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THE CHESS ANALOGY. WITTGENSTEIN AND SAUSSURE COMPARED

Abstract: In the present article, I wish to highlight the philosophical and anthropological importance of the analogy between chess and language. Although in different ways, both Wittgenstein and Saussure perform the same inversion: it is not language to be interpreted as the verbal version of chess, but it is chess that represents a specific form of verbal technique. According to Saussure, the analogy works only if it cuts itself off from the logical-normative character usually associated to the game. Wittgenstein claims that the arbitrariness of mathematical, chess, and language rules is intertwined with the multiplicity of the forms of use. In the final part of the article, I try to analyse the difficulty, experienced by Wittgenstein and Saussure, in describing the historical origin of chess rules.

Keywords: Chess, History, Institution, Use, Wittgenstein

1. A double-edged sword?

The analogy between language and chess is an inevitable subject for any introduction to Wittgenstein and Saussure. Such analogy, however, casts a shadow on both the philosopher and the linguist. A suspicion hovers over Wittgenstein: the comparison between language games and chess could be the sign of what Harris (2010: 259) calls the "ghost of logical form" – the idea, dating back to the *Tractatus* – of a language based on the invariance of a permanent logical structure. As for Saussure, the shadow takes on a perspective bent which projects itself towards the future. The bishop winning the queen may in fact be seen as anticipating the formalist rationalism of what will be the European structuralism of L. Hjelmslev or of A. Greimas (Ducard 2017), inasmuch as it appears to have "une valeur pédagogique immediate mais superficielle" (Purdy 1986: 251). In either case, chess is at the same time a classic and a trick: it is a double-edged sword. Since 1950, the publication of two seminal articles (Turing 1950: 434, 460; Shannon 1950) has turned chess into a classic topic of artificial intelligence, and a testing ground for the mind/computer analogy. Since the 1940s, chess has also

taken on an ethical and political connotation that is not in the least neutral. In fact they become the exemplary case in *Theory of Games and Economic Behavior*, by J. von Neumann and O. Morgenstern (1944), that will soon become the "scientific Bible' of a radically liberalist notion of economy" (Prampolini 2010: 98, my translation).

In the present article, I wish to suggest an interpretation of this comparison which will highlight, on the contrary, the potential of such analogy. Although in different ways, Wittgenstein and Saussure¹ perform an inversion: *it is not language to be interpreted as the verbal version of chess; on the contrary, it is chess that represents a specific form of verbal technique*. Such inversion is performed in opposite and complementary ways. Wittgenstein insists on the inextricable entanglement of linguistic and non-linguistic uses, leaving in the background the fundamentally historical character of our existence. Saussure, on the other hand, focuses on the systemic and historical nature of the pair language-chess, while the interweaving of word and other forms of human praxis is left against the backdrop. In what is still the only monograph devoted to a comparative discussion of Wittgenstein and Saussure, Harris (1988: 87) focuses on chess to rub salt in the wound:

The idea that the structure of a linguistic system is comparable to the structure of a game [...] brings in its train a certain number of problems [...] concerning variation and change. Someone playing a game of chess knows that the game has fixed rules [...]. But is this true of someone speaking English?

In this view, Wittgenstein prevents the emergence of the problem, while Saussure faces it through the "draconian" (*ibidem*) division between the synchronic and diachronic points of view on language. As we will see in section 4, such concerns are not unsubstantiated. They should not, however, be ascribed to the language/

¹ Given their age difference, Saussure did not have the chance to read Wittgenstein's work. It is possible, however, that the philosopher had the opportunity to read some, possibly second-hand, work by the linguist. As Harris (1988: 1) has pointed out, the English translator of the *Tractatus*, C.K. Ogden, had read the *CLG*. Moreover, in the book he co-authored with Richards in 1923, Saussure is consistently quoted (Ogden, Richards, 1923: 4 and ff., 232) and criticised for being *little referentialist* (Joseph, 2004: 75). Wittgenstein, in turn, quotes explicitly Ogden and Richards' book (*L* 30-32: 9) to criticise it precisely for being *referentialist*. Furthermore, there is a second – albeit minor – short circuit. In the months preceding the outburst of the chess metaphor, Wittgenstein discusses in depth the arguments of a scholar of geometry, Johannes Hjelmslev, the father of Louis Hjelmslev, one of the most well-known continuators of Saussure's work (for a detailed analysis: Mazzeo 1999; 2001). The discussion about geometry and chess will overlap on more than one occasion in a series of recurring examples (see for instance *WWK*: 126; *PG*: 198).

chess analogy. On the contrary, had the two authors fully explored that path, they would have probably addressed some critical points of their respective positions.

Firstly, I would like to bring into focus the main issue at stake here. Let's imagine we are witnessing a criminal trial in which an authoritative commentator as Harris has taken up the role of public prosecutor. The prosecutor urges: in Wittgenstein the example is a vestige of the *Tractatus* since "the whole point of chess analogy is that the rules do determine in advance all the possible moves" (ibid.: 91). In that regard, there are some who have used the game in order to explain the structure of language following Wittgenstein's first work (Rosso 1976: xxii), and to emphasise the proximity with Saussure (Glock 1996: 68). Chess is the paradigm of Sprachspiel, but in so doing the opportunity to understand the linguistic and practical innovations which characterise the human world is lost. At times, Wittgenstein is numbered without hesitation among the "philosophes du language ordinaire en général" (Nerlich, 1983: 17) also thanks to the chess analogy, which was quite popular within that theoretical paradigm (for a good overview: Wunderli 1981). It is again the board game what makes the Austrian philosopher appear as a pretty peculiar formalist: first he criticises Frege, then he seems to return to an "outdated version of formalism" such as J. Thomae's (Frascolla 2014: 55). The suspicion is confirmed by the place of origin of the analogy, that for Wittgenstein (but some hypothesise this is also true for Saussure: Koerner 1973: 96, n. 24; Lauer 2014: 240, n. 37) is the early twentieth-century discussion on the foundations of mathematics.

Nonetheless, more than one textual clue does not seem to coincide with such reconstructive hypothesis. In Wittgenstein, for instance, the language-chess analogy does not appear in the Tractatus and in the preparatory texts to this work. Chess does not feature in the broadest and most explicit list of language games included in the Investigations (PII: § 23). Why? I propose the following argument: the reconstructive frame of chess as the logical-formal paradigm of language games is misleading. Since the very beginning, chess analogy has a different significance. For Wittgenstein this is crucial precisely because it is a spurious case, a space where language and use overlap. Chess is not a premise of logical cleansing. On the contrary, chess is important in his philosophy of mathematics because it contributes to understand the practical and linguistic nature of our relation with numbers as well. King, pawn and bishop become anti-platonic weapons: the category of use does not give way even to the game which, at first sight, seems to be the closest to the construction of an enclosed logical space, ruled by inescapable normative laws. It is already in his early 1930s writing that the anthropological supremacy of use in chess has tended to emerge.

Harris does not spare serious charges to Saussure either, since in his view chess would encourage an all too clear-cut split between diachronic and synchronic.² Here again the issue is complex. Compared to Wittgenstein, Saussure performs a different yet equally crucial operation. The example of chess is considered the best comparison "qu'on pourrait imaginer" (CLG: 125) for a reason: it reveals the need for a distinction between two points of view on language - one synchronic, focused on the collective appreciation of the speaker, and the other diachronic, associated instead with transformations over time. To Saussure, chess appears to be an irreplaceable example because it makes visible the specific nature of that peculiar institution we call "langue" (ibid., pp. 43, 125-127, 153-154).³ Not only does such duplicity of points of view concern a methodological distinction that is necessary to linguistics for a proper study of its subject. It is also the expression of the inescapable and crucial conflict between linguist and speaker. The former can aspire to a binocular synopsis on language the latter does not aspire to at all, being well satisfied with an "analyse subjective", as he calls it in Cours (CLG: 251 and ff.), in the present tense.

2. Wittgenstein's queen: the origin of an analogy

A quick look through his *Nachlass* reveals how dear the chess metaphor is to Wittgenstein (*BBE*): there are 256 occurrences of "Schach" (*chess*), and 244 of "Schachspiel" (*chess game*). It is not possible to examine all of them here, but it may be useful to focus on the first occurrences of this comparison. Such approach offers more than one benefit: it identifies a selection criterion that is not completely arbitrary; it reveals the origin of the analogy; and it may indicate, besides a few variations, the anthropological character present since the first reference to chess.

As we have already mentioned, the *Tractatus* is not the text in which the words "Schach" and "Schachspiel" are featured for the first time. These terms appear actually in the other non-posthumous book published by Wittgenstein, *Wörterbuch für Volksschulen*, where they are included as words whose spelling students are

² He is not the only one. The chess metaphor makes it easier for Saussure to be included in the tradition according to which linguistic form precedes use and its rules (Ducard 2017: 204). Those who wish to avoid this move find themselves obliged to a U-turn and to claim, as none other than T. De Mauro's teacher does, that "the comparison between game and language [...] turns out to be utterly inaccurate" (Pagliaro 1967: 112, my translation).

³ Little is known about their actual knowledge of the game of chess. What is certain is that the library of the young Saussure included a book on chess (Joseph 2012: 146). Wittgenstein seemed to be able to play a few games: with David Pinsent in 1912 (Pinsent 1912-1914: 188) and with Johnson in 1930 (Leavis 1984: 258).

required to learn (*WV*: 30). It is well known that the choice of words for compiling the dictionary was connected to the activities related to his teaching life. (Wünsche 1985: 95-96). Only a few years later, this pedagogical tool will make its appearance in openly theoretical texts. In a note from 8 February 1930 (*BBE: item* 107, 293), later published in *Philosophical Remarks*, Wittgenstein speculates (*PB*: § 24):

What if someone played chess and, when he was mated, said, "Look, I've won, for *that* is the goal I was aiming at"? We would say that such a man simply wasn't trying to play chess, but another game; whereas Russell would have to say that if anyone plays with the pieces and is satisfied with the outcome, then he has won at chess.

The first explicitly theoretical use of the word "Schach" is a polemical one. The aim is to show the mythological character of Bertrand Russell's proposition in *Analysis of Mind*, where he suggested a psychologist reading of phenomena like the relation between expectation and fulfilment. In a slightly earlier note, the first in which the language/game analogy makes its appearance, Wittgenstein (*BBE: item* 107, 240, January 15, 1930) is more assertive: "The question 'What is a word?' is completely analogous with the question 'What is a chessman (Schachfigur)?'" (*PB*: § 18). The peremptory nature of an analogy defined as "complete" (Gustafsson 2014: 2) from the start is quite surprising. Wittgenstein returns repeatedly to this analogy, especially in his 1930 lessons. It is mentioned on May 28 in a discussion at the *Trinity Mathematical Society* (Klagge, Nordmann 2003: 374); on May in a note by Moore (*WWK*: 103) who also cites the examples in his 1930-1931 notes (*L* 30-33: 291, 312-313); on June 19 in discussions with Schlick and other representatives of the Vienna Circle (*WWK*: 103) and again in the lessons held during Easter Term (April-June 1930, *L* 30-31: 19).

What is fascinating about such "analogical outburst" is its *polyvalent* character. Chess is a remarkable anthropological case inasmuch as it testifies to the overlapping of use, words, rules, and numbers. Wittgenstein's discussion with Schlick is particularly significant. The chess metaphor is used in reference to a question concerning the philosophy of mathematics, since that is "the favourite example in every formalist's discussion".⁴ There are in fact explicit and repeated references to an article by Hermann Weyl and, later, to Frege's *Grundsetze der Arithmetik*. Wittgenstein argues that formalism in mathematics is right when it

⁴ Penco (1981: 100 n. 5). To summarise briefly the contrast between the formalists and Frege: "Formal arithmetic, which is set forth in the writings of Thomae and Heine under consideration, is the view that arithmetic is a manipulation of meaningless signs, while arithmetic with content, Frege's own standpoint, is the view according to which equations are sentences expressing thoughts" (Marion 1998: 176).

claims the autonomy of axioms: at the same time he blames Frege for having failed to fully understand the implications of such intuition. Chess, mathematics, and language are autonomous in the sense that their structure is completely "willikürlich (arbitrary)" (ibid.: 103). For this reason, it would be foolish to say: "Jetzt werde ich mir eine Königin an schaffen mit ganz furchtbaren Augen, die wird alles aus dem Feld schlagen (I will procure a Queen with terrible eyes who will eliminate you all)" (ibid.: 104). The juxtaposition of these words, however, is not meant to be reductionist. It does not imply that the structure of language is the same as that of the logical square of a chessboard. The philosopher says it explicitly: "Wenn man mich nun fragt: Wodurch unterscheidet sich die Syntax einer Sprache vom Schachspiel? So antworte ich: Durch ihre Anwendung und nur durch diese (If I am asked what it is that distinguishes the syntax of a language from the game of chess, I answer: It is its application and nothing else)" (ibidem). As he will argue further on, the field of application of "verwenden (use)" (ibid.: 105) is what makes a difference and, at the same time, what marks a common feature. Mathematics, chess, and language resemble each other in that their rules are independent from their presumably corresponding objects. At the same time, the individual forms of use of mathematics, chess, and language, are different from each other.

Wittgenstein starts speculating on the idea that the arbitrariness of (mathematical, chess, and language) rules is intertwined with the multiplicity of the forms of use. So much so that in his discussion with Schlick (and at the *Trinity Mathematical Society*: Klagge, Nordmann, 2003: 374), he pulls out an imaginary case which is patently anthropological: if there were men on Mars fighting like pawns on a chessboard, chess would be the tool used to make prophecies (June 19, 1930, *WWK*: 103). The conclusion of his argument, however, takes an unexpected turn: once the conflict about its foundation has come to an end, mathematics "will look just as it does in elementary school where the abacus is used (das Gesichtannehmen, das sie auf der Volksschule hat, wo man mit der russischen Rechenmaschine arbeitet)" (*ibid*.: 106). According to the philosopher, chess does not flaunt the same invariant logical grid as language. It rather resembles the technical devices that help children with their math. The system of rules is arbitrary, as he repeatedly argues. He even puts bluntly: "grammatical rules are arbitrary, but their application⁵ is *not*" (*L 30-31*: 58. Emphasis in original).

It is well known that for a period of time, especially in the so-called *Big Typescript*, Wittgenstein tended to refer to language as "calculus" (for a sophisticated overview: Engelmann 2013). Even when Wittgenstein insists on the close relation between calculus and chess, he seems to do so for a reason

⁵ For an overview of the multiple meanings taken up in this period by the notion of "application" in Wittgenstein, Penco (1983: 103-109) is still a fundamental source.

that is anything but reductionist. This issue emerges clearly in a discussion held on December 30, 1930. Waismann is reading a passage from Grundgesetze der Arithmetik that reinstates the comparison between chess and arithmetic: "Es würde seltsam berühren, wenn hinsichtlich einer Scachfigure der Argwohnlau würde, sie könnte eine Widerspruch enthalten (we would be upset if we suspect a chess piece contains a contradiction)" (WWK: 130). Wittgenstein's reaction is suggestive. First of all, he takes the opportunity to insist on claiming that that of "non-contradiction" should be conceived as a "regel (rule)" and not as a "Satz (principle)" (ibid.: 131). Since "ich kann durch Regeln nie das Spiel bestimmen, sondern immer nur ein Spiel (the rules do not enable me to determine the game but always and only a game)" (ibidem, emphasis in original), contradiction should be dealt with as a local occurrence. Not a logical plague, but rather an impasse that, should it happen during a chess game, would determine the decision about the introduction of a new rule (ibid.: 125). These pages address the same argument against Hilbert: the example of chess is never used to show the pervasiveness of a pre-formed normative space (either chess board or classical logic). Viceversa, the analogy is useful to emphasise the local nature of principles that are traditionally considered universal by logic, like the principle of non-contradiction. When Wittgenstein affirms the idea of game as calculus, he goes along the same lines, which means those an anthropology of mathematics. Chess resembles calculus because both are not a "Theorie (theory)" (ibid.: 134). In both cases neither a "Metaspiel (metagaming)" (ibidem), nor a metalogic are involved. Against Hilbert and Frege, Wittgenstein utilises the practical character of chess and of mathematical proof. In the analogy, it is logic that behaves like chess, not the opposite. Both can in fact change dramatically (L 30-32: 19): "I might as well question the laws of logic as the laws of chess. If I change the rules it is a different game and there is an end of it".

3. Saussure's chess: Notes on Whitney

The fragmented and less resolved legacy of Saussure does not allow an accurate dating of the first occurrences of chess analogy. This certainly appears in *L'essence double du langage (ELG:* 67), whose dating, however, is uncertain (De Mauro 2005: xiv and ff.). I thus propose to consider the use of this analogy in his 1894 *Notes pour un article sur Whitney* as a particularly old⁶ and significant case. Here as well, this choice offers the benefit of a radical interpretation of the chess

⁶ Koerner (1973: 230, 288) repeatedly seems to suggest that this could be the first occurrence of the analogy. Depecker (2012: 26-27) points out one further occurrence, dating back to the same year,

analogy. In fact a comparatively early occurrence of the analogy would ensure that one does not hide behind the subtlety (which is not less relevant) of the evolution of the thought of either one or the other. It can also show the theoretical urgency which the use of the chess analogy has tried to address since the beginning. The rough work for an article on Whitney is of great theoretical intensity precisely because of its recklessness and provisional nature. "Le langage est une institution SANS ANALOGUE" (Saussure 1894: 211): this is the key argument of the article. In contrast to other institutions, language has a biological foundation since it "est absolument localisée dans le cerveau" (*ibid*.: 212). Unlike "mode", "droit" or "système politique", however, the object of language is not the "rapports NATURELS des choses" (*ibid*.: 211). By contrast, a chiasmus occurs: "le language est une istitution pure" (*ibidem*), since the exclusive object of its natural foundation is historical facts. The statement is challenging, and it is no surprise that this is where problems arise.

In what way are linguistic facts historical? Saussure is fighting a double blindness here. Those he calls "philosophes" and "logiciens" (*ibid*.: 208-209) refuse to understand that language changes determine "déplacements non calculables" (*ibid*.: 209). On the other hand, linguists are often groping in the dark because they find it hard to accept that "la matiére qui subit l'action historique" (*ibidem*) *is not a historical fact like the others*. These changes are in fact completely independent from external factors, and are related to the "dernier compromis qu'accepte l'esprit avec certaines symboles" (*ibidem*). There is no "clarté" (*ibid*.: 208) in them because such transformations cannot be explained or predicted through "les mêmes passions, les mêmes intérêts qui expliquent soit la crise soit l'état" of an institution (*ibidem*).

Language is a pure institution because it is a historical entity that, at the same time, lives outside the intelligence of those who perform it, or of the projects of those who use it. There may be a "coup d'Etat" (*ibidem*) in political history, but not in the history of language, since the historicity of languages ensures that the knowledge of their precedents will not help comprehending the relation between sign and idea. Albeit paradoxical, Saussure's emphasis is spot-on. If it were necessary to know its precedents (its historic variations, its fluctuations of use in space and time, etc.) in order to understand a language, it would be impossible for a baby to learn it. In order to do so, a baby should attend something like a school: it would be necessary to enrol in an *introductory course to the use of language*. Language is a radically historic institution (biology concerns its foundation – "la faculté", to cite the later Saussure). Speakers, however, perceive it as an eternal

in Saussure (1894: 331). On the game of chess in Saussure, see also: Mejía (1998); Swiggers (2014).

present, as a collective appreciation severed from both past and future. It could be argued that for Saussure *the speaker stands in the eye of the historic storm*. All around him or her, the change and contingency of human life twitches in the most powerful of forms; at the heart of such change lies a suspended peace made possible by the variations of what surrounds it.

Saussure grapples with a problem in his illustration of the paradox. The notoriously cautious Swiss linguist compromised himself by claiming no small thing: language has no equivalent. How is it possible to describe what happens in language without employing only examples that are internal to language and, thus, circular? Saussure offers two suggestions. The first one is often hinted at but never fully developed: writing is the only equivalent to language.⁷ The second appears to be more modest, and yet it is the only intermediate entity Saussure actually deals with: chess. In the pair "position" and "coup d'échecs" (ibid.: 207 and ff.), it is possible to trace that "nature [...] double" (*ibidem*) that characterises both chess and language. We only need to remove the strategic (i.e. psychologicalmathematical) element of calculus, which will be more popular in the twentieth century, to find finally an analogical aid for an institution that would otherwise be devoid of any comparison. The speaker can be compared to a chess player who is "inintelligent" and "inepte" (ibid.: 207-208). The speaker is a historic but idiotic player: "historic" because any language is subjected to the contingency of local change (it has no internal reason); "idiotic" because, going back to the Greek etymology of the word, any speaker can deceive oneself to believe s/he is the first and only one, an animal outside time. Such illusion is not determined by the lack of wit related to a mythical "génie de la langue" (*ibid*.: 216). Language, as Saussure would put it, is "destiné à être transmis" (ibid.: 220). For language to be transmitted it is crucial that the speaker is not constantly plagued by the "irritante duplicité" of language (*ibid*.: 217). The "convention initiale" (*ibid*.: 207) Saussure refers to, is not simply a given relation between signifier and signified. It alludes instead to a serious anthropological fact: every language needs a fiction in order to function: it has to pretend its lack of change. For this reason, those - like Whitney – who invoke "sens commun" to deal with linguistic studies are doomed to failure. Common sense poses language as an "anti-historique" form: "language awareness is awareness of the present" (Prampolini 2013: 94, my translation), and for this reason it is immune from the sceptical and persecutory doubt about a possible misunderstanding.

⁷ In this regard, it is hardly surprising that in the last months of his life Saussure decided to devote his time to the study of Chinese ideograms (De Mauro 2005: XXV), the utmost challenge to any general theory of writing.

Mind you: not only is this loophole possible, but it is also *necessary* to speak a language. To use the categories of any grammar book, replacing the *simple present* ("the apple is on the table") with the *historic present* ("Brutus murders Caesar") becomes a vital trick for the speaker, who can thus utter sentences without any representation of the otherwise paralysing negative-oppositive complex which informs languages and their variations. In the case of the linguist or the philosopher, on the other hand, to accept such substitution (one of the problem Wittgenstein will grapple with; see section 4) means going down a dead end since, in order to understand the anthropology of language, one has to hold together the synchronic and the diachronic through a binocular gaze.

Chess is the less imperfect analogue of what Saussure calls "jeu" as early as in his Notes (ibid.: 221; see Russo 2005; Fortuna 2007). Chess in fact is a singular state of game in a suspended form, as in a still image. As it has been rightly pointed out, in chess as well such self-reliance in the individual moment contains a fictional element (Lepschy 1966: 44-45). Every game has a diachrony the player has to acknowledge. You can only castle once, a given situation on the chessboard can only be repeated three times, it's a draw after fifty moves without moving or winning any pieces. However, the fact that chess contains such element does not represent an objection to the analogy but, on the contrary, it is its most stringent validation. For the linguist, chess is the best analogy "par toutes les analogies du ciel et de la terre" (ibid.: 220). Emphasis is in the original: the lack of terrestrial analogies is given by the fact that eternity is a transcendent category. For the materialist, the perception of the eternity of language is illustrated not by gods, but by chess. A speaker assumes to be seeing it because he/she reduces the historic present to the simple present. The philosopher linguist may glimpse it if he/she keeps an eye on their co/presence. In fact, every simple present is also historic, since it is part of a long diachronic chain. However, the former does not derive from the latter, and its subsequent phases can only be reconstructed ex post, since they cannot be calculated. The one-time nature of the castle recalls the fictional character of the separation between the present tense of the game and historical time which, at various times, can also be visible to the eyes of the most naive speaker: the Country his father used to call "Zaire" is now the "Democratic Republic of the Congo".

According to Saussure, the analogy works only if *it cuts itself off from the logical-normative character usually associated to the game* since chess is useful as institutional comparison: it is not an intermediate entity between language and the numerical machine, but rather between languages and "mariage" (*ibid*.: 214), "rites religieux", "formes politiques", "usages" and "instruments" (*ibid*.: 219-220). The insistence on the mathematical laws which can be found in these notes does

not suggest the existence of a "mechanism of language" (Koerner 1973: 329) which will be "underscored by FdS's statement following the comparison between language and chess that each position of the chess game 'comporte une description et une appreciation mathématique'" (*ibid.*: 339 note 15). The former formulation by Saussure in fact does not refer to chess analogy, but precisely to that linguistic dimension that the analogy leaves out. If we wish to study the quantitative and substantial datum of language (sound waves, glottis' structure, etc.), the "formule mathématiques" (Saussure 1894: 206) thus become a crucial tool. *Otherwise*, we just go back to the language system and the fight of white pawns against the black king.

4. Problems in Persia

Let's go back to the charges against the philosopher and the linguist. In the final part of his monograph, Harris claims that Wittgenstein and Saussure do not take sufficiently into account the birth, variation and change of rules, precisely because they rely on a game analogy. This statement requires to be disentangled like a wool yarn whose thread is lost. The case of chess paradoxically represents – for Wittgenstein at least – one of the rare instances in which he reveals his sensitivity for historical time (PG, I, § 4: 40):

What we call "understanding a language" is often like the understanding we get of a calculus when we learn its history or its practical application. And there too we meet an easily surveyable symbolism instead of one that is strange to us. – Imagine that someone had originally learnt chess as a writing game, and was later shown the "interpretation" of chess as a board game. In this case "to understand" means something like "to take in as a whole".

This needs to be emphasised, since such move is a genuine rarity. Wittgenstein is usually attracted to the analysis of that same common sense that Saussure (rightly) distrusts. The philosopher's insistence on ordinary examples leads the author of the *Philosophical Investigations* to an approach to languages frozen like that of any speaker in the eye of a historical-linguistic storm. In this case, however, Wittgenstein calls into question the historical change in non-generic nor negative terms.⁸ Here the theme of calculus re-surfaces but, even more so, the chess example

⁸ As I have argued elsewhere, we can count on one hand the number of such passages in Wittgenstein's *Nachlass*: Mazzeo (2017). For a broader discussion of the relation between everyday and ordinary use: Mazzeo (2016).

imparts an anthropological bend to the comparison. The theme of surveyable representation, so crucial in Wittgenstein's more mature philosophy, is featured here explicitly. In order for calculation procedures and chess to be understandable, they need to have the same features: not formal of logical, but rather practical and perceptual features. They need to be procedures that it is possible "to take in as a whole".

Having said that, it cannot be denied that when Wittgenstein and Saussure engage with the example of chess in Persia, they both reveal the most unfulfilled and the least convincing side of their approach.⁹ Harris (1988: 89) has pointed out the resemblance between the two passages, which is worth quoting in full. Let's start from Wittgenstein (*PG*, I, 8: 238):

The case is the same as that of the double use of the word "chess" to mean at one time the totality of the currently valid chess rules, and at another time the game invented in Persia by N. N. which developed in such and such a way. In one case it is nonsensical to talk of a development of the rules of chess and in another not.

The philosopher appears to be truly engaged in a differentiation of points of view similar to Saussure's. This move, however, has a deeply *anti*-historic connotation. In the same page, the Austrian philosopher suggests the juxtaposition between the variation of chess rules and "the development of π " (*ibidem*). The example is also illustrated in a superficial way: as is well known, chess was born in India, not in Persia; the question of the passage from one Country to the other is described in terms of who first invented the game, and not as a complex entanglement (still little known today) of cultural influences and transformations of use. Persia does not seem to be an inspiration for Saussure, either (*CLG*: 43):

Une comparaison avec le jeu d'échecs le fera mieux sentir. Là, il est relativement facile de distinguer ce qui est externe de ce qui est interne : le fait qu'il a passé de Perse en Europe est d'ordre externe; interne, au contraire, tout ce qui concerne le système et les règles.

⁹ In this respect, literature tends to split between those who seem to find in Saussure the strongest position (Harris 1988; 2010; Gambarara 2010), and those who on the contrary seem to privilege Wittgenstein at least for some aspects (De Mauro 1965; Stolz 2002). Others, on the other hand, limit themselves to emphasising some common traits between the two thinkers: both have a broader idea of language than that of Locke because theirs is related to the social world (Wein 1963: 4 and ff.); both produce "rupturas epistemólogicas" in their respective fields (Micolich 2005: 8) as they reject a rigid and a priori notion of identity (Frank 2011). For an attempt to insist on the importance of both for contemporary philosophy of language: Gambarara 2005; Fadda 2010.

The reference is similar but the meaning is different. Saussure refers to a geographic passage which, as such, is supposed to be external as it leaves the system of language rules untouched. The example seems to be a poor choice for the opposite reason literature usually imagines. The difficulty does not raise from the chess analogy which, as such, "brings in its train a certain number of problems" (Harris 1988: 87), because it is in fact *Wittgenstein and Saussure who cannot measure up to the analogy*.

In the case of chess, in fact, it is by no means easy to distinguish internal and external factors. More specifically, the passage of the game from Persia to Europe provides a counterexample for the possibility of a neat uncoupling of the two. While it is true that at first the passage only determined "external appearances", "after 1200 pressures to speed up the game [...] led to a variety of experiments and local rules which diverged each other in various ways" (Eales 1985: 69). New rules were introduced which still exist today, including the possibility for a pawn to advance two squares along the same file on its first move (*ibidem*). In Medieval Europe, its use was different from the contemporary one: it was an extremely slow moving game in which checkmate is a rare event since victory is usually achieved "by the gradual process of taking all the opponent's pieces" (ibid.: 78). Such new uses prepare for the fifteenth-century turn through the introduction of a previously unknown piece: the queen. This new, more powerful piece, together with a more mobile rook, radically transforms the game (ibid.: 72). As concerns chess, Saussure and Wittgenstein choose as paradigm a game that certainly "has proved extraordinary stable" (ibid.: 195). Their aim is commendable: to insist on the autonomy of linguistic structure from referential factors. Such temporal stability, however, does not denote a reluctance to historical time. The game changes in time from four to two players, including and then abolishing the use of dice, and adding further pieces. Dismissing the relation between chess and Persia, Wittgenstein reveals the difficulty to understand historical processes. The analogy between the history of chess and pi is its unsettling symptom. As Wittgenstein points out (section 2), the claim that "my queen has flaming eyes" does not change a single thing in the game. The queen, however, is the product of a historical change whose structure has nothing to do with pi's serial, though endless, unfolding.

In Persia, Saussure demonstrates he suffers from a different problem. The separation between synchrony and diachrony is necessary to understand how language works. On the other hand, the linguist deals with the chess example with rigidity. Language change cannot definitely be traced back to, for instance, fashion, climate, or a people's spirit. At the same time, it is difficult to make a clear-cut distinction between the use of words and the use of tools, modes of production and forms of human life. Chess changes because its players change, together with

the ethical and political modes of their lives. Why should this be different in the case of speakers? When he refers to language as institution, Saussure lists use among the institutions among which it cannot but distinguish itself (section 3), without however realising that, on the contrary, use (as stated in the title of his doctoral dissertation: *De l'emploi du génitif absolu en sanscrit*) is an essential part of language. While Wittgenstein fails to see the historicity of the sign, Saussure underestimates the importance of use, the borderline "intersection entre les pratiques et les discours" (Virno 2015: 43).

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