

## NEW CLASSIFICATION (variations + duals)

*This is what I read not so long ago in a judge's report: "Problem NN had to be excluded on account of a dual in an additional variation which in the judge's opinion is a strong one." I started thinking, is there a scale for measuring the "value" of a variation or the "cost" of a dual? Should a judge be guided only by his own convictions when assessing whether a dual is "weak" or "strong"? My reflections led me to the creation of a new Classification of Variations and Duals that I am offering to the readers, in the form of Tables 1 and 2, for their consideration.*

### 1. Solution variations.

What are solution variations and what types of them exist? There is a huge variety of terms that composers use in their vocabulary to define solution variations: main, thematic, conceptual, central, set, virtual, additional, secondary, collateral, sideline, technical, demonstrative, etc. Which of the above terms are merely epithets (metaphorical definitions) and which ones are really meaningful? Let us try to clarify this.

The first official attempt to divide variations into specific groups can be found in *The Rules of Chess Composition* (which were introduced as a separate part into *The Chess Codex of the USSR* becoming effective on October 1, 1973). According to Article 12 of the said Rules, concept expressiveness consists "in clearly singling out the thematic variations presenting the author's concept." Next came a useful clarification saying, "secondary variations – additional play – must not overshadow the main play." Thus, a distinction was outlined between thematic and secondary variations. Unfortunately, the wording was not good enough, since one can only speak of thematic variations when a particular theme is presented, and moreover, the term "secondary" looks a lot like "second-rate." Variations were classified in a more rational way in N. Zelepukin's dictionary (Kyiv, Zdorovya Publ., 1982, reviewed by V. Rudenko): "A distinction is drawn between main (conceptual, thematic) variations, which reveal the author's concept, and additional (collateral) ones."

It is not hard to see that the **criterion** underlying the first quasi-classification consisted in "the way in which variations relate to the author's concept." For easier perception, the two specified groups can be defined as follows: 1) variations revealing the author's concept; 2) variations unrelated to the author's concept.

Unfortunately, subsequent theoretical elaboration of the issue was suspended for many years. Today's reality is that many composers have formed a steady conviction (or rather prejudice) that there exist only the two above-mentioned groups of variations, the first one being most frequently referred to as "main" (also, thematic, conceptual, central, etc) and the second as "additional" (also, collateral, secondary, sideline, etc). It is time now to pay attention to the existing contradictions and to make the necessary corrections to the established stereotypes.

The new **Classification of Variations** is based on a different criterion, namely, "the designated aim of variations." This criterion is embedded in the very definition of the term "variation": **the totality of white and black pieces' moves related by a common aim**. Thus, it is easy to single out three independent groups of variations: *main, supplementary, and auxiliary*.

#### 1<sup>st</sup> group of variations: **Main variations.**

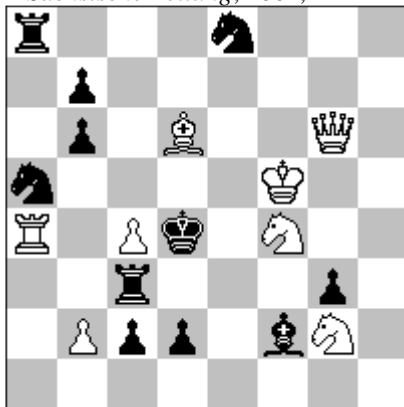
The aim of *main* variations is to shape **the author's concept** (main play) that reveals itself in the implementation of:

- any *theme* that has an established name of its own (e.g. Grimshaw, Odessa theme, Albino, etc) or is clearly defined (e.g. one required in a theme tourney); in this case the essence of the author's concept manifests itself in *thematic* variations; and

- any *idea* (synthesis of ideas) that does not have an established designation as a *theme*; in this case the essence of the author's concept reveals itself in *conceptual (idea-related)* variations.

The notions "idea" and "theme" are close, but do not coincide. In a wide sense, "idea" can be defined as the main aim of an individual move, maneuver, combination, or plan. In a more narrow sense, "idea" corresponds to the notion of "tactical idea" – a most important element of a problem's content based on strengthening (defensive) or weakening effects of the parties' moves. Just as a house is built of small bricks, so, too, the content of any composition consists of a versatile synthesis of ideas. When an *idea* is preliminary defined and/or demonstrated, the notion of "theme" comes into play, its content consisting precisely in the clearly formulated *idea*. Most of the *themes* are named after the author who first formulated the theme and/or implemented it in a problem.

**No. 1. Igor Agapov** (version)  
Sächsische Zeitung, 2004, 1<sup>st</sup> HM



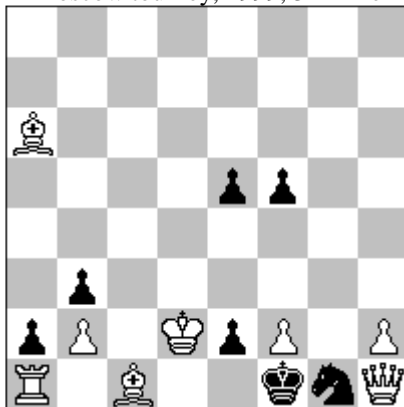
#3

8+11

**№ 1. 1.Qh6!** [2.Qh8+ Sf6 3.Q:f6#]  
**1...Sc6 2.Be5+!! S:e5 3.Q:b6#, 2...Kc5 3.Se6#**  
**1...Re3 2.Se6+!! R:e6 3.Q:d2#, 2...Kd3 3.Sgf4#**

Here, the following *tactical idea* is employed: sacrifice of a white piece on the square that has just been attacked by black. In practice, this spectacular *idea* got an own name, “Keller paradox,” and went on to exist as a *theme* (“Keller-1 paradox”). Thus, in **No. 1** the author’s concept is presented in two *main* variations of a *thematic* nature.

**No. 2. Igor Agapov**  
Moscow tourney, 1999, 3<sup>rd</sup> Prize



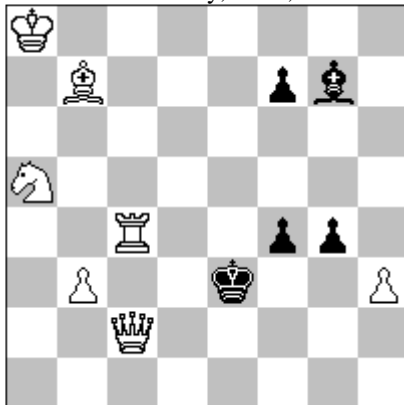
#3

8+7

**№ 2. 1.Kd3! – zz**  
**1...e1Q 2.Be3! – zz, 2...Qb1+ 3.Kd2#**  
**1...e1S+ 2.Ke3+ Sd3 3.Bd2#**  
(1...e4+ 2.Kd4! K:f2 3.Be3#  
1...f4 2.Be3+ e1Q 3.Ke4#)

In the 1<sup>st</sup> Russian East vs. West match (1997), the *theme* for the threemover section was as follows: “Play by a promoted black piece.” This *tactical idea* did not have any special name, but it was specifically formulated as a *theme* in the tourney. Therefore, both of the *main* variations in **No. 2** are also *thematic* (*theme* of “The 1<sup>st</sup> East vs. West match”).

**No. 3. Igor Agapov**  
Moscow tourney, 2002, 1<sup>st</sup> HM



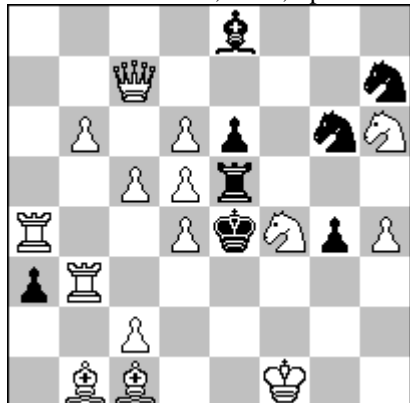
#3

7+5

**№ 3. 1.b4!** [2.Sb3! – 3.Qd2#, 2...Bc3 3.R:c3#]  
**1...Bc3 2.Rd4!! [3.Rd3#] 2...B:d4 3.Sc4# 2...K:d4 3.Qe4#**  
**1...Bf8 2.Bf3!! [2.Qe2#] 2...g:f3 3.Re4# 2...K:f3 3.Rc3#**

Each of the two *main* variations in **No. 3** presents the following complex of *tactical ideas*: a checkless sacrifice of a white piece with a threat, followed by different mates in response to capture of the sacrificed piece, in particular by the black king. This complex is highly harmonious, but it still has not been given a name; therefore, it is more appropriate to speak of the presence of two *conceptual* (rather than *thematic*) variations here.

**№ 4. Igor Agapov (change)**  
*The Urals Problemist*, 2004, Special Prize



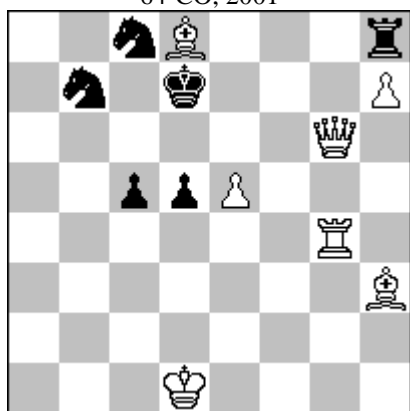
#3 15+8

**№ 4. Rab4! –**

- 1... ~ 2.Re3+! (A) K:f4 3.d:e5# (B)  
 1...Sf6 2.d:e5+! (B) K:e5 3.d7# (C)  
 1...S:h4 2.d7! (C) R~ 3.Re3# (A)  
 1...R~ 2.c3+! Kf3 3.c4#  
 1...Bb5+ 2.c4+! K:d4 3.c:b5#

In **No. 4**, the five *main* variations consist of two independent complexes (Adabashev synthesis): the first three variations are *thematic* (theme: cyclic change) and the other two are *conceptual* (tactical idea: consecutive play by pawn batteries).

**№ 5. Igor Agapov**  
 64-CO, 2001



#3 7+6

**№ 5. 1.Qe8+! –**

- 1...K:e8 2.Rg8+ Kf7 3.e6# (mm), 2...R:g8 3.h:g8Q# (mm)  
 1...R:e8 2.Rg7+ K:d8 3.Rd7# (mm), 2...Kc6 3.Bd7# (mm)

In **No. 5**, the core of the *author's concept* is to demonstrate 4 non-stereotyped model mates. Both of the *main* variations can confidently be referred to as *conceptual*. At the same time, in recent years composers have come to use “a complex of model mates” as a conventional name for a *theme* and so the above variations can also be referred to as being *thematic*.

Thus, the distinction between *conceptual* and *thematic* variations is quite small (sometimes the two types can even be equated to each other), but still it does exist. It is important to understand that in both cases we are referring to *main* variations shaping the *author's concept*.

**2<sup>nd</sup> group of variations: Supplementary variations.**

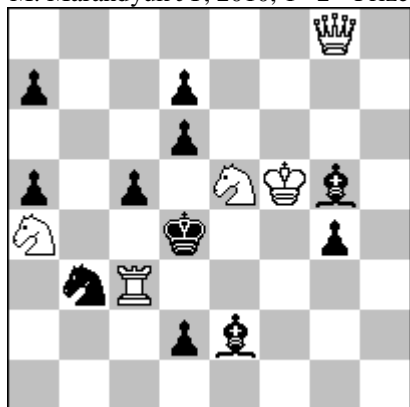
The aim of *supplementary variations* is **to enrich the author's concept** (supplementary play) with some extra *tactical ideas*. The following subtypes can be singled out in this group of variations:

- a) those underlining the *ideas* embedded in the *main* variations; and
- b) those demonstrating independent *ideas* differing from the ones presented in the *main* variations.

The totality of the *key move and the main and supplementary variations* **make up the intended (author's) content** of a composition; this is in fact what is to be evaluated (in a competition or a tourney).

When indicating *main* variations, these can be referred to by such synonyms as “principal” or “central”; their offshoots “collateral” or “sideline,” however, are totally inappropriate for designating *supplementary* variations.

**№ 6. Igor Agapov**  
 M. Marandyuk JT, 2010, 1<sup>st</sup>-2<sup>nd</sup> Prize



#3 5+11

**№ 6. 1.Qe8? – 1...Be7!**

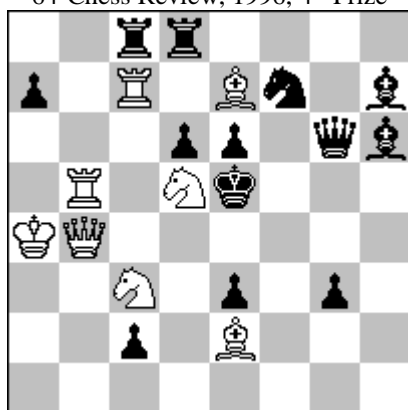
- 1... ~ (a) 2.Sc6+ (A) Kd5 3.Qe4#  
 1...Bb5 (b) 2.Sf3+ (B) Kd5 3.Qe4#  
 1.Qh8! –  
 1... ~ (a) 2.Sf3+! (B) Kd5 3.Qa8# (C)  
 1...Bb5 (b) 2.Sc6+ (A) Kd5 3.Qh1# (D)

The *main* variations of the virtual phase and of the actual solution contain the *theme* of reciprocal change in Le Grand form. The second system of variations in **No. 6** is very close to the author's concept, since the mating moves become the second moves there, underlining the *author's concept*:

- 1...Bf6 2.Qh1! (C) d5 3.Qg1#  
 1...Kd5 2.Qa8+! (D) Kd4 3.Qe4#

These are *supplementary* variations.

**№ 7. Igor Agapov**  
64-Chess Review, 1996, 4<sup>th</sup> Prize



#3

8+13

**№ 6. 1.Qh4!!** [2.Bf6+ Q:f6+ Q:f6#]

**1...Qe4+ 2.Sb4+! Kd4 3.S:c2#**

**1...Qg4+ 2.Sf4+! Kd4 3.S:e6#**

1...e:d5 2.Qd4+! K:d4 3.R:d5#, 2...Kf5 3.Qe4#, 2...Ke6 3.Q:d5#

The *conceptual* variations of **No. 7** present a sophisticated complex of *tactical ideas* with cross-checks and decoying of black pieces to a pin-line. The third variation, in spite of its bright play, is just a *supplementary* one, demonstrating an independent *tactical idea* (queen sacrifice).

Sometimes, in the process of composing the author succeeds in combining *supplementary* variations into an integral complex; in that case, a second system of *main* variations can be arranged (as in **No. 4**).

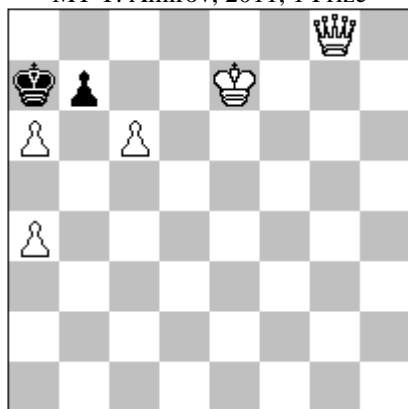
**The 3<sup>rd</sup> group of variations: Auxiliary variations.**

The aim of *auxiliary* variations is:

- to provide for the presence of a solution – *demonstrative* variations (in endgame studies); and
- to provide for correct performance of the stipulation – *technical* variations (in problems).

*Tactical ideas* included in *auxiliary* variations are insignificant or negligible. It is clear from the above that *auxiliary* variations are not of any artistic value, lying outside the scope of the intended content; therefore, they may not and should not be evaluated or be perceived as affecting composition quality. What should be evaluated is not the content of *auxiliary* variations (there is no need for doing so, since they are no part of *the intended content*), but the very fact of their presence, which is something quite different. An abundance of *technical* variations as well as excessive complexity of *demonstrative* variations tend to erode *the author's concept*, depriving it of clarity and expressiveness. That is precisely the reason why one should avoid *auxiliary* variations if possible or keep their number at a minimum.

**№ 8. Igor Agapov**  
MT T. Amirov, 2011, 1 Prize



#3

5+2

**№ 8. 1.Qd5! – zz**

**1...b:a6 2.Qb3 ~ 3.Qb7#**

**1...b6 2.c7 K:a6 3.Qa8#**

**1...b5 2.Q:b5 Ka8 3.Qb7#**

**1...b:c6 2.Q:c6 Kb8 3.Qb7#**

The four *thematic* variations present the *idea* of fourfold black pawn play which is the essence of the *Pickanniny theme*. There are no *supplementary* variations in **No. 8**. The remaining variations do not contain any essential *tactical ideas*:

1...K:a6/Kb6 2.Qb5+ ~ 3.Q:b7#

1...Ka8/Kb8 2.c7, Qd7 (dual) ~ 3.Q:b7#

These are *auxiliary (technical)* variations providing for correct performance of the stipulation.

Quite remarkable is the comment by the judge A. Syurov: “*Pickanniny theme. There are but a few such problems in the mini-genre. However, the duals in response to the black king’s moves are very unpleasant. I know many judges who exclude problems for defects like these.*” It looks like the judge had some doubts before deciding to abstain from evaluating the *technical* variations. The decision he made may indeed contradict the opinion of “*many judges,*” but it is quite in line with the new Classification!

“The secret” of the creative laboratory is as follows: a clear-cut dual-free version (Ke7>d7, Qg8>h1), but with a banal key 1.Qh1-d5, looked dull. After a brief hesitation, I preferred **No. 8** with its brilliant key: 1.Qg8-d5!! – and I made no mistake there...

**2. Dual.**

A *dual* (from the Latin *dualis*, i.e. duality) is a deviation from the unique order of moves contemplated by the author in any phase of play on the second or subsequent moves. A *dual* is a flaw, since its presence is at variance with the “solution uniqueness” principle. Depending on their significance, *duals* are usually divided into *strong* and *weak*. The former ones usually lead to no difficulties: *duals* in *main* variations are considered to be *strong* and compositions with such *duals* are recognized as incorrect. However, the issue of *duals* in “non-main” variations is a sharp one, since here everything is left to the judges’ discretion (!).

One might think that the issue is quite clear, in view of the well-known rule that the presence of a *weak* dual is merely a reason for decreasing the estimated value of a composition. However, in reality any judge, guided by his own conviction, can classify any *dual* as *strong*, which automatically leads to disqualification of the composition. Actually, the point is that in the absence of clear-cut criteria it is impossible to reliably determine the status of a variant – after all, there is NO CLASSIFICATION! One can only put an end to that arbitrariness by relating the significance of a *dual* to a definite group of variations (as described above)! If that approach is taken, to disqualify a composition would require establishing (and proving) that the *dual* in question is included in a *main* (i.e. *thematic* or *conceptual*) variation. When discovering a *dual* in a *supplementary* variation, the judge will have the right to decrease the problem's estimated value. By contrast, the presence of a *dual* in an *auxiliary* (i.e. *demonstrative* or *technical*) variation will not require any evaluating action on the part of the judge; he must only focus his attention on the *intended content* – the only thing that should be evaluated. Furthermore, the judge will preserve the right (but not the obligation) to lower a problem's estimate when its *auxiliary* variations are too numerous and/or complicated, even if such variations have no *duals*!

The new **classification of duals** is linked to the three groups of variations; therefore, it is also proposed that three independent groups of *duals* be singled out: *strong*, *weak*, and *unessential*.

### 3. Classification: variations+ duals.

**Table 1** contains the new Classification of Variations and Duals and also specifies (regulates) their interrelations.

**TABLE 1**

VARIATIONS		DUALS	
Name	Designated aim	Name	Composition evaluation
<b>1. Main:</b> - thematic, - conceptual	- shape the author's concept	<b>1. Strong</b>	- composition recognized as incorrect, - "zero estimate" (in a competition)
<b>2. Supplementary:</b> - underlining the main variations, - demonstrating independent ideas	- enrich the author's concept	<b>2. Weak</b>	- decreased value
<b>3. Auxiliary:</b> - demonstrative, - technical	- ensure the performance of the stipulation	<b>3. Unessential</b>	- no impact

Variations appearing in virtual phases (set play, tries, probing attempts) require separate explanation. Solution phases can be virtual; but variations may not be so – they are always real! A comprehensive virtual phase may contain all three groups of variations, but in practice it is commonly accepted to single out only *main* variations. This is a specific feature of theirs!

**Table 2** presents the particularities of evaluation of a composition with a dual in a virtual phase.

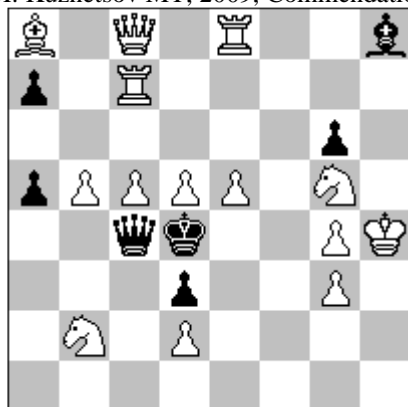
**TABLE 2**

DUALS		EVALUATION	
Group	Location	For the phase	For the composition
<b>1. Strong</b>	- in white's play – in a main variation	- invalidity of the phase (or of a part thereof)	- decreased estimate if the author's concept can exist without the invalid phase; - "zero estimate" if the author's concept is unsound without the invalid phase
<b>2. Weak</b>	- in black's play – in case of a dualistic refutation	- quality deterioration	- decreased estimate
<b>3. Unessential</b>	- anywhere else	- no impact	- no impact

The principle of "equality of phases" is effective in the sense that the formal requirements usually imposed on compositions (legality, presence of a solution, and solution uniqueness) are applied to all phases. "Equality of phases," however, by no means implies "equal value of phases," since virtual phases have always been (and will always be) subordinate to the actual solution. The principle of "concept expressiveness" obliges a composer to clearly outline the main play and to construct the plot of a problem in such a way that the climax is demonstrated in the solution rather than elsewhere, for otherwise the harmony is gone!

### № 9. Igor Agapov

M. Kuznetsov MT, 2009, Commendation



#3

14+7

№ 9. **1...Q:c5 2.R:c5 ~ 3.Rc4#**  
**1...Q:d5 2.Q(R)d7 Q:d7 3.Sf3#**  
**1...B:e5 2.R:e5 K:e5 3.Qh8#**  
**1.Qa6! ~ 2.Q:g6 Q:d5 3.Q:d3#**  
**1...Q:c5 2.Q:a7! Q:a7 3.Rc4#**  
**1...Q:d5 2.Qd6! Q:d6 3.Sf3#**  
**1...B:e5 2.Qf6! B:f6 3.Re4#**  
 1...Qc1 2.Sf3+ Ke4 3.d6# (1...Q:b5 2.Q:b5)

The *thematic* variations are presented in bold characters (WCCT-8 theme); the *supplementary* variations, in normal characters; a *technical* variation is given in brackets. The second variation of the set-play phase contains a *dual*: 1...Q:d5 2.Q(R):d7. This variation is part of *the author's concept* so it is a main one.

Why, then, did the presence of a *dual* in a *main* variation of the *virtual* phase in **No. 9** not lead to a “zero estimate” for the problem (Album of Russia, 27 points)? A likely reason is that all judges evaluated the content of the problem without taking account of the “dualistic” variation (as part of the virtual phase)!

#### 4. Sub-variations, threat, zugzwang, defenses by a king's move.

**4.1.** Sub-variations are ramifications within a variation. Let us imagine a situation where several branches emerge in a *main* variation of a solution: some are thematic and others are non-thematic. What should be the result of discovering a *dual* in a non-thematic branch? No theoretical interpretation of this issue has ever been developed; hence different views are possible based on genre peculiarities (specifics) and even on personal preferences. The evaluation of such a *dual* depends on the identified status of the sub-variation:

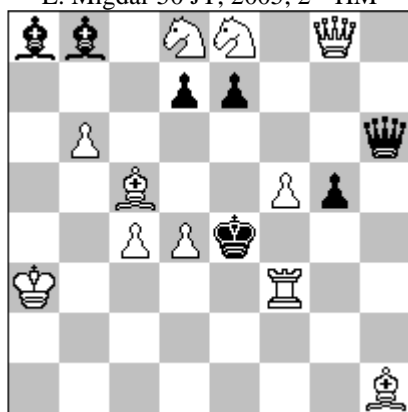
- *strong* – the sub-variation is a part of a *main* variation;
- *weak* – the sub-variation is a non-thematic part of a *main* variation;
- *unessential* – the sub-variation is not a part of a *main* variation (not included in *the author's concept*).

The wish to have a “legal” basis for disregarding *duals* in non-thematic ramifications even led to the formulation of the principle of “solution management.” However, the authors of this essentially innovative principle unfortunately limited themselves to declarations, without proposing any clear and distinct criteria for “solution management.” Therefore, the attempt to implement that principle failed, since in practice its literal interpretation was transformed into a banal opportunity to “conceal” *duals*.

Example **No. 9** provides some guidance for assessing *duals* of this sort.

### № 10. Igor Agapov

E. Migdal-50 JT, 2005, 2<sup>nd</sup> HM



# 3

11+7

№ 10. **1.Sf7!** [2.Q:g5! Q:g5 3.S:g5#]  
**1...Bd6 2.Sf6+! Q:f6 3.Q:a8#** (3...d5?)  
**1...d6 2.S:g5+! Q:g5 3.Qe6#** (3...Be5?)  
**1...Qh4 2.Sed6+! B:d6 3.Q:a8#, 2...e:d6 3.Qe8#**

The variation (1...Bd6 2.Sf6+!) has a branch: 2...e:f6 – where not only 3.Q:a8# but also 3.S:d6# (*dual*) is possible. What should judges do in such a situation? Quite insightful is the commentary from the chief judge (V. Rudenko): “An original interpretation of the *Pickabish* and *pseudo-Novotny* themes. The problem would be a contender for a high prize if it were not for the *dual* in the first variation which cannot be regarded as being *unessential*.” Thus, in this particular case a *dual* (on the mating move) was considered to be *weak* (!) and this rightly led the judge to decrease the overall estimate of the problem (from a “high prize” level to that of an honorary mention). On the whole, this kind of approach seems to be logical and justifiable.

**4.2.** A threat completely falls within the definition of the term “variation,” moreover, a threat:

- can be included in *the author's concept* as one of the *main* variations (*thematic* or *conceptual* threat); this is the kind of threat found in **Nos. 4** and **6**;
- can add to *the author's concept*, as a *supplementary* variation, by underlining the concept or by demonstrating an independent *tactical idea*; this is the kind of threat found in **Nos. 3, 9**, and **10**;
- can perform an auxiliary function only (typical example: short threat), being a *technical* variation; this is the kind of threat found in **Nos. 1** and **7**.

4.3. The following questionable theses are quite common:

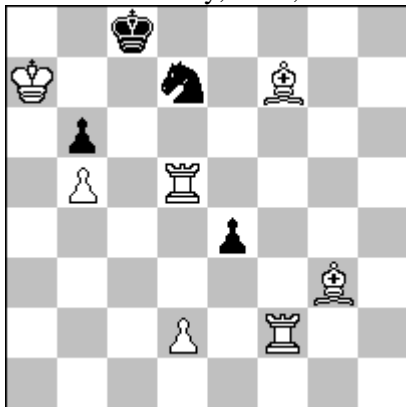
- in a zugzwang problem, all variations have the “main” status and each *dual* is a strong one;
- any *dual* in response to the black king’s moves has the “strong” status.

There are, however, no logical grounds for these theses. There exist two possible ways to start a variation: zugzwang and threat. Both ways are equal in status and have no advantages over each other. Similar to threat-based problems, in zugzwang problems it is always possible to identify variation types on the basis of the proposed classification (*main, supplementary, auxiliary*); therefore, the evaluation of duals may not and must not depend on the way in which a variation is started.

The same can also be said about variations beginning with a move by the black king: There are no essential reasons for singling out these variations as a separate group. Therefore, the evaluation of *duals* in variations “of this sort” must be based on the type of group a particular variation belongs to (pursuant to **Tables 1** and **2**).

### № 11. Igor Agapov

Moscow tourney, 2010, 2<sup>nd</sup> HM



#3

7+4

№ 11. 1.Rf4! – zz

1...Se5! 2.Be6+! Kc7 3.Rf7#, 2...Sd7 3.Rf8#

1... e3 2.Rc4+! Kd8 3.Bh4#, 2...Sc5 3.Be6#

1...Kc7 2.R:e4+! Se5 3.Rc4#

The *technical* variations:

1...Sf8, Sc5 2.R:e4, 1...Sf6 2.Be6+, R:f6 (*dual*) — with random knight leaps – contain no essential *tactical ideas*, which fact is indicative of their auxiliary status.

From the report by the judge (A. Kuzovkov): “Five mates featuring black knight pinning. A good key; vivid battery play. The minuses are the duals **in the collateral variations** that should all the same be avoided in zugzwang problems.” As we can see, the terminology has not been essentially modified since the times of the first quasi-classification. What does the term “**collateral variations**” refer to here: *supplementary, technical, or other types*? And why are precisely zugzwang problems the ones in which *duals* should be avoided in variations “of this sort”? The picture I see is quite different: the obvious minus of **No. 11** consists not in *duals*, as such, but in the very presence of *technical* variations (with the knight leaps) that erode *the author’s concept* by the mere fact of their existence.

**P.S.** This paper makes mention of such terms as “key move,” “threat,” “author’s concept,” “intended content,” and “recognition of incorrectness” without specifying them in detail. There will be more on these and lots of other things in the next issues.

With best regards to all readers,  
Igor Agapov, Izhevsk, November 7, 2011

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