Swimming in Theory

Many of the chapters in Dvoretsky’s Endgame Manual (DEM, for short) end with a section called “Tragicomedies.” These are practical examples of terrible blunders related to the theme of that chapter. Well, I recently completed most of the work on a new book to be titled Endgame Tragicomedies. It will help my readers refresh their memories of some important theoretical positions and techniques, and make them think about why everyone, from run-of-the-mill amateurs to gifted grandmasters, commits endgame errors, so that they may avoid such errors in the future. For those who are not familiar with DEM, this new book will serve as an introduction to the fascinating world of the endgame, and may perhaps inspire them to a systematic study of endgame theory.

Let me acquaint our visitors with some excerpts from this new book.

**Aronian – Carlsen**
Moscow 2006

B

69…Ra1?!  
Black had no need to exchange one defensive position for another. It was simpler just to prevent the pawn’s advance by keeping the rook behind it: 69…Re2! (70 Kd6 Kf7!), only switching to the flank attack after 70 Re8, with 70...Ra2.

70 Ke7 Ra5 71 e6 Ra7+ 72 Rd7  
B

This is an important theoretical position, in which Black has an easy draw, because his rook is on the long side. But you still have to know a few subtleties – many a chessplayer has lost from this position. And the present game proved to be no exception.

72…Ra8

The safest defensive method is to maintain control of the eighth rank. For if White succeeds in playing Ke8, followed by e6-e7, without consequence, he will have a won position.

And yet, the rook may still go to almost any square; for example, 72…Ra1. You see, after 73 Ke8+, the saving idea for Black is the active 73…Kf6! 74 e7 Ke6! – this is why the white rook stands so poorly. And it’s important that on 75 Kf8, Black has the check 75…Rf1+!.

The last note makes it clear that the **only rook retreat along the a-file**
that loses is $72...\text{Ra6??}$. After $73\ \text{Ke8+ Kf6 74 e7 Ke6 75 Kf8!}$, the rook check is no longer possible. Paradoxical as it sounds, many players have put the rook on just that square: a6!. The most famous example is the ending of the game Capablanca – Menchik (DEM, diagram 9-11).

73 Rd6??

White gets nothing out of $73\ \text{Rd8 Ra7+ 74 Kd6 Ra6+ 75 Ke5 Ra5+ 76 Rd5 Ra8}$.

B?

With the rook on d6, Black must keep his rook on the eighth rank – because if he allows Ke8, then he no longer gets the active counterplay with Kf6, since the pawn advances to e7 with check!

Moving the rook closer to the king by $73...\text{Rb8??}$ is bad, in view of $74\ \text{Rd8 Rb7+ 75 Kd6 Rb6+ 76 Kd7 Rb7+ 77 Kc6–}$.

This leaves only one move that does not worsen the situation, namely: $73...\text{Kg6=}$.

773...\text{Ra7+?? 74 Ke8 1-0}

The finish might be: $74...\text{Ra8+ 75 Rd8 Ra1 76 e7 Ra7 77 Rd1, or 77 Rc8}$.

What can we say about all this? The conclusion seems obvious: the young and exceptionally talented Norwegian grandmaster was unfamiliar with basic endgame theory, because he never studied endgames.

However, the day after the game, I talked with Carlsen’s trainer, grandmaster Peter-Heine Nielsen, who assured me that Magnus had studied books on the endgame. This invalidates the obvious explanation – the problem cannot be ignorance of elementary concepts. In fact, this episode spurs us to give some thought to the disconnect between theory and practice, and the need to train oneself in putting one’s knowledge to practical use.

School lessons in mathematics cover theoretical rules, formulas, and problem-solving methods. But teachers do not confine themselves to teaching theory: they also give their students many exercises. Without these, acquired knowledge only becomes dead weight, most of which is soon forgotten.

Let us suppose that a person who had never sat behind the wheel of a car were to commit to memory every rule of motor travel, and all the techniques of steering, until he knew just when and how to turn that wheel and which pedals to press. Would that be enough to send him out on the street with the motor running? Of course not – first, he’d need to practice, to work out and solidify his driving habits.

It’s just the same in chess: **knowledge of endgame theory does not guarantee that you will know how to play the endgame.**

Reading endgame books, you will encounter many instructive examples, but you don’t know which of them are of special importance and require that you know all of their subtleties. (In fact, one of the chief methodological ideas behind the writing of DEM was precisely to single out this key, essential information.) In order to better understand and memorize the material under consideration, it’s important to examine additional examples on the same theme, and to solve the appropriate exercises.

As I noted in the preface to DEM, the connection between theory and
concrete practical endgames is not always straightforward and obvious. It’s sometimes difficult to spot familiar theoretical contours in a complicated position, to understand just which of the ideas you have studied needs to be utilized here. And at other times, by contrast, the position may be quite similar to a theoretical one; in that case, it’s important to note the subtle differences, and decide what effect they will have on the course and outcome of the game.

This brings to mind an episode from one of the sessions of my school for gifted chessplayers, held near Moscow in October 2001. The participants included young candidate-masters, masters and even grandmasters as well. I lectured on the theory of the endgame “rook and advanced pawn vs. rook.” My students wrote it all down, and then they were given the following position (DEM, diagram 9-22):

Rohde – Cramling
World Junior Championship, Innsbruck 1977

If Black’s rook were on e1, the draw would be his with no problems at all (in DEM, this situation is dubbed the “second method of defense from Philidor’s Position”). But the rook does not stand so well, which means that White to move wins – although, contrary to expectations, it involves considerable difficulty. He must calculate some concrete variations accurately – based, naturally, upon the evaluation of the basic theoretical positions.

I divided the participants into two-man teams. Each team was to play out this endgame, with one person taking white, the other black – this way, both sides had equal chances in the matches.

The teams were allowed a certain amount of time (30 or 45 minutes, I think) to prepare for play: they could analyze the position with the aid of their notes and moving the pieces about (but of course, without using computers). Then, the matches began.

One would not expect the task to be too complicated under these circumstances. Unfortunately, not one of the games reached the proper conclusion: in each game, at least one player (and usually both) committed grievous errors, and generally in the very first moves.

I repeated the session, using a different rook endgame: Hector – Krasenkow (DEM, 9-14) – and with the same sad result.

Three months later, the experiment was repeated at a training session of the strongest club of the moment, the French club NAO. I reminded the team members of the basics of rook endgame theory, and then asked them to play out the above two positions against me in simultaneous format (this time, with no preliminary analysis). The result was exactly the same: not one of my opponents was able to cope with the task – and this team included the leading grandmasters of France: Etienne Bacrot and Laurent Fressinet among others.

I tell this story for a reason: it gives a stark illustration of how far even very strong grandmasters are from a real level of endgame mastery. Nor is
this surprising: after all, they have never made a systematic study of
endgame theory, nor have they trained in the calculation of complex
variations based upon this theoretical knowledge.

I have no doubt that we would have seen the same result had we made
some serious middlegame problem the subject of study instead. So, is it
worthwhile to spend all our time and strength in endless work on our
openings, as do the overwhelming majority of chessplayers, while there
are other areas of chess that hold huge opportunities for growth in
mastery?!

I offer for your consideration two “multi-part tragicomedies,” in which
both sides erred repeatedly.

Salwe – Burn
Saint Petersburg 1909

W

This position is, of course, completely
drawn. And yet Burn, one of the leading
players of his day, demonstrates such
ignorance of the basics of endgame
theory as to bring his game to the verge
of defeat.

75 Rf7+ Ke8?!
The first misstep. 75…Kc8! was the proper choice: the king should head
for the short side.

76 Rh7 Rd3
A good move; but 76…Ra3, with 77…Ra6 to follow, was undoubtedly
simpler, executing the basic Philidor defensive method.

77 Ke6 Re3+
It was not too late to aim his king for the short side: 77…Kd8?!.

78 Ke6 Rd3 79 Rh8+ Kf7 80 Rc8

B

80…Ra6+?
The losing move – checks from the short
side are hopeless. In such situations, the
only saving idea is to put the rook
behind the pawn: 80…Rd3 81 d5 Rd1 82
Ke6 Ke7!, or 82 Rd8 Ra1!. With a
center pawn, this defensive method
guarantees an easy draw, even with the

king stuck on the long side.

81 Re6?
The drawback of White’s move is that it allows his opponent to return to
the correct plan: 81…Ra1 82 d5 Rd1! =.

White wins (although with considerable difficulty) by 81 Kd7! Ra5 (81…
Ra7+ 82 Rc7 changes nothing) 82 Rc5! Ra7+ 83 Rc7 Ra5 84 Kd6+ Kf6:
Many years ago, A. Iglitsky recommended the weaker 85 Rc8 Ra6+ 86 Kd7 Ra7+ 87 Kc6+.

Here, the annotator continued: 87…Ra6+? 88 Kb5 Rd6 89 Kc5 Ke7 90 Re8+, failing to notice the subtle rejoinder: 87…Ra4! =.

85…Ra6+ 86 Rc6 (86 Kc5 Ra5+ 87 Kc6 Ra6+ 88 Kb5 Ra1 would be pointless).

The right reply to 86…Ra1 would be 87 Rb6!, giving his king a comfortable hiding place on the e-file. For example, 87…Ra7 (87…Kf7 88 Kc7) 88 Rb1 Ra6+ 89 Kc7 Ra1, and 87…Ra5+ (89…Kc5 90 d6) 90 Re8+ Rb8 91 Kd7 and 92 d6+–.

On 86…Ra7, it would be premature to play 87 Rc1 Ra6+ 88 Kc5 Ra7+, when 89 Kb6? lets slip the win, because of 89…Rd7! 90 Kc6 Ke7. Again, he could play 87 Rb6, or else 87 Re5!, when Black would be in zugzwang, and must move either his king or his rook to an inferior position: 87…Ra1 (87…Kf5 88 Rc1 Ra6+ 89 Kc5 Ke5 90 d6+–) 88 Kd7 Ra7+ 89 Re7 Ra8 90 d6+–.

81…Ra8?

Not knowing the correct defensive plan here (Ra1-d1) allows White to play 82 Kd7+–, transposing back into the variations previously examined. Alas, Salwe did not take advantage of this possibility, missing the win once and for all. Black, at long last, setup the Philidor Position.

82 Rc7+? Ke8 = 83 d5 Kd8 84 Rd7+ Ke8 85 Rc7 (85 Rh7 Ra6+) 85…Kd8 86 Rc6 Ra7 87 Rh6 Rd7+ 88 Kc5 Rc7+ 89 Kd4 Ra7 90 Rh6 Rg7 91 Ra6 Rb7 92 Ra1 Kd7 93 Ke5 Rb6 94 Ra7+ Kd8 95 Kd4 Rh6 96 Ke5 Kg6 97 Rh7 Rh6 98 Rb8+ Kd7 99 Rg8 ½–½

Nonetheless, at the start of the twentieth century, chess wasn’t taken as seriously as it is today, and theory was poorly known. One would think that, by the close of the century, the picture would have changed. Yet take a look at the following endgame.

_Zhu Chen – Taimanov_
Roquebrune 1998
It’s amazing that such an experienced grandmaster as Taimanov would not know where to keep his rook! He had an elementary draw by 85…Ke7 or 85…Rd3.

86 Kd6 Ke8 87 Rh8+ Kb7 88 Kd7 Re7

After 90 d6!, the pawn could not be stopped.

90…Rg5?

The only saving line was 90…Rg6+ 91 Kd7 Rh6!, leaving the rook on the long side, as far away from the pawn as possible.

In the continuation, both players ignored the need to control the h-file.

91 d6 Rg6+

White had an easy win by 92 Ke7! (the threat of 93 d7 gives her opponent no time for 92…Rh6) 92…Rg7+ (92…Kc6 93 Rc8+ Kd5 94 d7 Rg7+ 95 Ke8 Ke6 doesn’t work, in view of 96 Rc6+) 93 Kf6, and Black doesn’t have either 93…Rh7 94 Re7+, or 93…Rd7 94 Ke6.

92 Rh6! = was necessary.

93 Re7?

Almost any other move would have won. 93 Kd8 or 93 Ke7 would have secured the pawn’s advance to the seventh rank; and 93 Rh8 would have secured control of the long side.

Now, Black achieves the draw with 93…Rh1!.

93…Rg8?

The last mistake.

94 Rh7

This is a well-known theoretical position of mutual zugzwang (DEM, Diagram 9-8). It’s Black’s move, and he must worsen the position of one or the other of his pieces. I remind you that 94…Kb6 loses to 95 Rh1 Rg7 + 96 Ke6 Rg6+ 97 Ke7 Rg7+ 98 Kf6 Rg2, and now not 99 Re1? Rh2! =,
but 99 Rd1+--. (White would not have this move with Black’s king on b7).

94...Rf8 95 Ke7 Rf1 96 d7

Another way was 96 Ke8+ Kc6 97 d7 Re1+ 98 Re7 Rh1+ 99 Re6+.

96...Re1+ 97 Kd8

B

97...Kc6

On 97...Rg1, the classic winning method would be to build a bridge: in other words, to shield the fourth rank against vertical checks. For example, 98 Rh4 Rh1 99 Re4 Rh1 100 Rb4+ Ka7 101 Kc7 Re1+ 102 Kd6 Rd1+ 103 Ke6 Re1+ 104 Kd5 Rd1+ 105 Rd4+-.

Yet a simpler way might be 98 Rh8 Re1 99 Re8 Rh1 100 Ke7.

98 Kc8 0-1