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Observations on Chess Design

Introduction

There are many books devoted to describing chess sets; a few are listed in the References. Most of these books deal with public or private collections, or consist of illustrated catalogues of specific exhibitions. The approach is different here: in the following pages, several dozen chess sets are described and illustrated, but they are shown only as examples, within a review focused on the general development of the chess set design. This means that the great majority of artistic chess sets, which are produced for tourists or collectors, is absent here, including items of great artistic and/or pecuniary value.

Attention is therefore focused on chessmen for practical use, and the whole subject is followed in a systematic way. The main problem in this topic is that there are two domains, which are involved together, usually without any communication between them. On the one hand, we have the Staunton model of chessmen, which now is preferred everywhere. Recently, there have also been small variations in this set, and the official chess matches and tournaments are necessarily played with one of these "new" models. On the other hand, contemporary design techniques could easily do better than a model produced in the middle of the 19th century.

A condition, which does not appear to have been followed with due attention, is that the main aim of any such design is to produce items best suited to playing the game. Understandably, this is hardly taken into account in the productions of the fine arts and handicrafts, but the designers could also do better. This review may provide some auxiliary insight.

Florence, October 2018.

Points in favour of abstract chessmen

Towards the Staunton Chessmen

What might be considered the most suitable way to shape a chess set? Let us pass over any discussion of artistic chessmen, addressed to collectors or art enthusiasts. Our interest will be focused on proposals of chessmen addressed to chess players – independent of their real reception. This approach is not the most popular in the many works devoted to chess sets. Probably, the best study to deal with the evolution of the models of chessmen with due attention both to their shape and function is an old little book (Lanier Graham 1968); it may be found a bit too concise, and of course it cannot comment on items proposed after 1968, the year of its publication – a useful complement for recent years may be a review by Larry List on the production of the 20^{th} century¹.

Among chess collectors, and historians dealing with chess sets, the most frequent distinction made is between abstract or figurative chessmen; it generally appears that figurative sets are more longed-for; indeed, it is evident to everybody that the courtly atmosphere of the game is fully displayed when images of real kings, queens, bishops, and so on, are clearly present on the chessboard. Another favourable point is that any sculptor may feel more challenged to make use of all his skill and ingenuity when he is asked to carve such small sculptures of court personages, which can become valuable works of fine arts or even jewellery.

In the case of chess, however, we find a significant problem that eventually leads to support the abstract solution for actual practice. To begin with, it must be remembered that an abstract shape of the chessmen was preferred in ancient times, typically with the so-called Islamic chess sets, which were in common use also in the Christian European countries, up to the Renaissance. The abstract Islamic chessmen could be used by many nations in the East and in the West, with no problem. One often reads that the Islamic chessmen had abstract shapes because of a religious prohibition to represent human personages. This may have played some role, but there is an even more general justification for choosing an abstract model: the fact is that a change from a figurative to an abstract form of the pieces becomes necessary in practice as soon as the game is played in different countries. There is no way to carve a wood piece so that it truly represents something that for the Rook may be a cart, or a boat, or a tower; and for the Bishop not only a real bishop, but at the same time a madman, a standard bearer, a runner, an elephant, and so on.

¹ (McClain 2017): Chapter 10. Larry List, The 20th Century. pp. 180-201.

A similar situation has often occurred later on, whenever the game was played by people coming from different countries. For instance, the common models of chessmen in the Russian Empire had, among others, Bishops clearly outlined as elephants, and Rooks as ships; this was in full agreement with their images in the past and also with the meaning of their Russian names, *slon* and *ladya*, respectively; in other countries, however, these figures could hardly be accepted. Nowadays, we do have an international chess association, FIDE, and the chess set used in official competitions is a slightly modified version of the Staunton set; here, only the upper part of one of the six different chessmen (the Knight, four pieces in the set of thirty-two) has a residual figurative character, corresponding to the head of a horse. Other marks are just barely indicated, as hints of their crowns for Kings and Queens or of a tower for the Rook. The model of the chess set now in common use may thus be acknowledged as a useful compromise.

Régence and Staunton

If we study the history of the shape changes of the chessmen, we find a few dominant cases, which were so successful as to be accepted throughout several countries. We can limit the scope here to the Régence and the Staunton sets. After some version of the Islamic chessmen, these were the first models to reach an international spread in Europe. Of course, many models of chessmen had been preferred in various places, and we have precious specimens coming from the various courts and other superb environments. It is an interesting field for research to reconstruct the local evolution in the single countries, or even regional zones, and to verify which of the old features were then kept in the two mentioned sets, used in many countries. Of course, also the various models that have been used in the countries of Central Europe deserve a particular interest, such as the developments of the *Selenus* set and others of German and Austrian provenance (Holländer 2005).

The Régence set, as illustrated in the *Encyclopédie methodique* is clearly a set that derives from both aesthetic and manufacturing demands, considering their production by turning on a lathe. In particular, Pawn, Bishop, and Queen were mainly distinguished by increasing dimension. Not surprisingly, the international spread of the French culture involved the spread of these chessmen too; however, the model was known in several variants and the Knight only seldom kept its rotational symmetry; often a horse head was added, or the top was obliquely cut.

Antique chessmen of the Islamic kind.

(Kloprogge 2007, p. 22)

Russian Kholmogory Chess Set (Williams 2000, p. 80)

Chess Set Régence - Encyclopédie

 $\frac{(http://uia-echecs.blogspot.com/2015/03/joueurs-amateurs-francais-celebres-au.html\,)}{bres-au.html\,)}$

Staunton Chess Set, registered by Nathaniel Cook, 1 March 1849.

(Keene 1990, p. 50)

Early Staunton Chess Set

(Dean-Brady 2010, p. 155)

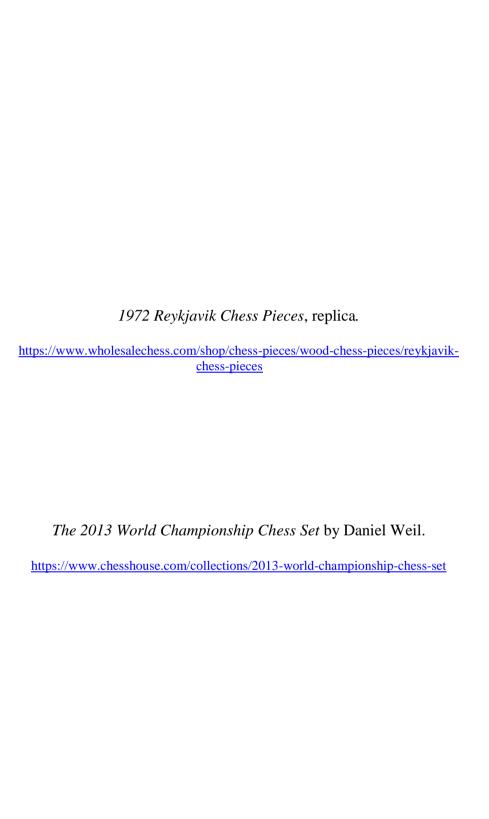
Later on, and up to nowadays, it has been the second "international" model, the Staunton chess set, that has gained the greater success, to the point that it is still acknowledged as the only design to be accepted in official tournaments. What can be found at the origin of this very successful model?

As for the spread of the French culture in the other case, a remarkable part of the success must be assigned to the fortune of the English culture throughout the world: many countries in several continents had English as mother tongue, or at least as a second language in common usage. In previous times, various models of chessmen were used in Great Britain, and several features of the new Staunton sets were already present. There are however some intrinsic merits in the new Staunton chessmen, which can explain a part of their success; first, from the functional point of view, these pieces were more stable than average, with larger bases, and a somewhat reduced height. The environment in which they were designed was that of the London architects, who in the middle of the 19th century were building so many and so big public and private edifices in a neo-classical style. As inspiration for the Pawns, they could select various models of balausters; even the heads of the knights derived from the Parthenon marble frieze, recently arrived in London.

Developments of the Staunton chess set

Usually, it is impossible for a model devised in the middle of the 19th century to resist to the evolution of the artistic fashion in later times and especially to the recent proposals of industrial design: for any object now in common usage, the shape and contour it had in the 19th century has remarkably changed. As a matter of fact, a great number of new models of chessmen have been proposed, but unfortunately most of them had only the limited aim to increase the collections of chess sets, with priority given to figurative chessmen that have no value for actual play. Our aim here is to understand which have been the developments in the "right direction".

Actually, a few cases are known in which the most direct and favourable way has been tried, namely official matches and tournaments for which FIDE has compelled players to use special sets. In these cases, however, the changes of patterns have been very limited, and all these "special" sets can just be seen as slight variations of the Staunton profile (except for a few cases of sets to be given as prizes, not meant for actual play). It may be enough to quote two "special" sets, the set used in the renowned Fischer-Spassky 1972 match in Reykjavik and the Pentagram set, used in the top matches since 2013; the latter model has been designed by Daniel Weil, again an architect.



One may now wonder whether this model can still be considered as the result of a suitable project of design; there are several aspects that may be in conflict here. To players accustomed to using their Staunton sets, it will not be easy to suggest any "better" model. This is like suggesting to actors performing a costume play to wear today's civilian clothes. This may be the main reason why we have many projects of "new" chessmen devised by artists who do not care at all if they really are suitable for play.

In other words, if an artist is now asked to design a new kind of chessmen, he feels free to use his imagination with no limits, namely independent of whether his chessmen will ever be used in actual play. Some hope remains that new proposals will be accepted by FIDE, or even better required from, for ordinary play, but up to now we have just to examine whether new suitable kinds of chessmen can be proposed by interested artists or with the updated techniques of industrial design.

Marcel Duchamp and Man Ray

The relation between chess and the fine arts is both old and close. It cannot be surprising that many artists have taken some profit from the elevated background that has always surrounded the king of games. Several well-known artists have produced special chess sets; in most cases they can be loved as art pieces, but have no value for actual play. Just one example from a wellknown artist, Salvador Dali: he used his own fingers for shaping his chessmen! (Seemingly, the fashion goes on, Tunga in his chess set of 2005 uses various teeth as chessmen².)

Here, the contrary approach is followed: how an artist can profit from his own experience in order to introduce improvements into the shape of the chessmen. Renowned artists who have contributed to the domain are very few. Two of them must be mentioned as great pioneers, Marcel Duchamp and Man Ray. They had a huge influence in the specific domain, maybe greater than any artist ever had earlier on, and later too.

More than anybody else, Marcel Duchamp has left traces together in the history of chess and in the history of the fine arts. However, the chess set that he designed as early as in 1919 did not receive a great attention: better known is probably his pocket chess set, which is however something rather different from any model of chessmen that have been designed for commonly playing on the chessboard. His primary merit for the development of new models for chessmen may thus better be found in his activity, as, in particular, a promoter of the proposals of his friends and colleagues.

² (Sanders 2009) pp. 88-91.

In the specific domain of suggesting a new chess set addressed to players, a major relevance must be attributed to Man Ray. The chess set that he proposed first in 1920, was then modified more than once, for decades; probably, there does not exist one chess set designed by Man Ray that can be taken as the "true" example of his chess projects. Actually, the search itself of a project by him may be wrong, at least initially: actually, his first model seems to have been obtained just by collecting individual items that were by chance present in his own atelier. One has to remember that working with ready-made objects was at the time one of the more fashionable approaches to artistic production. It is easy to understand that the first model soon underwent several modifications, now very difficult to reconstruct exactly.

It is however remarkable that Man Ray in developing his further projects somehow turned from a Dada artist into a modern designer. The fundamental idea remained the same, but he devoted deep studies to the geometry and the profile of his objects. It is far from common to see an artist accepting the constraint of design rules. To a certain extent, something similar occurred later on with *Il Gioco del Mondo* by Giò Pomodoro, even though his fine profiles were based on rather esoteric interpretations.

There are several points to be considered about the chessmen introduced by Man Ray. The skill of the artist is apparent, as well as his attempt to improve the current model: anybody should acknowledge at once that this really is more "modern" than any variation of the established Staunton chessmen. There is an essential further point to take into account: Man Ray did not work in an isolated environment, far from that of the chess tournaments; on the contrary, he was familiar with several renowned chess grandmasters, to begin with Aleksandr Alechin himself. It is reported that Man Ray even trusted in the acceptance of his proposal by the new FIDE (established in 1924), so that his chessmen could become the new endorsed kind of pieces, to be used in the official tournaments. It seems that this was not a personal illusion, but a proposal actually sponsored by Alechin and other important chess masters.

With the exemplary cases of Marcel Duchamp and Man Ray we have found a kind of synergy between chess and art, so as to bear fruit in both directions. Other artists have continued this approach; let us limit our attention to a few cooperative projects and events.

The Imagery of Chess

The chess exhibition "The Imagery of Chess" was held in New York in 1944 (just in the middle of the Second World War) and it was truly exceptional. Julien Levy was the owner of an art gallery and had close ties of friendship with artists interested in chess, like Marcel Duchamp and Max Ernst. The

first idea of the show had come to Levy during the previous summer, when he used to play with Ernst with chessmen formed by pouring plaster into eggshells. In the same 1943, the three fans addressed an invitation to artists and other friends potentially interested in presenting new works in an exhibition they were planning on chess, and they managed to secure the participation of famous artists.

Thirty-two chess works were selected, equal to the pieces in a set; they were presented by well-known artists, such as André Breton, Alexander Calder, Max Ernst, Isamu Noguchi, Yves Tanguy. A prototype of the 1922 Bauhaus model by Josef Hartwig (discussed later on) was also exhibited. Unknown artists were also admitted, as it especially happened for Richard Filipowski, a twenty-year-old student; in fact, his *Clear Chess Set* project was delivered by his design professor, László Moholy-Nagy, a former member of the Bauhaus, who was experimenting new applications for recent polymeric materials and had been invited to the exhibition.

All exhibitors contributed original ideas that soon attracted attention by critics and historians, of both art and chess. The conception of some of the sets shown dated back some years before, but they shared the character to breaking with tradition and the determination to innovate from the depths, involving the very meaning of the game. An exhibition like this would not have been possible in the past, and at that level has not been organized even afterwards.

It is very useful today that an important exhibition was organized in 2005 as a thorough recreation, with the reconstruction of the detailed catalogue and the addition of various interesting evidence; on the occasion a book was published (List 2005) that informs both about the recent exhibition and about the 1944 one, with several unpublished details. Even more recently, materials from "The Imagery of Chess" are periodically shown at the World Chess Hall of Fame in St. Louis, but they have also formed the central part of other exhibitions in Europe, such as those in London in 2008 (Mundy 2008), and Barcelona in 2016 (Segade 2016), with associated books and catalogues.

The fundamental fact is that the artists who participated in the 1944 exhibition were themselves devoted to experimentation in the artistic field: except for rare isolated cases, there had never been a group of artists and works converging towards new ways to "see" chess in an original way. Since then many new models have been presented, but the greatest detachment from tradition took place on the occasion of the 1944 exhibition, and with the second world war still in progress.

Homage to Duchamp by Salvador Dali, 1964.

(Dean-Brady 2010, p. 256)

Chessmen by Marcel Duchamp, 1919.

(Kloprogge 2007, p. 304)

First design of the Chess Set by Man Ray, 1920.

(Kloprogge 2007, p. 301)

Designs for Chess Sets by Man Ray, 1940s.

(Williams 2000, p. 133)

Chess Set by Man Ray, 1962.

(McClain 2017, p. 181)

Il Gioco del Mondo by Già Pomodoro, 1981.

(Borghi 2015, p. 37)

Chess Set and Board by Julien Levy, 1944.

(List 2005, p. 38)

Chess Set by Max Ernst, 1944.

(Kloprogge 2007, p. 305)

Clear Chess Set by Richard Filipowski, 1944.

(List 2005, p. 61)

Fluxus Chess sets

About twenty years after the famous exhibition of 1944 (and with a more or less direct influence of artists already present there, like Duchamp and Cage), New York happened again to be meaningful for chess in an artistic environment, within the Fluxus group (Williams-Noël 1997) coordinated by George Maciunas, an artist who also designed chess sets in person, as well as taking care of those of his colleagues. These artists, who collaborated on several projects of poor art, and opposed to academic forms of all kinds, were of various backgrounds and origins, from the USA, of course, but also from Europe, and with a significant presence of Japanese. Just Japanese were the artists who left more traces for chess, Yoko Ono and Takako Saito.

The most famous result was probably the *White Chess Set* by Yoko Ono, in which the black colour had completely disappeared from both the normal 8x8 chessboard and the common thirty-two chess pieces. The result was that only after a few moves the players were no longer able to distinguish their own pieces from those of the opponent; this situation was intended as an invitation to peace rather than a struggle, but the game thus played clearly became another.

On the other hand, the contribution of Takako Saito has been particularly original and varied, for instance with her unusual cubic chessmen indicated later on; of the same artist we can point out extraordinary later models such as *See-Saw Chess Set* of 1988, in which among other things the chessboard lines are tilting, and the *Linear Chess Set* of 1989 in which the normal Staunton chessmen are not placed on the 8x8 chessboard, but on an extraordinary 1x64 board. Of course, playing a game there will not be immediate, but not as impossible as in the project by Yoko Ono.

Project RS & A Ltd.

From January to April 2009 an important chess show was held in the Art Museum of Reykjavík. Perhaps more than in other cases, on that occasion it was sought to dissect the connections between chess and the human sciences involved, starting with psychology. The exhibition curators, and the related bilingual – Icelandic and English – catalogue (Sanders 2009), were Mark Sanders, Julia Royse and Larry List. List also wrote the most extensive part that in the book precedes the actual catalogue of the thirty-two series on display; it appears as a valid attempt to link the new artistic tendencies to the creation of chess pieces, connecting them, if possible, with the best known

experiments of the past. That exhibition was not an isolated episode: the curators Sanders and Royse had founded (using the acronym *RS & A Ltd*, together with Francesca Amfitheatrof) a company based in London.

In particular, the three partners of the company are carrying out the project of commissioning chessmen series to the most famous contemporary artists; fifteen of the thirty-two sets presented at the Reykjavík exhibition were derived from that project. Other exhibitions of the same kind were held in London, New York, Moscow and Dublin. Shortly thereafter, an exhibition on a somewhat reduced scale (with only six works of the project) was organized in Milan in 2010, coinciding with the *Design Week*. Also in association with *RS & A Ltd*, in 2011 an exhibition was held in Australia organized by The University of Queensland Art Museum, followed by an exhibition, on the same basis, and with a sixteenth set added, in the well-known Saatchi Gallery in London (September-October 2012).

As could be expected, these works are very different from each other, very different from the Staunton chess set, and often also different from what a "modern" project might suggest (I mean, one that takes into account the practical needs of the game): a less extravagant chess set, such as Barbara Kruger's *Untitled* of 2006, is an exception; the model by Alastair Mackie of chessmen with a cylindrical profile will be encountered later on.

Chessmen influenced by industrial design

Chess sets have enjoyed a particular reputation over the centuries and even in the industrial era they have often been used for advertising in the most diverse sectors, and also for the production of special series by companies that had established themselves in large-scale industrial production of different objects. The examples are many and can be grouped by material.

Perhaps the material that was used first and longer is porcelain, or even ceramics. Several English factories with famous names have produced particular chess sets for centuries, beginning with the ceramic one inspired by Macbeth designed by John Flaxman in 1783 for Joshiah Wedgwood (Williams 2001, pp. 56-58). In Germany, the royal manufacture of Berlin, KPM (Dean-Brady 2010, pp. 72-73), and above all the famous one of Meissen, the oldest porcelain factory in Europe, have been active in the field; from the latter (which had produced well-known chess sets since the 18th century) several chess sets designed by Max Esser came out in the first half of the 20th century, including the well-known ones with marine animals of 1925 (Dean-Brady 2010, p. 128). Also from the oldest French porcelain factory, that of Sèvres, are known chess series, such as that of 1923 attributed to Suzanne Lalique-Haviland (Wichmann 1964, Fig. 191). Even the most famous manufacturers

of glassware have taken part and we can mention chessmen models produced in France by Lalique (Schafroth 2002, pp. 150-151), in Germany by Villeroy & Boch, in Belgium by Val Saint Lambert (Dean-Brady 2010, p. 250). The examples can be multiplied by moving to other companies and other materials, to the steel ball bearings of the Swedish SKF set, or to the aluminium of Columbia Aluminum used in the set designed by Scott Wolfe to be distributed as a gift from the company.

The presence of chessmen series produced – especially for advertising and exhibition – from these and other important factories appears in our eyes a hardly meaningful by-product of a challenge between giants. However, these are environments where mass production of objects is conceived with updated design techniques; also the proposal of new models for chessmen is usually presented without too many additional "artistic" decorations; therefore, they may better offer guidelines to improve the use (or at least the usability) of new models in actual play. It remains to search the direct impact of design techniques, specifically applied to the production of chess sets.

Play it by Trust – White Chess Set by Yoko Ono, 1966.

(Sanders 2009, p. 29)

Untitled by Barbara Kruger, 2006.

(Sanders 2009, p. 81)

Swedish Chess Set by SKF, 20th century.

(Dean-Brady 2010, p. 248.)

Columbia Aluminum Chess Set, by Scott Wolfe, 1983.

(Schafroth 2002, p. 156)

Chess Set by Villeroy & Boch, c1975-1992.

(Schafroth 2002, p. 152)

Industrial design and prismatic chessmen

The Bauhaus chess set

It is necessary to focus our attention into one chess set, which was born in a renowned environment of innovative design, nothing less than the Bauhaus. The relevance of this particular project still appears great, to such an extent as to deserve a deep examination, more detailed than usually found in the corresponding literature. Actually, it may be considered as the first ever chess set born out of a "modern" approach of industrial design. It will soon be a century old, but it keeps its ideal value today, and new copies are still on sale.

A short introduction is necessary on its creator, Josef Hartwig, and the Bauhaus environment. The easiest item with which to become familiar is just the Bauhaus itself: of course, the activity of the Bauhaus school has left many traces, and its pioneering character has been acknowledged by many historians. Some info is available in any reference work on the history of the fine arts, and of architecture in particular; it is possible to refer to a big bookcatalogue where many Bauhaus products are shown and commented on (Thöner 2009).

We are only interested here in the production of objects for common use, designed at the Bauhaus. Nowadays, the industrial design of any product is the result of a deep preliminary study; several aspects are considered together, how pleasant is its shape, how effective it works in actual practice. This modern approach was already present at the Bauhaus. Moreover, they devoted a special attention to discover first of all the very essence of the object, its *Wesen*, as they called it³ (and this research can even be made derive from the philosophy of Immanuel Kant). Except for individual objects made to satisfy a given customer, it may be surprising to realise that very few of the models developed at the Bauhaus reached the market; one of the chess sets designed by Hartwig was among the few items that achieved a serial production, even if as a rather limited run.

The relative success of this production induces to better study both the author and the design. Josef Hartwig (1880-1955) was a master stone-cutter in charge of coaching disciples on the practical techniques used in carving wood and stone objects. Certainly, he did not belong to the leaders of the Bauhaus group. The design of the chess set has not been his only creation, but the remaining ones have not been enough to give him a long-lasting fame. In any case, the association of Hartwig with the Bauhaus is a kind of guarantee,

³ (Thöner 2009) Peter Bernhard, Konstruktivismus und "Wesenforschung" im Design. Das Bauhus-Schachspiel. pp. 185-190.

which in itself justifies the attention devoted to the chess set under examination. Thanks also to the Bauhaus special environment, Hartwig started his project on a totally new basis: prism parts with ways to somehow directly indicate both the power of the particular piece and its move faculty.

The fact that the Bauhaus chess set reached the production stage does not mean that Josef Hartwig designed one object on paper, then built one prototype of it, then cared for its serial production. Actually, he designed more than a dozen sets and produced real wood specimens of some of them. There are many books devoted to the shape of the various chess sets that have been proposed in the past and one or another of the Bauhaus chess sets is often shown and commented on. Sometimes, we find mentioned that Hartwig proposed a given model in 1922 or 1923 and a modified final version in 1924. Most of the more recent descriptions agree with the presence of two subsequent projects, even if the former of the two sets shown may be different.

In the books that recently circulate among chess collectors, one of the most distinguished and influential authors is Larry List; in addition to books written or edited by him, others have his contribution as a fundamental part. Now, in one of his more recent texts he devotes a page (actually, four with the illustrations) to the Bauhaus chess set, and quotes the high number of seven different variations⁴. It has been rather hard to find where this information comes from.

The best way to solve our problem would be to visit the Bauhaus Museum in Berlin and its Library. We find however additional problems: due to works in progress, the Museum is partly closed and the Library is not open to the public for several years. From contacts with the Museum, we find however one further name of a contributing author, Anne Bobzin: she worked in the Museum for a dissertation and authored a booklet (Bobzin 2006) published by the Museum itself. This apparently is the source of the "seven models": we looked for different models of the Bauhaus chess sets, and here they are.

We find that more models did exist; five or six are actually shown in the booklet; however, there is solid evidence for further models, because these items have been labelled with Roman numbers, scattered from Hartwig I to Hartwig XVI. Thus, we were looking for seven chess sets and we should instead find at least sixteen of them. Actually, it is likely that no further models were designed after Hartwig XVI, the only one to reach a serial production. However, it is not an easy task to reconstruct exactly how many of the sixteen models reached the prototype stage and did not remain just on paper. We

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 $^{^4}$ (McClain 2017). Chapter 10. Larry List, The 20^{th} Century. p. 184.

should thus ascertain how many different models have been designed on paper, how many of them reached the prototype stage, how many of them can still be found (considering both real wood specimens and those shown in photos of the time). It would be a hard challenge for any chess collector to exhibit all sixteen items in his own collection.

A sure chronological series appears impossible to find, but we can take some advantage from a kind of logical development from a given model to the following ones. This requires highlighting the constant patterns in the succession of the various designs. Other artists have proposed full series of models for chessmen, which are very different and can hardly be recognized as due to the same author. In examining the various designs devised by Hartwig for his chess sets, we can instead use a suitable guideline: the difference between his models only consisted in the modification of one or a few features or parts of previously suggested models, whereas most of the pieces remained unchanged. One has to remember that the given shapes did not only have an aesthetic aim, but were proposed so that they could somehow indicate the move faculty of the given piece.

Probably the most evident of all these changes involved the pedestal. It seems that all the pieces were first devised as standing on a pedestal, which only for the King had the same square section as the body itself of the piece; it was more or less larger than the body of the other pieces. After a somewhat intermediate stage, in which the pedestal still existed but assumed the same square section of the body of the given major piece and was absent for the Pawns, all pedestals were finally abolished and all the chessmen of the last models were directly placed on the chessboard with their body.

Other traceable modifications concern the way used for suggesting the possible moves of the given piece. A remarkable change in this regard was applied to the Bishops: in order to suggest their diagonal moves, they were initially shaped in the form a square pyramid (standing on a slightly larger square pedestal). This shape (BA) apparently had a couple of shortcomings, explaining its disappearance in later models: first, no other pyramid was encountered on the board, and the tip of a pyramid is not the best shape to be handled by players during a game. The following selection was for a kind of prism with an X-shaped cross section; this was consistently adopted in following models, first with its square pedestal (BB), then without it and thus standing on the cross section of its body (BZ) – and not on two parallel edges, as sometimes shown in illustrations.

For the Queen the situation has been more complex. Initially, the body of the Queen had a circular section, and only later on this cylinder changed into a square prism identical to the body of the King. (Obviously, the contrast of

the square pedestal was more evident in company with the round body.) More complex has been the situation with the head of the same Queen. In order to suggest her moves in any direction, a spherical head was initially introduced. The two spheres of the Queens' heads were the only circular items on the board. Now, a special aim of all these chessmen was to better comply with the squares of the board, and thus avoiding the popular circular sections – finding a sphere in this chess set could thus appear as a mismatch. Not too much surprisingly, we thus find Bauhaus chess sets in which the head of the Queens had no longer a spherical shape; instead, an X-shaped prism was selected, shorter but similar to the body of the Bishops; they were placed so that four directions could be indicated by the body and four additional directions by the head. The complexity mentioned derives from the fact that in this case one solution did not displace the other; the spheres do appear both at the beginning and at the end. (On the other hand, it seems that we can exclude any model for the Queen with an X-shaped head on a cylindrical body.) In conclusion, we have to distinguish four shapes for the Queen: cylindrical body topped by a sphere (QA), square prism topped by a sphere (QB), square prism topped by a cross-section figure (QC), cube topped by a sphere (QZ).

Kings, Rooks and Pawns could only be distinguished by the presence and the kind of their pedestals, if any; however, only in the later models they had a cubic shape; in the former ones they were square prisms with a somewhat longer height than the base side.

The remaining piece is the Knight and this we find designed in several different shapes, before arriving at its "final" form. Actually, the differences among the various specimens are not great, but at the same time they are bigger than the change of just a part, as seen for the other pieces. Earlier on, several different solutions were devised with the piece composed of three parts; the base commonly was the square pedestal, as for the other pieces, and this represented the first third of the piece. The second, or intermediate, part was a kind of square stem (or neck of the horse, in case); it did not stand on the centre of the pedestal, but on one of its four corners, with one of its edges in common with that of the pedestal. This intermediate part was somewhat longer than the other two parts in the first projects, but then the three parts had usually the same height. What changed the most was the upper part, the "head of the horse". Initially it was a square prism placed horizontally on top of the "neck" (NA); then it changed into an L-shaped part: moreover, this new "head" could be placed on top of the "neck" either touching it with its end (NB) or with its centre (NC). The following final form is easier to make and to understand. We take a cube (or a prism very similar to a cube); we divide

it into two parts; from each of the two parts, we cut a quadrant off and then we superimpose the two "half-pieces" obtained, rotated by 180° (NZ).

In the Figure below, these different pieces are outlined. It is possible to summarise the final situation as follows. A set of sixteen chessmen is ultimately obtained starting with eight cubes of a smaller dimension for the Pawns and eight a little taller for the major pieces. The smaller cubes are left unchanged. Out of the taller ones, two remain as such and are the Rooks; four are somewhat carved or worked by cutting off some parts and thus provide the two Knights and the two Bishops; on the top of the two remaining ones the corresponding Queen's and King's heads are applied, a rotated smaller cube for the King, a sphere (instead of a previous crossed prism) for the Queen.

As stated before, a problem can be to find at least sixteen similar chess sets starting with those that have been kept. However, as shown in the previous discussion, we are not faced by really different sets but with one individual chess set in which one or another relatively small part is changed. If all the changes observed were separately introduced, so that we obtain the greatest number of different sets, two Kings, four Queens, three Rooks, three Bishops, four Knights, three Pawns, would offer almost one thousand possible combinations. Thus, our task would be to eliminate most of these combinations, for instance no model with pyramidal Bishops together with cubic Pawns, and so on.

A completely reliable reconstruction is not easy to find. In any case, out of the sixteen models, three appear as the most significant. Obviously, Hartwig I, be it only for its historical value: it was the prototype and it was made known to the international public through "The Imagery of Chess". Obviously, Hartwig XVI, the final model, the only one to reach a serial production.

Among the fourteen intermediate projects, outstanding appears to be Hartwig XIV, which also became familiar to a large public, being among the chess sets exposed in Leipzig at the 14th Chess Olympiad of 1960 (Grätz 1961). It may even be considered more coherent than the other models, due to the absence of the "unrelated" sphere on the Queens and the partial presence of the pedestals, only absent for the pawns. The Bishops, in particular, take some advantage from the presence of their pedestal (without it, it has occurred more than once that they have been placed on the chessboard standing on the lateral edges).

Outline of the evolution of the Bauhaus model.

Bauhaus Modell I, by Josef Hartwig, 1922.

(Modell Bauhaus 2009, p. 189)

Bauhaus Modell XVI, by Josef Hartwig, 1925.

(Holländer 2005, p. 311)

Bauhaus Modell XIV, by Josef Hartwig, 1923.

(Grätz 1961, p.70)

Further examples of chessmen with prisms and cubes

The original model from the Bauhaus had several followers of square-section chessmen. For these models, one must immediately quote an author who did not limit himself to describing the works of his colleagues: *F. Lanier Graham*. His chess set is extremely simple and consistently respects the square section of all the pieces, without the appearance of curved lines. A different but equally coherent solution was present in the chess set of *Gérard Ifert and Ellen Marx*, a year before, with indeed all the pieces in the form of regular prisms of various heights, and slits marked on top to depict their moving faculty. Of a similar kind is a set made in perspex at Huddersfield that won a Design Centre Award. Other square-section chess projects have been proposed later on, obviously always looking for a better connection with the chessboard. The *Jaeger-Chess-Set* series, created by Tom Patti in Massachusetts, is particularly enjoyable in its simplicity, using full glass for all the prismatic pieces and also for the blue chessboard, illuminated from below.

A particular field of design applied to chess is encountered in the field of architectural design, which is often called into question also as inspirer of the Staunton set itself. The idea of using models of skyscrapers for the chessmen has found several implementations: for instance, there are *Skyline Chess Sets* on sale and one can even choose between London or New York⁵. Most explicit is the architectural appeal in the *Calatrava Chess* designed by Thomas Perrone; for the pieces he uses nothing less than scale models of the most famous buildings designed by Santiago Calatrava. The manufacturing technique used is 3D printing, very promising even in this domain.

Some recent results of the attempt to design new chessmen in the architects sector were presented in an exhibition at the *Jai & Jai Gallery* in Los Angeles in 2014. We often start from normal pieces, but they undergo transformations that vary from small changes to complete distortions; actually, it had not been required to the authors that their new chessmen be suitable for the game. For example, the set *Why I Do not Like Chess* by Pieterjan Ginckels appears particularly simple, apparently too much so; in it, chess screws are used that move... by screwing them. We can also mention, as another more recent example, the chess exhibited in 2016 for *Swarovski* at the Milan *Settimana del Design* by a very famous architect, Daniel Libeskind, who makes crystal and marble buildings appear on the chessboard, with Kings reminiscent of nothing less than his project of the Freedom Tower.

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⁵ https://www.regencychess.co.uk/skyline-chess-c-25_74.html

Chess Set by Lanier Graham, 1966.

(http://www.chesssetsproject.com/uploads/2014/05/Lanier4-600x516.jpg)

Chess Set by Gérard Ifert and Ellen Marx, 1965.

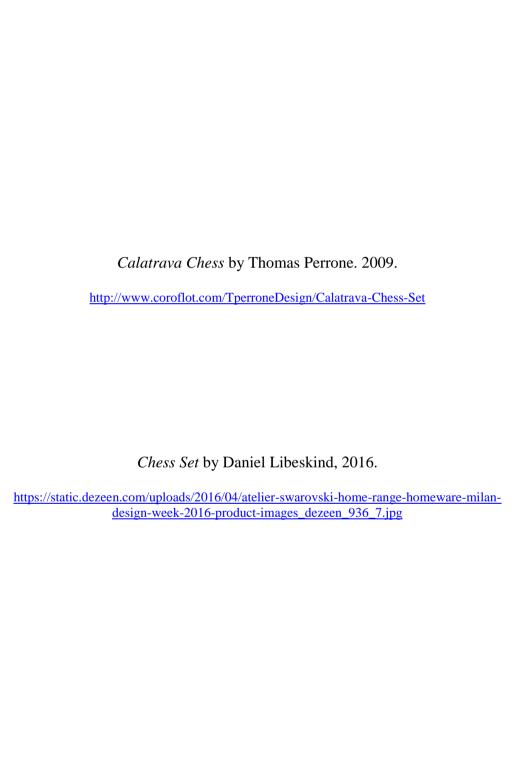
(Lanier Graham 1968, pag. 78.)

Huddersfield Chess Set, c1975.

(Golombek 1976, p. 223)

Jaeger-Chess-Set by Tom Patti, 1987.

(Siebert 1989, p. 122)

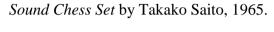


A case of further simplification of the prismatic form is represented by adopting cubes for the chess pieces. We can also find particular chess sets made up of thirty-two identical cubes, at least at the sight. It is enough to turn to the inventiveness of an experimenter in the specific field as Takako Saito: in her Sound Chess each piece emits its own sound when it is moved; in other series, even from the Sixties, other senses intervened, as in Weight Chess distinguished by weight, or Spice Chess, recognizable by smell. Another example is the recent Chess Set for the Blind by Duncan McKean of Bristol: all pieces are cubes of 5 cm, a size just under that of the chess square. To distinguish these pieces, steel is used for white pieces and wood for black; also the internal magnets are of different strength, and moreover all the pieces are distinguished by marks (also recognizable to the touch) that signal the respective faculty of moving. A further example may be the Negative Space Chess Set by Stefan Gougherty; among designers, the fondness for a cube as the most suitable basis for the chessmen continues, and Josef Hartwig happens not to have been a dreamer without followers.

The examples cited are only a part of square-section chessmen designed with a prismatic or even a cubic shape. There is a further possibility: pieces, with a pyramidal profile in which the square section gradually decreases with height. For examples more directly related to architecture we can examine the *Juřica* series designed by Jaroslav Juřica as a tribute to the architect Pavel Janák, member of Czech cubism. Also solutions in which the other pieces have a profile basically different from the pyramidal Pawns have been proposed; an example is based on the use of regular polyhedra: the *Platonic Chess Set* series created in 2005 by Patricia Tower.

A secondary objective, but pursued rather frequently, has been the achievement of compactness no more, or not only, in the individual piece but in the whole series. That is, the focus shifts from greater functionality in the game to greater convenience in transporting and storing pieces. As in a few other cases (including the same Bauhaus chess set), the project extends to the chessmen's container: all thirty-two pieces can be interlocked and placed in close contact with each other in a special box⁶.

⁶ https://www.moma.org/collection/works/4746



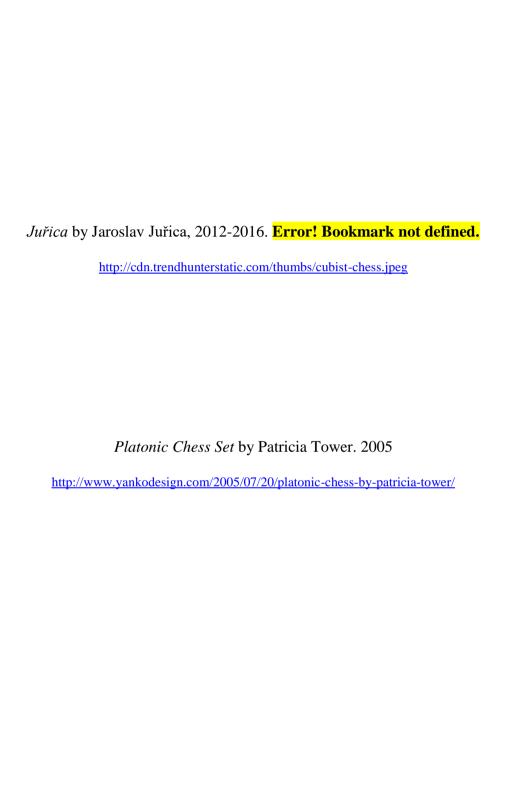
(McClain 2017, p. 201)

Chess Set for the Blind by Duncan McKean, 2013.

https://www.behance.net/gallery/34005788/Chess-Set

Negative Space Chess Set by Stefan Gougherty, c2013.

(https://www.dezeen.com/2013/11/01/most-unusual-chess-set-by-stefan-gougherty/)



In some cases, the pieces can be interlocked so as to obtain a compact solid, often in the form of a parallelepiped, with the whole series. This was obtained, for instance, with the prismatic set designed by F. Lanier Graham, already seen. And it is a fashion that continues: just look at the *Scaccomatto*, multi-original edition of Franco Rocco, advertised in 1993 in the back covers of several issues of the chess journal *L'Italia Scacchistica*.

Still on the subject of compactness, further progress can be achieved by using hollow pieces. Clearly part of the stability of the single piece is given up; however, the manner in which the pieces can be made to disappear inside each other after the game is impressive. An instructive example of this kind (which however used both circular and square sections) is Charles Perry's 1967 chessmen obtained from a nickel-plated brass tube, with a square or circular cross-section for the two fields. All the pieces fall into two small tubes: the King first is fitted with the Queen in order to double the length and the remaining pieces can be inserted inside these two unusual containers, one as a cylinder, one as a square prism. A similar project was realized for the 1972 World Chess Championship, using circular sections only.

In spite of the undoubted aesthetic advantages of constructions based on a square section and therefore more coherent with the chessboard, all these pieces do not seem particularly suitable for the practice of the game. To a layman (and to a chess player!) the reason why designers love so much square prisms and cubes in this domain is not apparent.

Scaccomatto, by Franco Rocco, c1992.

(L'Italia Scacchistica, Gennaio 1993, back cover)

Chess Set by Charles Perry, 1967.

(Lanier Graham 1968, p. 82)

Chessmen with rotational symmetry

Lathe turning and cylindrical chessmen

Most features in the shape of chessmen did not originate from theoretical studies. Of course, pieces with a circular section are much more frequent, because they are easier to grasp and to move on the board. The image of a pin or a little skittle with a basis and a grip can at once be accepted for practical use: the problem will only be how to distinguish such "Pawns" from the five different pieces with greater power. Let us try to design suitable chessmen, leaving the chessboard aside for now. In a first approximation, we have to select as many as possible pieces with a similar shape, in various heights and diameters. It is best to start with Pawns, which represent half of the pieces into play: in the initial position, a Pawn is eight times more frequent than either a King or a Queen, four times as a Bishop, a Knight or a Rook. Once we have forgotten the squares on which we must move, we soon find a suitable shape for the Pawn. Nobody would think of a Pawn with a square section, just as nobody would think of a prismatic skittle, a square pin on an Italian billiard table, or a cubic ball to play soccer!

The same shape of a skittle can serve more than as an analogy. It may seem strange, but a series that has skittles of different sizes as a basis for the various chessmen has really been proposed, even if it, the 32 Peg Dolls, then leaves open the way how to finish the pieces – only sold in the raw state – in order to make them recognizable. Although extremely simple and aimed at DIY enthusiasts, these clearly "poor" objects have resisted for many years in the Etsy catalogue of objects on sale in the US market. Perhaps the simplest way to complete the job would be to apply on the top of these pieces the same symbols that are now used in books and journals for writing the moves; in so doing, one may be tempted to proceed even farther, towards chessmen in the form of simple disks, as is commonly the case in Chinese chess and in several kinds of pocket chess sets.

The pin shape for the Pawns – with its many reasonable variations – can be considered as the arrival point of countless empirical attempts to reach a form at the same time nice enough and convenient for use; in short, one attains this automatically, after discarding other less suitable alternatives. This has be seen as an arrival point, but it can become the starting point for any designer of a new model for chessmen. A designer of today will find interesting variations in the profile of these Pawns and, above all, will have the task of designing the other pieces so that they are different enough from each other and at the same time maintain an apparent similarity with the "initial" profile of the Pawns.

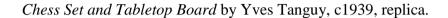
32 Peg Dolls

 $\underline{https://img0.etsystatic.com/039/0/5309241/il_fullxfull.509453212_lqi5.jpg}$

The discrimination between Knight and Bishop required special tricks even in the Middle Ages, when they were similar truncated-cone pieces that could only be distinguished by the superior bulge, with one tip for the Knighthorse, two for the Bishop-elephant. A general additional objective to be achieved would be to simplify the production processing; in particular, to maximize the use of the lathe, without the need for further carving. Also for Knights, chessmen have existed in the past with an abstract form, and cylindrical symmetry; perhaps it is from these that we should start again to "move forward"; in particular, the design presented in the *Encyclopédie méthodique* was of this type. The criterion for distinguishing the Knight from the Bishop was then that only the latter was similar to Queen and Pawn, and of intermediate height.

In the past, chess players have used many different models of chessmen with a circular section, which could be produced easily by lathe turning. There are not so many models developed by artists and designers. To any architect, the obvious reference for similar pieces is a balauster, and the possible variation on this theme are many, but mostly insignificant. For models proposed by architects, the call of skyscrapers (as encountered above for prismatic pieces) has been clearly stronger than that of balausters. On the other hand, when a designer or an artist has approached the question of pieces with a circular section, the search for original proposals has mainly led to cylindrical pieces. Basically cylindrical have been for instance the chess sets designed by such renowned artists as Tanguy and Vasarely. The same trend is continuing to more recent times, for instance with Fancy's *The King's Men*, or even in the *Chess Board* by Alastair Mackie, within the *RS & A Ltd* group.

Considering the relatively high frequency of cylindrical profiles, it would be surprising if nobody had tried to design a chess set with a similar guideline as the Bauhaus set, but with a cylinder as a basis instead of a cube. Something of this kind can only seldom be found. An example may be the chess set designed by Vilmos Huszár: a construction plan was ready in 1921, when the Bauhaus set did not yet exist and aluminium was a fashionable material, but it seems that its implementation only occurred in 1974. On the other hand, the cylindrical profile can easily be enlivened with section changes, such as for instance in the set by Jörn Pfab



(List 2005, p. 64)

Chess Set and Board by Victor Vasarely, c1970.

(Zug 1988, p. 90)

The King's Men Cess Set (on sale by Fancy in 2018).

 $\frac{(https://fancy.com/things/347712672847893129/The-King\%E2\%80\%99s-Men-Chess-Set?utm=userlist)}{Set?utm=userlist)}$

Amorphous Organic by Alastair Mackie, 2008.

(Sanders 2009, p. 111)

Chess Set by Vilmos Huszár 1921-1974.

(Holländer 2005, p. 316)

Chess Set by Jörn Pfab, 1976.

(Himmelheber 1988, p. 60)

If the simpler chess sets of the balauster type have not been much loved by artists and designers, they have nevertheless represented the majority of chessmen devised by artisans, without ever needing any deep study of design. Essentially, one had just to continue a tradition that had lasted for centuries, of course with several variations in different places and times. The problem how to differentiate chessmen obtained only by lathe turning has occurred several times and has been solved in different ways. As examples we can consider a set, *Hamburg um 1925*, produced in Hamburg around 1925. Going to more recent times, an interesting example is the Shenandoah set by O.L. Harvey of 1964; its interest mainly derives from the fact that it was produced after another twenty-two similar sets and only with this twenty-third version the author acknowledged having solved his problem – which now is ours too - to produce a complete set without any figurative element and supplying homogeneous pieces, at the same time quite distinguishable. If we want to make a complete series on the lathe, including the Knight, we can resort to workmanship and give up keeping for that single piece a complete cylindrical symmetry; an example of this kind can be obtained with suitable movements during turning, as indicated for instance in the chess set described in 2000 by Shopsmith Inc^7 .

Some attempts of producing original models in this direction do exist, but new designs are seldom proposed. We can observe a couple of examples below, but the choice is not big. One is *Cosmic Age* originally produced in Italy by ANRI, after the design of Arthur Elliot 1958, with many replicas, and the second is *The Copper/Steel Contemporary*, in which the two metals are used for white and black chessmen respectively. If a designer wishes to follow this kind of models, inspiration can maybe more easily arise from current models of Islamic chessmen, such as the Algerian or the Indian types shown below; they are just two examples among many others, from various countries.

More than once, we have encountered the problem of how the various pieces can be distinguished from one another; indeed, it basically is a problem that admits more solutions, such that the designer can even be found spoilt for choice. One can reasonably suppose that our designer will soon be able to obtain a prototype to his full satisfaction. Fortunately enough, it is now possible to find such "new" chess sets by the dozens, and a recent contribution derives from the use of 3D-printing, which opens the field to more designers at the amateur level. This activity has been reviewed in many books and articles. To move forward there are still two main obstacles to overcome.

 $^{^{7}\ \}underline{http://www.shopsmithhandson.com/archives/nov_dec00/html/chess_2.htm}$

A difficult obstacle will remain to convince others of the validity of the proposal, even up to the top of the chess organizations. This obstacle will remain insuperable while Staunton chessmen maintain the present dominance; in the meantime, it seems useful to continue the search for "valid" solutions. The other obstacle is to make the shape of the pieces possibly better compatible with the squares of the board on which they must move. Since a convincing prototype can better be obtained by designing chessmen with a circular section, it remains to work on the chessboard with appropriate modifications.

Modified chessboards

In the contrast between a circular section of the pieces and the squares of the chessboard, it is the latter who may better give up; in fact, among the sets proposed in recent years there are not a few that insert circles to indicate the positions of the pieces on the board. The problem of how to pass from a square to the corresponding circular "square" has been solved in several ways; some of the examples indicated below are also shown in an article on the web⁸.

Clearly, the simplest solution leaves the game board unaltered: you can draw a chessboard of 8x8 circles – tangent or close to each other – without showing the square grid (which would be 7x7 if one joins the centres of these circles), as in the *Playmore chess* by Fredrik Lund; alternatively, the circles in question can be traced inside the squares of the chessboard, with a diameter equal to the side of the square, or a little smaller.

The solution in which we allow ourselves to raise or lower these circles on the remainder of the board is more complex. There are also solutions (which we can neglect) with several planes involved, such as in the *3D Chess board* by Ji Lee, where the squares are present on various levels with a chessboard that looks like a double peak of a rocky mountain.

The main cases are two: the circles where the pieces are placed are located on the lowest level of the chessboard and are separated by reliefs that form mountain ranges with the peaks that would correspond to the intersections of the normal chessboard. Vice versa, we may have cavities in correspondence to such intersections and the circles raised, corresponding to the higher plane of the new chessboard. An example of the second type, even if the height difference is minimal here, may be the *Rubber chess set* of Büro für Form.

⁸ http://www.beautifullife.info/industrial-design/top-15-original-chess-sets/

Hamburg um 1925, c1925.

(Himmelheber-Schneider 1988, p. 70)

Shenandoah by O.L. Harvey, 1964.

(Loranth 1966, p. 11)

Space Age by Arthur Elliot and ANRI, 1958.

(http://www.schachmuseum.com/)

The Copper/Steel Contemporary

http://www.beautifullife.info/industrial-design/top-15-original-chess-sets/

Islamic Chess Set from Algeria, 19th century.

(Keats 1985, p. 46)

Islamic Chess Set from India, 19th century 2nd half.

(Strouhal 1996, p.250)

Together with what has been seen so far, the possibility of innovation hardly has an end. Always looking for a greater conformity between pieces and chessboard, one can reach a chessboard in which the squares are adapted to the pieces by even quitting the flatness of the board.

In an extreme case, one could propose a chessboard with all its squares constituted by hemispherical cavities in which to insert pieces with the same hemispherical base. Even for an unusual idea of this kind we can find prototypes already made, such as the chessmen *Chess Set and Board*, which Julien Levy, produced in 1944 using plaster, and eggshells as moulds, and a corresponding "chessboard" either wooden with hemispherical cavities, or cavities impromptu etched in the sand, as it originally happened.

Even without reaching a hemisphere, concave and convex surfaces have actually been proposed, for chessboard and for chessmen respectively. Perhaps the most appropriate proposal, to be taken into consideration – also to look for further developments – is that of *Wobble chess* set by Adin Mumma in which the pieces appear free to swing around the vertical. In other solutions, pieces with a circular section are placed in cavities with a circular section as well, such as *Onda chess set* by Alvaro Uribe; in this case, the brightly coloured polypropylene pieces have a magnetized insert that stabilizes their position on the metal board. The *Celestial Chess Set* by Jerod Hugghins may represent another example, not too different, even if in this case the pieces are inserted into the holes of a curved chessboard.

Among these types, one more original than usual is the 2008 *Chess set for Tesla* by Paul Fryer that uses vacuum tubes for the pieces, to be inserted into the corresponding clogs, with the pins of the contacts. As sets had been produced for mechanics enthusiasts, using bolts and the like, with this model even the nostalgic of old electronics could be satisfied, although it will not be easy for them to use the set in a blitz game – provided they find one of the seven sets that seem to have been produced altogether.

On closer inspection, today the inventiveness of the designers has already exceeded our expectations; the 2017 *Sphere Chess Board* by Ben Myers makes some fairly common pieces move on a chessboard that corresponds to the surface of a sphere. A comparable "object", *The World is Flat*, had been exposed by Laurel Consuelo Broughton in the chess-and-architecture exhibition held in Los Angeles Jai & Jai Gallery, but a rather similar idea was already present in the *Chessball* by Milan Mikuláštík's, with chessmen sticking to a soccer ball via Velcro. In these cases, however, we end up arriving at a game different from chess: in particular, the absence of the edges of the chessboard changes the strength of the various chessmen.

For the future of chess, we are looking for something... less advanced! Disregarding any spherical board, already "surpassing" the flat chessboard with hollows and hills is something that can be enjoyed more by designers than by chess players. Judging from the results, just creating "suitable" chessmen appears to be a hard enough task for designers of these days.

Playmore chess by Fredrik Lund.

http://creoflick.net/images/Playmore-chess-5913.jpg

Rubber chess set of Büro für Form, 2006.

http://www.buerofuerform.de/work/accessoires/view/article/playmate.html

Wobble chess set by Adin Mumma.

http://www.adinmumma.com/; https://images-na.ssl-images-amazon.com/images/I/71uz3nYCdzL. SY355 .jpg

Onda chess set by Alvaro Uribe.

http://creoflick.net/images/Onda-chess-set-5912.jpg

Celestial Chess Set by Jerod Hugghins, 2008.

http://www.designerblog.it/post/6746/celestial-chess-set

The World is Flat, by Laurel Consuelo Broughton, 2014.

(https://www.jainjai.com/chess/)

Chessball by Milan Mikuláštík, 1998.

 $\label{lem:commons} $$ $$ (\underline{https://commons.wikimedia.org/wiki/File:Milan_mikulastik_chessball_01.jpg?use-\underline{lang=en}) $$$

Conclusions

There are many models of artistic chessmen developed for collectors. Our attention has been focused on items deriving from artistic or industrial milieus with however the intention to provide sets that could simply be used in actual play. It must be recognized that sometimes the proposals from these environments are distinguished individually by some innovative feature, as this is particularly evident in the case of the industrial design, to begin with the Bauhaus model.

The examples discussed here have been collected in groups, according to guidelines that keep various types of projects within separate sections. Most specimens come from the 20th century, with only a few older or more recent. Actually, the most fruitful time for new proposals in this domain seems to have occurred a few decades before and after the middle of the 20th century. It is not easy, nor frequent, to join the attempts of the artists with those of the industrial designers, and the result is that unfortunately the two directions tend to diverge.

The general framework, considering also the proposals of other origins, is still rather disappointing; for now, it seems that for chess the same situation is valid, as was indicated (Munari 1994) many years ago by Bruno Munari for the armchairs, taken as an example for a correct design.

Si guarda una poltrona come se fosse una scultura, si confonde il design con lo styling e cioè la progettazione logica con lo svolazzo estetico e le forme ispirate liricamente. Da questo punto di vista è facile passare alla proposta di "design artistico" fatta da artisti, qualcosa che vuol essere antidesign, progetti di oggetti d'uso fatti con molta fantasia e con niente tecnica.

(One looks at an armchair as if it were a sculpture, one confuses the design with the styling; namely, the logical design with the aesthetic flourish and the lyrically inspired shapes. From this point of view it is easy to switch to the idea of "artistic design" made by artists, something that wants to be "antidesign", projects of objects for everyday usage made with much imagination and with no technique.)

The expression "no technique" should be understood here as inadequate or insufficient consideration of the potential practical use of the object designed, a chess set in our case.

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