

## Did Adolf Hitler's Parkinson Disease Affect his Conduct of World War II?

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### Abstract

Adolf Hitler had Parkinson Disease. Although it affected him physically, it is unclear if it affected his ability to analyze, to conceptualize, to reason, or to think. Although it cannot be proven if he was cognitively impaired or a drug induced psychosis (a psychosis induced by the amphetamines he received as a treatment for his Parkinson disease) the evidence suggests he was not seriously cognitively impaired and that any unrealistic thinking resulting from amphetamines was, probably, a minor factor.

Hitler was a life-long risk-taker, a gambler. His life-long risk-taking, his high stakes gambling, antedated his development of Parkinson disease and his use of amphetamines. His life-long risk-taking, his high stakes gambling is considered to be the reason he made startling (and favorable) decisions before World War II and the reason he made similarly favorable decisions early in World War II. His risk taking and high stakes gambling is also the reason he made startling bad decisions: decisions that ultimately led to Germany losing World War II.

Adolf Hitler had Parkinson disease (PD). This is not in dispute: it has been documented in descriptions by his contemporaries including physicians. It has been documented by comparing samples of his handwriting from before he was diagnosed in 1934, to shortly before he killed himself in 1945. It has been documented by videos taken over his lifetime. There is a dispute as to whether Adolf Hitler had post-encephalitic or idiopathic PD. This cannot be resolved. However, it does not affect whether PD affected Hitler's conduct: The effects of the disease, not its cause are in dispute.

### Parkinson Disease Can Affect Conduct in Several Ways

By imposing physical limitations, by impairing mobility. Videos of Hitler, one month before he killed himself, reveal Hitler walking slowly and not swinging his left arm [1]. He has a masked face, a stooped bent-forward posture and a resting tremor of his left arm [2,3]. Hitler is stooped and tremulous but mobile. Hitler was more mobile than Franklin D. Roosevelt who, because of poliomyelitis, had been confined to a wheelchair for his entire Presidency. And no one questions whether Roosevelt's poliomyelitis affected his conduct of the Presidency. Hitler was physically capable of performing his duties as *Fuhrer* or Leader of Germany until the day he committed suicide by shooting himself.

By causing depression. Depression severe enough to require treatment occurs in up to 50% of PD patients [1]. Depression may be an inherent part of PD as well as a reaction to a potentially debilitating illness. Hitler suffered four major depressive episodes before he developed PD. The first episode occurred in 1907 after the death of his mother. Hitler was apathetic, retreating from his daily activities, he was moody, guilt stricken and withdrawn. This resolved with time. The second depressive episode occurred in November 1918 after Hitler was gassed and temporarily blinded. Upon learning of Germany's surrender, Hitler, whose eyesight was recovering, became depressed and probably developed hysterical blindness. He became apathetic, withdrawn, and retreated from his daily activities. This resolved with time and his entry into politics. The third depressive episode occurred after the aborted Beerhall Putsch in November 1923. He became withdrawn, retreated from his daily activities and contemplated suicide. This resolved with time. The fourth episode occurred after the suicide of his niece and lover, Geli Raubal. Hitler became withdrawn, retreated from his daily activities and contemplated suicide.

During World War II after he developed PD, Hitler was often sad and upset but he was not depressed: he did not become apathetic, he did not withdraw from his daily activities and did not contemplate suicide-only at the very end, and with Berlin besieged and the Russians about to overrun his bunker did he commit suicide [4].

By causing cognitive impairment often progressing to dementia. Dementia occurs, in time, in the majority of patients with PD. Dementia is characterized by disorientation, confusion, memory loss, inability to conceptualize and apathy. No one did a mini-mental status examination or a Montreal cognitive assessment on Hitler. Lacking such objective evidence one can only speculate. Dementia, when developed, is readily recognized. It's unlikely that Hitler's associates, intelligent but misguided, would not have recognized dementia. Martin Bormann, Hermann Goering, Josef Goebbels, Heinrich Himmler, General Alfred Jodl and Albert Speer followed Hitler to the end. Apathy, a prominent symptom of dementia, was absent in Hitler: He lacked most of the symptoms on the PD Apathy Questionnaire: he remained interested in daily events, he was concerned about his condition, and he had plans and goals for the future.

Cognitive impairment, without dementia, harder to diagnosis without a neuropsychological examination, an examination which no one administered to Hitler, is difficult to discern from Hitler's behavior. Patients with cognitive impairment may appear normal, but close friends and associates may note changes in their personality and behavior. Often the patients are described as being impassive, indifferent, indecisive, moody, withdrawn. The patients are repeatedly asked if they are depressed which they are not. None of the above applies to Hitler.

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There is evidence of a change in Hitler's behavior. Thus Speer, Hitler's architect and armament's minister wrote, after the War [1]. "Up to 1938 Hitler allowed his associates to take full responsibility for their assigned fields... Later a change took place... he avoided discussion. This tendency...was connected with his growing suspiciousness. Hitler now lacked the capacity for thinking- out large scale conceptions." Whether this represented cognitive impairment or suspiciousness of his generals who were, according to Hitler, losing the War is unresolvable.

H. Trevor – Roper, an eminent historian, comments: "The extent of his knowledge and his amazing grasp of detail, have been universally, if at times reluctantly admitted...those who attended staff conferences in the first two years of the War, have described his earlier, more patient methods...feeling his way warily and learning what he could. Later, how different had the conference table become...Hitler was now the ultimate authority." Trevor Roper minimalizes the role of disease in Hitler's decline: "most historical dictators have passed through similar states of development... but once the system begins to collapse--- the reason is the ultimate inefficiency of dictatorships."

Lastly the issue of the use of drugs, amphetamines, on Hitler's behavior should be discussed. Amphetamines, administered by Hitler's physician, Dr Morrell, could've resulted in paranoia and a loss of impulse control and a psychosis similar to schizophrenia including lack of concentration, disorganization of thought, lack of insight, inability to carry-out daily activities (much less run a government) and auditory and visual hallucinations [5,6]. Hitler's paranoia and lack of impulse control were present before he had PD and before he used amphetamines. Indeed his paranoia was useful resulting in Hitler's murdering his best friend, Ernst Roehn, who may well have been plotting against Hitler. However, there is no evidence that Hitler had an amphetamine psychosis. There is no evidence he had auditory or visually hallucinations and he was sufficiently well organized and had sufficient insight that he was able, until the day of his suicide, to carry-on the functions of a wartime leader: meeting at least twice daily with his military and political advisors, listening to their reports, analyzing them, and then making decisions.

The incidence and prevalence of amphetamine psychosis is difficult to determine as the number of people taking the drug is not known, only the number with problems. The induction of an amphetamine psychosis is a function of the daily dose of the drug (unknown for Hitler), the number of days he received the drug (unknown for Hitler), the purity of the drug (unknown for Hitler), the presence of contaminants in the drug (unknown for Hitler). While the evidence is good that Hitler took amphetamines [6], it's unclear if they changed his behavior-changed it sufficiently to affect his conduct of the War. Drugs, including alcohol, can affect behavior and thinking. However, no one believes Winston Churchill's heavy drinking affected his conduct of World War II.

In this paper it will be argued that Hitler's lack of impulse control, his gambler's instinct, was an inherent part of his personality: His gambler's instinct, brought him to the Chancellorship of Germany in 1933 and, nearly, brought him to over lordship of Europe.

In 1923, Hitler, the leader of a small and obscure right-wing movement, the National Socialist Part (Nazi), tried to emulate his hero, Benito Mussolini, and violently seize control first of the Government of Bavaria and then of Germany. This was a high-stakes gamble, based on an inadequate understanding of the political situation in Germany: Hitler believed, based on a brief meeting, that the governor of Bavaria, Gustav Ritter von Kahr, the chief of police, Colonel Hans Ritter

von Seisser, and the military commander of Bavaria, General Otto Hermann von Lossow, would support his coup, his *putsch*. He also believed the German people would support him, a relatively unknown politician who had seized power illegally. Hitler's gamble failed, he was arrested and served time in prison. Hitler learned to be suspicious of promises and to become a better judge of people and their motives. He also learned that power had to be seized "legally", that is the gaining of power had to have the outward appearance of being "lawful." And, in 1933, through a series of political maneuvers, Hitler legally became Germany's Chancellor [7-10].

In 1936, after Hitler had consolidated his control in Germany, after he met leading politicians from France and Great Britain, after he studied them carefully and took his measure of them and found them wanting, Hitler gambled that he could re-occupy the Rhineland: the region west of the Rhine that, after Germany's loss in World War I was de-militarized, and served as an unarmed "buffer" between France and Germany. In 1936 Hitler's armed forces were one-hundredth the size of France's and militarily and technically inferior. He gambled, correctly, that France, traumatized by its losses in the World War I, would not oppose him. Hitler's reoccupation of the Rhineland removed the Rhine, the great natural barrier between France and Germany, as a French defense [7-10]. As Ian Kershaw wrote: "Few thought Hitler would take great risks over the Rhineland when conventional diplomacy could succeed. In any case French military leadership grossly exaggerating German armed strength had made it plain that they opposed military retaliation and that the reaction to a fait accompli would be purely political. The truth was the French had no stomach for a fight over the Rhineland.....and Hitler sensed this.... Nothing was certain and not all Hitler's advisers favored the risk he was increasingly prepared to take.....But Hitler had been proved right in his boldness."

In 1934, one year after he became Chancellor, Hitler impulsively gambled that he could annex Austria. Although he had not lived in Austria since 1914 (20 years in the past), as a native Austrian Hitler believed the people of Austria would welcome his embrace. Hitler's operatives assassinated the Austrian Chancellor, Engelbert Dollfuss, but his gamble failed when Mussolini, Austria's protector, came to Austria's aid. A good gambler understands his game: black-jack, dice, poker, roulette, understands the odds of the game, and understands the people or "house" he is playing against. In 1934, Hitler didn't understand the game (the desire of the people of Austria for union with Germany) or the players (Mussolini). During the next four years Hitler built up the economy, the military strength and the prestige of Germany (an economy, military strength and prestige absent in 1934) and befriended Mussolini [7-10]. In 1938 having assured himself that France and Great Britain would not act, and having assured himself that Mussolini would not oppose him, Hitler gambled that he could annex Austria. His understanding of his opponents was better than that of his generals, generals who were convinced the annexation would result in war. And in March 1938 Hitler and Germany peacefully annexed Austria [7-10].

In 1938, after Hitler had annexed Austria and surrounded Czechoslovakia on three sides, Hitler gambled that he could annex the Sudetenland, the German- speaking part of Czechoslovakia, the part that contained the main defenses of Czechoslovakia. Although France had an alliance with Czechoslovakia Hitler gambled, correctly, that France would not act. France had not acted when Hitler marched into the Rhineland and France had not acted when he annexed Austria-why, he reasoned, would they oppose him on Czechoslovakia. Although Great Britain had an alliance with France, Hitler gambled, correctly

that Great Britain, guilt-ridden over the hardships the Treaty of Versailles had imposed on Germany, and having not acted when Hitler occupied the Rhineland and annexed Austria would not act. After- all Hitler could claim, correctly, that he was only taking back territory that historically was German, or at least was occupied by Germans. Although Hitler's generals anticipated a war if Hitler ordered them to march into Czechoslovakia, Hitler was convinced after meeting the leaders of Great Britain (Chamberlain) and France (Daladier) that they would agree to his plan to annex the Sudetenland [11]. And once the Sudetenland, its mountains and fortifications were breached, the remainder of Czechoslovakia was helpless [7-11].

In 1939, Hitler gambled that he could annex the remainder of Czechoslovakia, lands that were not German [7-11]. Although Hitler gambled correctly that France and Great Britain would not act, he lost any trust he had built with France and Great Britain especially with Britain's accommodating Prime Minister, Neville Chamberlain.

Later in 1939, Hitler gambled that he could annex parts of Poland, parts that were German, without going to war. To hedge his bet, to minimize his gamble, he made an alliance with his arch-rival Stalin. Hitler sensed that Stalin, an absolute dictator like himself, a man as suspicious and paranoid as himself, and a man as "realistic" as himself, was impressed by Hitler's bullying of France and Great Britain, and of the relative cowardice of the West in confronting Hitler. Hitler suspected, correctly, that Stalin did not trust the West, and that although they were philosophical rivals, he and Stalin were "realists" and could make a deal [7-11,12].

Although Great Britain and France declared war on Germany, they did nothing to help the Poles, and the German army over-ran Poland in three weeks. Hitler, who was paranoid and a gambler, did not trust Stalin, and he planned, eventually, to attack Stalin. The idea of attacking Russia, of gaining living- space, *lebensraum*, in the east for Germany was inbred in Hitler. He had written about it in *Mein Kampf* and he needed only an opportunity [12,13]. Stalin, who was as paranoid as Hitler, had read *Mein Kampf* but was not a gambler, he believed that Hitler, who would be pre-occupied with war in the West, would not attack. Stalin believed that Hitler would not gamble on a two- front war [7-10,12].

In 1940, Hitler gambled that he could defeat France and secure his western front. In 1940, the French army was considered the best in the world, and France was allied with Great Britain, and the British navy was the best in the world [7-10, 14-16]. Rather than taking the traditional route of attack through the Low Countries, the flat lands of Belgium and Holland, Hitler's main thrust was through the "impassable" Ardennes Mountains. He gambled on the advice of a relatively unknown general, Erich von Manstein, a general whose innovative and unorthodox ideas excited Hitler [14,15]. Hitler gambled correctly, the German invasion through the Ardennes resulted in the defeat of France in eight weeks, a defeat that the German Armies in World War I could not accomplish in four years. In 1940 Hitler had had PD for at least six years and his thinking was unimpaired.

In 1941, Hitler gambled that he could defeat Russia. His life-long ambition, enunciated in "*Mein Kampf*" was to secure an empire for Germany in Russia [10,12]. He believed the odds favored him, based on the poor performance of the Red Army in its recent war against Finland, a performance related to Stalin's destruction of the Russian General Staff in 1939 – 1940. [7-10,14,15,17,18]. Hitler had defeated France and although Great Britain was undefeated, Hitler did not believe Britain represented a credible threat. Hitler did not believe that

in attacking Russia he was risking a two- front war. Hitler gambled that he could thrust into Russia in a three pronged attack: north toward Leningrad, centrally toward Moscow, and south toward the Ukraine and the oilfields of the Caucasus [14,15,17,18]. Like a good gambler Hitler thought he had estimated his odds and his opponent, Stalin, correctly. Hitler's gamble was too great, he had underestimated his odds and the tenacity and determination of his opponent especially Stalin, a man he had never met. Although Hitler conquered and occupied White Russia and most of the Ukraine, his army was defeated at Moscow [7-10,14,15,17,18].

In 1941, after his ally, Japan, attacked the American Pacific Fleet at Pearl Harbor, Hitler declared war on America. His alliance with Japan did not obligate Hitler to declare war on America, but he reasoned that America's aggressive actions in the Atlantic Ocean in defense of Great Britain would cease if America had to turn her attention to the Pacific. He gambled that his declaration of war would encourage Japan to continue her fight against American and not make an early peace. He gambled, incorrectly, that if he had to fight America he could defeat her, a "mongrel" nation lead by a crippled and immobile President [7-10].

In 1942 and 1943, Hitler again gambled that he could defeat Russia. In 1942, his gamble nearly paid-off when his Army again invaded the Ukraine and almost captured Stalingrad [14-15, 17-19]. His defeat at Stalingrad caused him to "double-up", to gamble, unsuccessfully, that he could recover his losses in 1943 at Kursk, a major Russian fortress [14,15,17- 20]. Hitler was like many gamblers, successful initially, he kept gambling, confident of his ability to assess the odds, and so he becomes reckless. Hitler's state of mind is well described by Albert Speer, one of Hitler's closest associates [21]: "Initially, in 1940-1941" Speer wrote, "Hitler knew how to distinguish key matters from those of lesser importance, was adaptable, and surprised everyone by the swiftness with which he could choose among several possibilities and justify his choice. Effortlessly, he found his bearings when presented with technical processes, plans and sketches. His questions showed that during the brief explanation period he could grasp.....the essentials of complicated subjects."

In 1943, after Stalingrad, after defeats in the Africa and defeats in the Battle of the Atlantic, Speer wrote: "Both his old associates and his adjutants agreed that Hitler had undergone a change in the past year. This could scarcely be surprising, for during this period he had experienced Stalingrad.... Hitler could see the meaning of this turn of affairs and undoubtedly he reacted to it...with disappointment and dejection."

In June 1944, Hitler gambled the Allies would land at Calais, the shortest distance across the English Channel. He lost his "bet" when the Allies landed at Normandy [22]. In December 1944, Hitler gambled he could repeat his success in 1940, launching a surprise attack through the Ardennes, the Battle of the Bulge. He lost [23]. As Ian Kershaw wrote [4]: "Later came the tacit acknowledgement that his risk taking, his last gamble, the Ardennes offensive, had been a losing throw of the dice."

In 1918, if one were to choose one person out of 80,000,000 Germans to reverse the losses of World War I and the Treaty of Versailles, one would not choose an Austrian refugee, Adolf Hitler, a "high school" dropout, a vagrant who had never held a steady job [1,2]. The odds that in 13 years, Adolf Hitler could rise to the Chancellorship of Germany, were incalculable, odds only a gambler, a risk taker like Adolf Hitler would take.

Hitler's early successes occurred because his lack of impulse control, his risk-taking, and his gambling instinct were coupled with an insightful understanding of human nature and a poisonous but forceful philosophy. He was a fanatic but an insightful one [24].

Stalin, Hitler's great rival, could similarly be described as a fanatic and an insightful one [21-27]. Stalin, who was not a gambler, won while Hitler lost. Although it could be argued that Hitler's later failures occurred because his PD exaggerated his lack of impulse control, his gambling instinct, and "robbed" him of his understanding of human nature, it's unlikely the disease, a disease starting in 1934 progressed so rapidly. And while amphetamines may have sharpened his paranoia it's unlikely they accounted for his errors. As Redlich wrote [24]: "In all likelihood Hitler abused amphetamines but was not addicted to them, like his great antagonist, Sigmund Freud who used cocaine for a time but was not addicted. No solid evidence is cited indicating that Hitler's amphetamine abuse caused his crimes, but it might have played a role in lowering his inhibitions and his committing such grave mistakes as declaring war on the United States. Ultimate proof for this assumption, however, does not exist."

Another view is that of Professor Nassir Ghaemi a professor of psychiatry [28] who cites evidence from Leonard Heston MD and Renate Heston RN who did extensive interviews with people who knew Hitler [5]. It was the Hestons who documented Hitler's use of amphetamines which began in 1937; long after Hitler's risk taking behavior was established. Ghaemi believes that Hitler had bipolar disease [28]: "Hitler had clear manic and depressive episodes throughout his life. Excellent evidence exists from the memoirs of his closest friend from young adulthood, August Kubizek, who described dangerous fits of depression.....at such times he was inaccessible, uncommunicative and distant....Hitler would wander around aimlessly and alone for days and nights.....this state lasted several weeks.

Hitler's manic symptoms included over-talkativeness, grandiosity, euphoric mood, decreased need for sleep, and hyperactivity, all occurring episodically, and in alternation with depression as occur in bipolar disorder." Ghaemi believes the combination of bipolar disease and amphetamine use accounted for Hitler's mental decline in his later years. Ghaemi, and the Heston's, make no mention of Hitler's Parkinson disease. Ghaemi writes [24] "Hitler had relatively severe bipolar disease, like (Winston Churchill) and (General) Sherman, but unlike them he received daily intravenous amphetamines treatment for the last four years of his life (1941 -1945)....a normal person would have a tough time remaining sane.....To call Hitler a time bomb would be to understate matter."

These are interesting conjectures but as Ghaemi did not examine Hitler and his insights remain conjectures. Although one cannot exclude the potential effects of cognitive decline [29,30], of amphetamine psychosis [5,6], or of possible bipolar disease [24] the likelihood is that Hitler and Germany's failure resulted from waging war against the United States, the world's greatest industrial power, the British Empire, containing a quarter of the world's population, and the Soviet Union, the country with the world's largest land mass. If one looks at history, it's more likely that Hitler's failures, like the failures of Hannibal, Attila the Hun, or Napoleon Bonaparte were inherent in the hubris of a risk-taker, a gambler

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