



Neoclassical Chess

A New Evolution of The Game

An alternative for competitive, amateur and school chess

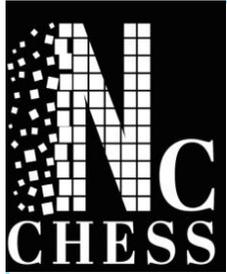
Gabriel F. Bobadilla

Dr.- Ing. in Applied Mathematics and Ingeniero Industrial, U.P.M. (Universidad Politécnica de Madrid)

Master's in Economics and Finance, CEMFI (Foundation of the Bank of Spain, Madrid)

Master of Science in Electrical Engineering, Caltech (Pasadena, USA)

Candidate Master (FIDE)



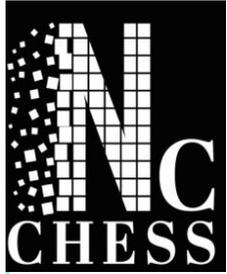
"Neoclassical Chess: a New Evolution of The Game", by Gabriel F. Bobadilla

What is Neoclassical chess? An evolution of the game of chess

How is it similar to classical chess? In all respects. Its rules are the rules of chess. It is chess.

How is it different? The initial position is a common chess position, different for each game, and unknown until just before the game. Play starts with White's 4th move (or Black's 4th in the Neoclassical Chess Black variant).

How is the initial position obtained? A computer program selects at random a recent master game from its standard database. The position is the one obtained after the first 3 full moves of the selected game (or 3.5 in the latter case).



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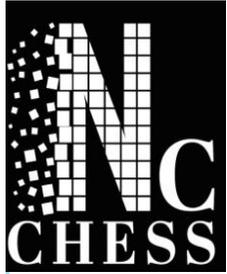
Why Neoclassical chess?

Because the game of chess is becoming an opening examination

How so? Computer-aided opening preparation is becoming as important, or more, as live Over-the-Board play.

Are there alternatives to Neoclassical chess? Yes, for example Chess960, but they are very different from chess, and they eliminate its history and heritage. Neoclassical chess preserves both.

How is this problem approached? As a mathematical one, establishing existence and uniqueness of the solution.

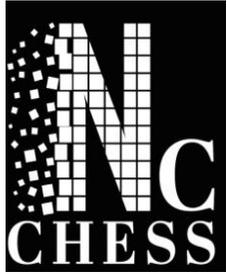


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Does Neoclassical chess work in competitive and amateur chess? It does!

Has any tournament taken place? Yes. We have organized them for both GMs of the Spanish elite and for amateurs.

How can I play or do a team match? Download the free app on your mobile or tablet. Then find human player(s) and a chess set and press once to obtain the initial position from the app. Afterwards, just play chess!



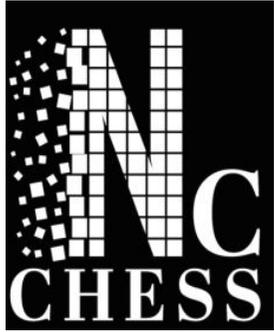
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What does Neoclassical chess contribute to education and school chess?

It is proposed to replace chess? No. It can coexist with and reinforce chess for school competition and learning.

Can it be a complement in chess learning? Yes, the free Schools version of the app is a learning tool with several levels, selecting initially the most employed and important openings, then progressively expanding their knowledge.

Is Neoclassical chess useful for general educational development? Yes, because it crucially emphasizes learning based on pattern-recognition, more than on rote memorization. The pattern-recognition skill is more efficient and more closely linked to the development of human intelligence for maths, language, music and the arts.



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To know more about and to try Neoclassical chess

Download the free App (Android, iPhone and Windows). Basic and Schools versions.

Also free Schools version for PC in the Windows Store

Windows 10 <https://www.microsoft.com/store/apps/9nblggh6hx24>

Windows 8.1

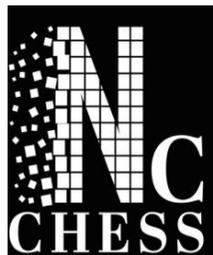
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Follow us on Twitter *@NeoclassChess*

Correspond with the author at gfbobadilla@outlook.es

Websites www.neoclassicalchess.com and www.ajedrezneoclasico.es

where also the original paper establishing the foundations of Neoclassical chess can be found



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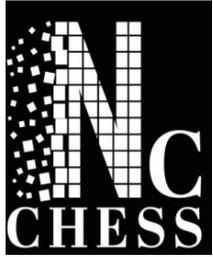
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SUMMARY OF PAPER

Introduction and Background

Chess from its origins has been an “almost infinite” game, where the combinatorial explosion of possibilities gives rise to so many different positions that playing skill has mattered more than attempts at preparation for most possible initial courses of the game. Recently, a **problem** has arisen: with the growth of opening theory and widespread access to preparing with the aid of a computer, the possibility of extensive memorisation of the opening has become more important than ever. This is having a great impact at strong and top competitive levels. Even at experienced amateur competitive levels, opening preparation has today considerable effect on play well into the middle-game.

Among the many variations of chess that have been proposed, some have been designed with the specific purpose of solving this problem. The most relevant among them is Chess 960 (Fischer-Random chess). The main **limitation of these variants** is that most chessplayers like chess as it is: these variants are not perceived as “real” chess, as the rules or positions involved are very different and, most importantly, **the integrity and history of the classical game of chess are discarded along with opening theory**. So we can state that the problem has not been solved, it has just motivated the invention of some different games.



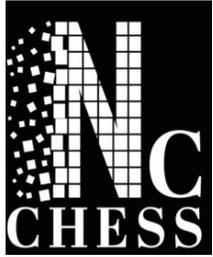
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Objective

The objective of the current paper is to develop a new variant of chess in order **to solve the problem of the extensive memorization of the opening phase, while preserving the rules, integrity and history of the classical game of chess. We have defined all the desirable characteristics that such a new game should have, chiefly among them:** a game equal to chess except in the opening; a game of pure skill that starts from a balanced position (i.e. as balanced as in chess); that both includes and preserves the history of chess (“Backward and forward compatibility” with chess); and that reflects the contemporaneous opening preferences of relevant human master play and evolves incorporating future preferences, in both cases through a non-discretionary process. Additionally, we have aimed to modify classical chess in the least possible degree, the strict minimum needed to solve the problem, and to accomplish this in a reproducible, non-arbitrary manner. Hence we have confronted the effect of the computer on the preparation of the opening phase, while fully accepting the influence of the computer on all other aspects of modern chess.

Methods

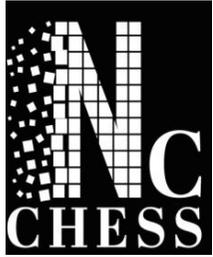
In order to develop the new game, we have built a logical framework to state our objective from a mathematical perspective. **The problem has been reformulated as a constrained optimization problem within a space of variants of chess.** We define a notion of **distance** from each of these variants to classical chess, which we take to be the “loss function” of the optimization problem (the performance measure to be minimized). Then we determine which one(s) among these variants is closest to classical chess, subject to the constraint that **it must include sufficient uncertainty about its initial position.** In the framework we present, all features of the solution flow as logical consequences of the objective and methods, and result in a clearly-defined standard for the new game. We also examine, in a mathematical sense, the issue of the “uniqueness” of this solution.



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Results

The solution to the problem, that we have denominated Neoclassical chess, is the following: **all rules are identical to the rules of chess, the only difference being that the game starts on the position after the first three full moves of a game taken at random, just before the start of play, from relevant contemporary chess master practice.** We have also established a **Black variant of Neoclassical Chess**, in which the game starts with Black moving first on the position obtained after seven “half-moves”, i.e. the fourth move of White in the selected master game (together with an introductory Black variant, after five “half-moves”, i.e. on White’s third). These number of moves is not arbitrary but chosen to be the minimum that solves the problem, and is supported by a robust regularity of the empirical distribution of master opening play, which we have found in the course of this work. **Uniqueness of the solution** establishes Neoclassical chess, in a well-defined sense, as the single alternative to classical chess that preserves its integrity and history while solving the problem of the exhaustion of the opening phase. **We have implemented the solution as a computer program and mobile application**, available for download in the current three major platforms. The application provides, with a single pressing of a button, the set of initial chess moves and hence the initial position, for the players to set on a physical board and proceed to play chess.



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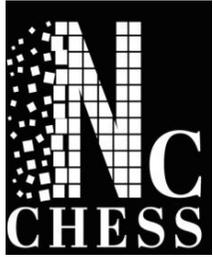
Discussion

Precedents of Neoclassical chess

We have examined other precedent proposals along with Chess960, which we take as an initial, tested reference. We have established in relation to our framework, how they deviate from our established objective or methods, and how, as a consequence, they are burdened with some crucial limitation.

Neoclassical chess for amateurs, professionals and elite players: an Over-The-Board game

We believe that the most fundamental impact of Neoclassical chess and the root of all the rest of its positive consequences is that **it reinstates chess as a game to be played mostly over the board, in real-time between two human individuals who are led to non-predictable sporting and intellectual challenge in the course of play**. As a result of the modification we propose to the way the game of chess is started, a radical impact is made on the study of the opening, with a potential cascade of positive effects for the chess world: substantial increase in the “over-the-board” (OTB) part of the game and, as a consequence, increased interest on competition at the elite level. Additionally, it stimulates the spread of the knowledge of the full possibilities of the game to all players. Also, our analysis strongly suggests that Neoclassical chess may probably **enhance the quality of life of a substantial part of professional and elite players, as well as many amateurs**.



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Neoclassical chess in schools

Neoclassical chess might well **boost the well-established benefits of chess in schools** once an initial chess learning phase is completed and the opening becomes a subject of study, as **it strongly emphasizes the skill of pattern-recognition (with its unambiguously positive impact on intellectual youth development) over rote memorisation**. The benefit is compounded by the fact that the usefulness of the latter is being increasingly challenged in the digital era.

Classical versus Neoclassical chess

While Neoclassical chess is an alternative for the competitive chess of the future, **both Neoclassical and classical chess can coexist harmoniously and reinforce each other**, resulting in a significant enhancement for the chess world.

Conclusions

In conclusion, we have designed and developed a new variant of chess, which we have denominated Neoclassical chess, that solves the problem of the exhaustion and excessive memorisation of the opening phase in modern chess, while preserving the basic rules, integrity and history of the classical game of chess.

I will end up saying that Neoclassical chess is not designed to replace classical chess, or to be a better game. It does not even intend to be a different game. On the contrary, I am convinced that there is no better intellectual game or sport than chess, and that with this small modification to the way the game of chess is started, we can escape from the exhaustion of the opening phase without renouncing to chess itself.