# Negation in the language of theology – some issues\*

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#### Abstract

The paper consists of two parts. In the first one I present some general remarks regarding the history of negation and attempt to answer the philosophical question concerning the essence of negation. In the second part I resume the theological teaching on the degrees of certainty (*notae theologice*) and point to five forms of negation – known from other areas of research – as applied in the framework of theological investigations.

## Keywords

logic, theology, negation, difference, negation-as-failure, strong negation, imperative negation, *notae theologice*.

# o. Introduction

The year 2016 marks the 80<sup>th</sup> anniversary of the establishment of the so-called Cracow Circle which took place in Cracow on August 26, 1936. A meeting of a group of scientists, initiated by Fr. Konstanty Michalski who was the rector of Jagiellonian University, was

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held in connection with the Third Polish Philosophy Congress which was also held in Cracow at that time (Wolak, 2005, p. 97). Attendants included: Fr. Joseph Maria Bocheński, Jan Franciszek Drewnowski, Fr. Jan Salamucha, Bolesław Sobociński, and Jan Łukasiewicz. The first four became the founders and first members of the Circle. The main interest of the Circle was the methodology of philosophy and theology (Wolak, 2005, pp. 97–98). One of the program's goals was to prove the possibility of logically analyzing some of the issues of Christian philosophy and theology. Theology and Thomistic philosophy played a significant role in this program, as the aim was to restore them to their former glory by use of the latest tools of contemporary logic. Interestingly, it is speculated that the Circle was intended to be the Christian response to the activities of the Vienna Circle. This paper intends to pay tribute to the members of the Cracow Circle and the anniversary of its creation, as well as to present a small contribution, if any, to the development of the Circle's program assumptions, namely the last one of the aforementioned goals.

As the title of this paper suggests, this contribution intends to address the question of how to use negation within the context of theology. The understanding of theology is limited so as to avoid issues irrelevant to the considerations. Firstly, I assume theology as Catholic theology here, and secondly, I assume that as a methodical, rational, and purposeful reflection on divine Revelation, it is an academic discipline.<sup>1</sup> The more sophisticated understanding of theology, which is irrelevant for further deliberations, is omitted. The term here implies practicing theology in connection with faith in God's Revelation.<sup>2</sup> Theology has a very complex structure, which would require

<sup>&</sup>lt;sup>1</sup> The study of theology is controversial for certain philosophical or scientific circles.

<sup>&</sup>lt;sup>2</sup> This is a contentious issue. I will not consider the issue of a theologian's faith, as it would go beyond the framework of this work.

a separate study.<sup>3</sup> For the purposes of this work, let us assume only that it is divided into different sub-categories, the most important of which are the following disciplines: Biblical (e.g. the exegesis of the Bible), historical (history of the Church, history of dogmas), systematic (e.g. dogmatic and fundamental theology), and practical (e.g. pastoral theology, homiletics).<sup>4</sup> The considerations will mainly concern and be a part of the framework of Catholic systematic theology. They will particularly refer to negative theology as a theological system, which is distinguished by certain methodological assumptions connected with negation.<sup>5</sup> The main issue of this work concerns certain ways of understanding and using negation in theology. To achieve this goal, I will begin my reflection with a very general presentation of the philosophical approaches to negation<sup>6</sup>, from which I shall move on to some of the approaches to logical negations, especially those used in real theological research. Due to the assumption regarding natural theology, we assume that classical metaphysics ends with proof of God's existence, thus giving rise to theology as an ancilla teologiae.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> At the end of the work, some observations will be made on this subject.

<sup>&</sup>lt;sup>4</sup> As different religions and faiths are known, one can speak of different theologies shaped in different religions.

<sup>&</sup>lt;sup>5</sup> This system is called otherwise apophatic theology or *via negativa*, and is contrasted with cataphatic theology – *via positiva*.

<sup>&</sup>lt;sup>6</sup> Comprehensive elaboration on this issue would require a very comprehensive study. I use, to a large extent, the following monumental work on negation (Horn, 2001) – most of the historical findings come from this work, unless indicated otherwise.

<sup>&</sup>lt;sup>7</sup> The very concept of the proof of the existence of God is quite controversial. Also controversial are the logical problems related to the term "God", concerning e.g. its syntactic category.

## 1. Part l

The concept of negation stems from a certain kind of ontological relation, and for this reason its linguistic expression is, firstly, a term-negation, and, secondly, a proposition-negation. One of the first philosophers to consider the notion of negation was Parmenides (about 540-470 BC). Starting from the analysis of the concept of being as-is, with the Eleatic School, he arrived at opposing being with non-being.<sup>8</sup> Early Buddhism (cf. Horn, 2001, p. 1) and all major philosophers of ancient Greece (cf. Sophist 245 E) were independently concerned with the relationship between being and non-being, before and after Plato. Plato himself (in the Sophist) also dealt with this issue, while also speaking about negation. While for Parmenides there was no non-being, and it was consistently 'something'<sup>9</sup>, for Plato, in fact, for cognitive and linguistic reasons, the negation of being - non-being was ontical (Sophist 255-258). For him, negation was some form of 'otherness', and it was a form of being, or 'something'. This position from the Sophist is not his only one in terms of negation. A slightly different, though similar, view was presented by Parmenides, where he implicitly used three types of negation: simple negation (currently called classical), global negation of predic-

<sup>&</sup>lt;sup>8</sup> He is assigned the following sentence: '*Being* alone is and *nothing* is altogether not.'. Plato, in the *Sophist*, quotes Parmenides: 'Because it will never prevail that they are also non-existent. Always keep your thoughts away from this path' (*Sophist* 237 A and 258 D). See below.

<sup>&</sup>lt;sup>9</sup> This is a simplification and a serious issue for historians of ancient philosophy. To put it a little more precisely, though simplified still: "τὸ ὄν" means *being* and "ἔστιν" means *is* (inf. "εἶναι"). I quote Parmenides via (Diels and Kranz, 1906); 28B 6,1-2: "Χρὴ τὸ λέγειν τε νοεῖν τ' ἐὸν ἔμμεναι· ἔστι γὰρ εἶναι μηδὲν δ' οὐκ ἔστιν· τά σ' ἐγὼ φράζεσθαι ἄνωγα." ("It must be that what can be thought and spoken of is; for it is possible for it to be, and it is not possible for what is nothing to be.") I owe these comments to Father Konrad Rycyk OFM.

tions, and local negation of certain predictions (Król, 2013, p. 123ff). Other authors, e.g. Stróżewski, distinguish two types of ontological negation: discriminating (platonian) and crossing (parmenidian). The derivatives of these two negations are the two main problems related to negation being considered in ontology: *non-being* and *negative states of affairs*.

Plato's position on negation is mainly ontological, but it is possible to find reflections on the linguistic expression of negation even in his work. Aristotle's position is different in the sense that he reformulated the concept of negation in linguistic and logical terms. In the *Categories*, he introduced four types of oppositions (scholastic: *oppositis*) of expressions, ordered from strongest to weakest:<sup>10</sup>

- contradiction (*contradictio*) for example "He sits" vs. "He does not sit";
- privation (*privatio*) e.g. "sighted" vs. "blind";
- contrariety (*contrarietas*) e.g. "good" vs. "bad";
- correlation (*oppositio relativa*) e.g. "double" vs. "half"; "father" vs. "son".<sup>11</sup>

The distinction between affirmative and negative categorical sentences seems to originate from Stagirite. Out of the above oppositions, the contradiction is the only one to refer to sentences (propositions) and only in the case of the contradiction "it is necessary for

<sup>&</sup>lt;sup>10</sup> The treatise *De quatuor oppositis* by St. Thomas Aquinas concerns this issue. Thomas's authorship of the treatise is strongly questioned.

<sup>&</sup>lt;sup>11</sup> In scholastic philosophy, the opposite of the generally understood (*oppositio*) is understood as the relationship between objects that are not concordant in the same thing and from the same point of view (*A Scholastic List of Definitions for Philosophical Terms*, n.d.). Some also distinguish the polar opposite from the relative opposite (*oppositio relativa*), an example of which can be shown in the following pair: "man" vs "woman". Polarity refers to a certain scale.

the one to be true and the other false" (Horn, 2001, p. 8).<sup>12</sup> Aristotle distinguished two negations, depending on the placement of the negation in the sentence.<sup>13</sup> Therefore (Horn, 2001, p. 15):

- (S1) Socrates [is not] ill.
- (S2) Socrates is not-ill.

These sentences differ in terms of truth conditions: truthfulness depends on whether Socrates exists or does not exist. If he does not exist, the sentence (S1) is true, and (S2) is false. On this basis, one can build a peculiar logical square with the following vertices: S is P, S is not-P, S is not not-P, S is not P. There is a contradiction (contradictio) between the first and fourth as well as the second and third ones; a contrariety (contrariestas) between the first and second, and a subcontrariety (subcontrariestas) between the third and fourth. This has consequences also for negative theology, as similarly to the above example, opinions about God may differ in their logical values depending on the presupposition of God's existence. If negative theology, in its epistemological thesis (ENT), is actually neutral towards the problem of negation, then each of the detailed theses (SNT) is no longer neutral because it concerns language. Take, for example, the sentences "God is not limited" and "God is unlimited"; they have different meanings, as Aristotle already pointed out, because only the first one is a negation of the sentence "God is limited" (Horn, 2001,

<sup>&</sup>lt;sup>12</sup> These considerations have become the basis for the creation of a logical square in various versions, including the modal one. It is also interesting to note that Aristotle was already considering something in the shape of what is now understood as a presupposition, because the logical value of contradictory sentences depended on their form and the assumption of the existence of the subject of the sentence (Horn, 2001, p. 9).

<sup>13</sup> Cf. above.

p. 16). Any sentence in which the scope of negation does not apply to the whole sentence is therefore "somehow affirmative" (Horn, 2001, p. 18). The Stoics, on the other hand, distinguished the following:

- denial "Nobody goes".
- privation e.g. "This man is unpleasant".
- negation (apophatikon from Gk. ἀπόφασις) "Not: Socrates is ill".<sup>14</sup>

The last of these negations, *apophaticon*, is, in its full meaning, an external negation. Both of the Stagirite negations mentioned above are internal. The Stoics' apophaticon has the widest scope, because it pertains to the whole sentence and contains a negation of the particle "is," as well as a denial of the predicate. The Stoics formulated the law of double negation, i.e. the law which states that the negation of a negation of a sentence is equivalent to that sentence. Aristotle in Metaphysics (b. I, 986 a) mentioned how some of the Pythagoreans had created a table of ten opposing pairs of terms considered as the principles of things. These are: "(1.) Limit and the Unlimited; (2.) Odd and Even; (3.) Unity and Plurality; (4.) Right and Left; (5.) Male and Female; (6.) Rest and Motion; (7.) Straight and Crooked; (8.) Light and Darkness; (9.) Good and Evil; (10.) Square and Oblong". Heraclitus also discussed the opposite of unity being the driving force behind the development of the universe, as referred to later by Hegel. On the other hand, John Scotus Eriugena returned to the concept of Platonic negation in the form of a discriminatory negation, indicating in his hierarchy of entities that the negation of a lower being in a hierarchy is the affirmation of a higher being. It accepts only three of the four opposites of St. Thomas, and the contradiction is

<sup>&</sup>lt;sup>14</sup> This kind of negation is closest to the negation we encounter in Frege as well as in contemporary logic.

replaced by nothingness. Bergson recognized the subjective concept of negation, where the last one concerned the psychological attitude of the subject.<sup>15</sup> Frege questioned the division of judgments (as well as sentences or thoughts) into affirmative and negative, considering that the division was not logical. This was his example (Horn, 2001, p. 32):

- Christ is immortal,
- Christ lives forever,
- Christ is not immortal,
- Christ is mortal,
- Christ does not live forever.

The philosophical problem with the distinction between affirmative and negative sentences is fundamental. Multiple philosophers questioned this distinction, such as Peirce and Frege himself (Horn, 2001, p. 32ff). To sum up via Horn: "the fact that no clear criteria have been adduced for defining a class of negative propositions has not deterred centuries of scholars from debating the true nature of the negative proposition. Nor did the one-to-one correspondence between affirmative and negative propositions (or sentences?) stipulated by Aristotle, Royce and Wittgenstein [...] dissuade their contemporaries [...] from taking negatives to be inherently asymmetrical with, and in some sense inferior to, their affirmative counterparts."(Horn, 2001, p. 35)<sup>16</sup>. This puts apophatic theology in a particularly difficult position, as it is based on this very distinction. One could also approach this issue

<sup>&</sup>lt;sup>15</sup> The distinction for objective and subjective conceptions of negation can be found in (Kowalski, 1998). For historical issues in this section see (Stróżewski, 1967).

<sup>&</sup>lt;sup>16</sup> Compare this to the detailed research on negation, especially the negation of expressions that give attributes to people, which is relevant for us, in (Maciuszek, 2006). An interesting discussion of this problem can be found in (Kowalski, 1998).

in a simplified way, and demand that a negative sentence with some established understanding of negation should be negative, or that the occurrence of an agreed understanding of negation should result in a negative sentence. However, such an attempt to solve the problem seems artificial and inadequate in relation to language rules.<sup>17</sup> A very extensive logical study is being carried out concerning negation. However, as Sylvan points out, the general logical definition of negation corresponding to linguistic use is very complex, if at all possible (cf. Sylvan, 1999).<sup>18</sup> One of the reasons is that it is possible to formally distinguish (perhaps infinitely) many meanings of negation. On the basis of this primer on negation, one can develop a view on what its philosophical essence is: it is the *otherness*, i.e. the difference between the two. If T is an expression of a language, then non-T is an opposing expression to T, expressing this otherness.<sup>19</sup> From a logical point of view, this otherness should be semantic or pragmatic in character, because the syntactic aspect alone is not enough. In addition, constructive logic requires that non-A should be some kind of rejection of A.

<sup>&</sup>lt;sup>17</sup> There is another problem with apophatic theology, which is alleged to be contradictory. However, there are known and likely effective attempts to solve it, consisting of the use of other types of negations (Rojek, 2012). Cf. also (Król, 2013) whose considerations are similar, but concern a fragment of Plato's *Parmenides* dialogue, which cannot be understood consistently with the exclusive use of classical negation.

<sup>&</sup>lt;sup>18</sup> See also the other papers contained in (Gabbay and Wansing, 1999). Cf. also (Béziau, 2001).

<sup>&</sup>lt;sup>19</sup> Referring to Stróżewski's distinction, this *otherness* can be understood as having its own extremum in the form of a *crossing* (nothingness).

### 2. Part II

Let us move on to more detailed considerations regarding the main issue. First, we will quote five understandings of negation, and then show that they actually are, in a particular sense, used in theology. Let us now agree that A will be a sentence, and the mentioned examples of negation are:

- 1. non1-A means: A is false; classical negation (symbolically:  $\neg A$ );<sup>20</sup>
- 2. non2-A means: it is not known that A; negation-as-failure;<sup>21</sup>
- non3-A means: counter-example for A; Nelson's strong negation;<sup>22</sup>
- 4. non4-A means: A is forbidden; imperative negation;
- 5. non5-A means: A; paraconsistent negation.<sup>23</sup>

The ways of understanding the negation of sentences presented above are similar in that they are formulated in an intuitive way, aside from the paraconsistent negation. Their formalization is not purely a syntactic (formal) game, but is either based on actual use in natural

<sup>&</sup>lt;sup>20</sup> Classical negation is a clear term. Usually  $\neg A$  is interpreted as "A is false", or "It is not true that A". However, classical negation is an idealization of the inner negation, e.g. "Ann does not have a cat" and is idealized classically as "It is not true that Ann has a cat." Some people say that classical negation is not an idealization of the negation of natural language (vernacular negation), but an idealization of the negation of the language of mathematics (Béziau, 2001, pp. 5–6).

<sup>&</sup>lt;sup>21</sup> This way of understanding negation is derived from so-called logic programming, where: if it has not been proven that A, this means that: non-A. It differs from the other four negations considered, because it can be cancelled.

<sup>&</sup>lt;sup>22</sup> The strong negation of the Nelson non3-A sentence A, in the intuitive approach, means that there is a counter-example for the sentence A.

<sup>&</sup>lt;sup>23</sup> Intuitive understanding of paraconsistent negation is not clear (cf. Béziau, 2001). However, it is different from classical negation in the sense that it does not satisfy, as a precondition, the *ex contradictione quodlibet* rule.

language, or concerns certain areas of the language used in specific fields. These examples also show that although the natural language forms a whole, there are special logic rules or different logics in its specific areas. This difference of logics is traditionally expressed by what is usually referred to as the term non-classical logics. Based on modern knowledge, one can speak of classically non-classical logics, i.e. those whose structural rules are the same as those of classical logic (in other words, the operator of consequences has classical properties), e.g. multi-valued, relevant, or modal logics, as well as non-classically non-classical logics, i.e. such whose structural rules are different from the classical ones, e.g. non-monotonic logics. This raises the question of the methodological uniformity of individual scientific disciplines, particularly the theological disciplines. They can be formulated as follows: does a practicing scientist in a given discipline use a single logic or different ones? This question is related to another question, namely whether there is one or more than one concept of truth in use within the given discipline.<sup>24</sup> In the case of sciences, it is assumed that only the classic, correspondence theory of truth is used. This is certainly true of the natural scientific theory and the empirical data acquisition field. On the other hand, it seems that, considering the context of the discovery, each of these sciences, at some stage, must refer e.g. to hypotheses or assumptions, etc. This means that a different logic must be applied in this area. Referring to these remarks specifically in the context of theology, one can say that in theology, at least three concepts of truth are applied: classical, coherence, and personal. The first two concepts are well-known to philosophers, while the third is almost completely unknown. The basis for its formulation are the biblical quotations: «I am the way,

<sup>&</sup>lt;sup>24</sup> This is either a concept of truth or a criterion of truth. The case is complex and requires a separate analysis and, above all, data relating to specific domains.

the truth and the life» (Jn 16:4); then God said, "Let there be light!" (Gen 1:3). As I did not encounter any discussion regarding this personal concept of truth in philosophical literature, I will describe it very briefly, as such a presentation would require more extensive research. Truth is the same as a Person – God. According to Revelation, when God speaks something in indicative form, something becomes reality. On the basis of the Bible, we can say that God's words become real as if they were automatic – *per se*.<sup>25</sup> The only equivalent philosophical concept that I know of is the performatives of Austin, where a given statement becomes true by the very expression of e.g. "I baptize you"; because in some sense it creates reality. To make this concept of truth more familiar, one can refer to an argument from authority: if person X claims that A, then A is true. After the term "God" is used for X, we have; if God claims that A, so A. These three concepts (theories) of truth in theology have different uses:

- Correspondence theory is used in considerations concerning the material world and everyday life;
- Coherence theory is used for the accommodation of new theological research results;
- The third concept is applied, i. a. when justifying moral norms (e.g. commandments) and teleological sentences.

Consequently, there are three types of negations used in the aforementioned areas. In the case of language to which the classical concept of truth is applied, negation is understood in the classical sense, that is, "non1-A" means: A is false. In this case the matter is quite simple. In turn, when using a coherence concept or a criterion of truth, another negation is used. This situation arises when we are dealing

 $<sup>^{25}</sup>$  There are, of course, problems with understanding this issue. But the Bible itself explains this matter.

with a new statement or theological interpretation. Let it be expressed in the form of sentence A. The Magisterium of the Church usually takes a stand against A using the following rule expressed in the *Catechism of the Catholic Church* (p. 90): "The mutual relationships and coherence of dogmas can be found in the entirety of the Revelation of the mystery of Christ. "The diversity of these relationships with the fundamentals of Christian faith determines an order, the «hierarchy» of catholic truths." The theology therefore distinguishes in its corpus the doctrine of theological certainty arranged relative to the decreasing degree of their certainty, written below in bold (cf. Ott, 1974, pp. 9–10):<sup>26</sup>

- 1. *De fide divina definita* God's revelations with the highest degree of certainty found infallibly as the Revelation of God.
- 2. *De fide divina et ecclesiastica* Teachings of the Church definitively proclaimed by the Magisterium in an infallible manner (dogma).
- 3. *De fide divina* Truth revealed by God, although the Church did not speak dogmatically on the subject,
- Sententia fidei proxima Church teachings, generally accepted as God's Revelation, but not as such defined by the Magisterium.
- 5. *Sententia certa* Church teachings which the Church defined as infallible, having an inner connection with the revealed doctrine, although not announced as such.
- 6. *Sentia communis* Teachings which are often (or almost universally) recognized in the field of free theological research.

<sup>&</sup>lt;sup>26</sup> For the sake of clarity, it should be noted that theologians very rarely use these degrees of certainty to limit the number of degrees, and that the study of censures is very rarely maintained.

- 7. *Sententia probabilis* Teachings which are probable, with a low level of certainty, as it is not apparent or necessary from the revealed premises.
- 8. *Sentia bene fundata* Well-founded teachings, which, however, have not been proclaimed probable. In accordance with the 'spirit' of faith.
- 9. *Opinio tolerate* Opinions tolerated within the Catholic Church, but not supported.

The Church, based on the necessity of retaining the purity of faith, has constructed certain measures for this purpose. They are called censorship, or condemnation. These are statements referring to certain theological claims that are at any of the above degrees of certainty, in which the Church declares the inconsistency of or at least their doubt concerning the claims, with respect to the truths of faith (cf. Ott, 1974, p. 10). The types of such statements are as follows (cf. Ott, 1974, p. 10):<sup>27</sup>

- a. *Propositio haeretica* when the theorem is contradictory to a statement explicitly defined by the Church as belonging to Revelation (1);
- b. Propositio haeresi proxima when the theorem is contrary to a statement not explicitly proclaimed by the Church as belonging to Revelation, but considered by theologians as such (2);
- c. *Propositio haeresim sapiens* when the theorem is contradictory to a claim which is not considered infallible, but is recognized by theologians (3);

<sup>&</sup>lt;sup>27</sup> The right-hand side of censorship contains, in brackets, the numbers of theological certainty levels to which the censorship refers to.

- d. *Propositio theologice erronea* when the theorem is not contrary to a claim made directly by the Church, but to a logical conclusion of the Church's teachings (4,5);
- e. *Propositio temeraria* when a claim made in an unfounded manner (simplified or reckless) contradicts a commonly accepted view (6).

The theological truths of items 5-8 above must be 'reconciled' with the truths of items 1-4, which cannot be altered. During this reconciliation process, in which the criterion of coherence plays a key role, theology (a theologian) makes use of at least two non-classical types of negation. (ad. 1) In the first case, "non1-A" will mean: "A is rejected by the Magisterium because it leads to contradictions." Such is the case, for example, when A is considered propositio theologice erronea, because it leads to conclusions contrary to the truth taught by the Church. This is how classical negation works. A similar condition is fulfilled by intuitionistic negation. However, intuitionistic negation is not used in theology, because in this science there is no concept of construction in the intuitionistic sense. Instead, in theology, one can find the following reasoning: if 'it is absurd to recognize the non-existence of God', then 'God exists'. The allegation of the reasoning that it is impossible to identify God (constructively) has a provenance which seems intuitionistic. In apologetics, there is a certain tradition, in which a specific 'construction' of God (the concept of God), in based on observations of the world. This follows Saint Thomas' viae, where we find such 'constructions' of God as the First Cause or others.<sup>28</sup> In addition, as a curiosity, let us cite, for example, the view of St. Thomas Aquinas, who, due to his views on animation theory, which he acquired from St. Albert the Great, considered the

<sup>&</sup>lt;sup>28</sup> This issue is interesting and requires separate consideration.

doctrine of the Immaculate Conception of the Blessed Virgin Mary to be dangerous to the faith, because it implied a conclusion contradictory to the animation theory (Sum. Theol. III, q. 27, art. 2-5). (ad. 2) One use of non-classical negation is the case where non2-A means, just like negation-as-failure, "it is not known that A". Examples of such denials are situations regarding Marian dogmas: the dogma of the Assumption of Mary (1950) and the dogma of the Immaculate Conception of the Blessed Virgin Mary (1854). Before the proclamation of these dogmas, non2-A was accepted, where A was the content of the judgements, but after A was announced, these phrases were relocated in the aforementioned list of theological truths to Group 2.<sup>29</sup> Another example of such use of negation in theology is the canonization process of a non-martyr. Once the heroic virtues of person N. are established, it is assumed, for example, that: "Person N. is not holy", which should be understood as: "It is not known that the person N. is holy". Only after it is discovered that a miraculous event took place through the intercession of this person, the person can be considered a saint. (ad. 3) The canonization or beatification process has a specific legal institution called *advocatus diaboli* (the Devil's Advocate). The task of such a theologian in the context of this process is to prove that the examined person does not possess the characteristics of heroic virtues. The third type of negation non3-A is used because the advocatus diaboli must find a counter-example for the sentence "Person N. fulfills the condition of having heroic virtues" (cf. Vakarelov, 2006, p. 109). Markov, one of the discoverers of Nelson's strong negation,

<sup>&</sup>lt;sup>29</sup> The formalization of this negation is the so-called autoepistemic logic. The semantics for such a logic are based on the concept of expanding theories, which is exactly what happens in the case of theological research. It is worth remembering that this type of negation, expressed in logic by an appropriate rule, results in nonmonotonicity. In this case, it means that if new information appears, non2-A will be revised.

spoke of the counter-example construction as an intuitive interpretation for the strong negation. For a theologian, this construction consists of finding evidence for the lack of heroism.<sup>30</sup> (ad. 4) Due to the personal concept of truth and the role of God in theological deliberations, an important area of their field, we have to deal with imperative sentences from God or from the Church in the form of commandments. Some of them have a positive form (e.g. Honor thy father and thy mother), while some have a negative form (e.g. Thou shalt not steal). Such negation concerns imperative sentences, and such sentences undoubtedly exist within the theology.<sup>31</sup> From a philosophical and logical point of view, two kinds of negation are distinguished concerning imperative sentences. It is believed that imperatives have the following form: [modal element][radical] – symbolically: I(x) There are two types of negation depending on where the negation occurs or denies a modal element – symbolically I(x), or where it negates the core – symbolically I(x).<sup>32</sup> The first negation is called an external negation, while the second one is called an internal negation.<sup>33</sup> At least one of these negations is certainly used in theology, e.g. in the reasoning concerning the commandments. (ad. 5) The last one is paraconsistent negation, which occupies an important place in a specific area of theology, namely negative theology. Although there is a dispute about what paraconsistent logic is and, subsequently, what negation in such logic is, the fact remains that paraconsistent nega-

<sup>&</sup>lt;sup>30</sup> Curry (1963, p. 261) considers five meanings of negation: simple rejection (minimal negation), intuitionistic negation, strong negation (Nelson), classical rejection, and classical negation. Curry's work is one of the few to include a comprehensive study of logical negation.

<sup>&</sup>lt;sup>31</sup> Formalizing these intuitions would require more time and work. I think this is an interesting challenge for further research.

<sup>&</sup>lt;sup>32</sup> Dashes representing the negation of the relevant part of an expression appear here under the expressions, whereas they usually appear above them.

<sup>&</sup>lt;sup>33</sup> (Žarnić, 2012, pp. 1–2) contains a comprehensive discussion of this situation.

tion is used in theology, as there are areas of theological research in which there is a clash in the classical sense. Examples of such areas include negative theology, or even Scripture studies. However, paraconsistent negation is associated with a serious problem, namely that it does not have a clear intuitive meaning, as previously mentioned. This results in accusations of the artificiality of paraconsistent logic, or even of the fact that this negation is not a negation at all (cf. Béziau, 2001).

# 3. Conclusion

Theology, understood as science, has a very complicated structure. Theologians themselves are rarely methodologists or logicians, hence the weakness of this side of theological research. As has been shown, negation appears in various areas of theology. It should be noted that such uses of negation are often not conscious on the part of the theologians, but are logical in nature. In the field of theological research, formalization is rarely applied, which further weakens the ability of theologians to be aware of the nature of the negation used. However, assuming the sense of the examples given, sentences containing such negations are used in the reasoning used in the theological debates. This results in theologians using rules derived from non-classical logic in their reasoning. From a formal point of view, theology corresponds to a formal system in which there are five negations. This, in turn, proves that the technical side of theology is very complicated. Building such a hybrid is a surmountable challenge for logicians. There are known systems with more than one negation.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> An example is the Rasiowa system described in (Vakarelov, 2006) where we can concurrently find intuitionistic negation and Nelson's strong negation.

In other words, theologians can be considered multilogical, which seems surprising, as they usually use such negations in an intuitive way. The theologian's nature of multilogicality can be explained by referring to the philosophy of the subject as follows. A theologian is an agent of cognition, thinking, and acting. David Hilbert included the following in his Axiom of the Subject: "I think," and some logic is always connected with thinking. It is usually believed that there is only one such logic, especially when thinking concerns a specific area. A theologian uses several logics. The philosophically important question in this context seems to be the following: does such a state of affairs indicate any uniqueness of theology? Well, the answer is yes. This situation is special, because e.g. due to the use of negationas-failure in theology, we are dealing with a non-monotonic logic. This means that theology in some cases revises its theses. However, it does so in a way that is different than empirical teachings, where we encounter a different kind of revision, one also encountered in a paradigm change. Theology is not strictly a cumulative science, unlike e.g. formal sciences, although while some of its theses, depending on the degree of certainty, can never be revised, others can be.<sup>35</sup> Secondly, fundamentally, there is usually no imperative negation in science, and this is common within theology. Thirdly, the five kinds of negations which occur in theology, as I have attempted to present, rarely appear in a science simultaneously. Each of these five negations, however, is individually known, at an intuitive level, in some specific sciences. In addition, it can be assumed that some of the aforementioned negations are used in the context of justification, while others are used in the context of discovery.<sup>36</sup> The issue pre-

<sup>&</sup>lt;sup>35</sup> This problem needs to be addressed separately.

 $<sup>^{36}\,\</sup>mathrm{I}$  do not want to concern myself with this issue here, as it would require more discussion.

sented in this paper reflects the very complicated structure of theology. Catholic theology ultimately concerns one object, which is the Revelation of God. From a methodological point of view, it is treated as a kind of empirical data. The task of the theological sciences is firstly to define one's subject, and then to read the message contained in it and draw conclusions from it. Another important reason for using several negations is, as mentioned above, the different kinds of the understanding of truth in certain areas of theology.

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