

Music and Chess

A P O L L O M E E T S C A I S S A



Achilleas Zographos

Music and Chess Apollo meets Caissa
by Achilleas Zographos

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Apollo and Caïssa

Apollo

Called *The Bright One*, he is one of the Olympian deities in classical Greek and Roman mythology. Apollo is an eternal youth, the god of music and poetry and is often depicted playing a golden lyre. A complex deity, he was also the god of light and sun, divination, truth, healing and plague. He appears in the Renaissance poem *Scacchia ludus* by Marcus Antonius Hieronymus Vida (c. 1490-1566) that describes a chess game by Apollo and Mercury played in the presence of other gods. He has inspired numerous artists, among them the Russian music composer Igor Stravinsky who wrote in 1928 the famous ballet *Apollon musagète* (*Apollo, Master of the Muses*).

Caïssa (or Caïssa)

The muse or goddess of chess, originally a nymph in a poem of that name composed by Sir William Jones (1746-1794) in 1763. After a description of the game the nymph is introduced:

*A lovely Dryad rang'd the Thracian wild,
Her air enchanting, and her aspect mild:
To chase the bounding hart was all her joy,
Averse from Hymen, and the Cyprian boy;
O'er hills and valleys was her beauty fam'd,
And fair Caïssa was the damsel nam'd.*

It is modeled on Vida's *Scacchia ludus* in which the nymph is called Schacchis. Mars, whose love for the nymph is not returned, persuades the god of sport to invent a game (chess) that might soften her heart.

Hooper, David & Whyld, Kenneth; *The Oxford Companion to Chess, 2nd edition*; Oxford University Press, 1992, p. 65.

Dedicated to my parents Nicolas and Soula.

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Introduction

Chess is found in all forms of art: literature, theatre, sculpture or paintings, where the artist depicts, for example, people playing chess. It may likewise portray ballet or musicals. However this sort of relationship is not the main subject of this book. That said, there is no list with music works, paintings, cinema scenes or literature inspired from or involving chess. In the aforementioned cases, chess is an art object, it is the theme – like a sunset or whatever else you may wish – that inspired an artist to create. The thesis of this book is that chess is art in itself. It can create art and is strongly related to mathematics and music.¹

Apollo meets Caissa explores this thesis. In the comparisons made, many examples will be used. Some of them might be well known for obvious reasons: Referring to Beethoven and his *5th Symphony* could be boring even for the music-lover. Same goes for the chess enthusiast who sees the famous *pawn study* by Reti. However, I hope that the reader will take into account that this book is meant to be of interest to the non-expert as well, in this or the other field.

One main difference between chess and music is that in order to appreciate the beauty of the first, good knowledge of the game is required, whereas in music this is not necessary. Therefore, do not feel frustrated if the chess examples appear difficult to you. The book is designed to be readable even without completely comprehending the chess (or even the music) material involved. Lots of examples contain just kings and pawns in order to keep it as simple as possible. Chapter 13 *Imagination and mysticism* is the most difficult in this sense, but I heartily suggest you give it a try! Even if you do not succeed at the first attempt, you can give it a second chance, if your interest in the royal game rises after reading the book.

Some information on the structure of the book follows. Chapter 2 aspires to offer more than a term definition. It is a sort of a warm-up for the chapters to follow. Chapter 3 sets out the historical dimension. Chapter 4 is a necessary read explaining the algebraic notation, in order to be able to follow the chess examples of the book – experienced chess players may as well omit it. Chapter 5 is a prelude to chapter 6, which attempts a first comparison of chess and music. In chapter 7 the components of music are explained and compared in detail to chess. Chapters 8 to 13 present a variety of subjects directly or indirectly associated with chapter 7. Chapter 14 presents an interesting connecting theory by Juan Maria Solare. Chapter 15 makes an analogous attempt by yours truly.

Chapters 16 to 24 present personalities associated with our subject in one way or another. These involve World Chess Champions, famous music composers or interpreters, artists, and scientists with a special interest in both disciplines. Raymond Smullyan, who passed away recently at the age of 98, and Harmony Zhu who has turned 11 as these lines are written (February 2017) are some of them. Chapter 25 is about *Ludwig*, a computer program combining chess and music. Valeri Tsaturian and

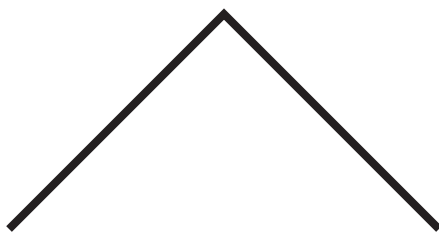
his invention *chessmusic* are presented in chapter 26, while Guido van der Werve's *chess-piano* is chapter 27. Finally, chapters 28-29 intend to share some further thoughts, while chapter 30 needs no additional explanation.

Some more points:

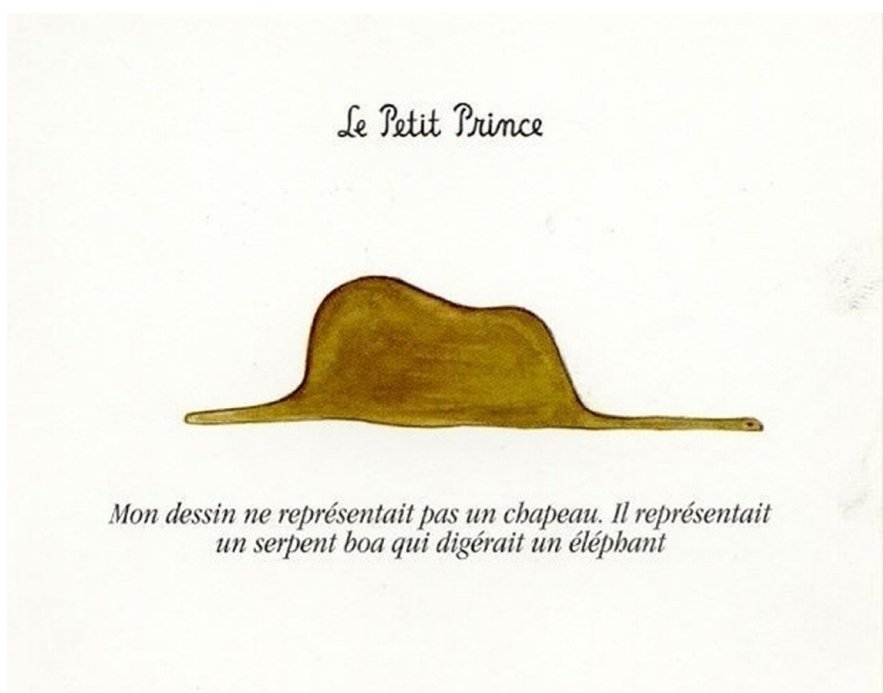
- Chess is regarded as an art and in this context its association with music is examined in its broadest sense. Thus, references to architecture or literature for example should not be surprising.
- Parts of the book are interviews or writings of others. In such cases, I feel that the role of the writer is restricted to choose (sometimes out of a wealth of information) and present the appropriate material. Finally, if not noted otherwise, I am also responsible for the translation of Greek and German texts.
- It is advisable to have a chessboard available in order to better follow chess examples.
- All internet links referred to in this book are valid at the moment of publication and are important for the comprehension of the text. Some of them might not be accessible in certain countries. An index of videos or youtube channels sorted by order of appearance is to be found at the end of the book.

¹For those interested, *Connections between Music and Chess* by John Greschak includes a list of works of music that are related to chess. Additionally, the following links present paintings with a chess theme: [http://www.jmrw.com/Chess/Tableau echecs/index.htm](http://www.jmrw.com/Chess/Tableau%20echecs/index.htm) *Art et curiosites echiqueennes (Art and chess curiosities)* and <http://www.chessreference.com/ChessArtwork/Chessreference>.

7.2 Melody and movement



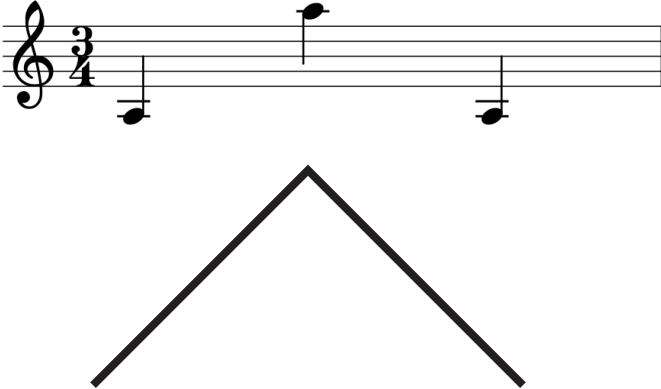
What might this shape illustrate? A triangle of which one side is missing? The peak of a mountain? Or perhaps the roof of a house? A picture can stimulate our imagination in multiple ways. Depending on perception, the same picture can stir different associations. Let us think about *The Little Prince* of Exupéry. The reader might see a hat, our narrator however is thinking about a boa that has swallowed an elephant.



The Little Prince

It is not unusual for a musician to see direction, motion and shape when listening to a melody, mimicking it with a spontaneous motion of the hand. Musicians are capable of “hearing” music by just seeing the notes, just as chess players are able to see a sequence of moves abstractedly, by just seeing the notation. “A good musician views with his ears and listens with his eyes.”⁷¹ Music is notated in a system consisting of five parallel lines (horizontal axis) and the notes placed on them (vertical axis). The same goes for chess. The chessboard constitutes in itself a system with two axes of 8 x 8 squares. Chess players can replay a game on a chessboard or in their mind (blindfold reproduction) by just viewing its score. Both systems are founded on algebraic principles.

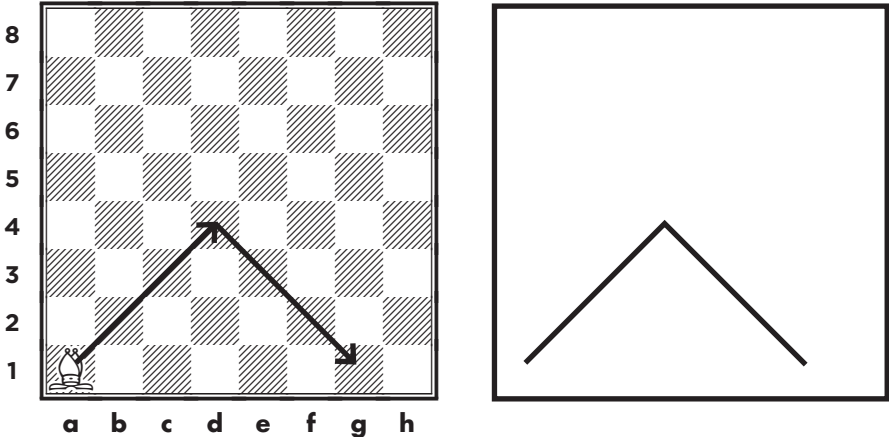
Since a melody is a sequence of sounds in time, it is easy to imagine its graphical presentation. In a two-dimensional chart, on the horizontal axis we could place time, on the vertical one the pitch. In an over-simplified example, a sequence of three isochronous notes could have the following form:



One does not need to be a musician in order to understand the idea. The middle note is placed higher on the staff and has a higher frequency than the other two. Watch the First movement (prelude) of J. S. Bach’s E major partita for solo violin, BWV 1006, performed by Lara St. John, with an animated graphical score: <https://www.youtube.com/watch?v=uoqFH-i7jYY>

Probably inspired by this fact, Lev Sergeevich Termen (known in the West as Léon Theremin) constructed in 1919 an instrument which produces music by recognizing only the movement of the hands in space, without actually touching it. It is worth seeing Clara Rockmore for example, playing *The Swan* from *The Carnival of the Animals* of Camille Saint-Saëns: <https://www.youtube.com/watch?v=pSzTPGiNa5U>

Movement and direction are also part of the thinking process of a chess player. He perceives the moves of the pieces as a movement in space. Let us make a comparison by observing the moves of a bishop in the squares a1-d4-g1.



Alekim Bogolgov by French artist Dominique Digeon is inspired from this very fact.



Dominique Digeon; *Alekim Bogolgov*; 1998

In the same spirit, Hans Holländer writes about *Il dilettevole e giudizioso giuoco de scacchi* (The delightful and judicious game of chess), an 18th century manuscript by Alessandro Sanvito:

Really amazing is the recording of sequences of moves on the chessboard in a chess textbook of the early 18th century, since it corresponds exactly to the dance notation of that time, hence the recording of dance steps. I assume that the author of that book was not only a chess teacher, but also a master of dance.²

Interesting is Nicolas Slonimsky's observation in his book *The Road to Music*:

“Also in a humorous vein are such musical pieces as *A Chess Game*, in which chess moves are imitated by melodic intervals. The pawn moves two spaces, and the melody moves two degrees of the scale. The knight jumps obliquely, as knights do in chess, and the melody moves an augmented fourth up. When the bishop dashes off on a diagonal, the music imitates the move by a rapid scale passage. Play this piece for a chess expert, and the chances are he will name the moves without a slip.”³



A MUSICAL CHESS GAME

The moves are: 1.e4 e5 2.Nf3 Nf6 3.Bc4 Bc5 4.0-0 0-0

Experts or not, many players would probably take their chance and bet on that. This is a piano score. The chess moves are symmetrical. The two music parts (right hand – black/ left hand – white) move symmetrically in opposite directions, most of the time in contrary motion. Listen to it at <https://www.youtube.com/watch?v=Rshhmb6JUuw&feature=youtu.be>



Blair G. Bradshaw; *The Immortal Game Anderssen vs Kieseritzky*

¹Zographos, Achilles; Σκέψεις και προτάσεις στη μουσική πρακτική; ΕΛΛΗΝ, 2000, p. 50.

²Holländer, Hans; Schach und Musik; KARL 4, 2007, p. 15.

³Slonimsky, Nicolas; *The Road to Music*; Dodd, Mead and Co., New York 1947, p. 80.