SmartChess Mini-Manual
By Dr. Danny Kopec,
International Master

INTRODUCTION

I was first introduced to SmartChess in June, 1989 as a result of a visit to the University of Maine by Professor Jurg Nievergelt. He left me with this neat tool for viewing, analyzing, and writing. However, during that time (as it always seems) I was already inundated with all kinds of projects involving relatively new software, so I wasn't too enthralled about learning yet another system. Perhaps I should clarify that I feared an excellent piece of chess software because I feared that I might totally wrap myself up in it -- which while possibly facilitating my chess, is not really something I am "supposed to do" -- at least not during normal business hours.

So SmartChess was near me for a few years and I would occasionally take a peak at it. However, as soon as I started to get into SmartChess and some of sample chess games that accompanied it, I would get fearful of the time warp which might become involved.

Little did I realize the potential for SmartChess to speed up nearly all my chess related work. My work as a Professor of Computer Science and International Chess Master quite often involves:

1) *Viewing* chess and computer chess games.

2) *Learning* and teaching about chess and computer chess play and performance by collecting games.

3) *Analyzing* games.

4) *Writing* about (communicating) chess and computer chess games and positions.

Once I started using SmartChess regularly I realized what a perfect tool it was for me. First of all, SmartChess is an application which operates on the Macintosh. The Macintosh is certainly a user friendly machine, and involves a shorter learning curve for effective use of applications, than other machines might, if only due to its simple interface. Furthermore, SmartChess is an excellent tool for facilitating the work of the chess writer, analyst, player, and teacher.

VIEWING

Naturally, as a person who loves chess, the opportunities for viewing many chess games quickly via SmartChess offer immense pleasure. There is certainly something to be said for the possibility of viewing many games (possibly with commentary) very rapidly. This offers a revolutionary change in the way people can enjoy chess and can learn how to improve their game.

Throughout my life I have enjoyed setting up the three dimensional wooden or plastic pieces and moving them as I analyze a game or position. However the possibility of looking at large numbers of games quickly not only offers one the opportunity for more chess pleasure, but also frees up lots of time for looking at chess and chess games in different ways. One can now quickly select games by Openings, Endings, players' names, players' ratings, length, pawn structures, etc (under the **Chess -- FEATURE SEARCH** menu selection).

It has generally been accepted that people's success in playing chess is largely based on the ability to recognize familiar patterns and configurations of positions. Seeing (viewing) many chess games can be very helpful in attaining the pattern knowledge (consciously or unconsciously) necessary to learn to distinguish good formations from bad ones.
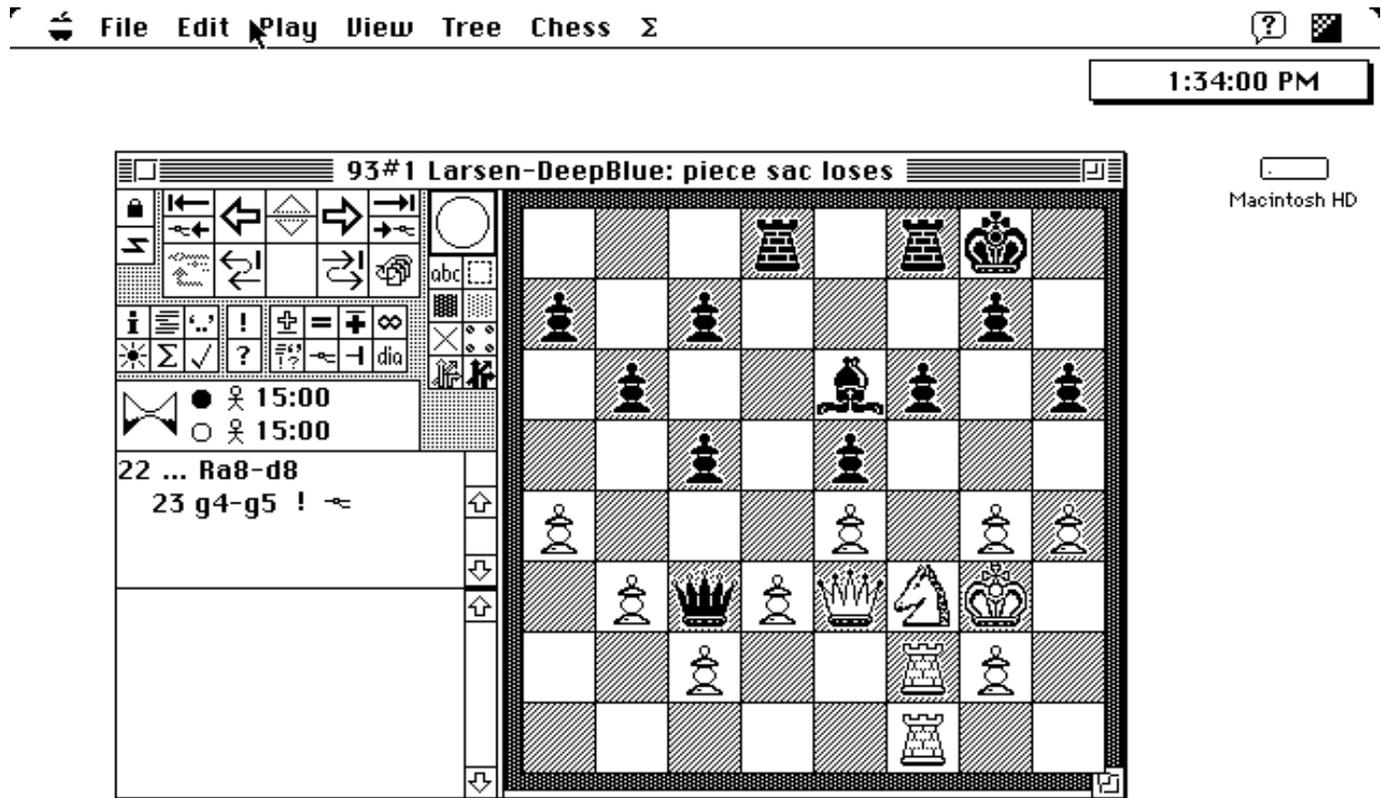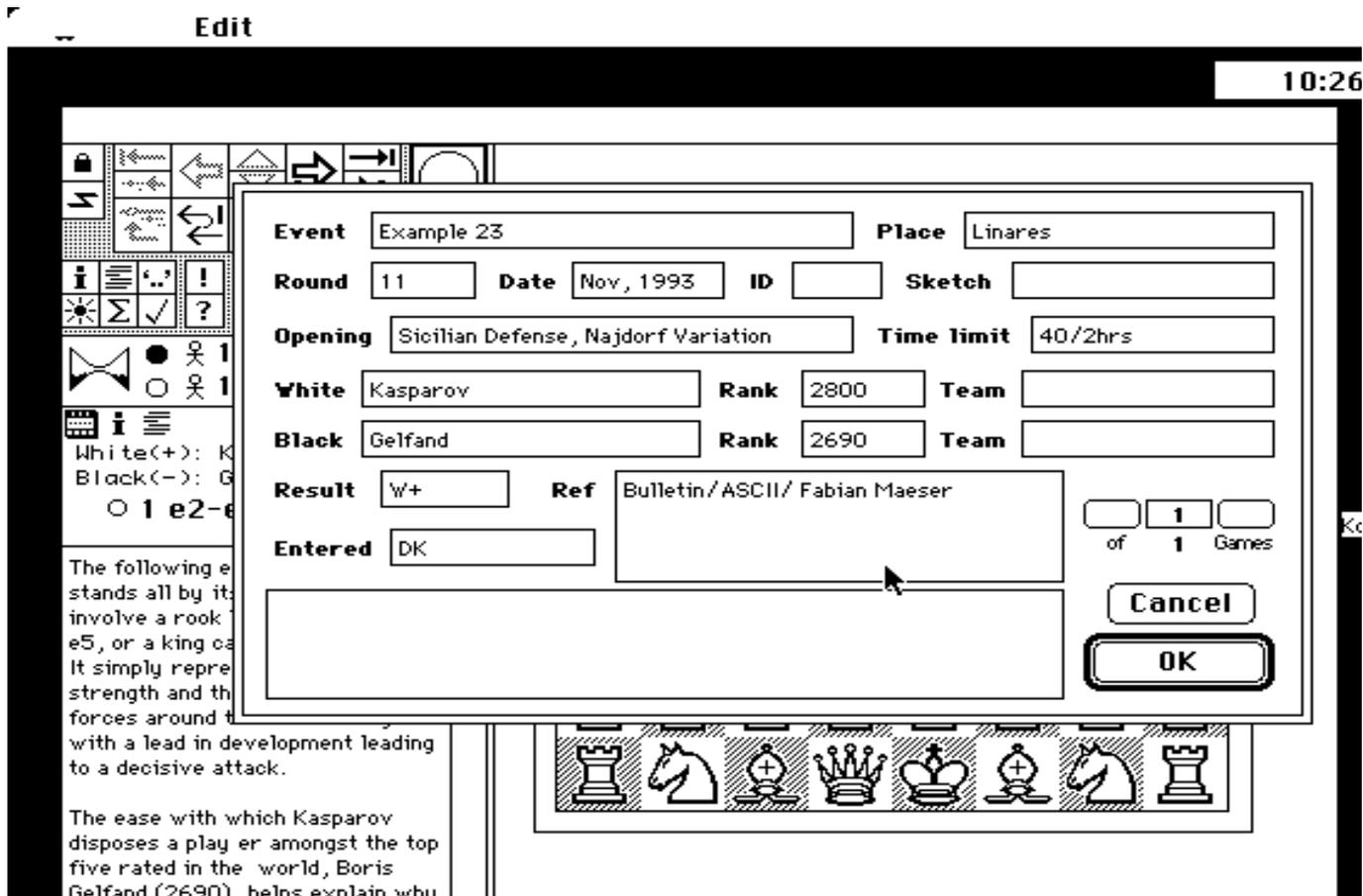
The Standard SmartChess Game Viewing and
Playback ICONS

The icons at the top left will instantly move you anywhere around and through the game which has been input in SmartChess. Clicking the Q in the $=>$ icon will present the game in "**MOVIE MODE**" so that you can sit back and enjoy the game. The other "arrow headed" icons will also enable you to move around the tree of moves and variations which you have created.   Clicking on OVERVIEW will let you see the game as a sequence of snapshots. **SET OVERVIEW** controls the distribution of these snapshots enabling you to see the game in six major "episodes".   Any work that I have done, either in anaysis or for writing purposes that I may need to refer to in the future is saved under the **File Submenu** with the command

SAVE.   In any case, SmartChess won't let me leave the system without reminding me about the need to **SAVE** my work.

GAME INFORMATION

Vital information for a game can be added as part of the **GAME INFORMATION** selection which can be found under the **File Menu**. Here you can enter typical game information such as the place, time, date, rating, result, names, opening, etc. of the game. All this information will be added to your **Collection** information when displayed.   To see (view) any game of a collection simply double click on that game in the **collection window**. That will open a new game window. When you are done viewing a game, simply closing the game window by clicking the square icon in the top left corner of your game window will take you back to your **collection window**.

Event | Example 23   Place | Linares

Round | 11   Date | Nov, 1993   ID | Sketch |

Opening | Sicilian Defense, Najdorf Variation   Time limit | 40/2hrs

White | Kasparov   Rank | 2800   Team |

Black | Gelfand   Rank | 2690   Team |

Result | W+   Ref | Bulletin/ASCII/ Fabian Maeser

Entered | DK

1 of 1 Games

Cancel

OK

White(+): K
Black(-): G
O 1 e2-e

The following e
stands all by it;
involve a rook
e5, or a king ca
It simply repre
strength and th
forces around t
with a lead in development leading
to a decisive attack.

The ease with which Kasparov
disposes a play er amongst the top
five rated in the world, Boris
Gelfand (2690), helps explain why

The GAME INFORMATION WINDOW

LEARNING

I have always felt that those who genuinely love chess will naturally want to look at as many chess games from top level competition as possible and review them. That is, play them over, assess them and ask questions. In my youth, as I was a developing player, that is exactly what I did. I asked questions which I posed to my cousin, who was then my chess mentor, and later to my chess friends. In this way I tried to develop a general picture of what had transpired in the game. That is, "Why did Black lose? Why did the game end in a draw? What did White do wrong?" I believe that this approach led to much unconscious learning which I was able to later apply in play. More importantly, it led to an increase in confidence with the general conclusion that all human players (even machines) are prone to errors which even I was able to detect at an early age.

In the near future via SmartChess it will be possible to view large numbers of games from diverse, strong, world famous events such as Fischer - Spassky II, 1992, Linares, 1993, amongst others. From such possibilities "viewers" will be able to derive much chess pleasure and knowledge about the game. The possibilities for creating **GAME COLLECTIONS** and instructional material which is both pleasurable and enlightening are immense. In my opinion the volume of material which can quickly be viewed, replayed and analyzed more than compensates for the missing pleasures which may be derived from actually handling and moving pieces. With SmartChess's ability to include game commentaries of virtually any length and to explore variations from any position, the result is a rich, albeit computer-based, chess experience.

ANALYZING

As soon as you become an "explorer" of chess positions beyond those of the actual moves played in a game, you, in a sense, become an analyst. Analysis in SmartChess is easy. To create analysis, all you have to do is click in alternate moves in a given position. The first move clicked in and its successors comprise the main line of the game, the move played. From any position where moves have already been created (clicked in) variations can be created by just clicking them in. To leave a variation, just click your way back to the position where the variation began. A very unique feature of SmartChess is the **SHOW TREE** feature found under the **View Menu**. This enables the "analyst" to see all the variations in the game sequence in one compact view which resembles a tree. That is,there are main line moves (left to right) representing the "trunk" variation and variations representing alternatives ("branches"). The numbers in the **SHOWTREE** view indicate the ply depth of any given position. A ply is a half move by either side. Most amazingly, clicking on any branch in the tree on the screen will instantly bring up the position at that point in the game.

In short, I have always contended that those who enjoy viewing, replaying and analyzing chess games are those who are bound to succeed. Furthermore, it is my belief that success in almost any competitive activity has three essential ingredients: motivation, practice, and observation all blended with a little talent. In this context SmartChess offers the serious student excellent possibilities in each of the above three regards. Certainly one can observe, one can practice by analyzing moves and variations, and finally the motivation for success can be driven by considering and reviewing the methods of those who have been successful.
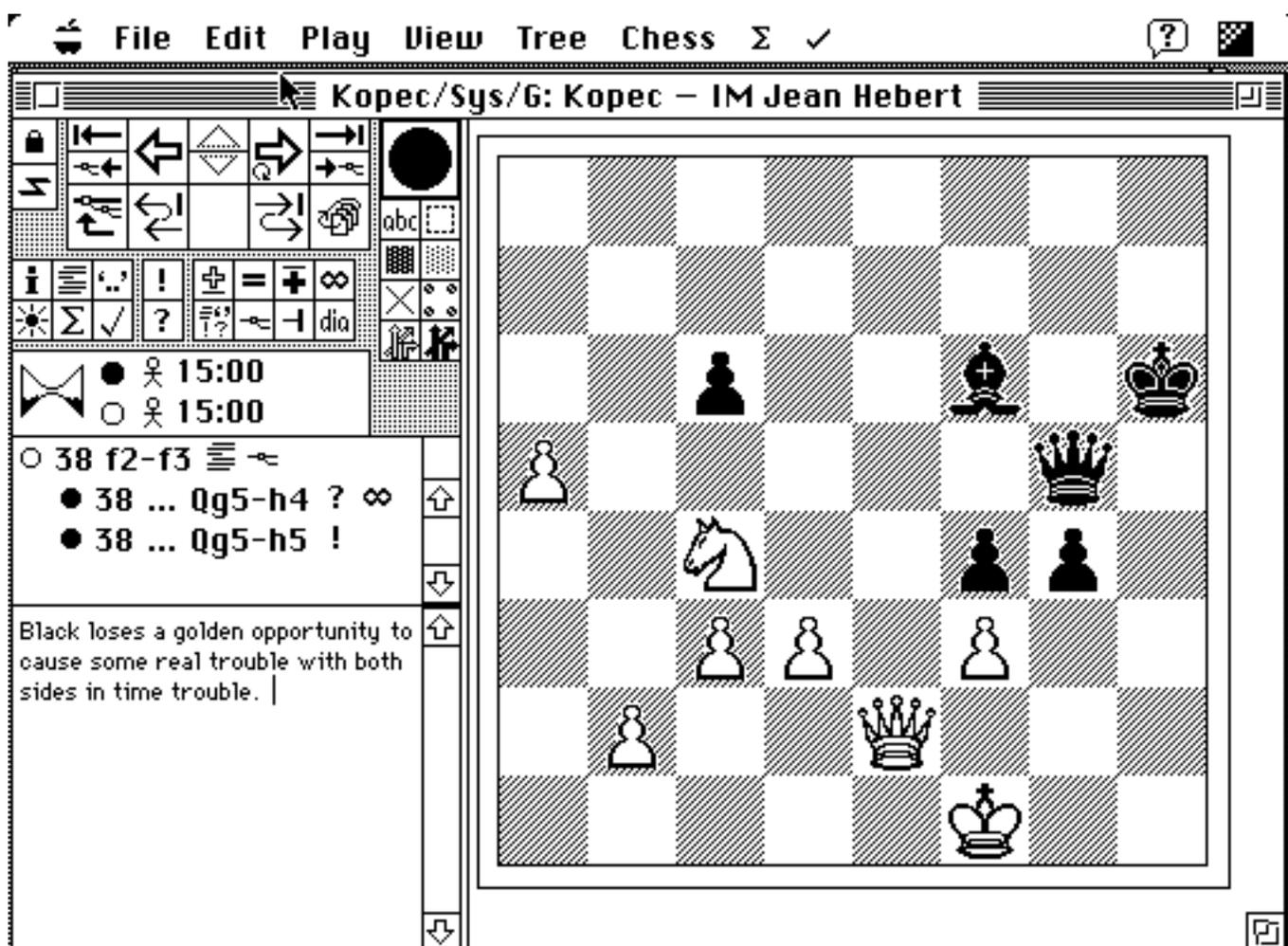
SmartChess as an excellent tool for doing and writing up analysis of alternatives. Here 38. ...Qh4? was the move played, while 38. ...Qh5! should have been played. Clicking on this move leads to an analysis of moves.

Converted to Rich Text Format (RTF) this analysis with continuations and a little editing produces: 38.... Qh5! 39.Kg1 (not 39.fxg4?? Qh1+ 40.Kf2 Bh4 mate) gxf3 40.Qh2 f2+ 41.Qxf2

Qg4+ 42.Qg2 (another potential error is 42.Kh1?! Bh4 43.Qg2? (better 43.Qf1) Qd1+ 44.Kh2 Bg3+ 45.Kh3 Qh5+ mate) Qd1+ 43.Kh2 f3 (if 43....Bh4 44.Qxc6+ should be winning for White) 44.Qf2 Qe2 45.Kg1 Qxd3 46.Qe3+ and White is winning. However, as readers can see, the variations are like a minefield.
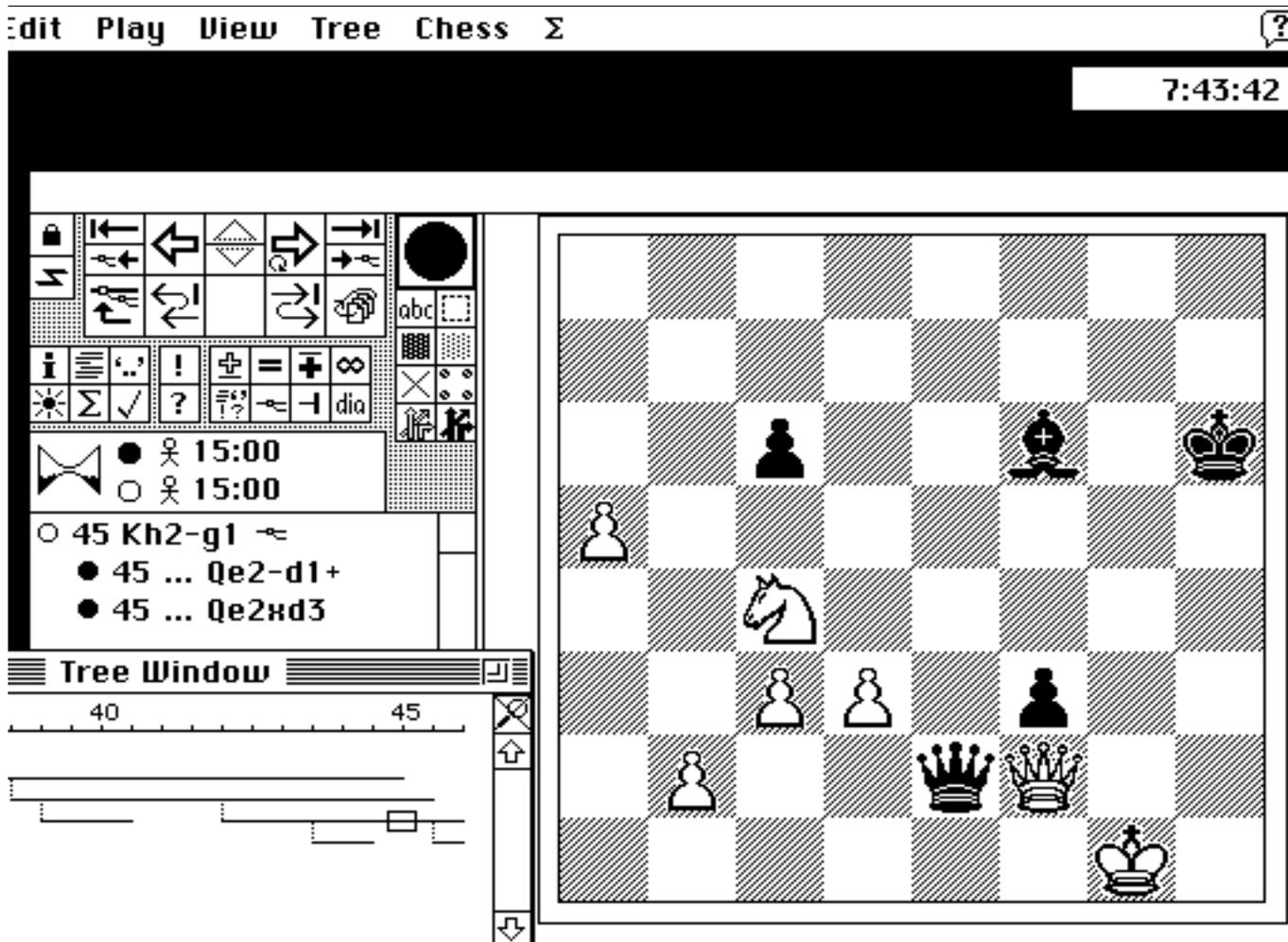
The analysis given above in the longest variation leading to 45.Kg1 as represented in the Tree Window as a result of clicking SHOW TREE. Any position and continuation can be viewed by clicking on a line in the Tree Window.

The game concluded: 39.Qg2 g3 40.q6 Kg6 41.a7 Qh8 42.Nb6 Qd8 43.Qe2 Qh8 44.Kg1 Bd8 45.Nc8 Black Resigns.

With the **SELF-TEST** feature you can compare your own move selections with those played by masters or analyzed by annotators.

Open a 'master' game, then enable **Self-Test** mode by clicking on the small lock in the upper left-hand corner of the game window (SmartChess now hides all subsequent moves). Play the move you think is the best, and -- if you guessed the right move - continue with the next move (you have three chances to get the right move before SmartChess goes automatically to the next move). with **SELF-TEST** from the **VIEW** menu, you can see a statistic about your performance.

WRITING

The mechanisms and possibilities for writing about chess have been widely expanded for me via SmartChess. Prior to 1980, I would develop a concept for a chess article by writing the score and comments by hand on paper while I played through the moves on the board. Then I would go through another "pass" through the moves and notes as I typed them up. Finally, I would make another pass through the moves and commentary to proofread it for final corrections. In later years (around 1980) I would type the commentary in on a wordprocessor as I played through the moves on a mid-sized chess set.   Then I would go through at least one more pass with the article to check for the correctness of my notes and score.s
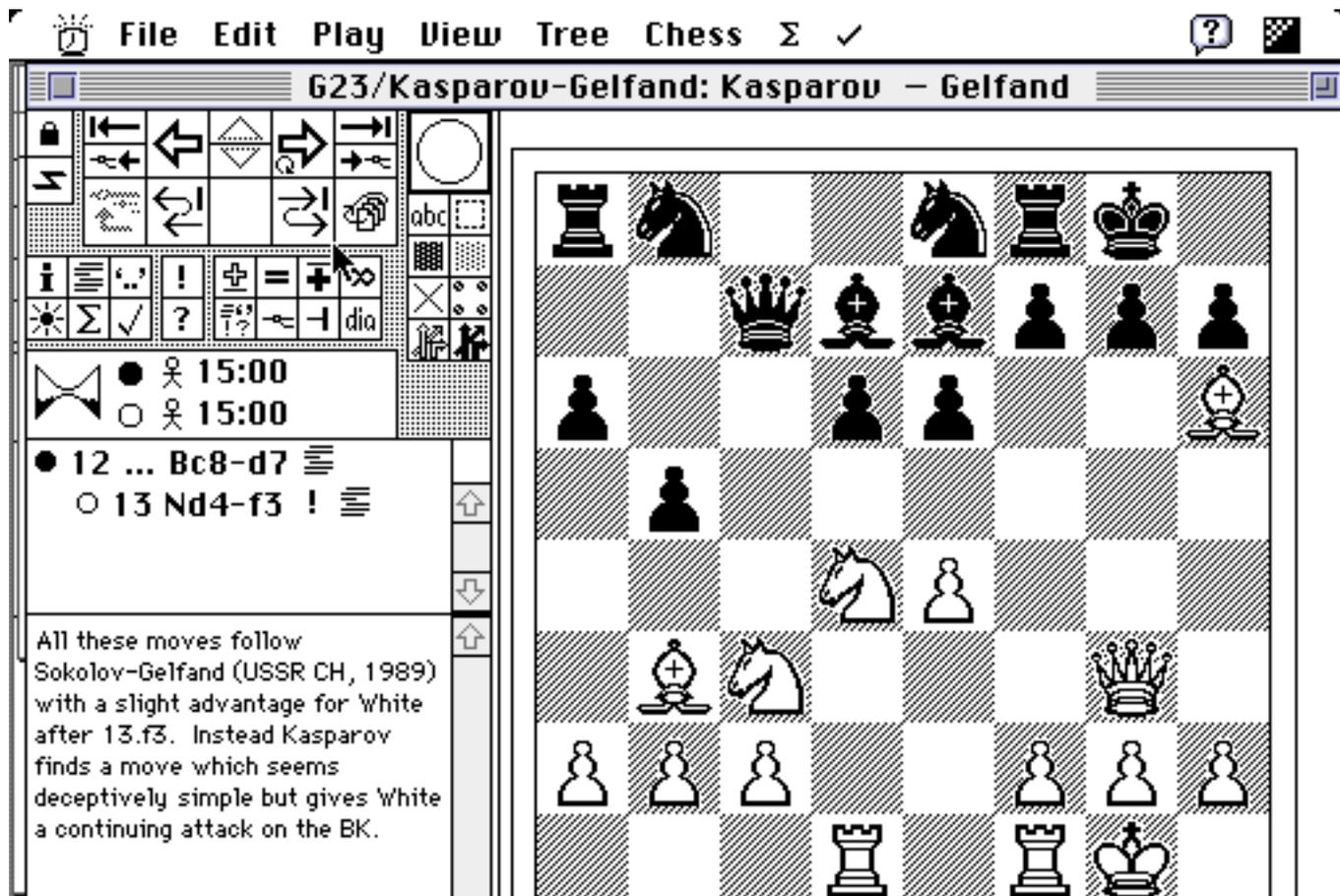
SmartChess is an excellent tool for the chess writer.

With SmartChess I am able to develop my articles directly from the score of the game. The program will also check that the score of my input moves (long or short algebraic, in several possible languages) is correct. All I need to do is click, click, click. Thus developing an article simply entails clicking in the moves and adding my commentary and variations just as I click in the moves which are depicted in a **Diagram Window**. The window is beautiful and clear and just about compensates for the inability to "hold and move" my three dimensional pieces on a three dimensional board. There is no restriction on the length of my commentary for every move or position. Variations from a given board are just created by clicking them in. To make annotations for moves like "!", "?", "!?" I don't have to go to hidden windows. All the icons for annotations are right there in front of me on the screen. To produce a diagram of a given position I don't have to access other

programs; all I need to is click **"COPY DIAGRAM"** from the **Edit Menu** and a diagram is created for the current board position.

Hence my standard sequence of operational steps for writing an article is:

1) **NEW GAME** under the **File Menu.**

2) Choose **PREFERENCES** from the **Edit Menu** and then I am ready to make the appropriate choices.

   <u>Note</u> that these PREFERENCES will normally only need to be set once in the activity of writing an article.

3) **Click** in the moves of the game with comments.

   [If for some reason I (or the program) notice errors in the input score I either "take a move back" (if I notice the error immediately) or go to the **Tree Menu** where I can **INSERT MOVE** or **INSERT MOVE PAIR** (for a move by White and Black or Black and White) or I can delete erroneous moves via **DELETE NODE** option under the **Tree Menu**, and then select the appropriate action from the choices suitable for my situation]

4) When I have done some significant work then I choose **SAVE** under the **File Menu** and name the file appropriately to make sure that my work is saved.

5) The next step is to send the game with notes to Microsoft Word for final grooming and editing. This is accomplished with the command **WRITE AS TEXT** under the **File Menu**. After choosing the appropriate settings (such as number of columns, font sizes, etc.) I select **WRITE** in the open dialog window. This produces a **RTF** (Rich Text Format) file which I am now able to open, read, and edit in Microsoft Word. When the prompt appears the **RTF** file now only needs to be **SAVED** under a new name (I usually give the extension to filename RTF, e.g. filename/RTF).

Using the steps prescribed on the previous page, SmartChess can be used to quickly develop annotated games for articles like the following in RTF.

Example 23: (from THE CONDITIONS AND METHODS FOR ATTACKING THE KING) (Blumenfeld & Kopec, 1993)

Kasparov - Gelfand Linares, 1993 Rd 11

The following example is one that stands all by itself -- it does not involve a rook lift, or a pawn on e5, or a king caught in the center. It simply represents great strength and the mounting of forces around the castled king with a lead in development leading to a decisive attack. The ease with which Kasparov disposes a player amongst the top five rated in the world, Boris Gelfand (2690), helps explain why the World Champion seems to be in a league of his own.

1 e4   c5
2 Nf3   d6
3 d4   cxd4
4 Nxd4   Nf6
5 Nc3   a6
6 Bc4   e6
7 Bb3   b5
8 0-0   Be7
9 Qf3

This move was made popular by Soltis in the 1970's against the Najdorf. Nonetheless, with some care, the whole line was considered rather harmless for Black.

9   ...   Qc7
10   Qg3   0-0
11   Bh6   Ne8
12   Rad1 Bd7

All these moves follow Sokolov-Gelfand (USSR CH, 1989) with a slight advantage for White after 13.f3. Instead Kasparov finds a move which seems deceptively simple but gives White a continuing attack on the Black K.

13   Nf3!

In just 12 moves Black will be forced to resign!

13   ...   b4
14   Ne2   a5

On 14. ...Bb5 White could play the same reply: 15.Nf4!. e.g. Bxf1 16.Bxg7! with a crushing attack.

15   Nf4!

White now threatens Bxg7 anyway. All four of White's minor pieces, his Q, and QR are all participating in the attack.

15   ...   Kh8

16   Bg5

If now 16. ...f6 White can win with either 17.Bxe6 or 17.Qh3 (or even Nh4).

With 17. Qh3 the line could go fxg5 18.Ng6+ Kg8 19.Bxe6+ Bxe6 20.Qxe6+ Rf7 21.Nxg5!! which is decisive. Or with 17.Bxe6 the threat is Ng6+. A continuation could go: 17.... Bxe6 18.Nxe6 Qc8 19.Nxf8 fxg5 20.Nxg5 and White has a winning advantage. e.g. 20. ...Bxf8 21.Nf7+ and 22.Qb3 with deadly threats or 20.... Bxg5 21.Qxg5 Nf6 22.Rxd6 Qxf8 23.e5 And White is winning.
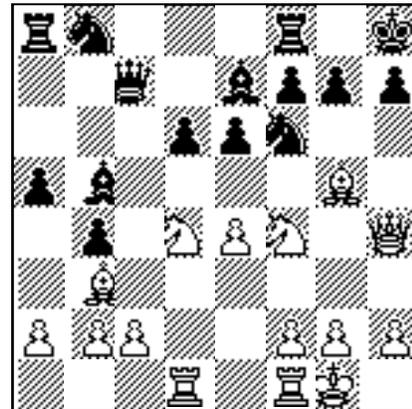
16   ...   Nf6
17   Qh4!

Another very strong move menacing Nh5.

17.   ...   Bb5
18.   Nd4!

The series of hammer blows continues. If now Bxf1 19.Ndxe6 fxe6 20.Bxe6 with the threat of Ng6+ is decisive.

18   ....   Be8

You cannot lose several tempi (e.g. Bd7-Bb5-Be8) and not complete your development (N/b8) against a player of Kasparov's attacking ability (of whom there are few) and hope to come out alive White's K-side threats are too strong for Black to be able to effect his only threat of a5-a4.

19.   Ndxe6

Kasparov finds a forceful and creative way to exploit the weakness of the e6 square and Black's back rank.

19   ....   fxe6
20   Nxe6   Qa7
21   e5   dxe5
22   Nxf8   Bxf8
23   Bxf6   gxf6
24   Rd8

If 24...Qe7 25.Qc4 wins instantly.

24.   …   Nd7
25   Qg4   Black Resigns.
On 25. ...Bg7 26.Qe6.

BOARD SETUP

Instead of writing about a complete game, if I need to write about an individual position, or set of positions, all I need to do is choose **NEW GAME** under the **File Menu** and then **BOARD SETUP** under the **Chess Menu.**   I **CLEAR** the board if the position is near an ending.   Then I click and drag each piece to its desirable destination square, clicking on squares which should be empty.   Finally I chose the appropriate settings from the dialog options (such as castling options for each side, whether en passant possible in the position being set up, side to move , and move number).   When I am done I **SAVE** my position with its moves   and   comments.
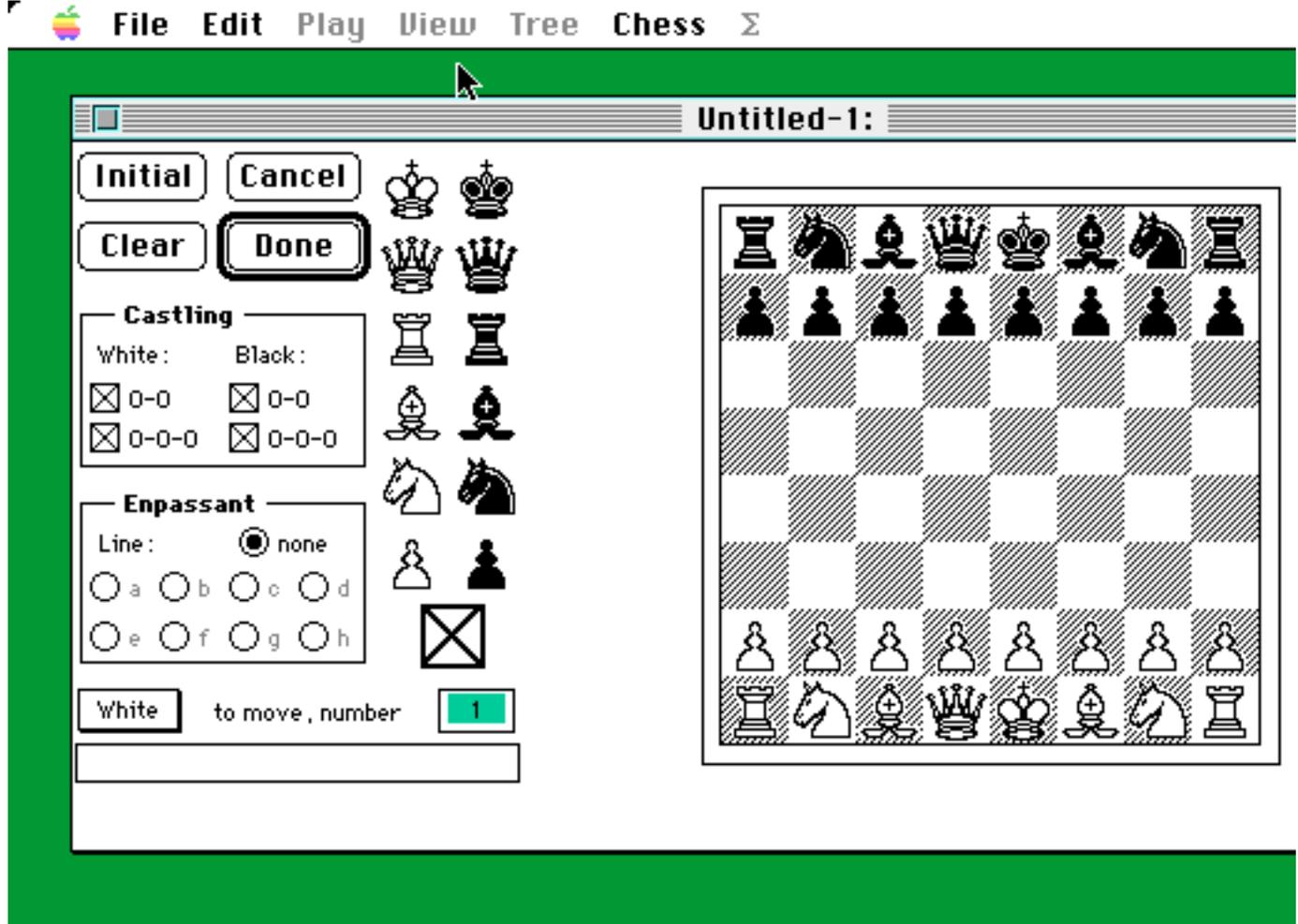
The SmartChess Board Setup Dialog Box

GAME COLLECTIONS

An important "complement" to the standard SmartChess features for Viewing, Analyzing, and Writing about chess is the ability to create and view/replay **GAME COLLECTIONS**. This feature enables one to view a group of games as a package or collection. You can create or receive such a collection of games annotated or unannotated. There are many notions of different kinds of collections which will be of interest to the chess enthusiast or student. These include collections of the games of famous players, collections of tournaments, collections of Openings, collections of events which may bring together a group of seemingly unrelated individuals, or simply collections of one's own games. Such collections are easy to create with commentaries.

A game collection can be quickly created by selecting **SHOW COLLECTION** under the **View Menu**. More games can be added to an existing collection by chosing **ADD NEW GAME** under the **File Menu**.

Now that you have learned to work with a single game it is useful to know that a game is simply a special case of a collection consisting of just that one game. For convenience and economy of memory you will want to collect up to a few dozen related games into a collection (i.e. a single file).

In my own case, with three household moves in recent years, the time often spent searching for certain games I have played in certain tournaments, games against certain opponents, or games with certain openings, led me to the conclusion that the possibility of creating computer-based collections of my own games was very intriguing and promising. I am presently in the process of transferring some 700 games from loose scoresheets or scorebooks which are becoming illegible to the finer impressions of SmartChess which can be reproduced in many forms.

It often arises that students want to see how I handle a particular opening variation, e.g. the English Opening. Having input my games as collections I am able to select all those which are English Openings with me as Black (by their Opening Key) or I can quickly find games by events, opponent's names, dates, etc.

0/35	White (11)	Black (11)	Opening	Result	Place	Date
	Abramovic B.	Akopian V.	QG Slav Exchange	1-0	Biel	1993
	Adams M.	Ftacnik L.	Sicilian Najdorf	0-1	Biel	1993
	Anand V.	Portisch L.		1/2	Biel	1993
	Georgiev K.	Dreev A.	QG Slav	0-1	Biel	1993
	Gluckmann D.	Piket J.	KI Fianchetto	1-0	Biel	1993
	Gurevich I.	Bareev E.	French Tarrasch	0-1	Biel	1993
	Gurevich M.	Lesiege A.	QG Slav	1-0	Biel	1993
	Hansen C.	Kalesis N.	Torre	1/2	Biel	1993
	Hellers F.	Khalifman A.	Caro Kann	0-1	Biel	1993
	Hubner R.	Brunner L.	QG Accepted	1-0	Biel	1993
	Illescas M.	Frolov A.	KI Petrosjan	1/2	Biel	1993
	Ivanchuk V.	Wolff P.	QG Accepted	1/2	Biel	1993
	Kamksy G.	Lputian S.	Sicilian Pelikan	1-0	Biel	1993
	Kozul Z.	Hamdouchi H.	Dutch	1-0	Biel	1993
	Lautier J.	Barua D.	QG Slav	1-0	Biel	1993
	Lima D.	Speelman J.		1/2	Biel	1993
	Lobron E.	Gelfand B.	Pirc	1/2	Biel	1993
	Moutousis K.	Dvoirys S.	English	0-1	Biel	1993
	Nalbandian T.	Hjartarson J.	Reti	0-1	Biel	1993
	Nikolic P.	Van der Sterren P.		1/2	Biel	1993
	Nogueiras J.	Salov V.		1/2	Biel	1993
	Rogers I.	Hug W.	French	1-0	Biel	1993
	Sherzer A.	Agdestein S.	Ruy Lopez	0-1	Biel	1993
	Shirov A.	Gurevich D.	Sicilian Richter Ra	1/2	Biel	1993
	Smirin I.	Maliskausas V.	Sicilian Najdorf	0-1	Biel	1993
	Smyslov V.	Ehlvest J.	Nimzo-Indian	1/2	Biel	1993

A TYPICAL COLLECTION WINDOW FROM THE 1993 BIEL INTERZONAL.

ATTACHING INFORMATOR KEYS

A game or **collection of games** can be classified according to the International standard of keys (codes) for chess openings developed in Yugoslavia (known as Informator Keys) by the following sequence of steps:

1) Open the **Informator Key** file.

2) Select **INSTALL AS KEY** from the **Tree Menu.**

3) Close the **Informator Key** game window.

4) Open the **game or Collection** you wish to **Classify.**

5) Under the **Edit Menu** chose **SELECT ALL.**

6) Now select **CLASSIFY** from the **Tree Menu**.

7) After a few seconds the games are classified according to the international Informator Keys

   (classifications) typically

   A0, A1, A2, ... B0, B1, B2, ... C0, C1, C2, etc.

8) Now the **game or collection** can be closed and **SAVED** with keys included in the **GAME**

   INFORMATION.

Game ID (1/51)	White (27)	Black (15)	Opening	Result	Place	Date
Old wine in a new bo	Spassky,B	Fischer,R	C39	1-0	Mar del Plata	1960
Only a draw	Keres,P	Fischer,R	B2	1/2	Curacao ct	1962
Peekaboo strategy	Fischer,R	Rossolimo,N	C12	1-0	New York	1965
Pride goeth	Olafsson,F	Fischer,R	E93	0-1	Zurich	1959
Romp	Fischer,R	Benko,P	B06	1-0	New York	1963
Sheer pyrotechnics	Reshevsky,S	Fischer,R	D42	0-1	Los Angeles m	1961
Shock treatement	Fischer,R	Fine,R	C52	1-0	Poughskeepie	1963
Slaying the dragon	Fischer,R	Larsen,Bent	B77	1-0		1958
Something new	Fischer,R	Gligoric,S	B57	1-0		1959
Squeeze play	Fischer,R	Smyslov,V	C7	1-0	Havana	1965
Tact and tactics	Pilnik,H	Fischer,R	B92	0-1	Mar del Plata	1959
The Najdorf Variatio	Fischer,R	Najdorf,M	B9	1-0	Varna	1962
The brilliancy price	Byrne,R	Fischer,R	A4	0-1	New York ch-l	1963
The confrontation	Botvinnik,M	Fischer,R	D98	1/2	Varna ol final	1962
The drawing master	Fischer,R	Trifunovic,P	C80	1-0	Bled	1961
The moral victory	Fischer,R	Tal,M	B47	1-0		1961
The sincerest form o	Fischer,R	Petrosian,T	B17	1-0		1961
The unpleasant obliga	Fischer,R	Rossetto,H	B41	1-0	Mar del Plata	1959
Theoretical scuffle	Fischer,R	Euwe,M	B14	1-0	Leipzig	1960
Time will tell	Fischer,R	Reshevsky,S	B34	1-0	New York	1961
Too little, too late	Fischer,R	Sherwin,J	B27	1-0	New Jersey	1957
Too many cooks	Keres,P	Fischer,R	B99	0-1	Yugoslavia ct	1959
When champions mee	Fischer,R	Stein,L	C92	1-0	Sousse	1967
When the Maroczu di	Lombardu,W	Fischer,R	B54	0-1	New York ch-l	1960

A FISCHER SELECTION WITH KEYS ATTACHED.

IMPORTING

SmartChess has been developed as a versatile system which can read data created in a number of standard formats including ChessBase, NicBase, ASCII (text) and SmartChess format itself.

Let us say a chess game score is available in algebraic notation (long or short). All that you need to do is copy this game score as **text** (usually **COPY** under the **Edit Menu** of most Macintosh word processors) . Then all you need to do to read the game into SmartChess is:
1) Open a new game in SmartChess with just the initial position and

2) Select **COPY TREE**   under the **Edit Menu** and the game becomes a SmartChess file which you can play through, modify, comment on, etc.

To ensure that the Importing process works, make sure that you delete any "headers" at the beginning of your ASCII game score. That is, just provide the "pure" chess moves of a chess game score in algebraic notation without any player's names, tournament information, etc., although move numbers and dots after White moves (e.g. 17.b4) may be included.

If a single game score is available as text in another format (ChessBase, NICBASE, ASCII, etc.) it can be read into (imported) to SmartChess by the following steps:

 1) Open SmartChess.

 2) Chose **NEW** or **OPEN** a particular game or **Collection** under the **File Menu**. If you chose **NEW** or are opening an existing game, then chose **SHOW COLLECTION** under the **View Menu**.

 3) Now select **IMPORT/EXPORT** under the **Chess Menu**. Chose the format from which you wish to import the game
    (**SCB , Standard text, ChessBase text , NICBase text, PGN (Portable Game Notation) or 4M** are the choices for formats).   Then select the format you are importing and in the dialog box which follows, indicate the file you want to import into SmartChess. If the import process worked then the file should be readable as a SmartChess file which you are able to view in the **Game Collection Window**.

EXPORTING

Gamescores in SmartChess format can also be easily exported for reading and use in other formats. The easiest way is to use the **WRITE AS TEXT** option under the **File Menu** if all you need to do is produce a complete ASCII (text) game score.

CREDITS

The Smart Game Board, the main viewing platform and interface for SmartChess, was developed by Anders Kierulf. Christoph Wirth is the main designer and implementor of SmartChess. The SmartChess Consortium (SCC) is header by Professor Jurg Nievergelt. Fide Master Fabian Maeser has made important contributions to the development of SmartChess.