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Elzenberg and issues discussed about obligation

Introduction

Each system of deontic logic covers more or less openly certain philosophical assumptions.¹ This paper will show a system of deontic logic, both on the syntactic and semantic side, which is intended to correspond to the assumptions of the theory of moral obligation proposed by Henryk Elzenberg within the formal axiology. Elzenberg developed his project of formal axiology in the late 1930s and early 1940s, using only the means of philosophical analysis, and therefore it may be interesting to present his results in the modern form of modal logic.² This will be addressed in the first part of the paper. The second part will present Elzenberg's possible voice in several currently debated issues of moral philosophy. This will be possible thanks to the introduced system of

¹ Geoffrey Sayre-McCord, "Deontic logic and the Priority of Moral Theory", *Nous* 20 (1986): 179–197, Heikki-Pekka Innala, "On the Non-neutrality of Deontic Logic", *Logique et Analyse* 43 (2000): 393–410.

² Only a small part of Elzenberg's legacy has been translated into English. Unfortunately, none of them deals with formal axiology. For more on Elzenberg's axiology, see Lesław Hostyński, "The Axiological System of Henryk Elzenberg", in: *Polish Axiology. The 20th Century and Beyond*, ed. Stanisław Jedynak (Washington: The Council for Research in Values and Philosophy, 2005), 179–212, Lesław Hostyński, Małgorzata Sady, "Formal Axiology of Henryk Elzenberg", *Dialogue and Universalism* 19 (2009): 19–38.

deontic logic, on the basis of which it is easier to note what is a thesis and what is not a thesis, following the assumptions that Elzenberg made in constructing his theory.

1. System outline

1.1. The ought of be

In the most general outline, an obligation for Elzenberg is a situation which, under the given circumstances, is assigned to be realized by a certain subject at a certain time.³ However, the basic condition for a situation to be an obligation for a given subject at a given time is that it ought to be at all. For the definition of obligation, the *proximus genus* is the ought of be.

The concept of the ought to be is the primary concept of Elzenberg's system of formal axiology. At the same time, it should be added at once, it is about the ought understood exclusively in the proper sense of the word. It is assumed that there are certain ought situations regardless of whether they serve anyone to satisfy needs or realize desires. They are ought in themselves, and not instrumentally, through preconceived conditions or goals. Thus, we refer to ought in the wrong sense when we say, for example: "war gas ought to be poisonous" or "a tyrant ought to be cruel", because war gas should be poisonous in order to eliminate the enemy's living force, and a tyrant should be cruel in order to be able to hold on to power. Ought here is conditioned by the fact that someone has the need to eliminate the living force of his opponent, and by the fact that someone wants to stay in power at all costs. In contrast, we can try to find oughtness in the proper sense in such sentences as "man ought to be reasonable" or "no living being ought suffer", insofar as being reasonable or not suffering of certain beings are ought situations not because they serve someone to do something. Of course, it is always possible to seek such an interpretation of ought situations that could play an instrumental role, but the examples with a tyrant or gas suggest that such a sense is present in our thinking, because talking about the oughtness of being poisonous or the oughtness of being cruel seems slightly

³ Henryk Elzenberg, "Zagadnienie obowiązku w aksjologii formalnej", in: *Pisma aksjologiczne*, ed. Lesław Hostyński et al. (Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, 2002), 109.

paradoxical. This shadow of paradoxicality comes precisely from the fact that no one ought, in the proper sense, be a tyrant, and no one ought, in the proper sense, create war gases to poison other people.⁴

An ought is expressed in sentences called norms of the general form "it ought to be the case that some object has some characteristic". We will want to further represent this type of norms in a certain formal language, which, in addition to the sentence letters $p_1, p_2, p_3 \dots$ representing states of affairs (simple situations) and the symbols $A, B, C \dots$ representing arbitrary situations, will include the unary modal operator of ought **oug**. Hence, we will write the norm "ought to be the case that A " briefly as "**oug** A ".

We already know that certain objects ought have certain characteristics. Now we can ask what if the objects actually have these characteristics and what if they do not have these characteristics? Let us take the first eventuality. If an object has some characteristic that it ought have, then it is a valuable object.⁵ When there is an ought in the proper sense, the object is valuable in the sense of perfect value. Otherwise, it is valuable in the sense of instrumental value. Perfectly valuable objects inspire reverence or respect, while instrumentally valuable objects are only useful because they satisfy needs or desires. Keeping in line with the example of a tyrant, it can be stated that a cruel tyrant is a valuable (good) tyrant. He is just what a tyrant should be, but of course in the sense of instrumental value, because no one who is cruel is the bearer of perfect value.

Now, what if an object does not have the characteristic, it ought to have? It is not valuable. Well, by virtue of its oughtness it demands those characteristic. And if there appear possible subjects who could make it become what it ought to be, then for these possible subjects, the obligation to act arises. And if, out of these possible subjects, the one best suited to the realization of the ought situation manages to stand out, and the moment in time best suited to the realization of the ought situation by this subject manages to stand out, then we have an obligation for this subject, at this moment of doing what ought to be. Therefore, the path to

⁴ Elzenberg justifying such a distinction unequivocally advocates one side of the naturalism *versus* anti-naturalism argument. Given that not all norms can be reduced to a contingent-instrumental sense, thus ought is not substitutable by some "natural" concept.

⁵ Henryk Elzenberg, "Pojęcie wartości i powinności. Tekst żemłosławski", in: *Pisma aksjologiczne*, ed. Lesław Hostyński et al. (Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, 2002), 135.

obligation leads from the ought situation (*Seinsollen*), through the ought realization of the ought situation for a specific subject (*Tunsollen*), to the ought realization of the ought situation by a specific subject at a specific moment.⁶

Let us take an example, if a car fell off the road and hit a tree injuring the driver, then of course there is an ought situation – medical help should be given to the injured person. And if there are any people in the vicinity of accident, these people ought make what ought to be, i.e. they should help the injured person. If it is one person, then that person ought help, and if there are several, then those who are in the best position to do so ought help. Maybe the person is a physician or at least a paramedic, or maybe the person is just the closest. In addition, this chosen person ought help at the best time to do so. Maybe as soon as possible, or maybe calling for an ambulance beforehand, or maybe preventing the threat of ignition of the spilled fuel first.

In order to express in our formal language the linguistic contexts in which obligation is referred to, we need to expand its expressive power. We introduce into the alphabet of this language a denumerable of unary modal action operators $s_1, s_2, s_3, \dots$. For any metalogical variable s , representing any action operator, the expression " sA " reads "due to subject s it is the case that A " ("the agent s makes it so that A "). Thus, we see that the letter s represents *de facto* possible subject of an action. Similarly, we introduce denumerable unary temporal operators $t_1, t_2, t_3, \dots$. For any metalogical variable t , representing any temporal operator, the inscription " tA " reads "at time t it is the case that A ", so the letter t can be considered a representation of a certain moment at time.

In the outlined formal language, we will further express the HE theory. To begin with, we will make some assumptions about the characteristics of the operators s and t . These assumptions will be elementary, as Elzenberg was not fundamentally concerned with their formal properties.

According to Elzenberg, a possible subject of an action is someone who can make a given situation occur, i.e. someone who can make a given object have a given characteristic.⁷ In this relationship, we will further exclude that anyone can be the perpetrator of a logically impossible situation by introducing an axiom:

⁶ Elzenberg, "Zagadnienie obowiązku w aksjologii formalnej", 104–109.

⁷ Henryk Elzenberg, "Zagadnienia związane z pojęciem wartości. Wykłady 1949", in: *Pisma aksjologiczne*, ed. Lesław Hostyński et al. (Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, 2002), 292.

$$A1 \quad \sim s(A \wedge \sim A).$$

Similarly, we will exclude that the logically impossible can occur at any time:

$$A2 \quad \sim t(A \wedge \sim A).$$

We also make the assumption for the simplest version of action logic, for which the attitudes of any subject of an action toward any situation can be two: perpetration or omission (the subject cannot be indifferent toward any situation).⁸ Hence, for any subject s and situation A , we assume

$$A3 \quad sA \vee s\sim A.$$

We make a similar assumption for the logic of time. No moment is indifferent to any situation, i.e., for any moment t and situation A :

$$A4 \quad tA \vee t\sim A.$$

If it is the case that A is due to the subject and it is the case that B is due to the subject, then it is the case that A and B are due to the subject. We will adopt the principle of agglomeration for the action operator

$$A5 \quad (sA \wedge sB) \rightarrow s(A \wedge B).$$

The adoption of agglomeration principle for time also seems to be unobjectionable,

$$A6 \quad (tA \wedge tB) \rightarrow t(A \wedge B).$$

If the subject s makes that A , it also makes all the logical consequences of A , hence we adopt the monotonicity rule for the operator s .

$$R1 \quad A \rightarrow B / sA \rightarrow sB.$$

If A occurs at time t , then all logical consequences of A also occur, hence we adopt the monotonicity rule for the t operator as well.

$$R2 \quad A \rightarrow B / tA \rightarrow tB.$$

With such an expanded formal language, the obligation operator can now be introduced definitively. We will say, following Elzenberg, that for a subject s at time t it is an obligation that A (abbreviated **obl**(s, t, A)) if and only if at the same time

⁸ As Segerberg writes, this is possible under the assumption that the perpetrator is always active, always doing something. Krister Segerberg, "Getting Started: Beginnings in the Logic of Action", *Studia Logica* 51 (1992): 350.

- (i) ought to be that A,
- (ii) ought to be that, due to the subject *s* it is the case that A,
- (iii) ought to be the case that at time *t* it is the case that due to the subject *s* it is the case that A.

In our formal language, we will now render these conditions by abbreviations

- (i) **oug**A,
- (ii) **ougs**A,
- (iii) **ougts**A.

Hence, the definition of obligation operator will now take the form

obl(*s*, *t*, A) iff **oug**A $\wedge$ **ougs**A $\wedge$ **ougts**A,

which reads: “it is an obligation for subject *s* at time *t* to make it is that A if and only if it ought to be that A and it ought to be that due to the subject *s* it is the case that A and ought to be the case that at time *t* it is the case that due to the subject *s* it is the case that A”. It is an obligation for subject *s* at time *t* to make a certain object have a certain characteristic, insofar as the subject should have this characteristic and should possess it through subject *s* and should possess it through subject *s* at time *t*. This definition is in line with Elzenberg’s postulates: an obligation it is a situation that ought to be realized by a certain subject and that ought also be realized by this certain subject at a certain time.

1.2. Meta-empirical will

Elzenberg was aware that talking about ought situations is troublesome because of the charge of arbitrariness.⁹ Does oughtness completely arbitrarily “fall from the sky” on certain situations, avoiding others? To defend against this he gave a kind of explanation of the source of ought. For this purpose, he introduced the concept of a meta-empirical will (in other words: autonomous will). Such a will is characterized by preferences based only on pure rational reasons. The meta-empirical will is directed toward what it finds stronger rational reasons for, and is therefore independent of impulses from the emotional and propulsive sphere. Hence, its preferences are universal, because, rejecting individual and

⁹ Henryk Elzenberg, “Podstawowe pojęcia aksjologii I. Wykłady toruńskie 1946-1949”, in: *Pisma aksjologiczne*, ed. Lesław Hostyński et al. (Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, 2002), 233.

species interests, it is guided only by universally valid considerations. And now, an ought situation is one that anyone endowed with a meta-empirical will prefers it to be rather than not be¹⁰. In other words, if ought situation is one in which a given object is endowed with a certain characteristic, it means that there are rational reasons for that object to have that characteristic rather than not to have it.¹¹ Obviously, we are referring to oughtness in the proper deontic sense as oughtness in the improper sense derives from the preference of empirical will, i.e. that which is guided only by what is beneficial or pleasing.

Of course, no one is endowed with a meta-empirical will, it is merely a mental construct to reflect this process that occurs when we ask how things ought to be. In seeking answers to such questions, we try to make our will more like an autonomous will. We scrap thoughts of our own possible benefits and pleasures, and seek universal rationales. Taking the example of an accident, we say that the injured person should be helped, because we find rationales for why the person should be helped rather than left alone. And this is regardless of whether we ourselves will have to make an effort to help the man or rather someone else, whether the sight of his blood disgusts us or rather attracts us, whether he is our friend or rather our enemy.

At this point, at the base of presented system, instead of the concept of ought, we place the relation of preference of meta-empirical will. This relation in our formal language will correspond to the binary preference operator **b**. We will read "**AbB**" as "from the point of view of pure rational reasons better when it is the case that A than when it is the case that B".¹² Given that this is a relation of a certain kind ordering situations into those more or less reasonably preferred, it seems reasonable to assume

¹⁰ Elzenberg, "Pojęcie wartości i powinności", 165–167.

¹¹ There are plenty of contemporary attempts to define meta-empirical will. For example, it is the will that is mutually agreed upon under ideal conditions of conversation (discourse theory) or from behind a veil of ignorance (theory of justice), or the will of someone who meets the conditions of an ideal observer (ideal observer theory), or the will of someone who has possessed all virtues, i.e. a perfectly fulfilled man (virtue theory).

¹² Inspiration for the presented HE system comes from the following studies: Frank Jackson, "On the Semantics and Logic of Obligation", *Mind* 94 (1985): 177–195; Lou Goble, "A Logic of Good, Should and Would. Part I", *Journal of Philosophical Logic* 19 (1990): 169–199; Lou Goble, "A Logic of Good, Should and Would. Part II", *Journal of Philosophical Logic* 19 (1990): 253–276; Lou Goble, "The Logic of Obligation, 'Better' and 'Worse'", *Philosophical Studies* 70 (1993): 133–163; Marek Magdziak, "The Ontologic of Actions", in: *Contemporary Polish Ontology*, ed. Bartłomiej Skowron (Berlin–Boston: De Gruyter, 2019), 219–243.

conditions of asymmetry and transitivity for the **b** operator. These conditions will correspond to the subsequent axioms of the system:

$$A7 \quad AbB \rightarrow \sim(BbA),$$

$$A8 \quad (AbB \wedge BbC) \rightarrow AbC.$$

Is it possible to include a strongly connected condition for **b** as well, thus recognizing the preference relation as a relation that linearly orders situations? Elzenberg rules out this possibility¹³. He argues that there is no common measure of evaluation for logically impossible and contingent situations. He says it is impossible to determine what should be more meta-empirically desirable, the most valuable of worlds or non-being. We will render this conviction in the next axiom¹⁴:

$$A9 \quad AbB \rightarrow \Diamond A \wedge \Diamond B.$$

We will assume a limited separability of the meta-empirical preference operator from the conjunction:

$$A10 \quad (AbB \wedge CbD \wedge \Diamond(A \wedge C)) \rightarrow (A \wedge C)b(B \vee D).$$

The full extensionality rule will also apply for the **b** operator:

$$R3 \quad A \equiv B / AbC \equiv BbC,$$

$$R4 \quad A \equiv B / CbA \equiv CbB.$$

With the meta-empirical preference operator, we can now define the ought operator, keeping with Elzenberg's findings in this regard:

$$\text{oug}A \text{ iff } Ab\sim A,$$

which reads "ought to be that A if and only if, by virtue of pure rational reasons, it is better when it is the case that A than when it is not the case that A". It is in the manner of ought that a certain object possesses a certain characteristic, insofar as the meta-empirical will finds better reasons for this, that rather than not the object possesses this characteristic.

In turn, the definition of obligation will now take the form:

$$\text{obl}(s, t, A) \text{ iff } Ab\sim A \wedge (sA)b(\sim sA) \wedge (tA)b(\sim tA),$$

¹³ Henryk Elzenberg, "Konstrukcja pojęcia wartości", in: *Pisma aksjologiczne*, ed. Lesław Hostyński et al. (Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, 2002), 86.

¹⁴ Hereinafter, a symbol $\Diamond$ will be used to represent the alethic possibility operator characterized by the system T. Brian F. Chellas, *Modal Logic. An Introduction* (Cambridge: Cambridge University Press, 1980), 135.

i.e. it is an obligation for subject s to make it so that A at time t if and only if, by virtue of pure rational reasons, it is better when it is the case that A than when it is not the case that A , and by virtue of pure rational reasons it is better when it is the case that A due to the subject s than when it is not so that A due to the subject s (in particular, is such that A by means of any subject other than s) and when by virtue of pure rational reasons it is better when it is the case that A due to the subject s at time t than when it is not such that A due to the subject s at time t (in particular, it is such that A by means of subject s at any time other than t).

1.3. Semantics

As can be seen, determination of what is ought or obligatory involves the rational activity of considering alternative possibilities and preferring one over the other, and therefore it seems obvious to determine the truth conditions of norms about ought and obligation in the semantics of possible worlds. Let the model of our formal language be the following relational structure:

$$\mathcal{M} = \langle \mathcal{H}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{B}, v \rangle,$$

where $\mathcal{H}$ is a non-empty set of possible worlds (elements of $\mathcal{H}$ are denoted by consecutive letters $w, w_1, w_2, \dots$). The letter $\mathcal{R}$ denotes a binary reachability (accessibility) relation between the elements of $\mathcal{H}$. The expression " $\mathcal{R}(w, w_1)$ " reads "the world w_1 is reachable from the world w ". $\mathcal{S}$ is an infinite sequence $S_1, S_2, \dots$ of binary reachability relations relativized to the perpetrators. For any element of this sequence $S \subseteq \mathcal{R}$, the expression " $\mathcal{S}(w, w_1)$ " reads "the world w_1 is reachable from the world w by the subject s ". Similarly, $\mathcal{T}$ is an infinite sequence $T_1, T_2, \dots$ of binary reachability relations relativized to time. For any element of this sequence $T \subseteq \mathcal{R}$, the expression " $\mathcal{T}(w, w_1)$ " reads "the world w_1 is reachable from the world w at time t ". The letter $\mathcal{B}$ denotes a three-argument relation set on the elements of $\mathcal{H}$. This is a relation of relative preference, so the expression $\mathcal{B}(w, w_1, w_2)$ (or shorter $\mathcal{B}_w(w_1, w_2)$) means that from the point of view of world w , world w_1 is better than world w_2 . As for v , it is the valuation function of sentence letters.

In model $\mathcal{M}$, the truth conditions for formulas that are sentence letters or formulas consisting of sentence letters and logical conjunctions or the possibility operator take the standard form¹⁵. To express the truth

¹⁵ Chellas, *Modal Logic*, 5, 68.

conditions for the other formulas, let us introduce the following definition abbreviations:

$$|A|^{\mathcal{M}} \text{ iff } \{\mathbf{w}: (\mathcal{M}, \mathbf{w}) \models A\}$$

is the set of worlds for which it is so that A , i.e. $|A|^{\mathcal{M}}$ is the *de facto* propositional content of the formula A in the $\mathcal{M}$ model. Now

$$[\mathbf{w}]^{\mathcal{R}} \text{ iff } \{\mathbf{w}_1: \mathcal{R}(\mathbf{w}, \mathbf{w}_1)\},$$

it is the set of worlds reachable from world $\mathbf{w}$ due to relation $\mathcal{R}$. By analogy, we definitively introduce the sets $[\mathbf{w}]^s$ and $[\mathbf{w}]^t$ as the sets of what is reachable in the circumstances of $\mathbf{w}$ for subject s , and what is reachable in the circumstances of $\mathbf{w}$, at time t . Thus

$$(\mathcal{M}, \mathbf{w}) \models sA \text{ iff } [\mathbf{w}]^s \subseteq |A|^{\mathcal{M}},$$

i.e., in the model $\mathcal{M}$, world $\mathbf{w}$, it is true that due to subject s it is the case that A if and only if in all worlds reachable from $\mathbf{w}$ for subject s it is the case that A .

$$(\mathcal{M}, \mathbf{w}) \models tA \text{ iff } [\mathbf{w}]^t \subseteq |A|^{\mathcal{M}},$$

i.e., in model $\mathcal{M}$, world $\mathbf{w}$, it is true that at time t it is the case that A , if and only if in all worlds reachable from world $\mathbf{w}$, at time t it is the case that A .

$$(\mathcal{M}, \mathbf{w}) \models \mathbf{A} \mathbf{b} \mathbf{B} \text{ iff } |A|^{\mathcal{M}} \neq \emptyset \text{ and } |B|^{\mathcal{M}} \neq \emptyset \text{ and for each } \mathbf{w}_1, \mathbf{w}_2, \text{ if } \mathbf{w}_1 \in |A|^{\mathcal{M}} \text{ and } \mathbf{w}_2 \in |B|^{\mathcal{M}}, \text{ then } \mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2).$$

In model $\mathcal{M}$, world $\mathbf{w}$, it is true that it is better when it is the case that A than when it is the case that B if and only if, from the point of view of world $\mathbf{w}$, any world in which it is the case that A is better than any world in which it is the case that B , and at the same time there is a world in which it is the case that A and there is a world in which it is the case that B .

In the model thus defined, the truth conditions for norms about ought and obligation take the form of:

$$(\mathcal{M}, \mathbf{w}) \models \mathbf{oug} A \text{ iff } |A|^{\mathcal{M}} \neq \emptyset \text{ i } |\sim A|^{\mathcal{M}} \neq \emptyset \text{ and for each } \mathbf{w}_1, \mathbf{w}_2, \text{ if } \mathbf{w}_1 \in |A|^{\mathcal{M}} \text{ and } \mathbf{w}_2 \in |\sim A|^{\mathcal{M}}, \text{ then } \mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2).$$

In the model $\mathcal{M}$, the world $\mathbf{w}$, it is true that it ought to be the case that A if and only if A is contingent and, from the point of view of the world $\mathbf{w}$, any world in which it is the case that A is better than any world in which it is not the case that A .

$(\mathcal{M}, \mathbf{w}) \models \mathbf{obl}(\mathbf{s}, \mathbf{t}, A)$ iff $|A|^{\mathcal{M}} \neq \emptyset$ i $|\sim A|^{\mathcal{M}} \neq \emptyset$ and for each $\mathbf{w}_1, \mathbf{w}_2$, if $\mathbf{w}_1 \in |A|^{\mathcal{M}}$ and $\mathbf{w}_2 \in |\sim A|^{\mathcal{M}}$, then $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2)$

and $[\mathbf{w}]^S \cap |A|^{\mathcal{M}} \neq \emptyset$ i $[\mathbf{w}]^S \cap |\sim A|^{\mathcal{M}} \neq \emptyset$ and for each $\mathbf{w}_1, \mathbf{w}_2$, if $\mathbf{w}_1 \in [\mathbf{w}]^S \cap |A|^{\mathcal{M}}$ and $\mathbf{w}_2 \in [\mathbf{w}]^S \cap |\sim A|^{\mathcal{M}}$, then $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2)$

and $[\mathbf{w}]^T \cap [\mathbf{w}]^S \cap |A|^{\mathcal{M}} \neq \emptyset$ i $[\mathbf{w}]^T \cap [\mathbf{w}]^S \cap |\sim A|^{\mathcal{M}} \neq \emptyset$ and for each $\mathbf{w}_1, \mathbf{w}_2$, if $\mathbf{w}_1 \in [\mathbf{w}]^T \cap [\mathbf{w}]^S \cap |A|^{\mathcal{M}}$ and $\mathbf{w}_2 \in [\mathbf{w}]^T \cap [\mathbf{w}]^S \cap |\sim A|^{\mathcal{M}}$, then $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2)$.

In the model $\mathcal{M}$, world $\mathbf{w}$, it is true that it is obligatory that A for subject $\mathbf{s}$ at time $\mathbf{t}$ if and only if, from the point of view of world $\mathbf{w}$, any world in which it is the case that A is better than any world in which it is not the case that A , and at the same time A is contingent, and any world in which it is the case that A due to the subject $\mathbf{s}$ is better than any world in which it is the case that A due to the subject other than $\mathbf{s}$, and it is contingent for it to be the case that A by means of subject $\mathbf{s}$, and any world in which it is the case that A due to the subject $\mathbf{s}$, at time $\mathbf{t}$, is better than any world in which it is the case that A due to the subject $\mathbf{s}$ at time other than $\mathbf{t}$, and it is contingent for it to be the case that A by means of subject $\mathbf{s}$ at time $\mathbf{t}$.

The HE system is satisfied in the class of models $\mathcal{M}$ satisfying the following conditions, for any worlds $\mathbf{w}, \mathbf{w}_1, \mathbf{w}_2, \mathbf{w}_3$:

W1 $[\mathbf{w}]^S \neq \emptyset$,

W2 $[\mathbf{w}]^S \subseteq |A| \vee [\mathbf{w}]^S \subseteq |\sim A|$,

W3 $[\mathbf{w}]^T \neq \emptyset$,

W4 $[\mathbf{w}]^T \subseteq |A| \vee [\mathbf{w}]^T \subseteq |\sim A|$,

W5 if $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2)$ and $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_2, \mathbf{w}_3)$, then $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_3)$,

W6 if $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_1, \mathbf{w}_2)$, it is not true that $\mathcal{B}_{\mathbf{w}}(\mathbf{w}_2, \mathbf{w}_1)$.

According to conditions W1 and W2, for any world $\mathbf{w}$, there are its worlds reachable due to any subject $\mathbf{s}$, and at the same time, the totality of such worlds reachable due to subject $\mathbf{s}$ uniquely determines any situation A . In other words, W1 rules out the possibility of so-called dead ends due to causation, and condition W2 rules out the possibility of situations indifferent due to causation (any subject either makes A or omits A). According to W3 and W4, every world has accessible worlds due to moment $\mathbf{t}$, and at the same time, for any moment $\mathbf{t}$ and

any situation A , at moment t is such that A or at moment t is such that not- A . This excludes the possibility of the existence of so-called dead ends due to time and situations indifferent due to time. Conditions W5 and W6 express the conditions of transitivity and asymmetry of the relative preference relation between worlds, thus it establishes a partial order between them.

As can be easily seen, axioms A1 and A3 are satisfied in the class of $\mathcal{M}$ models due to conditions W1 and W2, while axioms A2 and A4 are satisfied due to conditions W3 and W4. In turn, the fulfillment of axioms A8 and A7 depends on the presence of conditions W5 and W6 in the model. The fulfillment of inference rules does not require additional conditions. Therefore, it turns out that every theorem of the HE system is satisfied in the class of $\mathcal{M}$ models. It can also be shown that any formula that is not an HE theorem is also not satisfied in the $\mathcal{M}$ model. Thus, every formula satisfied in the class of $\mathcal{M}$ models is an HE theorem. Hence, we obtain a completeness theorem, which proves that our syntactic and semantic approaches are characterized by the same set of logically true formulas. Such a model can be the canonical model

$$\mathcal{M}^* = \langle \mathcal{H}^*, \mathcal{R}^*, \mathcal{E}^*, \mathcal{F}^*, \mathcal{B}^*, v^* \rangle,$$

where $\mathcal{H}^*$ is a non-empty set of worlds, which are now understood to be consistent maximal extensions of the HE system. The non-emptiness of this set follows from the fact that the HE system is consistent, as can be seen by constructing the translation function φ , which assigns to each formula of the HE language a formula of the language of classical sentence calculus. If

$$\varphi(p) = p, \text{ where } p \text{ is any sentence letter,}$$

$$\varphi(\sim A) = \sim \varphi(A),$$

$$\varphi(A \wedge B) = \varphi(A) \wedge \varphi(B),$$

$$\varphi(\Diamond A) = \varphi(A \vee \sim A),$$

$$\varphi(\mathbf{s}A) = \varphi(A),$$

$$\varphi(\mathbf{t}A) = \varphi(A),$$

$$\varphi(\mathbf{A}\mathbf{b}B) = \varphi(A) \wedge \sim \varphi(B),$$

then it turns out that the function φ to each thesis of HE system assigns a tautology of the sentence calculus.¹⁶ Therefore, it is not possible for a formula and its negation to be both HE theses.

Relation $\mathcal{R}^*$ is characterized as usual:

$$\mathcal{R}^*(\mathbf{w}, \mathbf{w}_1) \text{ iff } \mathbf{w}_1 \subseteq \{A: \Diamond A \in \mathbf{w}\}.$$

In turn, $\mathcal{S}^*$ and $\mathcal{T}^*$ are sequences of binary relations given on the set $\mathcal{H}^*$ such that for any elements of these sequences S^* , T^* and for any worlds $\mathbf{w}$, $\mathbf{w}_1$ we have

$$S^*(\mathbf{w}, \mathbf{w}_1) \text{ iff } \{A: sA \in \mathbf{w}\} \subseteq \mathbf{w}_1,$$

$$T^*(\mathbf{w}, \mathbf{w}_1) \text{ iff } \{A: tA \in \mathbf{w}\} \subseteq \mathbf{w}_1.$$

The three-argument relation $\mathcal{B}^*$ is defined as follows

$$\mathcal{B}_w^*(\mathbf{w}_1, \mathbf{w}_2) \text{ iff there are formulas } A, B \text{ such that } \mathbf{w}_1 \in |A|^{\mathcal{M}^*} \text{ and } \mathbf{w}_2 \in |B|^{\mathcal{M}^*} \text{ and } A \mathbf{b} B \in \mathbf{w},$$

where $|A|^{\mathcal{M}^*} = \{\mathbf{w}: A \in \mathbf{w}\}$.

The valuation function of sentence letters now takes the form of: $v^*(p) = \{\mathbf{w}: p \in \mathbf{w}\}$, where p is any sentence letter.

The model $\mathcal{M}^*$ is a model of the HE logic language because it satisfies conditions W1–W6. $\mathcal{M}^*$ is also the model we are looking for because the fundamental theorem for the canonical model holds for it, i.e., for any formula A and any $\mathbf{w} \in \mathcal{H}^*$, $(\mathcal{M}^*, \mathbf{w}) \models A$ iff $A \in \mathbf{w}$.

2. Issues discussed about obligation

2.1. Kant's principle

Elzenberg's attractiveness of the presented theory of moral obligation will be tested by answering the question of whether satisfactory answers can be given to contemporary theoretical problems concerning moral obligation within this theory.

In contemporary moral philosophy, the problem of validity of Kant's principle, briefly expressed by the maxim "ought implies can", is widely discussed. The question is how does ought relate to the possibility of

¹⁶ For other logical conjunctions, the conditions look analogous.

its realization? Are there ought situations that no one is capable of realizing? For example, can we say that it is an ought to stop world starvation? Or can it be a obligation for someone to do something he cannot do, such as saving a drowning person for someone who cannot swim? The answer is not inconsiderable, because if we answer both questions in the affirmative, we face the threat of excessive moral demands. On the other hand, if we answer in the negative, moral requirements will lose all their recommending power.¹⁷ Either we will be overburdened with requirements beyond our strength, or we will avoid any, because we can always evade the requirements, making ourselves incapable of fulfilling them.

On the grounds of Elzenberg's system, we can find a solution to this dilemma. The answer depends on what kind of ought is in question. After all, if one considers an ought relativized to time and person, then the answer must be in the affirmative. For obligation, Kant's principle applies, as is made clear by the presented genesis of obligation. An obligation falls on a person at a given moment when he or she is in the best position at that moment to realize the ought situation. Assignment to a person thus presupposes that the person can realize the ought. The rationale decides. This resolution is reflected among the statements of HE system, where we find Kant's principle for obligation on several levels:

T1 $\text{obl}(s, t, A) \rightarrow \Diamond A,$

T2 $\text{obl}(s, t, A) \rightarrow \Diamond sA,$

T3 $\text{obl}(s, t, A) \rightarrow \Diamond tsA.$

Only such a situation can become an obligation for a certain subject s at a certain moment t , which is itself logically possible, and is logically possible for subject s , and is logically possible for subject s at moment t (subject s has the ability and opportunity to realize it¹⁸).

However, if the allocation of the ought to a given subject at a given moment as his obligation is to be real, based only on pure rational reasons, then not only the ought must be possible for a given subject at a given moment, but also the avoidance of the ought for a given subject at a given moment must be possible. This too is reflected among the theorems of HE system.

¹⁷ Peter B. M. Vranas, "I Ought, Therefore I Can", *Philosophical Studies* 136 (2007): 167–168.

¹⁸ Vranas, "I Ought, Therefore I Can", 169–170.

T4 $\text{obl}(s, t, A) \rightarrow \Diamond \sim A,$

T5 $\text{obl}(s, t, A) \rightarrow \Diamond \sim sA,$

T6 $\text{obl}(s, t, A) \rightarrow \Diamond \sim tsA.$

Therefore, it turns out that necessary and logically impossible situations are neither obligatory nor forbidden for any subject at any time.

It can be asked where the intuitive certainty about the validity of Kant's principle for obligation comes from. As Elzenberg writes, since an obligation is a ought assigned to a specific subject and set in time, it is therefore a ought that is due. This means that if it is omitted, the subject is sanctioned with a negative moral evaluation.¹⁹ Thus, Kant's principle imposes here as self-evident, an obligation must presuppose the possibility of its fulfillment, because it would be absurd to impose sanctions on someone for something he could not fulfill.

The case is different for the ought itself.²⁰ This situation is an ought for which there are better rationales for it to be rather than not to be, completely regardless of whether anyone and ever will be able to fulfill it.²¹ The ought is no longer due because it is not assigned, and so no one faces sanctions for failing to do it. Hence, it is right that among HE's theses there are no formulas

$\text{oug}A \rightarrow \Diamond sA,$

$\text{oug}A \rightarrow \Diamond tsA.$ ²²

Only the thesis of HE system, which associates ought with logical possibility, may seem troublesome in this context:

T7 $\text{oug}A \rightarrow \Diamond A,$

¹⁹ Elzenberg, "Zagadnienie obowiązku", 108–109.

²⁰ Henryk Elzenberg, "Kilka uwag aksjologiczno-etycznych w związku z fragmentem rozprawy Pricharda", in: *Z historii filozofii*, ed. Michał Woroniecki (Kraków: Wydawnictwo Znak, 1995), 400–401.

²¹ A similar resolution of the Kantian principle problem through the distinction between *prima facie* and all-things-considered obligations is found, for example, in the papers: Norman O. Dahl, "Ought Implies Can and Deontic Logic", *Philosophia*, 4 (1974): 487, Wayne Martin, "Ought but Cannot", *Proceedings of the Aristotelian Society. New Series*, 109 (2009): 113.

²² As Morscher notes, this version of Kant's principle is already a purely ethical principle, difficult to accept on the grounds of deontic logic. Edgar Morscher, "The Definition of Moral Dilemmas. A Logical Confusion and Clarification", *Ethical Theory and Moral Practice* 5 (2002): 487.

T8 $\text{oug}A \rightarrow \Diamond \sim A$.

However, the presence of this thesis is not surprising in light of axiom A9, allowing comparison in terms of rationality only of what is logically contingent. Thus, as we can see, only contingent situations can be subject to deontic qualifications: ought and obligation. Ought and obligation are similar in this respect.

As Martini wrote that moral consciousness is organized around infinite ideals, demands on us that we know we cannot fulfill.²³ We already know that one must agree with this insofar as ought is concerned. Obligation is less restrictive in this regard. What is necessary is the subject's ability and opportunity for a given ought to become its obligation. Thanks to the precise distinction between the concepts of ought and obligation, the problem of Kant's principle finds a solution on the basis of Elzenberg's system.²⁴ Nevertheless, this solution raises further questions related to moral philosophy. What if a subject is faced with two options for action that are possible for him, each of which is an ought, but for which the realization of one involves the omission of the other? Is it his obligation to meet both oughts at the same time? Or is it a obligation for a given subject to fulfill a ought that he can, admittedly, fulfill at a given moment, but at a cost that qualifies as heroic? Simply put, by settling the dispute over the validity of Kant's principle in Elzenberg's system, we raise questions about the possibility of moral dilemmas and the issue of supererogatory acts. Two further issues discussed in the contemporary deontological debate.

2.2. Moral dilemma problem

In modern moral philosophy, the problem of possibility to allow the existence of moral dilemmas on the basis of a consistent ethical theory is discussed. By moral dilemma is meant two ought situations or two obligatory options of action for the same subject at the same moment, such that the realization of one implies the omission of the other. Examples of dilemmas express such questions as: Should one be good-natured or sophisticated, or just or merciful? Should one help the hungry or the ex-

²³ Martin, "Ought but Cannot", 103.

²⁴ Of course, a number of objections have been given against the validity of Kant's principle for obligation. Notable responses can be found, for example: Vranas, "I Ought, Therefore I Can", 173–196, Michael J. Zimmerman, *The Concept of Moral Obligation* (New York: Cambridge University Press, 1996), 79–96.

cluded, insofar as one lacks the means and time to help both at the same time. Should one die rather than step up to cannibalism in a situation of chronic starvation?

Opponents of the possibility of such dilemmas argue that, on the basis of a sufficiently rich ethical theory, any conflict of obligations is all in all resolvable, while the fact of dilemma is due in each case to some cognitive limitation of the subject, which prevents him from seeing which of the options involved has greater validity. Proponents, on the other hand, believe that there is something in the very essence of conflicted duties, some symmetry or incommensurability between them, which makes such a conflict inconclusive on the grounds of any rich ethical theory.

To advocate either side of the argument is of considerable practical importance. If we consider that ethical theory can allow for dilemmas, it turns out that morality can demand too much from us, for more than we can do. It may impose two obligations that we will not be able to fulfill at the same time. In turn, if we reject the possibility of dilemmas, our theory becomes so distant from everyday practice, where we actually experience dilemmas, that it may even be considered unnecessary, because it will be useless precisely when it would be most needed. How can this problem be dealt with on the ground of HE system?

It turns out that, as in the case of the question of validity of Kant's principle, the answer to the question of allowing dilemmas on the grounds of HE system depends on whether it is a question of the oughtness or obligation of both options, and whether it is a question of the logical impossibility of their occurrence at the same time, or rather only the physical impossibility of finding the right subject or the right moment to realize both options.

After all, if it is considered that the dilemma presupposes two ought situations that are logically exclusive, i.e., if we attach the dilemma conditions to the HE system:

$$\text{oug}A, \text{oug}B, \sim\Diamond(A \wedge B),$$

then, on the grounds of this system, the oughtness of being A and B at the same time does not arise, because the thesis is not a full agglomeration principle for oughtness, but only a weaker version of it²⁵:

²⁵ Such a limited agglomeration principle for a theory that admits dilemmas is discussed by Goble. However, he rejects it as leading to paradoxical consequences. It is impossible to reproduce these difficulties on HE grounds. Lou Goble, "A Logic for Deontic Dilemmas", *Journal of Applied Logic* 3 (2005): 467–468.

T9 $(\text{oug}A \wedge \text{oug}B \wedge \Diamond(A \wedge B)) \rightarrow \text{oug}(A \wedge B)$.

Moreover, with the dilemma conditions, the thesis is that it ought not be the case that A and B at the same time, i.e. $\sim\text{oug}(A \wedge B)$, as Kant's principle applies:

$\sim\Diamond(A \wedge B) \rightarrow \sim\text{oug}(A \wedge B)$ ²⁶.

What if we weaken the dilemma conditions and consider that we are dealing with two oughtness that, although logically possible, it is physically impossible to find a perpetrator for both at the same time, such as in the case of mercy and justice (although it actually happens that the implementation of one of these oughtness always translates into the omission of the other, there is nothing logically impossible for them to occur at the same time). If the following conditions are attached to HE

$\text{oug}A, \text{oug}B, \sim\Diamond(A \wedge B)$,

then the ought of being for both options at the same time, $\text{oug}(A \wedge B)$, already arises.

As can be seen, in neither of these two dilemma options does the HE system fall into inconsistency. In the first case, there are only two oughts in conflict, but the combined oughts of which the system rejects. The cumulative ought of two ought options separately arises only when there is just no physical possibility of their realization. This is in line with what we have established about ought following Elzenberg. Ought is determined only by rationale, regardless of whether anyone will ever be able to realize it.

Will it be different for obligation? If we add dilemma conditions to the HE system

$\text{obl}(s, t, A), \text{obl}(s, t, B), \sim\Diamond(A \wedge B)$ or $\sim\Diamond s(A \wedge B)$ or $\sim\Diamond ts(A \wedge B)$,

then also, although we will not get an inconsistency, the aggregate obligation to realize what is obligatory separately will not arise, and this is regardless of whether it is a logical impossibility or only a physical impossibility to realize both options at the same time. The principle of

²⁶ Contradiction in ethical theory with dilemma conditions is obtained not only by the agglomeration principle and Kant's principle, but also by the principle of deontic consistency, in various forms, $(\text{oug}A \rightarrow \sim\text{oug}\sim A)$ with the obligation execution principle $(\text{oug}A \wedge \sim\Diamond(A \wedge B) \rightarrow \text{oug}\sim B)$. David O. Brink, "Moral Conflict and Its Structure", in: *Moral Dilemmas and Moral Theory*, ed. Harold E. Mason (New York: Oxford University Press, 1996), 111–113. The principle of execution obligation is not an HE thesis.

agglomeration applies only to such obligations that can in all respects be realized simultaneously:

$$\text{T10 } (\text{obl}(s, t, A) \wedge \text{obl}(s, t, B) \wedge \Diamond(A \wedge B) \wedge \Diamond s(A \wedge B) \wedge \Diamond ts(A \wedge B)) \rightarrow \text{obl}(s, t, A \wedge B).$$

An obligation can arouse upon a person at a given moment, provided that that person can make at that moment what it ought to be. Otherwise, the obligation does not arise. While the HE system allows the appearance of conflicting obligations, it does not force the offender to perform them simultaneously.

To sum up, oughts and obligations can be conflicted and this does not lead to unpleasant consequences on the grounds of the HE system. If the conflicting options are not logically possible to occur at the same time, then there is no ought to be at the same time and consequently no obligation to be fulfilled at the same time. This is justified on the basis of Elzenberg's system on the grounds that only contingent situations are subject to the qualification of ought and obligation. The difference arises when the options in conflict are not possible at the same time in the weaker sense as the impossibility of finding a perpetrator or moment to realize them. Then, despite this impossibility, there is a cumulative ought of two options, but not a cumulative obligation to carry them out. This finds its explanation on the basis of Elzenberg's system in the fact that in order for something to be an ought the rationale decides that it is better than not. In turn, in order for such an ought to turn into someone's obligation at a certain moment, additional rationales must be found for assigning to that very subject at that very moment that ought to be realized. One such rationale is that this subject at this very moment can realize it at all.²⁷

²⁷ Note that such a resolution of the problem of dilemmas on the grounds of HE is in line with many voices in the discussion of a question about the acceptability of dilemmas, which distinguish between *prima facie* obligation and all-things-considered obligation. It is said that dilemmas can occur at the level of the former, but not the latter. Dilemmas would arise from the fact that there is no conclusive rationale for selecting from the many *prima facie* obligations the one that would become the individual obligation that overcomes all others: Brink, "Moral Conflict and Its Structure": 113–116; Terrance C. McConell, "Moral Dilemmas and Consistency in Ethics", in: *Moral Dilemmas*, ed. Christopher W. Gowans (New York: Oxford University Press, 1987), 170.

2.3. Supererogation problem

Contemporary moral philosophy also discusses the problem of the possibility of adopting supererogatory acts, i.e. acts that qualify for heroism or saintliness, on the grounds of ethical theory. This is a particularly acute problem within the systems, such as Elzenberg's, that link obligation to maximization, i.e. where obligation is, in one way or another, about doing what is best. The question is, after all, as to how acts are possible that, although they satisfy the conditions of obligation, as they are the best option for a given subject at a given moment, are not due, because if they are not fulfilled, the subject is not negatively evaluated morally.

Let us consider some examples. If a grenade falls into a trench, is it the obligation of any of the soldiers there to cover it with their own bodies so that others can survive the explosion? How do you qualify the act of someone who sells the car he conveniently uses to commute to work in order to donate the money to charity? Is the sole witness to a blazing fire in an apartment building morally obligated to save the people inside?

The answer to this problem is also of considerable importance for the role of morality in human life. For if supererogatory acts belong to the class of obligations, then morality becomes very demanding, imposing the requirements of heroism on every human being. If, on the other hand, supererogatory deeds are placed outside the requirements of morality, they will become the incomprehensible extravagance of certain oddities, and morality itself will lose all its power to set great tasks for man.

In order to give an answer to this problem within the HE system, let us first turn our attention to the partition of all possible actions for a given subject s at a given moment t due to deontic qualification. To do so, let us introduce the following definitional abbreviations for, in turn, prohibition and optionality.

for(s, t, A) iff **obl**($s, t, \sim A$),

opt(s, t, A) iff $\sim \text{obl}(s, t, \sim A) \wedge \sim \text{obl}(s, t, A)$.

And now, by virtue of the HE system thesis,

T11 $\sim(\text{obl}(s, t, A) \wedge \text{obl}(s, t, \sim A))$,

evaluation of an arbitrary situation A , for a given subject s at time t can be threefold:

T12 $\text{obl}(s, t, A) \vee \text{opt}(s, t, A) \vee \text{for}(s, t, A)$.

As can be seen, any action of the subject *s* at time *t* is either obligatory or forbidden, or is neither one nor the other, i.e., it is optional. Let us check whether supererogatory actions can belong to any of these three possibilities.

Saving comrades from grenade shrapnel, carrying someone out of a burning building, assisting the needy through a generous donation – all of these are situations that are better when they occur than when they do not, and are therefore ought situations. Therefore, supererogatory acts are certainly not considered to belong to the sets of forbidden or optional acts for any subject at any time. Are they obligations? The premise of the question is based on the fact of the subordination of ought to obligation, as expressed in the HE thesis:

T13 **obl**(*s*, *t*, *A*) → **oug***A*.

Out of several soldiers who can throw themselves on a grenade to save the others, can you find the best one to do so? Are there any distinguishing rationales for just this person and not another to assist the charity, or are there any conclusive rationales for doing it just now and not some other time? Are there any conclusive rationales behind this very moment for the one person who witnesses the fire to throw himself into the flames to save others when the fire has already spread so much? There are no such rationales in these cases. There are no conclusive rationales either for this subject and not another to undertake what ought be done, or for this very moment and not another. Therefore, it turns out that the fulfillment of supererogatory acts, although morally ought, is not an obligation. The general of ought situations can be divided according to how many addressees can be found for it to be fulfilled. If one, we have an obligation, while if there are many, as in the example with the grenade, or if everyone is an addressee, as in the case of charity, then no obligation arises.²⁸ Likewise with time: there may be a fixed moment for a given subject, and then we are dealing with an obligation, but there is no longer an obligation if the moments are many, or even if each one is equally good, as in the case of helping the needy, or when there is no such moment at all, as in the case of helping with a raging fire.

²⁸ Similarly, Dorsey: a supererogatory act is an act that is particularly valuable but rationally not required. It is not rationally required because the entity does not find conclusive practical reasons to undertake it, given the non-trivial sacrifice it would have to make in performing it. Dale Dorsey, "The Supererogatory, and How to Accommodate It", *Utilitas* 25 (2013): 371.

As can be seen, the resolution of the problem of classifying supererogatory acts on the grounds of HE system, as in the case of two previously discussed problems of moral philosophy, depends on the proper distinction between ought and obligation. Supererogatory acts are not obligations, but their implementation is an ought.²⁹ We find an explanation of this on the basis of Elzenberg's system. They are not obligations because there is no sufficient rationale to designate unambiguously the subject or the time of performance. Hence they are not due, and there is no sanction for failing to fulfill them. Where, then, does praise or merit come from for their fulfillment? Precisely from the voluntariness of some subject to undertake them at an unspecified time. In addition, the degree to which we will call a given act heroic will depend on the voluntariness of taking the action in the face of a high degree of risk, difficulties to be overcome, the importance of the matter, the urgency of its occurrence, the extent to which others evade the notion of this action.³⁰

Conclusions

The paper outlines Henrik Elzenberg's system of formal axiology in terms of ought-obligation concepts. At the core of this system is the preference relation of meta-empirical will, i.e. such a will that considers only pure rational reasons. The ought is that which is preferred by such a will, namely, what is better to be than not to be for the sake of pure rational reasons. If such an ought occurs, then we have a value, and if it does not occur, then it falls as an obligation on the best, again, for the sake of pure rational reasons, subject, at the best, for the sake of pure rational reasons, moment.

²⁹ Kaniowski agrees with the presented classification of supererogatory acts but believes that in addition the fulfillment of obligations can also bear the signs of supererogation. The cases in question are those where obligations are fulfilled under very difficult conditions or where a multitude of obstacles to their fulfillment are overcome (Andrzej M. Kaniowski, *Supererogacja. Zagubiony wymiar etyki* (Warszawa: Oficyna Naukowa, 1999), 400). For us, such cases will be ought situations, for which the level of effort needed to perform them will weaken their power to bind the given entity to perform them. Therefore, this will not be a separate category of supererogatory acts.

³⁰ This is confirmed by Zimbardo, who considers the voluntariness of the act and the high risk to the perpetrator as the basic characteristics of heroic acts. Philip Zimbardo, *The Lucifer Effect. Understanding How Good People Turn Evil* (New York: Random House, 2007), 466.

Elzenberg's theory has turned out to be strong enough to provide possible answers on several issues of moral obligation currently under discussion. Of course, these are not original answers. Each of them has already been proposed somewhere in the literature, as I have pointed out in the relevant footnotes. However, what is important is that these answers find their rationale on the basis of transparent assumptions of Elzenberg's system. Crucial to the proposed solutions turned out to be the precise distinction between ought and obligation as well as the characterization of their formal structure in the HE system.

In the course of discussion, it turned out that Kant's principle applies to obligation, because obligation is an ought assigned to a certain subject at a certain moment. Assignment occurs through rationale – such an individual is burdened with the obligation of realization as is best suited to it. Assignment presupposes the ability and opportunity of that person at that moment to realize what ought to be done. Otherwise, the obligation does not arise at all. Hence, the obligation is due – the subject can and should perform what ought to be done, and in the case of failure to do so, a negative moral evaluation falls on him. Unlike for ought, here the Kant principle does not apply. The ought does not imply the possibility of its realization. A situation is an ought insofar as the meta-empirical will finds better rational reasons for it to be rather than not to be, completely regardless of whether a possible subject and a possible moment can be found for it.

The same with the adaptability of moral dilemmas. It cannot fall on anyone to realize situations that, although they are obligatory separately, it is not possible to realize them at the same time. This is different in the case of two ought situations, which, although they cannot be realized at the same time, are both logically possible. Nothing prevents the adoption of ought to be at the same time.

As for the problem of adopting supererogatory actions, it turned out that on the basis of Elzenberg's system, these are ought situations, but not obligatory. While there are sufficient rational reasons to consider them ought, there are insufficient rationales to assign them for implementation to some possible perpetrators, at some possible time due to their level of difficulty. The merit of the subject comes from undertaking them voluntarily, despite awareness of the risks.

Bibliography

- Brink David. 1996. "Moral Conflict and Its Structure". In: *Moral Dilemmas and Moral Theory*, ed. Harold E. Mason, 102–126. New York: Oxford University Press.
- Chellas Brian. 1980. *Modal Logic. An Introduction*. Cambridge: Cambridge University Press.
- Dahl Norman O. 1974. "Ought Implies Can and Deontic Logic". *Philosophia* 4: 485–511.
- Dorsey Dale. 2013. "The Supererogatory, and How to Accommodate It". *Utilitas* 25: 355–382.
- Elzenberg Henryk. 1995. "Kilka uwag aksjologiczno-etycznych w związku z fragmentem rozprawy Pricharda". In: *Z historii filozofii*, ed. Michał Woroniecki, 398–403. Kraków: Wydawnictwo Znak.
- Elzenberg Henryk. 2002. "Konstrukcja pojęcia wartości". In: *Pisma aksjologiczne*, ed. Lesław Hostyński, Andrzej Lorczyk, Agnieszka Nogal, 71–96. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Elzenberg Henryk. 2002. "Zagadnienie obowiązku w aksjologii formalnej". In: *Pisma aksjologiczne*, ed. Lesław Hostyński, Andrzej Lorczyk, Agnieszka Nogal, 101–122. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Elzenberg Henryk. 2002. "Pojęcie wartości i powinności. Tekst ziemłosławski". In: *Pisma aksjologiczne*, ed. Lesław Hostyński, Andrzej Lorczyk, Agnieszka Nogal, 123–168. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Elzenberg Henryk. 2002. "Podstawowe pojęcia aksjologii I. Wykłady toruńskie 1946–1949". In: *Pisma aksjologiczne*, ed. Lesław Hostyński, Andrzej Lorczyk, Agnieszka Nogal, 197–257. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Elzenberg Henryk. 2002. "Zagadnienia związane z pojęciem wartości. Wykłady 1949". In: *Pisma aksjologiczne*, ed. Lesław Hostyński, Andrzej Lorczyk, Agnieszka Nogal, 259–303. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Goble Lou. 1990. "A Logic of Good, Should and Would. Part I". *Journal of Philosophical Logic* 19: 169–199.
- Goble Lou. 1990. "A Logic of Good, Should and Would. Part II". *Journal of Philosophical Logic* 19: 253–276.
- Goble Lou. 1993. "The Logic of Obligation, 'Better' and 'Worse'". *Philosophical Studies* 70: 133–163.
- Goble Lou. 2005. "A Logic for Deontic Dilemmas". *Journal of Applied Logic* 3: 467–468.
- Hostyński Lesław. 2005. "The Axiological System of Henryk Elzenberg". In: *Polish Axiology. The 20th Century and Beyond*, ed. Stanisław Jedynek, 179–212. Washington: The Council for Research in Values and Philosophy.

- Hostyński Lesław, Małgorzata Sady. 2009. "Formal Axiology of Henryk Elzenberg". *Dialogue and Universalism* 19: 19–38.
- Heikki-Pekka Innala. 2000. "On the Non-neutrality of Deontic Logic". *Logique et Analyse* 43: 393–410.
- Jackson Frank. 1985. "On the semantics and logic of obligation". *Mind* 94: 177–195.
- Kaniowski Andrzej M. 1999. *Supererogacja. Zagubiony wymiar etyki*. Warszawa: Oficyna Naukowa.
- McConnell Terrance. 1987. "Moral Dilemmas and Consistency in Ethics". In: *Moral Dilemmas*, ed. Christopher W. Gowans, 154–173. New York: Oxford University Press.
- Magdziak Marek. 2019. "The Ontologic of Actions". In *Contemporary Polish Ontology*, ed. Bartłomiej Skowron, 219–243. Berlin, Boston: De Gruyter.
- Wayne Martin. 2009. "Ought but Cannot". *Proceedings of the Aristotelian Society, New Series* 109: 103–128.
- Morscher Edgar. 2002. "The Definition of Moral Dilemmas. A Logical Confusion and Clarification". *Ethical Theory and Moral Practice* 5: 485–491.
- Sayre-McCord Geoffrey. 1986. "Deontic Logic and the Priority of Moral Theory". *Nous* 20: 179–197.
- Segerberg Krister. 1992. "Getting Started: Beginnings in the Logic of Action". *Studia Logica* 51: 347–378.
- Vranas Peter B. M. 2007. "I Ought, Therefore I Can". *Philosophical Studies* 136: 167–216.
- Zimbardo Philip. 2007. *The Lucifer Effect. Understanding How Good People Turn Evil*. New York: Random House.
- Zimmerman Michael J. 1996. *The Concept of Moral Obligation*. New York: Cambridge University Press.

Summary

The paper presents the most important assumptions of Henryk Elzenberg's formal axiology concerning the concepts of ought and obligation. For this purpose, the formal language of deontic logic was used. In this language, the HE theory was presented, which was characterized both from the syntactic and semantic side. Using the HE system's theses, possible ways of resolving three currently debated issues related to moral obligation were shown: the question of Kant's principle's validity, the possibility of adopting moral dilemmas and supererogatory acts on the grounds of ethical theory. As it turned out, the key to all the resolutions was the precise distinction between the concepts of ought and obligation.

Keywords: deontic logic, ought, obligation, meta-empirical will, Kant's principle, moral dilemmas, supererogatory.