

Why we play chess

By Sebastian Raedler

“The game of chess is not merely an idle amusement. Several very valuable qualities of the mind are to be acquired and strengthened by it, so as to become habits ready on all occasions. For life is a kind of chess.” *Benjamin Franklin*

1. Introduction

With hindsight, I am surprised that I discovered chess so late in life. I always knew of its existence and understood the ways in which the figures moved, but chess nonetheless meant nothing to me. It was something that other people spent their time on.

That changed when my work led me to travel extensively. It made taxi trips, train rides and airport lounges an integral part of my life, leaving a lot of dead time to be filled. At first, I tried Sudoku, but that soon became boring. So, I started playing chess. I played against the computer and was baffled by the speed and ease with which my electronic opponent destroyed my defenses and defeated me. My only consolation was that I could go back in the game to rectify my more outrageous mistakes. Chess was more demanding than Sudoku, but the option of undoing my mistakes took the edge off.

This consolation disappeared when I played my first online match against a human opponent. When the game began, my heart started pounding. There was – on the other side of the board – someone out to kill my king. Whenever it was my turn, I stared at the bewildering complexity of geometrical patterns before me. I knew that were hidden traps on the board, but I had no idea of how to spot them.

Meanwhile, the clock was ticking. If I did not move fast, I would lose on time, but if I moved quickly, I would fall into the invisible traps my opponent had laid for me. It was wild and terrifying. Then, to my surprise, I won the game. As the computer confirmed the result, I felt relief. The hidden traps on the board had not ensnared me and my opponent's designs on my king's life had failed.

My elation was short-lived: I lost a string of matches in quick succession and saw my chess rating collapse. But I was hooked. The kick of the battle and the oddly pleasing dance of geometrical patterns on the board had captivated me. The intensity of the fight led the rest of my life – my worries, my tasks and my very sense of identity – disappear from mental view, leaving me to float blissfully in the abstract realm of attacking lines, tactical tricks and mesmerizing combinations.

As I watched myself spending hours in a semi-meditative trance induced by the battle of the chess figures, I marveled at the eagerness with which my mind engaged with the tangled patterns before it, the ease with which it got confused by the ever-shifting patterns and the intensity of emotion that my many blunders caused me. The innocent-looking board, I found, held a universe of drama. This universe is what my essay aims to explore: the experience of getting ensnared in the world of chess, with all its glories, its pitfalls, its frustrations and its plentiful rewards.

2. Chess as war

a. The pleasure of the game

Chess is first and foremost a battle, a vicious war between the white pieces and the black pieces that has been going on for more than a thousand years. The two armies have slaughtered legions of pawns, bishops and rooks and have captured each other's kings many times over only to end up in the same starting formation. What is it that they are fighting for?

It is not ideology, for neither side has any. Nor is it the prospect of material gain, for there is nothing of value to be found on the board. This is also not a clash of cultures, for both sides are going about their business in exactly the same way.

The most plausible answer is that their fighting is motivated by the sheer joy of activity. The philosopher Friedrich Nietzsche argued that all activity is an expression of conflict, of forces battling one another – and that the ultimate aim these forces are pursuing is not a final state of victory, but rather the activity of fighting itself, the measuring of forces in which the combatants experience themselves as active and alive.

Chess exemplifies this vision of reality: unlike in real war, there is not even a pretence that the conflict is motivated by a higher purpose. It is a battle for the sheer enjoyment of the fight. While the players are clearly driven by the hope of winning, at a deeper level they are motivated by a desire to play, the pleasure they take in applying their powers and feeling active and engaged in the process.

Chess' immersive quality – like of other competitive sports – is rooted in its ability to reconnect us with the elements of battle and violence that have been stripped from our well-protected lives. It allows us to tap into our most atavistic emotions: the lust of attack, the excitement of landing a crushing blow and the horror of seeing a promising situation turn to ashes. What we feel in the moment

of victory is the exaltation of the hunter thousands of years ago when the beast he has wrestled with finally stopped breathing or the soldier who finds himself victorious at the end of a disorienting battle. The 64 innocent-looking squares on the board activate the rich emotional landscape that our more violent forebears have bequeathed to us. Chess is a way for us – in our protected state of civilization – to relive the savage conflicts of earlier stages of human development, allowing us to fight a prolonged war to the death, while sitting in the protected confines of our living room.

The excitement and heightened level of focus triggered by the game create what cognitive scientists call a state of “flow”, a condition in which our awareness of time is suspended and we are fully absorbed in the acute attention on a single activity. Being a state of “flow” is immensely pleasurable. It is the opposite of boredom: we are completely engaged and become one with the activity at hand.

At the deepest level, it is this satisfaction we derive from entering a state of flow – not the desire for victory – that motivates the battle on the chessboard. This becomes clear if we imagine playing a game against an inferior opponent that leaves us unengaged, but easily victorious. Such a game holds little appeal. Certainly, winning our games makes chess the more pleasant, but it is the pleasure of fight, the joy of feeling our powers fully engaged that is our main reason for playing. Victory is just a pretext: what really matters is the fight itself.

b. A grinding battle

The ideal chess game is one in which our pieces' moves cohere effortlessly into a dazzling attack that overwhelms our opponent. Yet, this rarely happens. Instead, our opponent typically fights back viciously, thwarts our plans, puts us under pressure and threatens us with defeat. If we win, it is typically a whisker and barely having escaped disaster.

In playing chess we are often shocked by the resourcefulness of our opponents: when we strike what we expect to be a devastating blow and already congratulate ourselves on our brilliant victory, our opponent frequently invents defences and evasive moves that we did not anticipate and which block our attempts to achieve a swift victory. If everyday life undermines our confidence in the intelligence of the people around us, two or three games of chess will quickly restore it: the sharpness and smartness with which our opponents react to the attacks we throw at them, the brilliant manoeuvres they use to extricate themselves from threatening positions frequently leave us in awe.

Thus, what we expected to be the final few moves of a game that is practically already won is often merely the transition into a new phase of the game, with our opponent hanging on even where he should be lost – and, in some instances, even winning the game, leaving us devastated.

The longer we play, the more we let go of the vision of easy victory – and instead come to appreciate the qualities of the prolonged battle: the careful building-up of resources, the patient probing of our opponent's position and the meticulous in-between moves that help to plug gaps in your defenses and bring our pieces into the optimal position before an attack.

What results is a careful dance of threats and counter-threats. Often the chess board is filled with wild stand-offs: pawns, bishops and queens staring at one another from close quarters, ready to strike – and yet standing perfectly still. As in war, this slow built-up is interrupted by short bursts of ferocious violence. The

art lies in knowing when to strike. The inexperienced player is tempted to resolve the tension immediately, but the more skilful player lets it build, allowing it to yield imbalances and opportunities and only resolving it when doing so is to his benefit.

Small advantages in chess have a tendency to cascade into ever-bigger ones as the game advances. We slowly push our opponent into a corner, deprive him of the space to move – and make him passive. Yet, all the while we are aware that there is always the risk of blunder, a single bad move that undoes all our careful preparation and loses the game. This is one of the most crushing and horrifying experiences in chess: to see a single moment of stupidity cancel out the gains from our previous efforts.

Thus, a game of chess is often not the brilliant fulfillment of our plans, but a slow and brutal slog, in which the minutest advantage has to be extracted with huge effort and often disappears if we drop our focus even for just one moment. Victory in chess is a dirty, protracted and painful affair – not a beautiful maiden, but a scrappy thing that only yields if we are willing to get beaten up for it.

Yet, often we do not even get that far. At the start of a game, we form – half-consciously most of the time – a scheme of how we would want the battle to proceed: we see gaps in our opponent's defense, unprotected squares on which our figures might be positioned and free diagonals we might exploit. Then, unexpectedly, a piece that we had defended insufficiently gets ripped off the board. We are down material and if our opponent plays correctly, we are bound to lose the game.

This engenders a sense of anger and helplessness. No longer in control of the game, we find ourselves merely responding to our opponent's blows. We are just one step away from total collapse and the temptation to give up becomes almost irresistible.

This condition is known as “cracking”, i.e. suffering a loss of focus in one’s game under the pressure of a powerful onslaught. A player who has cracked is settling into the idea of his own defeat and only makes token efforts to keep his opponent at bay. Where earlier his moves were targeted and precise, they now become disjointed and incoherent. It is easy to defeat an opponent in such a state of mind.

The crucial skill is not to give up at this point, not to play automatically and quickly in order to get to the end of the game with our honor half intact. In a typical game, there are still many opportunities for our opponent to blunder, for us to block his path to victory and for the game to end in a draw or even a win for us. But this requires us to overcome the paralyzing forces of disappointment, self-loathing and despair engendered by our early mistake. It requires us to block the sense of panic and futility that we experience when confronted with an apparently hopeless situation.

What we need in these situation is the stamina of the boxer who is being pummeled by his opponent round after round, but nonetheless stays on his feet. As long as he is still in the fight, there is a chance that we will land the decisive hit to win the fight. When this happens, it results in some of the most glorious moments in chess: when – against all the odds – we escape from a hopeless situation, parrying every blow, finding unlikely last-minute escapes and end up winning. This leaves us in a state of elation akin to that of the survivors of plane crashes: it is the incredulous realization that the disaster has passed by and we are still alive.

These experiences of bruised victories, near disasters and total collapses help us to lay to rest our earlier hopes of easy victory and brace ourselves for scrappy fights with many missteps and set-backs. In this sense, playing chess helps us to grow up. As young children, we react to obstacles and frustration with tantrums, willing to throw it all away to give vent to our indignation. Every adult still has remnants of that angry toddler inside: the infantile mind that is only prepared to play the game if everything goes according to plan.

Playing chess teaches us to shed these pretenses: the only way to make progress is to be prepared for calamity, for obstruction and the hundred annoyances that result when a well-prepared mind is set on thwarting our plans. The only way to play the game – and to play it well – is to be prepared for these blows, not to slacken our powers, not to crack, but to push on in a focused, disciplined manner despite all the frustration.

We come to realize that suffering setbacks and facing unexpected obstacles is not an indication that our game is going badly. Rather, it lies in the nature of the game: we face formidable opponents and challenges of considerable complexity. We have to accept that we will lose pieces and be attacked. It is the price we pay for playing the game. To sustain losses and setbacks, have our beautiful plans be counterattacked and undermined is not the sign of failure, but the natural proceeding of things. We should not react – as we are wont to do – with dismay and despondence, but rather be very clear in our minds that this is what we have signed up for.

Once we have highlighted the importance of not cracking under pressure, it is time to confess that – despite all our best efforts – we will sometimes lose games. And the simple truth is that this is an incredibly painful and humiliating experience.

A friend once sent me this news headline: “Police raid man’s flat after hearing screams. He was just doing badly at online chess.” For anyone who has tried his hand at chess, the headline feels all too real: an unexpected loss can be upsetting, infuriating and soul-destroying. When a superior opponent outclasses us, the game seems purposefully designed to rub our noses in our own inadequacy.

According to behavioural economics, the pain associated with losing a certain amount of money is stronger than the pleasure associated with winning the same quantity. Every chess player will immediately recognize this predicament: a win in chess is mildly satisfying, but a loss is excruciating. A loss – especially

involving a blunder we commit – feels like a cruel indictment on our intelligence, a mocking of our insufficient ability to think straight.

The implications of this finding are staggering: it suggests that we could spend a lifetime of improvement, in which things constantly get better in objective terms, and yet live in an emotional deficit – i.e. experience more dissatisfaction and pain than pleasure. This might be useful from an evolutionary point of view, ensuring that we do not get satiated and lazy, but it also makes for a distinctly frustrating overall experience.

The challenge is for us to accept the unacceptable: that losing is part of the experience. For a player seriously to entertain the aim of never losing a game would be ludicrous. There is no point in getting upset with ourselves if we lose games. It is part of what it means to play the game.

Does this harrowing account of chess as frustrating and painful contradict our previous account of it as a joyful battle? Not all. Chess is demanding, frustrating, infuriating and painful – but that is exactly what makes it fun. It is fun not because it is easy, but because it is difficult. The pleasure comes with the challenge, the measuring of forces and the constant threat of defeat. It is the thrill of a game that pushes us to the very edge of what we are capable of. There is no contradiction between the notion of chess as immensely pleasurable and chess as unbearably frustrating: these are simply two aspects of the same truth.

3. Chess and the weakness of our thought

a. All aboard the blunder bus

Chess is an expression of rationality. In a good chess game, no move is without purpose and everything is subordinated to the end we are pursuing. To play chess well, we need the technical ability to calculate how the different pieces in a given situation interact, assess which possible moves are best suited to further our designs and gauge our opponent's likely responses, realistically assessed and free of wishful thinking. We need the ability to spot possible traps and entanglements and the creativity and mental flexibility to consider all the possible moves that might get us to our aim, even those that appear outrageous on the surface.

Yet, if chess teaches anything, it is that we are not very good at this kind of rationality. Painful and outrageous mistakes litter our games. We constantly overlook threats, miss opportunities, miscalculate moves – and find ourselves shockingly and embarrassingly lost because of our own inability to think correctly.

Thus, while chess on one level is a ruthless battle with our opponent, full of captures, violence and destruction, at a deeper level it is a battle against ourselves, against our own propensity for error. It is a battle that we frequently lose. This makes chess a humbling activity: it impresses on us how limited our understanding is, how fallible our judgment. It cruelly highlights our astonishing tendency to overlook the obvious. While in everyday life, we can hide from ourselves the lack of precision and clarity in our thinking, in chess it is mercilessly pressed upon us.

There is a recurring moment in chess when we realize that we have made a horrendous mistake that is poised to lose us the game. It is a moment of horror, helplessness and anger against ourselves, a moment saturated with the

awareness of our own inadequacy. Even the best players frequently put their hands to the heads in disbelief at what they have just done, overlooking clear opportunities, giving away pieces or even losing an entire game because of their inability to calculate correctly. Every chess game is secretly inspired by the hope that we will finally get it right: that we will play in a disciplined manner and without making horrendous mistakes. But this hope is typically crushed.

A loss at chess feels more personal than losses at other types of sports because it carries a damning judgment about the very core of our identity: our ability to think. After a series of bad losses at chess, it is tempting to conclude that we have degraded mentally. No matter how many times we had promised ourselves that we would not make a certain mistake, we run straight into it again and are left with the conviction that we are intellectually too weak ever to play chess properly. The experience of our crushing stupidity being cruelly exposed can be gut wrenching and easily fuel the temptation simply to give up.

What adds to the insult is that – unlike in other areas of life – all the information is available to us: everything that matters is there, in plain sight on the board – and yet, we still cannot get it right.

It is impressive how the resulting sense of frustration and inadequacy can bring even grown man to a state of groaning desperation. A friend of mine, a considerably better player than I am, once told me that he would be unable to play chess online for a while because his phone screen was broken. When I asked him how this had happened, he got embarrassed, then confessed: he had been in the process of winning a game against a stronger player, then made a bad move and lost. In frustration, he fired his phone into a corner of the room. This was a successful finance professional, an accomplished individual, reduced to childish outbursts by the vagaries of chess.

The main problem we face when playing chess is that we are overwhelmed by complexity. There are too many patterns and interrelations to keep track of. A single move can redefine the relationship between all the pieces on the board

and it is hard for our mind to keep track of all these relationships. In evaluating a given configuration, we need to take into consideration not just the immediate risks and opportunities, but also the longer-term consequences of any possible move. Given that these branch far into the future, the resulting cognitive load is overwhelming. Dealing with it necessarily involves partial and truncated calculations, requiring the additional technique of deciding when to continue and when to cancel the evaluation of a given branch of the outcome tree.

This daunting complexity ensures that we often comes to the point when we lose control of the situation, when the cognitive load overpowers us, when everything turns into a jumble in which we are only half guessing on the right course to proceed. At this point, chess becomes a whirlpool of impressions and intuitions. It rarely ends well, but it is always fun, even as we are cursing.

The positive side of complexity is that it contributes to the sensation of flow: in mentally struggling with the complex patterns before us, our minds are absorbed, engaged and activated. The rest of the world disappears and our attention floats blissfully in the sea of complicated patterns before us. If our minds were perfectly adapted for the task of analysing chess moves, playing the game would be as entertaining as assembling an IKEA chair. We would call it mundane and uninteresting and would rather spend our time doing something else. The spectacle, the entertainment and the drama of chess stem precisely from the constant threat of error, the omnipresent possibility that we have overlooked a crucial detail. Our epistemic limitations introduce an element of suspense – the possibility of sudden reversals and frequent shocks – that makes chess so engrossing.

Our main tool in dealing with the problem of complexity is repetition. Repetition generally has a bad press: it has the sound of monotony and tedium. Most of the interesting things in life – adventures, love affairs and World Cup finals – are interesting because they are free of repetition. And yet repetition is a uniquely powerful tool. It makes us quick and sure-footed. It allows us to recognize patterns that we have encountered before – and use the experience that we have

gathered to improve our performance. If we recognize a trap in our games today, it is because we have fallen into it many times in the past. Every piece of knowledge bears the scars of past defeats that were the price we paid for attaining it.

Repetition frees us from the need to calculate difficult configurations from scratch, but rather allows us to fall back on what cognitive scientists call “chunking”: we no longer see the figures on the board as a mass of details, but as recognisable patterns. In the same way in which we read complete words, while young children – as inexperienced readers – carefully have to decipher them letter by letter, the experienced chess player sees certain configurations and knows how to react to them immediately. He has seen them a thousand times and does not need to calculate the correct response. He simply knows. This reduces the cognitive load, saves time and lowers the risk of error.

The irony is that – objectively considered – chess is computationally less burdensome than the physical activities that we master with ease, such as walking up a flight of stairs. The problem is that our brains are simply not wired for it. For a robot, climbing stairs is difficult, while playing chess is easy. For us it is the other way around. This phenomenon is known as “Moravec’s paradox”: our brains had millions of years to adapt to the challenge of physically manipulating the world, so we experience it as undemanding, but we have been exposed to the challenge of playing chess for less than two thousand years, so this is where we struggle.

As a consequence, when it comes to playing chess, we have to accept the computer as our superior. This is a recent development: in the early 2000s, commentators still complimented the fledgling computer programs for playing chess almost as well as humans. Now the strongest compliment paid to the world champion Magnus Carlson is that he plays like a computer.

An integral aspect of playing chess today – for both amateurs and professionals – is the ability to have our games analysed evaluated by a chess computer. The

machine tells us which of our moves were “excellent”, which were “mistakes” and which were outright “blunders”. Pleased by a brilliant victory, we often have to learn – under the merciless eye of the machine – that it was shot through with errors, missed chances and even near-death experiences that we simply failed to notice.

The availability of this analysis means that it is significantly easier for us to make progress in our chess careers today than it was a few decades ago. Back then, a player could cheerfully make the same mistakes game after game – systematically reacting to a given situation in a suboptimal way – without ever noticing his error. Thanks to the intervention by the computer – which both identifies our misguided moves and suggests superior alternatives – the risk of this happening is dramatically lowered.

In sifting through the mistakes that recur in our chess games, three themes stand out. The first is the importance of the concept of fast and slow thinking, popularized by the cognitive psychologist Daniel Kahneman. When we start playing chess, the temptation to go in for the first obvious move we see is almost irresistible: there is a check to be given or one of our opponent’s pieces to be attacked and before we have fully reflected on the implications of doing so, we already stride to the attack.

A key development in chess is to resist this temptation, to slow ourselves down, to look ahead and ask how our intended move would affect the interrelation between the remaining pieces on the board, what vulnerabilities it would create in our own structure and what likely moves our opponent might play in response. Once we engage in this kind of reflection, we often find that the tempting option makes little sense. The wisest course of action is often a “quiet move”: a marginal improvement in our position that closes a gap in our defense or blocks our opponents escape path two or three moves down the line. Thus, to play chess well our first task is to sober up, to drop our buccaneering spirit and to accustom ourselves to thinking slowly.

The second – and related – task is to widen our focus of attention: opportunities to attack our opponent's pieces often lead to a curious narrowing of focus. We are mentally fully engaged with the locus of attack and emotionally fully invested in bringing it to fruition. Yet, in doing so, we often neglect maintaining the proper order among our figures in other parts of the battlefield – and as soon as the action shifts to those, we pay dearly for our oversight.

The challenge is to maintain a holistic view of the board: to ascertain before every move how all the pieces in our army are faring and to ensure that all are protected and integrated as well as possible into our plan of action. This widening of mental focus requires discipline and a good deal of computational effort, but it is the only way to succeed in chess.

Lastly, an important – and often neglected – task is to achieve mental flexibility. A given plan of ours might be entirely reasonable, but a couple of moves later, when our opponents' pieces confront us in a new configuration, it might no longer make sense. At this point, we have to change our plans, jettisoning our old designs and coming up with a new scheme that fits better with the changed circumstances.

Yet, we often suffer from a mental block that leads us to continue pursuing our original intent even after it has stopped being the optimal course of action. Our task is to overcome this mental lethargy, not to hold our beliefs fixed, but to make them fluid, malleable and perfectly adaptable to the changing circumstances on the board. It is to play chess like a dancer who smoothly and effortlessly adjusts his movements to the changing tunes of the music.

b. Chess and the ability to see reality

Another big challenge in chess is that of anticipation: to see our opponents' moves in advance and not to be surprised by them. It is common that weaker players plan a brilliant attack, not noticing that they are one step away from being checkmated. Preventing that checkmate would be easy, if only they noticed the threat – but they don't. They are too mesmerized by their own attacking scheme to waste any thought on the perils they find themselves in.

This highlights one of the key differences between strong and weak players. The strong player has a clearer eye for reality. While both look at the same chess board, the strong player inhabits a richer, more complex reality: superimposed on the physical figures, he sees the interrelations, their possible moves and combinations, the threats and opportunities arising from them. He lives in an enhanced reality that is invisible to the weaker player.

The weak player is no worse at moving the small pieces of wood across the board. He is not necessarily less intelligent than his superior opponent. His inferiority is not physical or intellectual, but visual. He simply sees less – and, in chess, what kills us is what we do not see: the missed opportunities and the overlooked threats. The mark of the weak chess player is that he is constantly surprised by the moves his opponent plays. He sees his pieces ripped off the board by moves and maneuvers that he never saw coming. Every blow is a surprise, a thunderbolt out of the blue. The weak player is under massive threat, but he does not know it until it is too late.

This makes chess a beautiful metaphor of our epistemic limits: in chess as in real life, there is always much that we do not see, much that is practically relevant and could – if only we were aware of it – be invaluable in the pursuit of our aims. The attainment of culture is the process by which we increasingly liberate ourselves from this blindness and develop a richer, more complete understanding of the world we live in. Thus inhabiting a more meaningful universe, we come to have a better grasp of how the things and individuals that

surround us can either help or hinder our plans. This allows us to move more skillfully, more smoothly through the *parcours* of life, in the same way in which the superior chess player's enhanced vision allows him to avoid the calamities that regularly befall his less informed opponent.

The weak chess player – just as the naïve person in real life – is constantly surprised by what is happening to him. In acting, he is quite happily blind about the likely implications and consequences of his actions, only then to be surprised when they materialize. His map of reality is too imprecise, too hazy to allow him to correctly anticipate the challenges he is confronted with. As a consequence, his responses to these challenges are haphazard and incoherent. Our aim must be to exit this state of naivety, to develop a vision of reality that is sufficiently precise to allow us to anticipate correctly what is coming toward us and not allow it to throw us off course.

One aspect of learning to see reality correctly is to liberate ourselves from wishful thinking. Wishful thinking is the favorite activity of the immature mind: to plan for a world as we would like it to be, not as it really is. Wishful thinking is a pleasurable activity, because in a world of wishful thinking all our tasks are easy and all our schemes succeed. Unfortunately, wishful thinking also frequently leads to disaster: when the people around us pursue their own interests, which might very well conflict with our own, our plans, based on the wishful assumption of perfect compliance from the world around us, fail miserably.

Chess forces us into a more hard-headed way of thinking, in which the relevant question no longer is which move we would like our opponent to play, but rather which moves he is likely to play, given that they will result in the greatest possible inconvenience to us. Often our opponent will overlook his best move – that is, the one that will be the most threatening and the hardest for us to deal with. When he plays a suboptimal move, that is excellent news for us, but we cannot plan on the assumption that he will. We have to assume that he will play the most devastating, most annoying move. If we have learnt to assess the

situation correctly, objectively and free of wishful thinking, we will be prepared to deal with it.

4. Chess and the search for harmony

a. Chess as poetry

The highest achievement in chess is a perfect coordination among our pieces, with each protecting the other and each combining their skills and efforts to make their joint attacks irresistible. A single chess piece develops its full impact only when it is properly integrated with its fellows. If it is, its potency is vastly magnified. We can have fewer pieces than our opponent and nonetheless be in a winning position, if our pieces are properly coordinated.

Achieving such harmony among our pieces not only increases their power, but also fills us with a sense of beauty. In a great chess position, the pieces interact and organically hang together just as the steps in a smooth dance or the words in a well-crafted poem. Everything fits, is coordinated and just right, so that the individual parts form a harmonious whole. The pleasure we experience when – for once! – a chess game runs smoothly, with our figures falling into ever new harmonious patterns, is the same we derive from a magnificent concerto or a masterful painting. The fluid and complex interplay of the chess pieces leave us in a state of marvel. Here we again encounter the notion of complexity, but this time from a different angle: not as a tax on our cognitive resources, but as the source of aesthetic enjoyment.

While the work of art is meant to be impractical – “to please without interest” in the words of Kant –, the beauty of a successful chess combination is immensely practical: the harmonious linkage of the individual pieces magnifies their potency and allows for devastating attacks on our opponent’s position.

The way to achieve this harmony is to operate with a clear plan. If we are not guided by a plan, our actions are set to be disjointed, unconnected and unfocused. We push our figures around, but this movement is not guided by any unifying idea. It is empty chess playing: ugly and unlikely to be successful. When

guided by a plan of action, however, our moves start to cohere, to complement one another in bringing about the desired aim. It is the pursuit of rationality in chess – the pursuit of our aims in the most effective way – that gives rise to aesthetic pleasure: the most impactful use of our pieces is also the most beautiful.

In thus combining his materials into a harmonious structure, the chess player resembles an architect, who aims at setting up a structure that is more beautiful, more practical and more resilient than that built by his opponent. In this sense, chess is the search for the perfect structure, the one in which our pieces are at the most harmonious and in which they support one another to create a maximum of robustness.

Yet, the inexperienced player often falls short of this ideal: halfway through the game, his pawns are typically scattered all over the board. He has moved them without plan, whenever an opportunity arose, making the structure a function not of design, but of mere chance. And it shows: there is no cohesion among his pieces. He is like an architect working without a blueprint, liberally scattering material wherever his fancy takes them. Predictably, his structure will crumble under the first serious attack. The inexperienced player has simply not yet understood the task he is facing: that of building a solid structure. This aspect of the game is not yet visible for him.

Yet, even experienced players often find that structures they have erected crumble quickly once they are attacked at the right point. An apparently solid position reduced to rubble by a well-aimed assault is one of the most awesome sights in chess. Once we have witnessed these acts of destruction, our games will always be infused by the lurking fear that our opponent's next move might cruelly uncover the fatal flaw in our own structure, leading it to be pulverized.

Thus, our task in chess is twofold: to build a resilient fortress for ourselves and to prove that our opponent's own construction is less robust than it appears. While practicing our own architecture, we are also pursuing a project of anti-

architecture at the same time: that of stamping our opponent's construction into the ground.

b. Chess as a conversation

While writing a poem is a solitary activity, playing chess is a conversation: by moving their pieces, the players signal their intentions and issue threats. The back and forth of proposals and refutations is a silent debate conducted on the board in the language of the little figurines. When we first start playing, this conversation mostly resembles a bar fight, with the two players lashing out at one another blindly and missing half the time. Yet, as we progress it increasingly turns into an intelligent debate of growing sophistication.

Our opponent's move is a message that we have to decode and respond to. We have to evaluate what his plan entails, which risks and opportunities it involves and how we should respond to it. If we decide to block his scheme, none of the moves we considered will ever materialize on the board – and yet, they will have figured prominently in the minds of the two players and the silent conversation between them.

Thus, far more than being a single narrative – the story of a single bloody battle – a sophisticated game of chess involves a vast stream of alternative narratives that run parallelly through both players' minds, full of possible attacks and possible defences, that play out even as the figures on the board stand still. Following this exchange of schemes and counter-schemes affords us the same pleasure as listening in to the conversation between two witty and well-informed minds. The more exquisite, clever and outrageous the suggestions, the more entertaining the debate.

In struggling with our opponent, we need to understand him, to read his mind and gauge his intentions. An autistic focus on our own plans will lead to disaster. Only by learning to see the world from his perspective, understanding his designs and the way he intends to go about them, can we successfully counteract them. If we simply follow our own plans without asking these questions, we will likely run into his traps and lose. Thus, while we are locked in a battle with our opponent, at the same time we are involved in an act of communion, in which we

exit from our solipsistic predisposition and open ourselves to his way of thinking. Instead of treating him as a mere obstacle on our path to victory, we are forced to acknowledge him as an active mind whose thought processes we have to engage with if we want to have any chance of success.

5. Conclusion

Why do we play chess? Because it is a thrilling battle whose intensity engrosses and absorbs us, allowing us to enter a blissful state of flow. Because it challenges our ability to calculate complicated combinations under time pressure, frequently frustrating us when we are not up to the challenge and yet always keeping us hooked with its maze-like complexity. Because it offers us moments of astonishing beauty when – against the odds and after a long series of blunders – our pieces coordinate perfectly, delivering a fluid attack that is both dazzling and devastating. And because it leads us to commune with others, trading bids and counter-bids, threats and surprises over the board, competing, fighting, debating and sharing jointly in the joy of the game.