original formula articulated by Austrian procedural law specialist Glaser already around the middle of nineteenth century, and elaborated later on by von Buri – *every condition that cannot be neglected, without such neglect resulting in coming off of the consequence, shall be considered causal*. All conditions, without which no specific consequence would ensue, have to be considered as equally causal for its taking place, regardless of their significance or distance from the examined consequence. Due to equivalence of all conditions contributing to occurrence of the consequence, this theory is known as the equivalence theory or the theory of condition (lat. *aequus* – equal; *valere* – be worth). In its application, the *condicio*-formula is understood to mean a *sui generis* process of hypothetical rational elimination: we figure out whether a consequence would have taken place, with or without the condition under our inquiry. We exclude the perpetrator's act as the observed condition from the causal chain and try to find out whether the consequence would have taken place if there was no act. Should we conclude through hypothetical exclusion of the act that the consequence had taken place even without it, we would not consider the observed act as its cause. And *vice versa*, should the process demonstrate that there would be no consequence if there was no act – the act would be

---

we do know that, until now, all people who have consumed a specific quantity of cyanic acid have died. Why is that so, remains a secret to us. To be sure, the chemist could explain to us that the contact between B's mucous membrane and the poison triggers specific processes that bring about the death. However, these judgments, too, as such, are based on the knowledge by experience. They say nothing about the 'subject-matter' of causation processes" (Gropp, Walter: *Strafrecht. Allgemeiner Teil*, second edition, Springer-Verlag, Heidelberg – New York, 2001, pp. 136 – 137).

2 Roxin, Claus: *Strafrecht. Allgemeiner Teil. Band I. Grundlagen. Der Aufbau der Verbrechenslehre*, third edition. C. H. Beck'sche Verlagsbuchhandlungen, München, 1997, p. 294.

3 See Srzentić (editor) and others: *Komentar Krivičnog zakona Socijalističke Federativne Republike Jugoslavije*, third edition, Savremena administracija, Belgrade, 1986, p. 48; Stojanović, Zoran, *Komentar Krivičnog zakonika*, Službeni glasnik, Belgrade, 2006, pp. 61 – 62.

causal for the consequence and, according to the *condicio*-formula, it would amount to its cause. Figuratively speaking, in the latter case we would address the perpetrator with the following words: „If only you did not do that, such thing would not have happened".[4] This is the way of establishing a *regressus ad infinitum* of a kind, i.e. an uninterrupted and endless causal chain whose links are composed by considerable number of human acts differing from one another in terms of time.

The first objection to the equivalence theory stems from the very procedure of establishing the causation effected by applying the *condicio*-formula. Although the phenomena are necessarily interconnected in reality by their sequence in terms of time, it is not possible, without empirical evidence, to claim the existence of causal relation between any human act and its supposed effect. As a matter of fact, in an attempt to establish what has created the observed consequence, we began with that very result. Already aware of the fact that A's act did result in B's death, we only intend to confirm that obvious regularity through logical statement as well.[5] The mental process in this case, in other words, starts with the assumption relating to the very issue that has to be established. Or, the *condicio*-formula may at best only ascertain an already visible causal relation.[6] In the contrary case, should we in fact be not aware of the mode of materialization of consequence, no formula whatsoever would help.

According to the above, in addition to acts directly connected with the consequence, a *condicio sine qua non* includes also rather distant acts that, even *prima facie*, are not appropriate to be considered in the process of establishing possible criminal liability. A's act of firing a pistol in an apartment that was followed by B's death is not the only condition without which there would be no death, although the causation related to A's act is logically the first thing to be considered; causal in terms of the equivalence theory is also the conception of A by his/her parents (as well as similar acts of all their ancestors, down to Adam and Eve, and/or monkeys), or, for instance, designing and constructing the facility that was the scene of the murder. All these are but the conditions without which there would be no given consequence. In applying the equivalence theory, one does not make the quality distinction between particular conditions. All conditions, both those close to the consequence and those

4 Kühl, Kristian: *Strafrecht. Allgemeine Teil*, fourth edition, Franz Vahlen, München, 2002, p. 26.

5 We do not challenge the extraordinary importance of logic in the sphere of law. Just the contrary, the application of the equivalence theory exactly confirms the importance of logic in legal education.

6 Along these lines, the Engisch's formula of the so-called „condition according to statute" deserves precedence (see footnote 38).

distant from it, are equivalent and instrumental for its emergence in the equal way. However, in concrete establishing of criminal liability for the consequence that has taken place, such distant conditions shall not be the subject of criminal law analysis. The first corrective in the above sense would be the statutory description of criminal offence and the very act of commission. Consequently, most of such distant acts in case of theft, for instance (Art. 203 of Penal Code), could not be classified as „taking away of another person's movable object".[7] Or, as the case may be, in the first mentioned example, even the most extensive interpretation of „taking one's life" could include into such consequentially determined act the act of conception that, in its essence, is something entirely contrary as a notion (creation of life).

The act relating to criminal offence becomes a corrective in yet another sense. The list of conditions of observed consequence is considerably affected by the adopted concept of the act of criminal character. Thus, according to Welzel's final teaching, the causing of a consequence by wrongful intention has to be introduced already in the notion of act,[8] so that some kind of subsequent evaluating and impartial inquiry of causation (which is otherwise presumed by the equivalence theory taken as a theory of equality of all conditions) would have no usual importance. The social teaching concerning the act does exclude from examining causation those acts that are not socially significant,[9] while a part of personal theories reduces the normative evaluation process exclusively to those acts that allow for managing the causal sequence.[10] Similar reduction is found also in Serbian criminal law theory.[11] However, such opi-

7 Along these lines as well, the condition without which there would be no consequence, would include, for instance, manufacturing the goods that were the subject of theft. If the goods were not manufactured, they subsequently would not have been stolen either. Manufacturing of goods, however, is by no means an act of deprivation of someone's property in terms of the defining elements of the offence of theft.

8 „In case of delicts characterised by wrongful intention, relevant for the definition of the offence is only the causal link that is directed by intent" (Welzel, Hans: *Das Deutsche Strafrecht. Eine systematische Darstellung,* eleventh edition, Walter de Gruyter & Co., Berlin, 1969, p. 45).

9 „An act is a socially significant human behavior" (Jescheck, Hans-Heinrich / Weigend, Thomas: *Lehrbuch des Strafrechts. Allgemeiner Teil*, fifth edition, Duncker & Humbolt, Berlin, 1996, p. 223).

10 This is, for instance, Arthur Kaufmann's personal theory. Personal theory of Roxin relating to act (act as „expression of personality"), on the other hand, is not a value judgment (Roxin, Claus: *op. cit.*, pp. 202 *et seq.*).

11 Thus, Stojanović's social-personal way of defining of act, for instance, results in excluding socially adequate behavior already at the level of act, although the exemption from criminal liability could be carried out at some subsequent stage (of causality, of permitted risk as the grounds of exemption from illegality or guilt). See Stojanović,

nion in our theory is an exception. Most of our authors do adopt the naturalist and classical notion of act that deprives it of any kind of normative contents (act as an intended bodily movement). The very causality in such discourse is reduced, in essence, to the application of the value-neutral equivalence theory, while the scope of conditions obtained through its application tends to become narrower – to the level of illegality and, particularly, of guilt. Thus, if A inflicts a minor injury to B, not being aware of the fact that B is a haemophiliac, so that B bleeds to death – the issue of A's criminal liability for the unwanted consequence may be reduced to the objective possibility that the perpetrator could have foreseen such consequence, as well as the causal chain. Although the reduction of possible causes may at the worst be done by the criminal court at the level of guilt as well – the comparative law and practice also apply the teaching of: adequate causality, theory of relevance, and the impartial reckoning in.[12] All these conceptions are attempts to narrow down, by applying the normative evaluation method, already in the field of the objective subject-matter of offence, the list of possible conditions which, through the *condicio sine qua non* formula, could be considered a *causa*. This is the way of reducing the task of equivalence theory to setting a relatively wide framework for distinguishing legally relevant facts necessary for the evaluation, while criminal liability and possible narrowing down would be carried out by reckoning the consequence in the objective subject-matter of criminal offence, or in the process of inquiring the wrongful intent and negligence.[13]

HYPOTHETICAL CAUSATION

In applying the *condicio*-formula to criminal offences involving an act of commission, one is not allowed to exclude the causal connexion on the ground of a hypothetical causation chain (the so-called „reserve cause").[14] Let us imagine that A kills B with a knife at the moment of

Zoran: *Krivično pravo. Opšti deo*, twelfth edition, Pravna knjiga, Belgrade, 2006, pp. 107 – 108.

12 The impartial reckoning in is a procedure according to which the existence of causal connexion between the act and the consequence, in the event of consequential criminal offences, is examined by applying a two-level treatment: at the first level, by applying the equivalence theory, we examine whether the perpetrator's act amounts to the cause provoking a consequence; at the second level, we attempt to find out whether the consequence may be attached in an impartial way to the perpetrator as his/her criminal offence.

13 Jescheck, Hans-Heinrich / Weigend, Thomas: *op. cit*., p. 284.

14 See, for instance, Wessels, Johannes/ Beulke, Werner: *Strafrecht, Allgemeiner Teil*, thirty second edition, C. F. Müller, Heidelberg, 2002, p. 53.

boarding a plane which crushed somewhat later during take off, killing all the passengers. If we ask, while inquiring in this case the matter of causation of A's act, while taking in consideration the subsequent air crash – whether death of the not-fated passenger would occur if he had not been stabbed – we would conclude that death would still occur even without A's act; it turns out that A's act is not the cause of B's death, although, by experience, there is no doubt that his/her act, as the most directly connected with the consequence, resulted in the given death. Consequently, the process of examining causation excludes the consideration of hypothetical causal connexion, even in the event of existing, as in the case mentioned above, of a considerable probability that B would be killed anyway in the subsequent air crash.[15] The hypothetical condition is excluded since being not really instrumental within the causal chain.[16] After all, such conclusion could be reached also on the ground of the *condicio sine qua non* formula, since some authors apply the conception of „falling off of the *concrete* consequence", and/or of non-materializing the consequence in the form of its concrete substance.[17] This addition to the formula is justified, so that every modification of consequence in terms of time, place or mode represents its condition. Consequently, *every condition that cannot be neglected without – if neglected – provoking the falling off of the consequence in its concrete substance, has to be causal.* In this way, if A kills a terminal patient B, the fact of shortening B's life would meet the causality condition, although death would ensue anyhow – as the very acceleration of death would suffice for the existence of the causal connexion. On the contrary, due to mortality of man, we would have to renounce the very existence of causal connexion in every case of one's death. Consequently, the correct application of the *condicio*-formula does not imply the question as to whether B's death would occur anyhow (and in any mode whatsoever).[18] Since in our case the death resulting from stabbing is not identical to death in air crash, so that without A's act there would be no B's death at that moment and in that manner – the causation of A's act cannot be questioned at all. Hypothetical

15 Similar examples: murder of a person entering into a vehicle with the bomb set by another, which would most probably be the cause of death as well; killing a person sentenced to death, immediately before his/her execution, by a member of the family of the one suffering damage, attending the execution.

16 The „air crash" event actually did happen, but after the completion of the causation chain under our inquiry. The process of establishing causation does not allow for any kind of guess-work as to what could have happened, if at all, if there was no stabbing. Perhaps, for the sake of an example, some telephone call a minute before the take off would dissuade the passenger from the intended flight, so that there would be no his/her „almost certain" death in the air crash.

17 See, for instance, Roxin, Claus: *op. cit.*, p. 302.

18 Wessels, Johannes / Beulke, Werner: *op. cit.,* pp. 53 – 54.

conditions are taken in consideration only exceptionally in the process of examining causation, i.e. acts that prevent the running of causal course, whose realization would mean that there would be no consequence at all,[19] as well as in case of *quasi* criminal offences of non-feasance (omission to act).[20]

INTERRUPTION OF CAUSATION AND THE SO-CALLED PROHIBITION OF RECOURSE

Since causation represents the examination of objective connexion and rules out the establishing of subjective orientation toward such outcome – the causation of a previous human act as an instrumental condition should not be negated by possible subsequent wrongful intention, negligence or incidental interference by third parties, by coming forth of unexpected natural phenomena or acts committed by a passive holder of right.[21] Consequently, should A injure B by stabbing him/her, but the subsequent death of B that came forth was a consequence of traffic accident on the road to hospital; a mentally disturbed nurse kills B in a hospital; a physician D, while performing surgery, was grossly negligent, and this was followed by fire in the hospital; considering himself an expert in folk medicine, B treats a wound with a vegetable preparation that causes serious infection and, finally, death of a person treated – in all these cases A's act remains causal.[22] It goes without

19 Consequently, should A prevent B to rescue a drowning person C, the A's act is causally connected with C's death after we have established that B would quite probably (and almost certainly) rescue C.

20 See Stojanović, Zoran: *op. cit.*, pp. 118 – 119.

21 „Causation as an objective connexion between man's act and a consequence does exist in the sphere of criminal law not only where incriminated act amounts to a direct requirement for taking place of the prohibited consequence, but also where such act, together with acts of other persons or requirements of other kinds, have contributed to materialization of the prohibited consequence, so that it emerged as its cause". (See the ruling of the Supreme Court of Yugoslavia Kž–36, of 17 June 1969, in: *Zbirka sudskih odluka*, Službeni list SFRJ, Belgrade, No. 3/1969, p. 134).

22 Contrary to that, our case law, as a rule, wrongly relates the notion of interruption of causal connexion to the operation of subsequent conditions. Serving as relevant example is the following segment of the assignment of reasons found in a court decision: „Should the death occur through interference of a new real cause (for instance, a third party actio or the effect of an Act of God) which, by its independent operation and in spite of the inflicted injury, leads up to death, then it might be considered that there was an interruption of the causal connexion betwee the act of the accused and the consequence that has taken place." (See the sentence of the Supreme Court of Bosnia and Herzegovina, Kž. of 12 December 1979, in: *Zbirka sudskih odluka*, No. 4/1979, p. 88). In case of an Act of God or an accountable act of a third party, there is no interruption of causality, but only

saying that this does not imply that consequence would be attached to a holder of right who is the actor of one of the previous acts. The corresponding reducing of criminal liability may be effected either at the level of objective reckoning in, or in terms of subjective reckoning in (of the guilt).

In the figurative sense, there would be interruption of the causal chain only after we conclude, by directly applying the formula to concrete case, that the observed condition is „outrun" (overwhelmed, surpassed) by the operation of subsequent condition.[23] In this case one does not speak of interruption in the true sense of the word, since, in fact, a subsequent act establishes an entirely new causal chain that, according to *condicio*-formula, has no connexion at all with the previous acts. Consequently, if A pours a slowly effective poison into B's drink in order to murder him/her, and B takes the drink, but C, who came to the scene, kills B by shooting him – the consistent application of the *condicio sine qua non* formula would mean that A's act is no more the condition of a given consequence.[24] B's act cannot be excluded from the analysis because it is not hypothetical but a really effective condition. This is the only situation where one might introduce, in terms of a wider context, the element of interruption of causation.

There shall be no interruption of causal connexion where another act characterised as wrongful intention interferes between perpetrator's act and the ensuing consequence. According to conception of so-called *prohibition of recourse*, particularly held by the older criminal law theory, this is viewed as the case of causal chain interruption of its kind. According to that conception, there shall be no *ex post facto* taking in

---

the interruption in the process of allowing for the consequence into the objective subject-matter of the offence.

23 There are authors speaking about the so-called interrupted causation (see, for instance, Gropp, Walter, *op. cit.*, p. 139, according to whom the outrun causation is but just one of its subspecies), although this term is not the most adequate one since causation, as such, may not be interrupted – it does exist or does not exist. The topic of „outrun" causation is treated, for instance, also by Baumann, Juergen/ Weber, Ulrich/ Mitsch, Wolfgang: *Strafrecht. Allgemeiner Teil*, eleventh edition, Ernst und Werner Gieseking, Bielefeld, 2003, p. 239. Roxin and Kühl apply the term on an equal footing (see Roxin, Claus: *op. cit.*, p. 305; Kühl, Kristian: *op. cit.*, p. 32).

24 One might ask whether B's death, as the observed outcome, would occur even without A's act (pouring the poison into the drink). Since the death occurred even without A's act – his/her act is not the *condicio sine qua non* of the lethal outcome, so that A shall be responsible for an attempted murder only. Causation of A's act whould, however, still exist, if, for instance, due to the beginning of poisonous effect, B would become so weak as to be able to reach for help in the neighbourhood; in the meantime, however, C murders him/her on the road to the neighbour. If there was no pouring of poison by A, B would not be present at the place at that moment, so that A's act remains a causal factor.

consideration of conditions preceding (in terms of time) the wrongful intention offence, i.e. the causation is interrupted by such offence committed by another. Inacceptability of that conception derives already from the basic requirement imposed by the *condicio*-formula according to which the sphere of relevant analysis has to include all conditions without which there would be no consequence, regardless of subjective relationship between all participants in the chain. Normative evaluation and the subjective contents' analysis, naturally, would not be avoided at the level of impartial reckoning in, or that of the guilt, but such narrowing down should not be applied in the sphere of implementing the equivalence theory.

CUMULATIVE CAUSATION

As we have seen, instrumental in taking place of an adequate criminal law consequence, as a rule, is a number of different conditions. The equivalence theory, just as the natural and jurisprudential notions of causation, imply always a *sui generis* cumulation of conditions.[25] In its narrow sense, the term „cumulative causation", however, is understood to mean a synergetic effect of several independent conditions in occurring of consequence; every single condition in such process, however, is not sufficient to independently cause the given consequence, which takes place only through cumulative effect of all synergetic conditions. At the same time, quantitative „insufficiency" of a single condition is taken to be a circumstantial element and is not a result of some preceding deal between the perpetrators, since this would be the case of joint commission. In that case the consequence as well, would be considered as their joint result, so that it would be reckoned in to all co-perpetrators. Consequently, the cumulativeness in this case would imply examination of several independent and, if taken individually, inapt causes that, together, bring about the intended consequence. Let us take a school example of a cumulative causation: A and B, independently from one another, give to C a poison dose that, taken individually, is not sufficient as to cause C's death, but taken jointly, both doses, however, do cause the death. There is no doubt that, according to the *condicio sine qua non* furmula, both acts were causal, because it is not possible to rule them out individually without, at the same time, excluding C's death as a fact.

Cumulative causation does exist also in the case of majority decision-making in collective bodies where voting and, generally, the

25 Jakobs, Günther: *Strafrecht. Allgemeiner Teil. Die Grundlagen und die Zurechnungslehre*, second edition, Walter de Gruyter, Berlin – New York, 1993, p. 192.

decision-making process is not protected by substantive law institute of indemnity.[26] If, for example, judges or lay judges, while deliberating and deciding through voting on an unlawful decision in the sphere of criminal procedure, independently of one another and without making a joint plan, reach the majority vote of the bench members (Art. 151, paragraph 1 of the Criminal Procedure Law) – each and every act in voting process shall be causal in terms of equivalence theory.[27] In this example as well, the act of every individual bench member is not sufficient to form the necessary majority, so that consequence takes place only by cumulative effect of all acts. Cases of cumulative causation are also possible with criminal offences against environment, where violations or encroachments of the object of protection often occur through cumulating the effects of individual polluters.

Further deciding on perpetrators' criminal liability depends on whether the evaluation is done already at the level of objective subject-matter of offence (by applying so-called objective reckoning in), or only in the sphere of guilt (by applying subjective reckoning in), which depends upon the adopted jurisprudential approach, the court practice, and a series of other circumstances. Although such analysis is not in the focus of the present article, it is worth noting that cases of cumulative causation, in spite of not creating a problem in the field of examining the application of *condicio*-formula, do not, as a rule, lead to reckoning in of the consequence itself. Materialization of B's act (in our first example) in the process of inquiring into A's criminal liability (and *vice versa*) is but an unusual circumstance which, as a rule, may not be counted on, and/or which – from the aspect of guilt – cannot be foreseen, and furthermore, which results in punishing both A and B for an (inappropriate) attempt. Although we have concluded that our court practice engages in the correction of equivalence theory results only in the matter of guilt (which in this case we would negate due to lack of meeting the requirement of duty, and the possibility of foreseeing such an outcome and a possible mistake relating to causal connexion), an event may also be evaluated normatively from the standpoint of adequate causation theory.[28] Since the

26 See, for instance, Art. 77, paragraph 2 of the Constitution of the Republic of Serbia.

27 See the criminal offence of violating the law by a judge, a public prosecutor and his/her deputy (Art. 360 of the Penal Code of Serbia).

28 In order for an act to amount – according to the conception of adequate causation – to the cause of a consequence, it is necessary for the consequence as well, to be adequate, i.e. apt according to experience, to produce it. The ground of such conception is to be found in the idea of a criminal law norm as provided for to prevent launching only into those legally inacceptable risks which, as their outcome, have the materialization of consequences, where just these (and not any other) risks come to being

objectively-subsequent evaluation points at the fact that an impartial observer, found in the social position of perpetrator, because of insufficient quantity of poison used, could not be able to foresee that death would result – such consequence is a result of accident and not of perpetrators' acts, so that they have to be punished for the attempt.[29] Consequently, the unusual character of the event does not negate the causation of the relevant acts as such. The atypical character of causal course is reflected in the sphere of its normative evaluation.[30] A similar conclusion could be reached also by applying the principle of objective reckoning in, which begins from two assumptions: a perpetrator by his/her act has to create or increase the danger of producing a concrete consequence; i.e. the given consequence must be a direct realization of the very danger created by perpetrator's act.[31] Since consequence in the mentioned example does not amount to the realization of risk of a single act, but of the joint independent and unexpected combination of effect of all acts, the realization of B's act becomes an essential departure from the supposed causal course.[32] Consequently, these consequences, too, shall not objectively be reckoned in to the perpetrators.

(see Jescheck, Hans-Heinrich/ Weigend, Thomas: *op. cit.*, p. 285). In order for a consequence to be reckoned in to the perpetrator, it is indispensable, according to the probability criterion, that his/her behavior be adequately correspondent to the consequence that has come forth. Since such criterion is indefinite, the adequacy formula is appropriate in the sphere of criminal law to rule out the reckoning in of only extremely atypical and rather improbable causal lines, so that it was formulated in a negative form; i.e. the observed consequence may not be reckoned in to a perpetrator should it seem improbable that a given act migh result in its coming forth. This is why the adequate causation theory is a highly restricted correction tool of results of the equivalence theory.

29 Wessels, Johannes/ Beulke, Werner: *op. cit.*, p. 67.

30 As said above, the expression „atypical causal course" is understood to mean the cases where a consequence does not come forth as a result of the usual course of events and general everyday experience.

31 The objective reckoning in supposes that perpetrator's act has to be instrumental in the realization of danger, i.e. in direct materialization of wrongful risk resulting from his/her act. Therefore the consequence is not reckoned in, objectively, if it did not directly emanate from the danger created by perpetrator's act, but instead being in an accidental connexion with it. Thus, for instance, if A, intending to murder B, injures him/her seriously, so that B is transported to a hospital where he/she dies in the fire – the question arises as to whether A's act has increased, in a legally relevant way, the danger of A's death in the fire. Since staying in a hospital does not amount to a relevant danger – the objective reckoning in had to be negated, so that A would be responsible for an attempted murder only. The case would be different, naturally, should coming forth of the consequence amount to adequate realization of the danger created by perpetrator's act only, for instance, if death occurred due to infection of the wound or if the injured person, being unconscious, suffocated because of womitting.

32 *Ibid*.

ALTERNATIVE CAUSATION[33]

In contrast to cumulative causation, where the implementation of *condicio*-formula is not a particular problem, the difficulties in application do arise as far as so-called alternative causation is concerned. The alternative causation involves simultaneous and independent operation of several conditions, among which every single one is instrumental in independently producing the observed consequence.[34] In our classical example involving the acts of giving the poison, this would be the case with A and B who, independently from one another, give a poison dose to C.[35] Examining *condicio*-formula in its basic form yields problematic results. Had A failed to give his/her dose of poison, C's death would still occur, with the understanding that his/her act was not causal for ensuing death. Similar conclusion could be reached also regarding B's act, due to simultaneous existence of A's lethal act, which is not a hypothetical but a real *causa.* Consequently, it turns out that A and B, in spite of acting independently and in spite of materialization of C's death, would be responsible only for attempted murder, although they have carried out their aim. Most authors because of that,[36] while being unable to avoid mentioned lack of logic, supplement in a way the form of the formula by the following formulation: *among several conditions that, to be true, may be alternatively but not cumulatively eliminated, without at the same time*

33 In the part of relevant literature the alternative causation is called „twofold" (see, for instance, Baumann, Jürgen/ Weber, Ulrich/ Mitsch, Wolfgang: *op. cit.*, p. 242; Jakobs, Günther: *op. cit.*, p. 192; Kühl, Kristian: *op. cit.*, p. 31), and/or „varied" causation (Wessels, Johannes/ Beulke, Werner: *op. cit.*, p. 52).

34 In this case as well, the same requirement is the valid one: the operation (acts) of perpetrators has to be treated independently, since otherwise they would be treated as co-perpterators to whom the consequence would be reckoned in as a joint result.

35 Acts have to be simultaneous since otherwise, had one act preceded the other, the first one would be the cause of death, because it really had produced it. Subsequent act that, due to the time of its taking place, had not been actually effective, so that in such a case it would amount to a hypothetical condition, whose impact is ruled out in applying the *condicio*-formula. The problem, however, does arise should it become impossible to prove which of the two non-simultaneous conditions did actually produce the consequence. Thus, for example, if two persons, independently from one another, fire a lethal shot each (one, for instace, in the heart, and the other in the head) immediately one after the other, it should be necessary to establish which shot was the first, causing thus the death. Should that be impossible to prove, the causation relating to both A and B, according to the *in dubio pro reo* rule, cannot be confirmed, so that both persons would be accused for attempted murder only. This, however, is not a causation problem, but the one of pleading (see Triffterer, Otto: *Österreichische Strafrecht, Allgemeiner Teil*, second edition, Springer-Verlag, Wien – New York, 1994, p. 132; Jakobs, Günther: *op. cit.*, p. 192).

36 Wessels, Johannes / Beulke, Werner: *op. cit.*, p. 52; Baumann, Jürgen/ Weber, Ulrich/ Mitsch, Wolfgang: *op. cit.*, p. 242; Gropp, Walter: *op. cit.*, p. 141.

having to disregard the consequence in its concrete substance – each of these conditions is considered causal in relation to taking place of consequence.[37] Although some authors point out that such extension of formula makes impossible unified application of equivalence theory,[38] we do find that addition to the *condicio*-formula is appropriate. Causation is a legal notion and it is possible for legal order to legitimately shape the limits of causality and, as circumstances require, modify the basic formula as well, should there be risk of even theoretical inconsistencies in implementation of law.[39]

37 Kühl notes, at least relating to this classical example, that perhaps there is no need for supplementing the formula: if one considers only the really effective quantities of poison given by A and B which, taken together, have caused C's death – then the residuum of their quantities that were not effectively causal must be deemed hypothetical condition whose causation is not to be examined. In this way, this example would be identical to a cumulative causation case. In such a case, in course of examining causation of A's act, we would conclude that his/her act is the cause of C's death because his/her part in the total quantity of poison that produced death may not be disregarded without having death as a consequence to be ruled out. The same conclusion would be reached also regarding B's act (see Kühl, Kristian: *op. cit.*, p. 132). However, that conclusion would be possible only in situations where act may be broken down in an extended analysis to parts that are genuinely and effectively causal. In the case, for instance, of two simultaneous lethal shots, such approach could not be possible. However, another argument would help in this case should we want to confirm the superflousness of extending the formula. In other words, in conformity with basic formula, in order to have causal connexion, all that is necessary is to prove the fact that C's death was slightly speeded up through the observed dose of poison. This, in most cases of interweaving of effects of separate acts that can be imagined (which otherwise is rather hard to realize since these would mostly involve co-perpetrators), will lead up to establishing causation already according to the basic form of *condicio*-formula).

38 This is emphasized mainly by proponents of formula relating to the so-called „condition conformable to statute" (*Formel von der gesetzmässigen Bedingung*) which is more than acceptable alternative to the *condicio*-formula. According to that formula, causation in terms of equivalence theory implies the answer to the question as to whether an act is followed (in terms of time) by changes in the outside world which, according to well-known natural laws, are necessarily connected with it, and which amount to consequence conformable to the subject-matter of offence. Such cognition may be contributed only by professional opinion of an expert appointed by court, and not by the *condicio*-formula alone. (See Jescheck, Hans-Heinrich/ Weigend, Thomas: *op. cit.* p. 283; for the original form see Engisch, Karl: *Die Kausalität als Merkmal der strafrechtlichen Tatbestände,* Beiträge zur Strafrechtswissenschaft. Neue Folge, volume No. 1, Verlag von J. C. B. Mohr (Paul Siebeck), Tübingen, 1931, p. 21). Should chemical analysis in the example with poison demonstrate that both doses have contributed to lethal outcome – both doses would be causal relating to the completed murder. Consequently, this formula is a way to avoid the lack of logic in applying the *condicio*-formula to cases of alternative causation, which otherwise, according to some authors, is not successfully settled by the addition to *condicio*-formula itself . (For detailed argumentation see Roxin, Claus: *op. cit.*, p. 303).

39 Comp. Baumann, Jürgen/ Weber, Ulrich/ Mitsch, Wolfgang: *op. cit*., p. 242.