Neil McDonald

The Catalan

move by move
Neil McDonald became a Grandmaster in 1996 and a FIDE trainer in 2017. He is a regular coach of the England Junior team at international events. Neil has written books on openings, endgames, tactics and strategy as well as biographies of famous players, and contributes articles to chesspublishing.com. He lives in Gravesend in Kent, England.

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Introduction

The Catalan Opening typically begins 1 d4 d5 2 c4 e6 3 \( \text{\textit{d}} f3 \text{\textit{f}}6 \) 4 \( g3 \) or 1 d4 \( \text{\textit{f}}6 \) 2 c4 e6 3 \( \text{\textit{f}}3 \text{\textit{d}}5 \) 4 g3.

A kingside fianchetto by White is its defining feature. In contrast to the Queen’s Gambit Declined, where \( \text{\textit{d}}3 \) or \( \text{\textit{e}}2 \) is usually played, White will develop the bishop to g2.

There are a lot of beautiful positional ideas in the Catalan. You can only admire the way Kramnik and Giri and So and Caruana use the bishop on g2 like a magician’s wand. The spells they cast mean that their opponents play a series of natural, half decent moves and find themselves in a lost position with no idea why.

The good thing for White in most lines of the Catalan Opening is that if he plays precisely, Black never quite equalizes – he is almost completely equal, but White’s tiny advantage usually lingers on a long time, right until the endgame. It is a rather unpleasant affair for Black to be always a bit worse, and if he is careless his fears about his position can grow from slight anxiety to serious alarm.

Sometimes White can do everything right in the Catalan, but his advantage turns out to be of a symbolic rather than real nature. For example, he obtains an endgame with a better pawn structure or a superior bishop, but a few vigilant moves by Black and it is time to agree a draw. Never mind: you can’t win at chess unless your opponent gives you some
help. There's always the next game.

Is there any drawback to the Catalan? Yes: abandon hope all ye who want to smash your opponents in 20 moves with a kingside attack! It can be done – there are some nice sacrificial attacks in this book – but, well, it requires Black to stir up trouble for himself by responding in risky style.

The bishop on g2 is pointing the wrong way if you want to get at your opponent’s king. Some players are consummate positional players, but are easily bowled over by direct attacks. You aren’t giving yourself the chance to exploit this weakness in the Catalan. Instead you are planning a rook invasion on c7 in 10 moves’ time.

It is, of course, a question of style and what you are looking for from the opening. If you want a safe game with few losing chances and a small plus, then the Catalan is for you. If you like grinding out wins in rook and pawn endgames it will suit you fine.

Despite the rather gloomy prognosis for Black above, I have examined some interesting counter measures for him. Almost all of the world elite are prepared to defend against the Catalan and have introduced many weapons against it.

This book aims to cover all the important ideas in every variation of the Catalan. Inevitably there will be gaps as it is such a wide, strategically complex and ever developing opening. I can only apologise in advance for any omissions.

Neil McDonald,
Gravesend
April 2017
Chapter Five
Black Plays in the Centre with ...c7-c5

In this chapter we’ll survey two variations with a quick ...c7-c5 by Black. Firstly, there is a Tarrasch approach with 1 d4 d5 2 c4 e6 3 ∘f3 ∘f6 4 g3 c5.

Black is prepared to accept an isolated pawn in return for an active development of his pieces and equality in space in the centre. On the other hand, few Catalan players can be unhappy at already having a target on d5 for their bishop.

Secondly, after 1 d4 d5 2 c4 e6 3 ∘f3 ∘f6 4 g3 dxc4 5 ∘g2 Black can strike at the centre with 5...c5.
Black aims to liquidate the white centre and thereby equalize in terms of space. The drawback is that he is delaying his development and so leaving himself vulnerable to a quick attack by the white pieces.

Looking at the games in this chapter we might conclude that the ...c7-c5 break doesn’t quite equalize for Black. It often frees Black’s game in the Queen’s Gambit Declined, but is less effective in the Catalan as White always retains pressure on b7.

Game 20
A. Korobov - A. Ermeni
Gjakova 2016

1 d4 d5 2 c4 e6 3 £f3 £f6 4 g3 c5

Black immediately challenges the d4-pawn. White’s opening build-up is very natural, but have a close look at the note to 7 £c3 as it discusses transpositions/the effect of Black playing a later ...c7-c5.

5 cxd5 exd5

The pawn sacrifice 5...cxd4 is a rare bird, but has featured in some top-level games. White should accept the gambit and then give back the material at an opportune moment to escape the pressure and emerge with a positional advantage. Thus 6 dxe6 £xe6 7 £xd4 £c6 8 £xd8+ £xd8 9 £g2 with sensible development so far by White.
Now after 9...b4+ 10 d2 e4 rather than 11 a3, as in A.Giri-L.Aronian, Beijing (rapid) 2013, I prefer 11 xb4 xb4 (Black threatens mate in three moves, but stay calm!) 12 a3 xa2 13 0-0 and White is ready to play 14 fd1 and then 15 d4 with the initiative in the centre. Black’s pieces are somewhat over stretched and his queenside vulnerable.

Similar, but with the dark-squared bishops still on the board – which seems a worse version for Black – is 9...b4 10 a3 xa2 (or 10...c5 11 g5 with pressure for White) 11 0-0 a6, as in S.Sjugirov-V.Zvjaginsev, Sochi 2015, and now 12 e3 d5 13 fc1 e7 14 b6 b8 15 h3! (White ensures he has unchallenged control of the open c-file; at the same time as a preliminary to his next move he avoids the exchange of bishops so as not to give Black’s knights access to the d5-square) 15...0-0 16 d4 with a nice edge for White.

6 g2 c6 7 c3

For the sake of clarity I have changed the move order of the game, which actually began 1 d3 d5 2 d4 e6 3 c4 c5 4 cxd5 exd5 5 c3 c6 6 g3 f6 7 g2. Here you can see that a very
early 3...c5 meets the same general response from White: you get to play g2-g3 and g2-g4.

The opening in this game is strictly speaking a Queen’s Gambit Tarrasch Defence. Nonetheless we need to have some idea of what we are doing as you can’t really avoid it if you play the Catalan. For example, if you begin 1 d4 d5 2 c4 f6 3 g3 e6 4 g2 you can congratulate yourself on having side-stepped lines where Black plays ...b4+ or makes an early ...d5xc4 exchange, but all the same he can continue 4...c5 5 0-0 c6 when after 6 c4 (what else?) 6...e7 you have a popular position in the Tarrasch. Then 7 cxd5 exd5 (if 7...cxd5 8 c3 cxc3 9 bxc3 0-0 10 b1 gives White a slight edge due to his pressure on b7 and strong centre) 8 dxc5 xc5 9 c3 0-0 reaches the position in the main game.

Notice also that if Black plays 6...dxc4 in this sequence (instead of 6...e7) then we reach other games in this chapter where you can choose between 7 a4 and 7 e5.

7...e7

Black’s bishop is misplaced on b4 after 7...cxd4 8 xd4 c5?! 9 b3 b4 10 0-0 as giving up the bishop pair with 10...c3 11 bxc3 is not appealing.

Instead, 8...e7 9 0-0 0-0 leads to a mainline of the Tarrasch where 10 g5 and 10 e3 are the main moves, while 10 b3!? is an interesting sideline: for example, 10...e8 11 b2 c5 12 c6 bxc6 13 a4, aiming to play against the hanging pawns with c1 next move.

8 dxc5!

Now that Black has spent a tempo on ...e7, and so can’t play ...f8xc5 in one go, White exchanges on c5 to clear a way for an attack on d5. I’ve taken another move-order liberty: the game actually went 8 0-0 0-0 and then 9 dxc5, but taking on c5 immediately cuts out the option of Black answering 8 0-0 with 8...cxd4 9 xd4 0-0, although you could then try 10 b3?!, as suggested in the previous note.

8...xc5 9 0-0 0-0 10 a3?

**Question:** What are the reasons for this little pawn move?
**Answer:** In a position with an isolated pawn, control of the square in front of the pawn is of serious strategic value. In this specific case the d4-square would be a great outpost for a white knight as it would be immovable by an enemy pawn and have important influence over the centre. However, at the moment Black’s bishop on c5 and knight on c6 are keeping out the white knights.

With 10 a3 the fight begins to wrest the square from Black. White intends to play 11 b4 to discomfort Black’s bishop. It would like to stay on the a7-g1 diagonal where it watches over d4, but then it loses the option of retreating to e7 to defuse the move \( \text{g5} \), which would otherwise pin the knight which defends the d5-pawn. Furthermore, White might go the whole hog and advance b4-b5, to force the black knight away from c6, when it also loses contact with the d4-square. This would have to carefully judged as White doesn’t want to loosen his queenside pawns too much.

At the same time 11 b4 will give White’s dark-squared bishop the chance to go to b2 where it enjoys an open diagonal, aiming at Black’s kingside and adding its weight to the battle for d4.

10...a6

Here are some other options for Black:

a) 10...\( \text{e8} \) guards e4 so that after 11 b4 \( \text{b6} \) the pin with 12 \( \text{g5} \) is less effective because 12...d4 doesn’t allow 13 \( \text{e4} \). Nonetheless the alternative 12 \( \text{b2 g4} \) 13 \( \text{c1 h6} \) 14 \( \text{a4} \) gives White a good game. Black can’t avoid 15 \( \text{xb6} \) gaining the bishop-pair as 14...\( \text{c7} \)? allows 15 \( \text{xf6} \), forcing the ghastly 15...\( \text{xf6} \) since 15...\( \text{xf6} \)? drops material to 16 b5.

b) 10...\( \text{e4} \) is a fighting move. After 11 \( \text{xd5} \) White should be better, but 11...\( \text{e6} \) gives Black a lot of play for the pawn. Instead, he might consider 11 \( \text{c2} \): for example, 11...\( \text{xc3} \) 12 \( \text{xc3 e7} \) 13 \( \text{d4 g4} \) (not allowing White a quiet positional advantage) 14 \( \text{xc6 bxc6} \) 15 \( \text{xc6 e2} \) 16 \( \text{e1 c4} \) 17 \( \text{f4 f6} \) 18 \( \text{ad1} \) and White has some edge.

c) 10...a5 restrains b2-b4 and after 11 \( \text{g5} \) d4 12 \( \text{xf6} \) (12 \( \text{e4 e7} \) isn’t much for White) 12...\( \text{xf6} \) 13 \( \text{e4} \) (here 13 \( \text{d5?!} \) is also interesting) 13...\( \text{e7} \) 14 \( \text{xc5 xc5} \) the neat pawn thrust 15 b4! sets Black problems.
The Catalan: Move by Move

Following 15...wb6 (if 15...axb4 16 axb4 xa1 17 bxc5 xd1 18 xd1 leaves d4 desperately weak) 16 b5 xb5 17 xd4 xd4 18 xd4 xe2 19 fe1 a6 and then 20 e7 (rather than the 20 ab1 of C.Kuberczyk-J.Carlstedt, German League 2016), I like White’s position despite the missing pawn due to his active room on e7, lead in development and the target on b7. Though the computers don’t agree with me!

11 b4 e7

After 11...a7 the pin with 12 g5 causes problems for the defence of the d5-pawn as 12...d4 allows 13 e4 when Black’s kingside pawns will be broken up.

12 b2 e8

At some point over the next few moves Black should play ...g4 to activate his bishop and gain counterplay. His overly passive approach lets White build up pressure in peace.

13 c1 f8

The best move was still 13...g4.

Exercise: Can you see a good plan for White to increase the pressure on the d5-pawn? Clue: think of a way to redeploy the knight from c3.

Answer: 14 e3!

White fixes the d5-pawn by increasing his grip on the d4-square. At the same time he clears the way for a brilliant knight manoeuvre via e2 to f4. On its new kingside post the horse will attack d5 just as it did on c3, but with more potency as the bishop on b2 has an open diagonal and so there is a threat of xf6 followed by xd5. On f4 the knight will also be able to join in a direct kingside attack if that becomes the best strategy.

14...h6 15 e2 e4 16 f4 e6
17 əd2!

**Question:** Why does White avoid 17 əd4 which looks very natural and seems to be tactically sound?

**Answer:** An interesting moment. White could, indeed, play 17 əd4! when after 17...əxd4 18 əxd4 with 19 əfd1 to follow attacking ə5 he has good winning chances. However, Korobov, rated 2674 at the time of this game, wasn’t satisfied with this simple approach. Indeed, his knight can go to ə4 any time: why clarify the position when you can keep your opponent guessing?

Therefore White probes with his king’s knight, eventually making Black weaken his queenside. He succeeds in wrong footing his opponent to such an extent that his knight eventually gets full possession of ə4 without having to be exchanged off.

17...f5 18 əb3 əe7 19 əc5!

After 19 əd4 əh7 the knight is sitting pretty on ə4, but the attack on ə5 is blocked. Instead Korobov wants to force Black to loosen his queenside pawns as after 19...əxc5 20 əxc5 the ə5-pawn is becoming indefensible.

19...b6 20 əb3!

If you want to play the Catalan well you have to play manoeuvres of this type to weaken the opponent’s pawns. The knight goes forward, a pawn attacks it, then it retreats. The quiet nature of the position makes the loss of time in White’s manoeuvre of little importance. On the other hand, the fact the pawn can’t return to b7 means that the a6-pawn and the c6-square have both permanently lost a defender.
20...c8 21 We2

Already the a6-pawn has become a target. Now Black should play 21...b5 or 21...a5 with a markedly inferior game in both cases after 22 d4. In the game he prefers to give up control of the c-file to clear the way for his queen to defend a6 and d5. Of course it is almost always a terrible strategy to make the queen the servant of pawns.

21...xc1 22 xc1 a8

Casting our minds back to the 17th move, we can see that Korobov has been vindicated in his decision to avoid the simplifying 17 d4 xd4 18 xd4. By keeping the play complex he has allowed his lower-rated opponent the opportunity to make some doubtful decisions.

22 d4

The knight lands on a beautiful blockade square with the immediate threat of 24 xf5 xf5 25 wd3 e7 26 xd5 wxd5 27 xe4 and White has won a pawn.

22...d7

In view of Black’s next move 23...h7 looks a better way to resist when the bishop helps defend the king rather than go on a fool’s errand to a4.

24 c7!

Korobov sends his rook to the seventh rank not to capture pawns, but to break the coordination of the black pieces and thus facilitate an attack on the kingside. Black’s next move is helpful to say the least.

24...a4?

The bishop abandons the fight. Black had to defend stoutly with 24...d8. If that loses then everything loses.

25 h4
Question: What is the purpose of this move?

Answer: When carrying out an attack you shouldn’t just move the big pieces. By putting the pawn on h4 White rules out any defence of the black king based on ...g5.

25...\texttt{b8}

Exercise: Now it looks as if the rook must retreat back to c1. Can you do better?

Answer: 26 \texttt{xe7!}

Having to respond to White’s play on the queenside and against d5 has caused a dis-harmony in Black’s position that makes a kingside attack decisive. The first blow is to remove the knight on e7 from the defensive equation.

26...\texttt{xe7}

Or 26...\texttt{xe7} 27 \texttt{f5 d7} 28 \texttt{g4, attacking g7 and threatening 29 \texttt{xh6+}, which is crushing for White.}

27 \texttt{f5 1-0}
Question: Why did Black resign?

Answer: At first glance White’s advantage in firepower on the kingside might not look decisive. However, he has three minor pieces (two knights and the bishop on b2) all aiming at the black king, and his queen is ready to join in the action with $g4$.

Meanwhile Black’s queen and bishop on a4 are out of things, while the knight on e4 can be exchanged off with $x4$, removing a key defensive piece. The rook on e8 doesn’t do much to protect its king, so that leaves only the bishop on e7 and the pawns on f7, g7, and h6 to resist an attack by the white queen and three minor pieces. It’s hopeless odds. White can always give up a minor piece to fragment the black kingside pawns and still have more than enough material to force a mate.

The immediate threat is to g7. Let’s look at a couple of lines to show how the attack might be brought home:

a) 27...$f8$ (if 27...$f6$ 28 $g4$ $f6$ (28...$g6$ 29 $xg6$ crashes through) 29 $xh6+$ $h8$ 30 $g6+$ $h7$ 31 $f5$ $gxh6$ 32 $xe4$ $dxe4$ 33 $e7+$ $g7$ 34 $xf6+$ $h7$ and you have a choice of three mates in one.

b) 27...$f6$ 28 $xd5$ $xd5$ 29 $xd5$ $d8$ 30 $h5!$ with threats including 31 $xf7+$ and 31 $xh6+$ with a quick mate. Black has nothing better than to give up his queen with 30...$xd5$ 31 $xe7+$ $xe7$ 32 $xd5$.

Game 21
F.Caruana-A. Naiditsch
Dortmund 2015

1 d4 $f6$ 2 c4 $e6$ 3 g3 $d5$ 4 $g2$ $xc4$ 5 $f3$ $c5$
A natural counterattack against d4, but of course any loosening of the black queenside is welcomed by the white bishop on g2. Even if Black succeeds in completing his development, it will be difficult for him to shake off the pressure against b7.

Before making this type of pawn thrust in one of your own games, try to decide in which of the following categories it belongs:

a) It is a freeing move that disposes of the enemy centre – a good thing.

b) It opens lines for the better developed enemy pieces – a bad thing.

Of course the value of a positional decision is usually debatable. In a lot of cases it is the superior precision, knowledge and imagination of one player during the rest of the game that will retrospectively assign the idea to ‘a’ or ‘b’.

6 0-0

White gets his king out of the centre before deciding on his plan. Instead after 6 Wa4+ ¿d7 7 Wxc4 ¿c6 we have reached a variation regarded as not very promising for White – see, for example, the Korchnoi-Kasparov game in Chapter Two.

More challenging is the line 6 Òc3 Òc6 7 Wxa4 ¿d7 8 Wxc4 cxd4 9 Òxd4 ¿c8 10 0-0 Òxd4 11 ¿xd4 ¿c5 12 ¿h4 0-0 (or 12...¿c6 13 ¿g5 ¿xg2 14 ¿xg2 and Black isn’t yet out of the woods as 14...¿d4 15 ¿xf6 gxf6 16 e4! looks good for White) 13 ¿xb7 ¿b8 14 ¿f3 ¿b4 15 ¿g5 ¿d4 16 ¿d2, as played in V.Kramnik-A.Naiditsch, Dortmund 2010. It looks like Black is active enough, but Kramnik (not for the first time!) consolidated his extra pawn and won.

6...¿c6 7 Wxa4
The alternative 7 e5!? is seen in the next game. White might also try the quieter 7 dxc5 with perhaps a small plus after 7...\\text{x}d1 8 \text{x}d1 \text{x}c5 9 \text{b}d2 \text{c}3 10 \text{b}xc3, etc. Despite being isolated the c3-pawn is a useful support for a white knight on d4. I should mention if 9...g4 in this sequence Black is first pushed back with 10 \text{e}4 \text{e}7 11 h3 \text{f}6 then 12 \text{e}d2 \text{c}3 13 \text{b}xc3 follows.

Caruana aims to regain the pawn on c4 whilst forcing Black to confront the threat of 8 e5 when the pinned knight on c6 will be attacked three times.

7...d7

Meeting the threat to the knight whilst preparing a discovered attack on the white queen with 8...\xd4.

After 7...\xc4 8 \xd4 \text{xd}4 9 \xc6+ \text{d}7 10 \text{d}1 \text{xd}1+ (if 10...\text{xc}6 11 \text{xc}6+ \text{b}xc6 12 \text{xd}4 and then 13 \text{xc}4 leaves White with a structural advantage) 11 \text{xd}1 \text{xc}6 it’s always nice to sacrifice your queen, but White is looking like a spoilsport: for instance, 12 \text{d}2 \text{b}5 13 \text{a}4 \text{bxa}4 14 \text{xc}4 when he has good chances.

8 \xc4

Regaining the pawn and attacking c5.

8...b5
**Question:** Why does Black play this seemingly loosening pawn move?

**Answer:** After 8...cxd4 9 cxd4 the pawn on b7 is a potential target. Therefore Black gets the pawn out of the range of the bishop on g2 with gain of time by hitting the white queen. If now 9 xb5? cxd4 10 xd3xb5 is best avoided by White as e2 will drop.

9 c3

Caruana prefers this retreat to 9 c3 as he wants to keep pressure on the c5-pawn.

9...cxd4

Black has a choice of moves here. If 9...c8 10 dxc5 d5 11 c2 xc5 12 c3 b4 13 d3 xg3 14 bxc3 is some plus to White despite the weakling on c3. He has the bishop-pair and the chance to expand in the centre with e2-e4 at the right moment. Risky for Black is 9...b6 10 e3 c4 (or 10...b4 11 d1 with an edge to White) 11 e5! (not so clear is 11 d5 xg3, etc) Finally, 9...b4 10 d3 c8 11 dxc5 xc5 12 g5 0-0 13 c2 c7 14 c1 leaves Black feeling boxed in.

10 c4 xg4 11 xd4 c8
**Question:** How would you assess the position?

**Answer:** Black has evacuated all his pieces from the h1-a8 diagonal. He would have preferred to have exchanged off light-squared bishops rather than have his bishop sitting on d7, so he hasn’t yet equalized. Nonetheless, White’s advantage is minimal.

**Question:** But can’t White grab the pawn on a7 now?

**Answer:** After 12 $\text{fxa7 Cc5}$ White’s queen is in jeopardy: for example, 13 $\text{b7 Cc5}$! (the key move to cut off a retreat to f3) 14 $\text{x}d5$ $\text{c7}$ and White can’t escape a draw by repetition after 15 $\text{a8 c8}$ 16 $\text{b7 c7}$, as 17 $\text{a6}$ $\text{a7}$ traps the queen. Alternatively, 13 $\text{a6 Cc5}$ 14 $\text{x}d5$ (the queen falls after 14 $\text{d2 a8}$ 15 $\text{b7 a7}$) 14...$\text{exd5}$ 15 $\text{d2}$ 0-0 leaves the white queen shut in and in danger of being lost. Black has at least a draw.

Therefore Caruana develops and keeps the attack on a7 as a latent threat.

12 $\text{f4 Cc5}$

A very natural reply. Black develops with gain of time and deals with the attack on a7.

13 $\text{d3}$

Notice how White’s unobtrusive 12th move gained power after Black’s reply, because 14 $\text{b7}$ now threatens to win the exchange. The bishop didn’t threaten anything at the time it went to f4, as Black had the option of $\text{Cc4}$. But that is the way it sometimes happens in chess: a move gains strength after the opponent’s best reply. In reality White exchanged one threat (13 $\text{xa7}$) for another (14 $\text{b7}$). And after Black’s next move – which is again ‘best’ – we see another chance for White to increase the pressure suddenly appear.

13...$\text{b6}$
Black meets the threat of 14 b7 and puts the queen on an active square where she ties down the rook on f1 to the defence of f2. She also solidifies the queenside in general. On the other hand, the bishop on d7 is left somewhat hanging and Black’s kingside is short of defenders.

**Question:** But the bishop on d7 is defended twice! How is it somewhat hanging? And where are the white pieces to attack the supposedly under-defended black kingside?

**Answer:** Patience! As after 12 f4 we have to look beyond the present position to see White’s chances. Black is going to castle, after which the bishop on d7 loses one defender, and then White will challenge its other defender. This will lead to the black kingside becoming depleted of defenders. Let’s see how the game unfolded.

14 d2 0-0 15 e4

Here we are: White threatens to win a piece by capturing on f6.

15...d5

Instead after 15...xe4 16 xe4 both d7 and h7 are hanging. Or if 15...fd8 16 xf6+ gxf6 17 f3 White can work on the fractured black kingside. Therefore Naiditsch blocks the attack on d7 while preventing damage to his kingside, but now all Black’s minor pieces and his queen are on the queenside.

16 g5?

Caruana aims to exploit his advantage in firepower on the kingside. In fact 16 xc5! wxc5 17 e5 fd8 18 fd1 would leave him with a small but enduring edge because of the bishop-pair. Evidently the American Grandmaster preferred to play a more lively game.

16...g6

Upon 16...f5 17 xd5 Black can resign as he drops a piece, while if 16...f6 the simplest way to win a pawn is 17 xh7! xh7 18 xd7.
17 \texttt{Ye5}  
White continues his kingside build-up.  
17...\texttt{Je7}  
Naiditsch might have sought counterplay against f2 with 17...\texttt{f6} 18 \texttt{xe5} \texttt{fxg5} 19 \texttt{f3} \texttt{c6} with unclear play. Of course it would have been difficult to switch to aggressive play at the cost of a broken pawn structure when he has played a solid opening so far.  
18 \texttt{f3} \texttt{c6} 19 \texttt{d2}  

\begin{center}
\includegraphics[width=\textwidth]{chess_board.png}
\end{center}

\textbf{Exercise:} Can you see White's threat? And what happens if Black plays 19...\texttt{f6} or 19...\texttt{ed8} to meet it?  

\textbf{Answer:} The threat was 20 \texttt{h6} \texttt{f6} 21 \texttt{g5}! when taking the knight allows mate on g7, so to defend h7 Black must give up the exchange with 21...\texttt{f7} 22 \texttt{xh7}. If 19...\texttt{f6} then 20 \texttt{e4}! wins a piece after 20...\texttt{xe5} 21 \texttt{exd5} as both black bishops hang, or 19...\texttt{fd8} 20 \texttt{e4}! (if 20 \texttt{h6} Black has 20...\texttt{f8}) 20...\texttt{f6}? (Black has to defend a lousy position with 20...\texttt{c7} 21 \texttt{h6} \texttt{e8} 22 \texttt{g5} \texttt{xg5} 23 \texttt{xg5} though the bishop on e5 dominates the dark squares) 21 \texttt{g5}! \texttt{d5} 22 \texttt{h6} \texttt{f8} 23 \texttt{h4} \texttt{e7} 24 \texttt{g5} \texttt{xg5} 25 \texttt{xg5} \texttt{f6} (if the knight retreats to c7 then 26 \texttt{xf6} decides) 26 \texttt{xf6} \texttt{xf6} 27 \texttt{xf6} and White has won a pawn.  
19...\texttt{f6}  
Finally Caruana has extracted a long-term structural advantage through his positional (we might say tactical) pressure on the kingside.  
20 \texttt{d4} \texttt{b7}  
He prefers not to let the white knight get to a strong central post after 20...\texttt{c5} 21 \texttt{ac1} \texttt{xd4} 22 \texttt{xd4}.  
21 \texttt{ac1}  
After 21 \texttt{h3} \texttt{e5}? 22 \texttt{xc8} \texttt{xc8} would be an interesting exchange sacrifice as White is weak on the light squares and his bishop passive on e3.
21...\texttt{fd}8 22 \texttt{h}3
Aiming the bishop at the undefended pawn. If now 22...e5 23 \texttt{xc}8 \texttt{xc}8 White can take the sting out of Black’s sacrifice with 24 \texttt{c}5!.

22...\texttt{d}7 23 \texttt{xc}8 \texttt{xc}8

\begin{center}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline
\texttt{Q} & \texttt{R} & \texttt{N} & \texttt{B} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{B} & \texttt{B} & \texttt{B} \\
\hline
\texttt{R} & \texttt{B} & \texttt{Q} & \texttt{N} & \texttt{B} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} \\
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\texttt{N} & \texttt{B} & \texttt{Q} & \texttt{B} & \texttt{N} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} \\
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\texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} & \texttt{P} \\
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\textbf{Question:} Why did White give up the c-file and Black not reply 23...\texttt{xc}8 to take control of it?

\textbf{Answer:} After 23...\texttt{xc}8 White would focus on playing on the d-file, either with the immediate 24 e4 or more likely with 24 \texttt{d}1, planning e2-e4 as appropriate (the threat is stronger than the execution!), so Naiditsch keeps his rook on d8 to bolster his defences there.

24 \texttt{c}1 \texttt{d}7 25 \texttt{c}5!
Black’s pawn structure is entrenched on the light squares, but not guarding central dark squares like c5 and d4. The exchange of bishops emphasizes Black’s fragility whilst vacating d4 for White’s knight or queen.

25...\texttt{xc}5 26 \texttt{xc}5 \texttt{c}8
Black is aiming to draw through simplification, but there is a favourable way for White to exchange rooks.

27 b4!
So far Caruana has shown restraint in the use of his foot soldiers, but now is the moment for his pawns to get involved in the struggle. The exchange of rooks will yield him a passed pawn. If Black refuses then 28 \texttt{d}4 will increase the pressure.

27...\texttt{xc}5 28 bxc5 \texttt{c}7 29 e4!
The threat of this advance has hung over Black’s knight for many moves. Now at last it is time to strike.

29...\texttt{e}7 30 \texttt{d}4!

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Not only defending the c-pawn, but more importantly attacking f6. Black can’t reply 30...e5 without dropping his bishop, and so he has to allow the further advance of White’s e-pawn.

30...g7 31 e5 f5 32 g2!

The bishop has performed its role on h3 and now returns to g2 to fight for the crucial d5-square.

**Exercise:** How should White reply to 32...d5, planning 33...c6 with a blockade on the light squares?

**Answer:** An example of Tartakower’s dictum that chess is the tragedy of one tempo. Black wants to play 32...d5, but this fails as he doesn’t have the g5-square guarded by a pawn: 33 g5! (threatening 34 xd5; Black has no time for 33...c6 as e6 drops) 33...c6 34 f1! (why not gain a tempo to centralize the king rather than take on d5 straightaway?) 34 h6 35 xd5 xd5 (if 35...exd5 36 e6+ and wins) 36 xd5 exd5 37 f3 f7 38 d4. White has every chance to win: his knight is on a superb blockade square and he has two advanced passed pawns which can’t be approached by the black king or attacked by the ‘bad’ bishop.

32...h6 33 d6!

An offer to exchange Black can’t refuse, as 33...d5 34 d4 or 33...d8 34 d4 with ideas of 35 c6 or 35 xe6+ are both fatal for him.

33...xd6 34 exd6

Only this way: White wants two passed pawns and access to e5 for his knight.

34...c6
Naiditsch’s minor pieces are now blocking the pawns and his king is ready to join in the action. White has to act fast before Black plays moves like ...f6, ...e5-e4, ...e6 and ...d5 to attack the c5-pawn.

35 e1!

Also good was 35 d2!, planning b3, xc6, a5 and c5-c6 to force the pawns forwards. With the game move White prepares d3 followed by either xc6 and then b4 and c5-c6 or xc6 and e5 followed by a pawn advance. If Black plays ...f6 White can if necessary play xc6 and then f2-f4! followed by e5.

35...a5 36 d3 b4

Black has guarded against b4, but an approach via e5 is still available to the white knight.

37 h4

If 37 xc6 xc6 38 e5 a4! and Black has the chance to escape as he should draw after 39 xc6 b3 40 axb3 axb3 41 d7 b2 42 d8+ b1+ 43 g2 e4+ 44 f1 xc6. Caruana therefore prepares to put his king on h2 so that he would win in this variation as it would no longer be check when Black promotes.

37...d4 38 h2!

Steering clear of 38 e5? a4! 39 xd7 b3 and Black will queen.

38...b5

Or 38...f6 39 f4! and White is ready for 40 e5.

39 e5 f6 40 c6!
A neat finish, though 40 f4 also wins. If now 40...\textit{xe}5 41 \textit{d7} \textit{xc}6 42 \textit{xc}6 and the pawn gets to d8.

\textbf{40...\textit{xc}6 41 \textit{xc}6 1–0}

After 41...\textit{xc}6 42 \textit{xc}6 White’s bishop will hold back the black queenside pawns whilst defending his passed pawn on d7.

A brilliant game by Caruana who showed enormous skill and determination. It’s no wonder he was rated 2805 at the time of this game.