

**Jacek Juliusz Jadacki**  
**ON CRITERIA OF TRUTHFULNESS**

Originally published as "O sprawdzianach prawdziwości," *Studia Semiotyczne* 16–17 (1990), 251–265. Translated by Rafał Jantarski.

---

We are constantly seeing philosophical claims being made (...), professed at times fanatically, but those sages are as far as ever from agreeing on a common criterium of truth. They believe in their systemata, force this belief on others, damning those who dare to oppose, not knowing themselves what conditions separate truth from falsehood.

---

Henryk Rzewuski, *Wędrówki umysłowe*, 1851

How can one establish whether the proposition is true? Under the classical semantic definition of truth in the classical interpretation of this definition, the answer goes as follows: determine whether the proposition corresponds with the reality. Sceptics add: determine with absolute certainty, further judging such requirements that are impossible to satisfy. Bohdan Chwedeńczuk rightly dismisses this condition as excessively demanding (Chwedeńczuk 1984: 40–41). He believes, as I do, that various propositions can achieve different degrees of certainty and require various criteria of truth (Chwedeńczuk 1984: 40). By definition, there is no overarching, ultimate, "self-sufficient" (Gierulanka 1962: 37) criterium, i. e. a criterium "by which we should be in a position to recognize the truth of any true statement" (Kotarbiński 1966: 113). It even seems that anything pretending to be an "attribute" of "truth-diagnostic nature" would have to be an alternative of properties (see Żytkow 1977: 34–35). Meanwhile, any truth criterium would be "valid for a given type of sentences" (Kotarbiński 1966: 113). Moreover, it is often the case, for example in theoretical hypotheses, that one has to

settle for an indirect criterium of truth (Kamiński 1957: 286-287). “Searching for the absolute criterium of truth for any given sentence describing facts is a hopeless endeavour” (Czeżowski 1970: 25). Franciszek Gabryl rightly warns that “there will be as many [...] criteria of truth as there are sources of cognition” (Gabryl 1900: 246).

Again, “an adequate definition of truth [...] does not carry with it a workable criterion for deciding whether particular sentences in this language are true or false (and indeed it is not designed at all for this purpose). [...] Decid[ing] whether or not any such sentence is true is a task of science itself, and not of logic or the theory of truth.” (Tarski 1969: 69-70). We are therefore operating within the confines of the definition of truth as long as we stop short from exposing various “*modi operandi* of the notion of truth” (Rosnerowa 1975: 1255); and only these can be accepted as criteria of truth, their mere indication cannot be regarded as characteristics of truth.

REMARK 1. I wouldn’t go as far as to say, as Chwedeńczuk does, that all truth conditions are “discovered by logic” (Chwedeńczuk 1984: 60). It certainly doesn’t apply to truth conditions of such sentences as “Krynica Morska sits on Mierzeja Wiślana”. As recently pointed out by Adam Drozdek, “things are to be judged against proper standards and standards are to be applied as specialists see fit”; it falls under the authority of the scientist whether to judge things by “experiment, observation, measurement” or proof (Drozdek 1981: 105).

REMARK 2. Let me introduce the following terminology used in this paper.<sup>1</sup>

Expression:

$$(1) \qquad (x)EPxQx$$

reads as: For each  $x$ :  $x$  is  $P$  when  $x$  is  $Q$ .

If expression ‘ $Qx$ ’ in (1) does not include a predicate ‘ $P$ ,’ it will mean:

- (a) (1) is a DEFINITION of ‘ $Px$ ’;
- (b) the fact that  $Qx$  is the NATURE (essence) of the fact that  $Px$ .

If, further, expression ‘ $Qx$ ’ in (refeq::1) is, and expression ‘ $Px$ ’ is not an observation term (perceptual expression), it will mean:

- (c) the fact that  $Qx$  is an ATTRIBUTE — of diagnostic nature — of the fact that  $Px$ .

---

<sup>1</sup>Comments on this terminology can be found in Jadacki 1986: 4-8.

Expression:

$$(2) \quad (x)CPxQx$$

means: For each  $x$ : if  $x$  is  $P$  then  $x$  is  $Q$ .

Again, if in (2) ‘ $Qx$ ’ does not have a predicative ‘ $P$ ’, it will mean:

(a) (2) is a CHARACTERIZATION (description) of the fact that  $Px$  and  $Qx$ , and, in particular, a DISTINCTION of the fact that  $Px$  and a DETERMINATION (separation) of the fact that  $Qx$ ;

(b) the fact that  $Px$  is a GUARANTEE of the fact that that  $Qx$ ;

(c) the fact that  $Qx$  is a FUNDAMENT (requirement) of the fact that  $Px$ .

If, further, ‘ $Px$ ’ in (2) is and ‘ $Qx$ ’ is not perceptual expression, it will mean:

(d) the fact that  $Px$  is a CRITERION (test) — a diagnostic guarantee — of the fact that  $Qx$ ;

should it be the opposite, it will mean:

(e) the fact that  $Qx$  is a SYMPTOM — a diagnostic fundament — of the fact that  $Px$ .

## EVIDENTIAL CHARACTERISTICS

“[Common] understanding of truthfulness”, writes Tadeusz Kotarbiński, “has it that one way of learning whether the sentence is true is to investigate things in question and find out if they indeed are as the sentence says” (Kotarbiński 1963: 56).

Che(a) For each proposition  $S$  and event  $Z$  {if  $S$  relates to  $Z$  then [if for a certain person  $O$  ( $Z$  is evident for  $O$ ), then  $S$  is true]}.

This state of being evident — a “forceful” (Chwedeńczuk 1984: 79), “irresistible impression” (Chwedeńczuk 1984: 66) — can take at least two forms and be either objective or subjective (Biegański 1910: 168, 172, 174; Rzewuski 1851: 69).

### 1. PERCEPTUAL INTERPRETATION

Che(b) For each proposition  $S$  and event  $Z$  {if  $S$  refers to  $Z$  then [if for a certain person  $O$  ( $Z$  is perceived by  $O$ ), then  $S$  is true]}.

## 2. INTUITIVE INTERPRETATION (Kotarbiński 1966: 113)

Che(c) For each proposition  $S$  and event  $Z$  {if  $S$  relates to  $Z$  then [if for a certain person  $O$  ( $Z$  seems necessary for  $O$ ), then  $S$  is true]}.

Evidential criterion — clarity and distinctiveness of perception (Drozdowicz 1980: 243) — was first formulated *expressis verbis* by Descartes, but, as pointed out by Witold Rubczyński (Rubczyński 1906: 309), it dates further back to the stoics (Rubczyński 1906: 358).

REMARK 1. According to Albina Słomska (Słomska 1978: 72), Stanisław Leśniewski identifies perceptual interpretation with "intuitive criterion of common sense."

REMARK 2. Evidential characteristics are sometimes presented as if to suggest that they are propositions themselves, and not perceived or considered events, that are evident. Such "rationalistic account" of truth conditions became, to follow Tadeusz Czeżowski, obsolete even in deductive disciplines. "The significance of self-evidence [...] has been dwindling, now diminished to a heuristic function that no more than assists in guiding the mind on the road to scientific discovery" (Czeżowski 1970: 19).

## STRUCTURAL CHARACTERISTICS

Kotarbiński argues the following. "Often, [...] we desire to know whether the sentence is true, although we possess no means to [directly] inquire how things stand. In that case we are compelled to [...] seek other CRITERIA OF TRUTHFULNESS (Kotarbiński 1963: 56).

Adherents of the syntactic definition of "truthfulness"<sup>2</sup> sometimes speak as if their vocabulary was offering not the definition but characteristics of "truthfulness," thus proposing an account that competes with evidential characteristics.

### 1. COHERENCE INTERPRETATION

Chs(a) For each proposition  $S$  [if for each proposition  $T$  (if  $T$  is true then  $S$  is coherent with  $T$ ), then  $S$  is true].

---

<sup>2</sup>The relevant definition was provided in Jadacki 1988: 87-88.

The Chs(a) formula — as well as the operational interpretation presented below — can be any given interpretation that is either congruential or inferential. As a syntactic definition, it can also have a radical or a limited version. In the former, proposition T belongs to “the whole body of knowledge”, or at least to the “possibly broad set of propositions” (Chwedeńczuk 1984: 82), with “knowledge” signifying here all sets of acknowledged propositions, as opposed to all acknowledged propositions considered to be true. In the latter, the set of initial propositions (Chwedeńczuk 1984: 83) is composed particularly of propositions that are true under evidential criterion in its perceptual interpretation.

REMARK 1. The thesis on truth gradability (Chwedeńczuk 1984: 87-89), related to the coherent characteristics (or definition) of “truthfulness”, is tenable only if gradability is taken to indicate various degrees with which one can acknowledge propositions: the larger the set of propositions acknowledged as true cohering with the proposition in question, the better the credentials for it being acknowledged (see remark 2 below in section “Assertion Criteria” and Jadacki 1989: 140-141).

REMARK 2. Brand Blanshard’s view, which Chwedeńczuk terms a “closed interpretation of coherentism” (Chwedeńczuk 1984: 82), seems to be embracing the radical version of Chs(a). It is hard to imagine that Blanshard would endorse the idea that each coherent system of propositions is true, or that only propositions coherent with every proposition are true.

REMARK 3. A limited (evidential) version seems to exemplify points of view offered by Alfred C. Ewing and Francis H. Bradley, termed by Chwedeńczuk respectively as an “open interpretation” and “generalized interpretation of coherentism” (Chwedeńczuk 1984: 83-84, 81-82). In the latter, the legitimacy of the initial propositions might as well have been established based on a perception criterion. What else could be implied by such phrases as “their acceptance co-determines our experience”, “system-independent experience”, or that their validity “is forced by experience, perception-derived data” (Chwedeńczuk 1984: 83), or that they are “imposed by experience (sensations, impressions) (Chwedeńczuk 1984: 84)? On this reading, it would appear that the controversy between the proponents of evidential characteristics and structural characteristics is devoid of substance (Chwedeńczuk 1984: 103). To be sure, Chwedeńczuk maintains that in this last interpretation initial propositions “are COLLECTIVELY [my emphasis] shaped by coherence and experience, but these may be either accepted or not solely on the premise of coherence” (Chwedeńczuk 1984: 83). First, however, we are told that we can “reject them on the grounds that they do

not cohere with the system (Chwedeńczuk 1984: 83). I cannot imagine what constitutes such a system, or a set of acknowledged propositions, BEFORE initial propositions are already in place. Chwedeńczuk himself admits as much when indicating that baseline systems are in fact arbitrary systematizations built *ad hoc* (Chwedeńczuk 1984: 99).

If, however, in acknowledging propositions it would be impossible (in general interpretation) to refer to obvious perception, one would be left with little choice but to restructure it into its radical version.

REMARK 4. Chwedeńczuk challenges the coherence criterium by charging that it succumbs to *regressus in infinitum* (Chwedeńczuk 1984: 228). Such a criterium, argues Chwedeńczuk, must be phrased as a proposition, which, AFTERWARDS (!), must itself pass the test of truth (Chwedeńczuk 1984: 98-99). This applies to all sorts of criteria, both pragmatic ones, as demonstrated by Bertrand Russel (Chwedeńczuk 1984: 221), and correspondence-based ones (Chwedeńczuk 1984: 233, 235; see also Jadacki 1982: 78-82). Chwedeńczuk goes on to admit that “the scientist [...] does not refer to experience while verifying, confirming, recognizing or rejecting hypotheses. What he does refer to is what these experience-driven propositions relate to” (Chwedeńczuk 1984: 103). Thus, it suffices to distinguish between SAYING that such and such statement is true from DETERMINING its actual truth-value (Chwedeńczuk 1984: 233).

Similarly, given that Leonard Nelson’s paradox is correct, it can be reconstructed based on any characteristic of truthfulness. To quote Jan Łukasiewicz, “no criterion of truth can be PROVEN, since the trial of proving inevitably slips into circular reasoning or *regressus in infinitum*” (Łukasiewicz 1911: 85).

## 2. OPERATIONAL INTERPRETATION

Chs(b) For each proposition  $S$  [if for each proposition  $T$  (if  $T$  is coherent with  $S$ , then  $T$  is true), then  $S$  is true].

REMARK 1. As it has been long established (Chwedeńczuk 1984: 181), inferential interpretation of Chs(b) limited by perception (in a sense that the set containing T is composed of perceptual propositions) can be understood as a characteristic that provides the criterion for general propositions. This approach is encountered in pragmatist literature, among others. Precisely this would drive “justification, confirmation, testing” (Chwedeńczuk 1984: 162), “verification procedures” (Chwedeńczuk 1984: 167), “objective validation” of truthfulness (Chwedeńczuk 1984: 168) and “compliance” of

laws “with experience” (Szumilewicz 1977: 227). Those maintaining that “proposition is true only when the ensuing conclusions can successfully pass the test of experience” forget, however, that, to quote Izydora Dąmbska, “an experience-test can also be passed by conclusions following propositions which are not true” (Dąmbska 1931: 15). This is because it is nothing else but a “typical testing procedure by consequences, which serves to establish high probability of propositions” (Czeżowski 1970: 22). We must not forget a point made by Adam Wiegner who argued that “it is indeed not the truth of acknowledged propositions but their claim to LEGITIMACY, construed as ‘acknowledgement as true,’ which results from verification procedures in empirical sciences” (Wiegner 1963: 123).

REMARK 2. Chwedeńczuk’s dismissal of such an interpretation in favour of universal pragmatism (Chwedeńczuk 1984: 186-187) seems wrong if we were to reject his understanding of William James’ conception of utility as congruence with experience.

REMARK 3. It is not the case, as Chwedeńczuk would like it, that rational interpretation of pragmatism necessarily requires us to assume that James, Peirce (Chwedeńczuk 1984: 113) and Dewey (Chwedeńczuk 1984: 143), instead of the truth condition, provide a condition (or maybe a symptom) for MEANING or understanding of expressions (including propositions):

Dfps For each expression  $W$  and event  $Z$  ( $Z$  is a meaning component of  $W$ , when  $Z$  is a consequence of  $W$ ).

“meaningfulness” because it can never be exactly clear when one is allowed to claim that a certain event is a consequence of a specific expression (or BELIEF in such expression if it is a proposition), regardless of this event being an emotional resonance, such as pleasure (Chwedeńczuk 1984: 118) or practical resonance such as action (Chwedeńczuk 1984: 118, 143).

Dfpr(a) For each proposition  $S$  and person  $O$  [ $O$  understands  $S$  when for each proposition  $T$  (if  $T$  is consequence of  $S$ , then  $O$  knows that  $T$  is consequence of  $S$ )].

Formula Dfpr(a), termed elsewhere “semantic directive of Charles Sander Peirce” (Chwedeńczuk 1984: 115, 171), is tenable if transformed into a characteristics providing a criterion for understanding (knowledge of meaning), not a symptom of it. If the prior knowledge of any imaginable consequence of a given proposition was required for it to be understood, it is unlikely that anyone would be ever able to understand any proposition.

Dfpr(b) For each proposition  $0S$  and person  $O$  [ $O$  understands  $S$  when for each  $Z$  (if  $S$  refers to  $Z$ , then  $O$  knows how to achieve  $Z$ )].

Knowing how to realize the event related to the particular proposition is not only a necessary but perhaps also a sufficient condition for its understanding.

REMARK 4. Sometimes pragmatists speak as if utility was the symptom of truth.

Dsp(a) For each proposition  $S$  [if  $S$  is true then for each (or specific) individual  $O$  ( $S$  is utilizable for  $O$ )].

This, perhaps, is what Chwedeńczuk and others call “the most pragmatic of pragmatic maxims”: “in short, ONLY THAT WHICH [my emphasis] is ‘true’ is beneficial in our manner of thinking” (Chwedeńczuk 1984: 168). Mind that Chwedeńczuk deliberately says “only” and not “all and only.” N.B. According to, for example, Bogdan Suchodolski (Suchodolski 1947: 403) and Zenon Szpotański (Szpotański 1969: 1341), utility (“fertility”) is, by pragmatist’s reading, not so much a symptom, but a criterion of truthfulness.

## GENETIC CHARACTERISTICS

### 1. ACCLAMATION INTERPRETATION

#### 1.1. UNIVERSALIST VERSION.

Chg(a) For each proposition  $S$  [if for each person  $O$  ( $O$  accepts  $S$ ) then  $S$  is true].

#### 1.2. SCIENTISTIC VERSION.

Chg(b) For each proposition  $S$  [if for each scholar  $B$  ( $B$  accepts  $S$ ) then  $S$  is true].

REMARK 1. According to Chwedeńczuk, scientistic version (being perhaps not characteristics but definition of “truthfulness”) is formulated by Peirce (Chwedeńczuk 1984: 138, 171, 175). He further rightly notes that not all unanimously accepted propositions are true (Chwedeńczuk 1984: 17).

REMARK 2. Some argue, like Dąbmska (Dąbmska 1931: 15), that common consent is not a criterion but the very nature of truth. Nb. this overlaps perhaps with a specific (“incidental”) meaning of “truthfulness”, where one uses the term “to show solidarity with the attitude expressed in somebody else’s statement” (Kmita 1964: 119-120).



## 2. APPROBATION INTERPRETATION

Chg(c) For each proposition  $S$  [if for a certain person  $O$  ( $O$  accepts  $S$ ) then  $S$  is true].

REMARK 1. The occasionally used authority criterion (Kotarbiński 1961: 147) can be regarded as a variation of genetic characteristics in approbation interpretation. It indicates persons whose beliefs are deemed to be true exclusively by virtue of them expressing such beliefs. It seems that, when he speaks of sociological and psychological notion of truth (Kubiński 1959: 183), Tadeusz Kubiński respectively means acclamation and approbation.

REMARK 2. Sometimes, somebody's approval of the proposition is not a criterion but a symptom of it being true (Chwedeńczuk 1984: 79). Chwedeńczuk rightly reminds us that there are indeed true propositions which have never earned anyone's approval (Chwedeńczuk 1984: 192).

## KNOWLEDGE VS. TRUTH

It appears that the meaning of "knowledge"  
precludes inexpressibility

---

Anna Wierzbicka, *Dociekania semantyczne*, PWN

Attempts at delivering genetic characteristics of truthfulness are rooted in the recognized correlation between truth, knowledge and acceptance. In order to reveal the actual patterns governing those interrelations, explanation of "knowledge" and "acknowledgement" will be needed.

## DEFINITION OF "KNOWLEDGE"

Dfw For each proposition  $S$  event  $Z$  and person  $O$  {if  $S$  refers to  $Z$ , then [ $O$  knows about  $Z$  when ( $O$  accepts  $S$  and  $S$  is true)]}.

REMARK 1. In the classification offered by Michał Hempoliński, Dfw corresponds with the maximalist (persuasive-methodological-alethic) model of cognition (Hempoliński 1983: 69), but only when the acceptance complies with the rule of rational assertion (see the relevant section below). Chwedeńczuk suggests that Dfw is a purely pragmatists' invention (Chwedeńczuk 1984: 192). The universally accepted "truism" (Chwedeńczuk 1984: 57), he argues, would look as follows:

(a) For each proposition  $S$ , event  $Z$  and person  $O$  {if  $S$  refers to  $Z$  then [if ( $O$  accepts  $S$  and  $S$  is true), then  $O$  knows about  $Z$ ]}.  
(b) For each proposition  $S$ , event  $Z$  and person  $O$  {if  $S$  refers to  $Z$  then [if  $O$  knows about  $Z$ ], then ( $O$  accepts  $S$  and  $S$  is true)]}.

Formula (a) explicates, among others, a thought already present in Plato who proposed that he who offers a true proposition also knows (Chwedeńczuk 1984: 86). Pragmatists assume further:

(b) For each proposition  $S$ , event  $Z$  and person  $O$  {if  $S$  refers to  $Z$  then [if  $O$  knows about  $Z$ ], then ( $O$  accepts  $S$  and  $S$  is true)]}.

It is difficult to recognize a true innovation, as shown by the example of Szymon Stanisław Makowski from three centuries ago: “[...] Truth is part and parcel of all knowledge, as a quality RESULTING [my emphasis] from its very essence. Thus, ‘truth’ is not only an essential predication of knowledge. [...] It is also not a predicate of merely accidental nature, as it would then be conceivable to think knowledge either without truth or with its opposition, this inevitably being falsity, a patent nonsense indeed” (Makowski 1979: 403-404).

REMARK 2. There arises a question whether somebody who acknowledges certain propositions GROUNDLESSLY does in fact KNOW about the event to which the proposition relates (or, more precisely, whether this event occurred). If the answer to the question is “no,” then the “truism” in (a) must be dismissed. Furthermore, some even judge the requirement for legitimate acceptance of the proposition as too weak.<sup>3</sup>

REMARK 3. We must also question (b). Somebody who knows about something may nevertheless reject the proposition, thus violating the (modified) rule of rational assertion  $Rra(a)^*$  (see below, remark 1 in the relevant section). In such circumstances  $Dfw$  also seems to be untenable, with the following as more acceptable alternative:

$Dwf^*$  For each event  $Z$  and person  $O$  [ $O$  knows about  $Z$  when  $O$  established that  $Z$ ].

(note that the formula ignores the possibility that one may forget what was established before). Let us also note that some propose to characterize knowledge by distinction:

---

<sup>3</sup>This and one other issue addressed in the following remark and remark 1 in the section “Rule of rational assertion”, has been brought to my attention by Prof. Marian Przełęcki and Prof. Barbara Stanosz. I am also indebted to the former for helping me clarify the formula  $Cha$  in the section “Assertion Criteria”.

Ch(ds) For each proposition  $S$ , event  $Z$  and person  $O$  [if  $S$  refers to  $Z$ , then (if  $O$  knows about  $Z$  then  $S$  is true)].

### KNOWLEDGE CHARACTERISTICS

Sometimes pragmatists' views on propositions can be interpreted in the following way (see above, remark 4 in section "Operational interpretation"):

Dsp(b) For each proposition  $S$  and person  $O$  [if  $S$  is true then [if  $O$  accepts  $S$  then  $O$  does so for certain benefit  $K$  ( $O$  achieves  $K$ )]].

If we now assume the above-formulated definition Dfw, we arrive at:

Chpw For each person  $O$  and event  $Z$  [if  $O$  knows that  $Z$  then  $O$  does so for certain benefit  $K$  ( $O$  achieves  $K$ )].

This formula — a pragmatist symptom of knowledge (Chwedeńczuk 1984: 197) — Chwedeńczuk calls "the instrumentalist rule" (Chwedeńczuk 1984: 197) or "hypothetical systemic component" (Chwedeńczuk 1984: 15-17). Failing to comply with the rule, "epistemological death", would lead to "biological death." (Chwedeńczuk 1984: 36).

REMARK 1. Chpw comes with reservations first indicated by Russell (Chwedeńczuk 1984: 221-222):

(a) acceptance of the true proposition is USUALLY beneficial: "to a significant degree, but not always", "regularly" (Chwedeńczuk 1984: 191);

(b) such benefits may take various shapes and sizes such as better understanding of the world, better coherence of one's beliefs or (greater) immediate satisfaction (Chwedeńczuk 1984: 57) — all of which is better and more inclusive than rejection of a true proposition.

REMARK 2. As indicated by Alfred J. Ayer (Chwedeńczuk 1984: 226-227), if proposed without such reservations, Chpw would be untenable even in the case of evaluative propositions.

### ACCEPTANCE VS. TRUTH

We can speak of truth perhaps only when it's been demonstrated.

---

Adam Wiegner, *W sprawie tzw. "prawdy względnej"*, 1963

RULE OF RATIONALITY OF ASSERTION (Chwedeńczuk 1984: 52)

W sprawie tzw. "prawdy względnej,

Rra(a) For each proposition  $S$  and person  $O$  (if  $S$  is true then  $O$  should accept  $S$ ).

REMARK 1. Rra(a) may strike some as downright silly, and calling it the "rule of rationality of assertion" may sound for some as a joke.

Let us consider the proposition "I will die on an even day". According to Rra(a), if this is true, then everyone should, and in effect are allowed to, accept it (see Rra(b) below). For Kazimierz Ajdukiewicz, this prediction turned out to be true. If Rra(a) was applicable, Ajdukiewicz should have accepted the proposition, although in 1956, when he first shared the premonition, he did not know whether it would materialize. If someone refuses to accept such consequences, Rra(a) would need to be amended into the following:

Rra(a)\* For each proposition  $S$ , event  $Z$  and individual  $O$  [if  $S$  relates to  $Z$ , then (if  $O$  knows that  $Z$  then  $O$  should acknowledge  $S$ )].

Formula Rra(a)\* should perhaps be supplied with one other requirement: " $O$  knows that  $S$  refers to  $Z$ " (in the antecedent of the implication). Appropriate adjustments would have to be made also to Rra(b).

REMARK 2. As far as the relation between truthfulness and acceptance of propositions goes, at first Chwedeńczuk declares himself to be at loss (Chwedeńczuk 1984: 15). Later, however, he goes on to formulate a relation that may be interpreted along the lines of Rra(a), calling it a "normative component of the system" (Chwedeńczuk 1984: 13-17; see also Chwedeńczuk 1984: 66). He may be focusing on aptness, be we can still limit our understanding of his solution to truthfulness, since the latter is said to be the extreme case of the former (Chwedeńczuk 1984: 16).

REMARK 3. With this rule we may now be able to approach the issue troubling Anna Wierzbicka, namely the "absurdity" of the phrase "This is true but I do not believe it". It appears that we need not assume such a strong relation between "truth" and "what we are compelled to believe" (Wierzbicka 1969: 20).

REMARK 4. As suggested by Chwedeńczuk, it is the task of science to seek acceptance of true propositions (Chwedeńczuk 1984: 30). Let us just remind ourselves, after Dąbmska, that "truthfulness is not the sufficient condition

for propositions to be scientific” (Dąbska 1931: 1), and that, following Łukasiewicz, “not all true propositions are scientific claims” (Łukasiewicz 1912: 66). The question whether “truth is the necessary condition for claims to be scientific” (Dąbska 1931: 14) is to be answered in the affirmative, as demonstrated by Dąbska. That said, some scholars, like Łukasiewicz and Marian Smoluchowski, are nevertheless “maintaining that truthfulness is neither a sufficient, nor necessary condition for establishing scientific claims” (Czeżowski 1958: 68-69).

#### FACULTATIVE VERSION

If someone should accept a given proposition, he is also allowed to do it. Thus, the rule of rationality of assertion can be weakened into the following:

Rra(b) For each proposition  $S$  and individual  $O$  [if  $S$  is true then  $O$  is allowed to acknowledge  $S$ ].

REMARK 1. It is incorrect to assume, as Chwedeńczuk does in defense of pragmatism, that “for the sake of our own utilitarian ends we cannot differentiate between what is true and what we accept to be true” (Chwedeńczuk 1984: 228; see also p. 224). Imagine to have once accepted a proposition which later turned out to be false. Or imagine accepting a proposition only TO A CERTAIN DEGREE, presuming, for example, that it is such and such — knowing at the same time that it IS (not to a certain degree) true or false. Wouldn’t such cognitive states testify to the possibility (and the need!) of distinction between truthfulness of the proposition and my accepting it? For this reason, such a distinction is not only, as Hempoliński puts it, one of four premises of the classical theory of truth (Hempoliński 1983: 64), but a baseline condition for any theory of truth in general.

It would be therefore ill-judged to think that in order to be considered true, sentence  $\alpha$  must be checked against its positive truth conditions, those being conditions “allowing to ACCEPT [my emphasis]  $\alpha$  as true” (Wolniewicz 1981: 73). It would be even less advisable to think that the “truthfulness of a proposition” hinges on STATING the existence of being (state of things) suggested by the proposition (Kamiński, Krąpiec 1962: 140).

REMARK 2. By employing James’ language (in his view pertaining to truthfulness in general), one can say about acceptance that it is:

(a) GRADABLE in terms of strength (Chwedeńczuk 1984: 154);

- (b) PERSONAL, as it is always acceptance by somebody (Chwedeńczuk 1984: 159);
- (c) CONTINGENT upon personal needs (Chwedeńczuk 1984: 156, 158, 183);
- (d) CO-DETERMINED by sensual components of experience (Chwedeńczuk 1984: 159, 183);
- (e) MOBILE, i.e. propositions are not accepted by themselves, they are such by resolution of specific persons (Chwedeńczuk 1984: 160).

It may be so that the idea of gradability (and other qualities) of truth can be traced back to, as implied by Jarosław Ładosz, “identifying truth as such with this or other effective criterion of truthfulness of propositions” (Ładosz 1961: 239; see above, remark 1 in section “Intuitive interpretation” and Jadacki 1989: 140-141).

REMARK 3. Wiegner urges the differentiation between the acceptance of a sentence and acceptance of it being true, “which in itself need not necessarily be accompanied by the former” (Wiegner 1963: 123). Here we are concerned only with this latter type (?) of acceptance, with the opposite being rejection of a proposition (on grounds of its falsity).

#### ASSERTION CRITERIA

We now face the question under what circumstances one is empowered to individually accept a proposition. The answer is: when one ESTABLISHED that the proposition was true.

Cha For each proposition  $S$  and person  $O$  (if  $O$  established that  $S$  is true then  $O$  is allowed to accept  $S$ ).

The latter may be achieved by application of truth conditions.

REMARK 1. To quote Ajdukiewicz:

“I. Each conviction to which one applied truth criterion is accepted as legitimate.

II. No proposition can be legitimately accepted prior to application of a truth criterion [...].

III. If proposition  $A$  follows from premises consisting of propositions  $B, C, \dots$ , then legitimate acceptance of  $B, C$  must precede [...] justification of  $A$  on the ground of them” (Ajdukiewicz 1960: 11).

REMARK 2. According to Chwedeńczuk, it is the task of epistemologists to deliver precepts for the application of truth criteria (Chwedeńczuk 1984: 169). It seems to me that such a claim would be unsubstantiated if it implied that the theory of truth did not belong to epistemology.

#### EVIDENTIAL AND STRUCTURAL CRITERIUM

Peirce's view, which Chwedeńczuk calls "epistemological rigorism" (Chwedeńczuk 1984: 195, 205), can be taken to mean that the (ultimate) criterion for acceptance of propositions, or, to quote James, their "legitimacy" (Chwedeńczuk 1984: 148), or "acknowledgment-worthiness" (Chwedeńczuk 1984: 161), is whether it finds scientific justification. We therefore arrive at:

Dta(a) For each proposition  $S$  and person  $O$  (if  $S$  is scientifically justified then  $O$  is allowed to accept  $S$ ).

On a side note, Chwedeńczuk substitutes implication formula Dta(a) (see Chwedeńczuk 1984: 195) with equivalent formula (Chwedeńczuk 1984: 204). The latter is also provided by Władysław Krajewski (Krajewski 1977: 85).

Now, if the proposition is scientifically justified, if given justification satisfying requirements prescribed by scientific research, it follows that if research permits evidential and structural criteria, then Dta(a) is based ultimately on these criteria.

#### ACCLAMATION CRITERION

Dta(b) For each proposition  $S$  and person  $O$  [if for each scholar  $B$  ( $B$  accepts  $S$ ) then  $O$  is allowed to accept  $S$ ].

To make Peirce's intent clear, the above formula should perhaps be phrased in the form of equivalence.

REMARK 1. It seems that it can be demonstrated how ineffective the acclamation condition of assertion is. Assume that a certain person  $O_1$  is the first to voice his opinion regarding (the acceptance of) a proposition  $S_1$ . If  $O_1$  is not a scholar, he must wait to see what the scientific community has to say about  $S_1$ . If, however,  $O_1$  is the first scholar (to voice his opinion on the subject at hand),  $S_1$  can be acknowledged only after other members of the interested community will do so. In that way nobody can individually and authoritatively (legitimately) accept any proposition. This is because, to follow Ayer, "truth is the matter of future consent" (Chwedeńczuk 1984:

225). We are then left with no other option but to accept what Russell calls “sociological prophecy” (Chwedeńczuk 1984: 219), that is, calling the proposition “true” “somewhat in advance” (Chwedeńczuk 1984: 239). Contrary to Chwedeńczuk (Chwedeńczuk 1984: 237-238), I am not inclined to think that the weakening of the discussed relation (unanimous acceptance of the proposition by all scholars as the truth criterion) would suffice to secure validity of a similar stance (see above section “Genetic characteristic”).

REMARK 2. Naturally, pragmatists’ views, especially those coming from James (Chwedeńczuk 1984: 148, 161), can sometimes be taken to mean that the proposition is justified, and therefore ready to be accepted, if it passes the instrumentalist test (see the above section “Knowledge characteristics”).

REMARK 3. James’ pragmatic directive clearly provides neither definition nor characteristic of truth. Used to guide behaviour in case of an observation that does not fit into the particular theory, understood as a system of hypotheses (Chwedeńczuk 1984: 160-162, 166, 192, 199)), it is driven by the optimization (mini-max) strategy, and when needed resorts to the condition of elegance or economy (see Dąmbaska 1931: 15; Gawecki 1944: 73; Szumilewicz 1966: 77; Szumilewicz 1977: 216, 230, 236). “Put simply”, writes Leon Chwistek, “it’s about technicalities of how we work and temporary conventions which can be rendered obsolete when required” (Chwistek 1961: 208).

According to Chwedeńczuk, acceptance of optimization strategy directive entails the systemic nature of knowledge and the world (Chwedeńczuk 1984: 202), as well as indeterminacy of truth and basic principles for competency (Chwedeńczuk 1984: 204). This indeterminacy does occur if what I call “CHWEDENČZUK’S UNCERTAINTY PRINCIPLE” (Chwedeńczuk 1984: 203) is legitimate. It goes as follows:

ZnCh “We are unable to pin down the specific experience and the corresponding proposition with equal accuracy” (Chwedeńczuk 1984: 203).

One could agree with such a principle if it would mean that assertions made in daily life always extrapolate from empirical studies and experience data never fully justify them (compare Jadacki 1985: 49-50).

Let us also note here, contrary to Chwedeńczuk (Chwedeńczuk 1984: 204), that on this account of “uncertainty” it is also our needs that would appear uncertain.

Let us make it clear, however, that it would be wrong to assume that “every proposition can [...] generalize [any] given experience” (Chwedeńczuk



1984: 203). Chwedeńczuk gives the following account of pragmatism: “It «happens» that sometimes a certain proposition is true, while at other times THE SAME [my emphasis] proposition is not” (Chwedeńczuk 1984: 206). One may agree with that because here the proposition means a proposition-sentence not a proposition-statement (i.e. content of the sentence). It is an illusion to believe that one still speaks the same language, in a logical sense of the term, after one has reconstructed the whole body of accepted propositions so that certain propositions-sentences — incompatible with experience under their previous meaning — could be accepted as true by attributing them a new meaning.

## REFERENCES

1. Ajdukiewicz, Kazimierz (1960). O stosowaniu kryterium prawdy. In: *Język i poznanie*. Vol. I, 11-13. Warszawa: Wydawnictwo Naukowe PWN.
2. Biegański, Władysław (1910). *Traktat o poznaniu i prawdzie*. Warszawa: Księgarnia E. Wende i S-ka.
3. Chwedeńczuk, Bohdan (1984). *Spór o naturę prawdy*. Warszawa: Państwowy Instytut Wydawniczy.
4. Chwistek, Leon (1961). Zagadnienia kultury duchowej w Polsce. In: *Pisma filozoficzne i logiczne*. Vol. I, 147-277. Warszawa: Państwowe Wydawnictwo Naukowe.
5. Czeżowski, Tadeusz (1958). Uwagi o klasycznej definicji prawdy. In: *Odczyty filozoficzne*, 68-74. Toruń: Państwowe Wydawnictwo Naukowe.
6. Czeżowski, Tadeusz (1970). Prawda w nauce. *Studia Filozoficzne* 3: 19-25.
7. Dąmbska, Izydora (1931). Prawa fizyki wobec postulatu prawdziwości twierdzeń naukowych. [Offprint from] *Księga pamiątkowa PTF we Lwowie*. Lwów.
8. Drozdek, Adam (1981). Prawdziwość teoretyczna i operacyjna. *Studia Filozoficzne* 10: 101-109.
9. Drozdowicz, Zbigniew (1980). Kartezjańskie kryterium prawdziwości. *Ruch Filozoficzny* 33, 3-4: 243-248.

10. Gabryl, Franciszek (1900). *Noetyka*. Kraków: Księgarnia Spółki Wydawniczej Polskiej
11. Gawecki, Bolesław (1947). Kryteria prawdziwości. *Wiedza i Życie* 16, 1-2: 67-74.
12. Hempoliński, (1983). Epistemologiczne modele poznania. Prawda i racjonalność przekonań. *Studia Filozoficzne* 5-6: 57-70.
13. Ingarden, Roman (1966). O różnych rozumieniach “prawdziwości” w dziele sztuki. In: *Studia z estetyki*. Vol. I, 395-412. Warszawa: Państwowe Wydawnictwo Naukowe.
14. Jadacki, Jacek Juliusz (1982). Spór o istotę prawdy. In: *Propedeutyka filozofii*. Vol. 2, 66-89. Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
15. Jadacki, Jacek Juliusz (1985). *Spór o granice poznania*. Warszawa: Państwowe Wydawnictwo Naukowe.
16. Jadacki, Jacek Juliusz (1986). O istocie prawdziwości (Uwagi o definicji matematycznej). *Studia Filozoficzne* 5: 3-30 .
17. Jadacki, Jacek Juliusz (1988). O istocie prawdziwości (Uwagi o definicji syntaktycznej i pragmatycznej). *Edukacja Filozoficzna* 6: 87-97.
18. Jadacki, Jacek Juliusz (1989). Uwagi na marginesie ‘Sporu o naturę prawdy.’ *Przegląd Humanistyczny* 2: 139-148.
19. Kamiński, Stanisław (1957). W sprawie prawdy naukowej. *Ateneum Kapłańskie* 49, 5, 2: 285-289.
20. Kamiński, Stanisław & Krąpiec, Mieczysław (1962). *Z teorii i metodologii metafizyki*. Lublin: Towarzystwo Naukowe Katolickiego Uniwersytetu Lubelskiego.
21. Kmita, Jerzy (1964). Problem wartości logicznej ocen. *Studia Filozoficzne* 1: 119-139.
22. Kotarbiński, Tadeusz (1963). *Kurs logiki dla prawników*. Warszawa: Państwowe Wydawnictwo Naukowe.
23. Kotarbiński, Tadeusz (1966). *Gnosiology*. Oxford: Pergamon Press.

24. Krajewski, Władysław (1977). O względnej prawdziwości praw i teorii naukowych. *Studia Filozoficzne* 4: 83-93.
25. Kubiński, Tadeusz (1959). Prawdy względne. *Ruch Filozoficzny* 19, 3-4: 183.
26. Ładosz, Jarosław (1961). *Wielowartościowe rachunki zdań a rozwój logiki*. Warszawa: Książka i Wiedza.
27. Łukasiewicz, Jan (1911), Zagadnienia prawdy. In: *Księga pamiątkowa XI Zjazdu Lekarzy i Przyrodników Polskich*. Kraków.
28. Łukasiewicz, Jan (1912). O twórczości w nauce. In: *Księga pamiątkowa ku uczczeniu 250 rocznicy założenia Uniwersytetu Lwowskiego*, 1-15. Lwów.
29. Makowski, Szymon (1979). O wiedzy. In: Zbigniew Ogrodowski (ed.) *700 lat myśli polskiej*, Part II, 398-405. Warszawa: Wydawnictwo IFiS PAN.
30. Rosnerowa, Hanna (1975). Współczesne spory o pojęcie prawdy i jej ekspresję. *Znak* 27, 10: 1243-1261.
31. Rubczyński, Witold (1906). Kryterium prawdy w teorii poznania pierwszych stoików i u Kartezjusza. *Przeгляд Filozoficzny* 9, 4: 358-368.
32. Rzewuski, Henryk (1851). *Wędrowki umysłowe*. Vol. 1. Petersburg: Nakładem B. M. Wolffa.
33. Słomska, Albina (1978). Wczesne poglądy Leśniewskiego na istotę prawdy i rolę nauki. *Studia Filozoficzne* 3: 67-77.
34. Suchodolski, Bogdan (1947). O prawdzie. *Znak* 2, 4: 390-409.
35. Szpotański, Zenon (1969). Prawda obiektywna i subiektywna. *Znak* 21, 10: 1341-1349.
36. Szumilewicz, Irena (1966). Prostota a prawda. *Gdańskie Zeszyty Humanistyczne. Filozofia* 9, 2: 75-98.
37. Szumilewicz, Irena (1977). Postulat prostoty (*simplex sigillum veri?*). *Studia i Materiały z Dziejów Nauki Polskiej*. Series E, 6: 215-239.
38. Tarski, Alfred (1969). Truth and Proof. *Scientific American* 220: 63-77.

39. Wiegner, Adam (1963). W sprawie tzw. «prawdy względnej». *Studia Filozoficzne* 1: 113-127.
40. Wierzbicka, Anna (1969). *Dociekania semantyczne*. Wrocław: Ossolineum.
41. Wolniewicz, Bogusław (1981). O przestrzeni logicznej. *Studia Filozoficzne* 10: 67-73.
42. Żytkow, Jan (1977). O pojęciu względnej prawdziwości w naukach empirycznych. *Studia Filozoficzne* 6: 33-37.