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## SCIENCE, ESPIONAGE AND TINTIN

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### ABSTRACT

Herge's immortal creation, Tintin has become a symbol of mankind's odyssey through the turbulent tides of modernity. He has had to confront almost all the nightmares that shook the twentieth century from the Holocaust and oil politics to the Cold War. The collapse of the British empire in the aftermath of World War II led to two new emerging superpowers (the USA and USSR) taking centre stage and battling for global supremacy in what came to be called the 'Cold War'. This spawned a 'Space Race' between the two nations as to which one would conquer the 'final frontier' of space first, which is remarkably presaged by Here in his albums, *Destination Moon* and *Explorers on the Moon*. Espionage is an enduring motif of the Cold War era as evident from several literary and historical records of that time. Here so adroitly depicts this espionage motif in the Moon adventures and especially in *The Calculus Affair* through the unrelenting surveillance of the Bordurian and Syldavian agents on Professor Calculus as they are vying after his creation—the powerful ultrasonic transmitter, and how Tintin, in his bid to save the Professor, gets embroiled in the tensions of the Cold War.

**Keywords:** Science, Space Travel, Espionage, Cold War

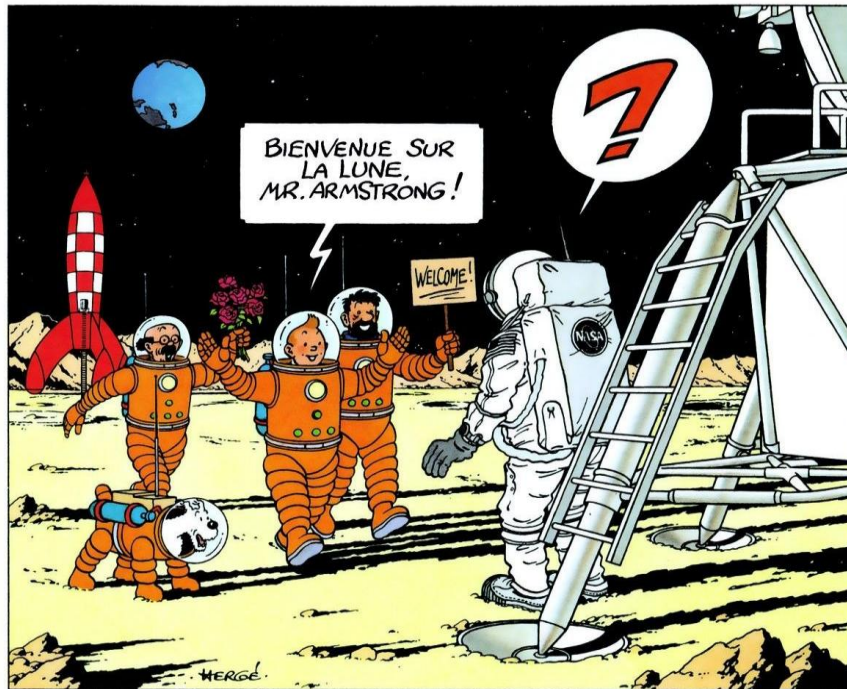
### INTRODUCTION

Tintin, Herge's boy-hero of the turmoil-stricken modern world, first made his appearance on 10<sup>th</sup> January, 1929 in the famous Belgian Daily named *Le Petit Vingtieme*. Largely based on an earlier character by Herge, a boy-scout named Totor, the intrepid Belgian journalist, with an adorable quiff of hair and assisted by his rambunctious canine companion named Snowy, became one of the most famous and iconic characters of the twentieth century. The character of Tintin over the many decades of its evolution has a lot of depth and nuance. Even though Herge's perspective is undoubtedly informed by a Eurocentric conception, Tintin has become a symbol of mankind's odyssey through the turbulent tides of modernity. Modernity had been hailed as something that was to be aspired with the optimism of being able to achieve hitherto unattained heights with respect to scientific advancement, increased production and industrialisation, global connections and humane values that cut across narrow barriers and allowed the modern individual to develop the creative and critical faculties of the modern mind. However, modernity as it came to exist in the twentieth century bore witness to the emergence of Fascism, World Wars, atom bombs, power struggles based on competition over the oil market, Cold War and so on. Tintin's character thus became a vantage point for Herge to critically ruminate over the appalling gulf between what modernity was supposed to be and how it actually panned out.

Over the course of the first fifteen volumes, the intrepid Belgian globetrotter has visited places like Soviet Union and America, played the role of ‘BoulaMatari’ or the benevolent ‘white man’ in Congo, rescued abducted princes from the clutches of diabolical criminals and thwarted nefarious schemes like the adulteration of petrol/oil resulting in explosion. But in the sixteenth and seventeenth volumes, *Destination Moon* and *Explorers on the Moon*, Herge takes his protagonist to the next level as Tintin and his friends embark on an audacious space odyssey—journeying to the moon. Space travel has always been a source of fascination for mankind. Jules Verne in his *From the Earth to the Moon* and *Around the Moon* sent astronauts to the moon but failed to provide a proper landing mechanism as he was unaware of any progress in that field. Wells’ *The First Men in the Moon* tells the story of a journey to the moon undertaken by Mr. Bedford, a businessman narrator, and an eccentric scientist, Mr. Cavor. Wells delves into the realm of the fantastic (a realm which Herge very consciously avoids) as he makes Cavor and Bedford encounter extra-terrestrial beings called Selenite’s on the Moon. Unlike his predecessors here tries to keep his work as realistic as possible.

Herge wrote these two volumes at a very crucial point of time in history—when space travel was merely a few years ahead and with the spectre of the Cold War looming large in the aftermath of the devastating World War II. Back in the Cold War era, two superpowers namely the USA and the USSR competed fiercely to conquer the ‘final frontier’—space. It was a race to be the first to reach the moon, to send satellites into orbit and to showcase technological superiority. From Yuri Gagarin’s historic journey to Neil Armstrong’s iconic words, “That’s one small step for man, one giant leap for mankind”, this competition pushed boundaries and inspired generations. The ‘Space Race’ was more than just a rivalry; it was a testament to human ambition and the power of innovation. Espionage is an enduring motif of the Cold War. The main purpose of Cold War espionage was to gather information and intelligence about the enemy, particularly their military and technical capabilities. This period is replete with stories of spies, agents and assassins, operating under cover and living double lives to infiltrate into enemy governments and societies. Herge’s *The Calculus Affair* takes Tintin into the heart of the Cold War and embroils him in a secret struggle for the plans to a deadly superweapon.

Herge first devised the idea of sending Tintin on a mission to the Moon while he was working on *Prisoners of the Sun* (1945). His decision to move into the field of science fiction might have been influenced by his friendly rivalry with his colleague, Edgar P. Jacobs, who had recently had success with his own science fiction comic, *The Secret of the Swordfish*. Surprisingly, Tintin and his companions foresee the Apollo XI mission, i.e. Neil Armstrong’s ‘first step’ on the moon.



Tintin and friends greeting Neil Armstrong for his momentous feat

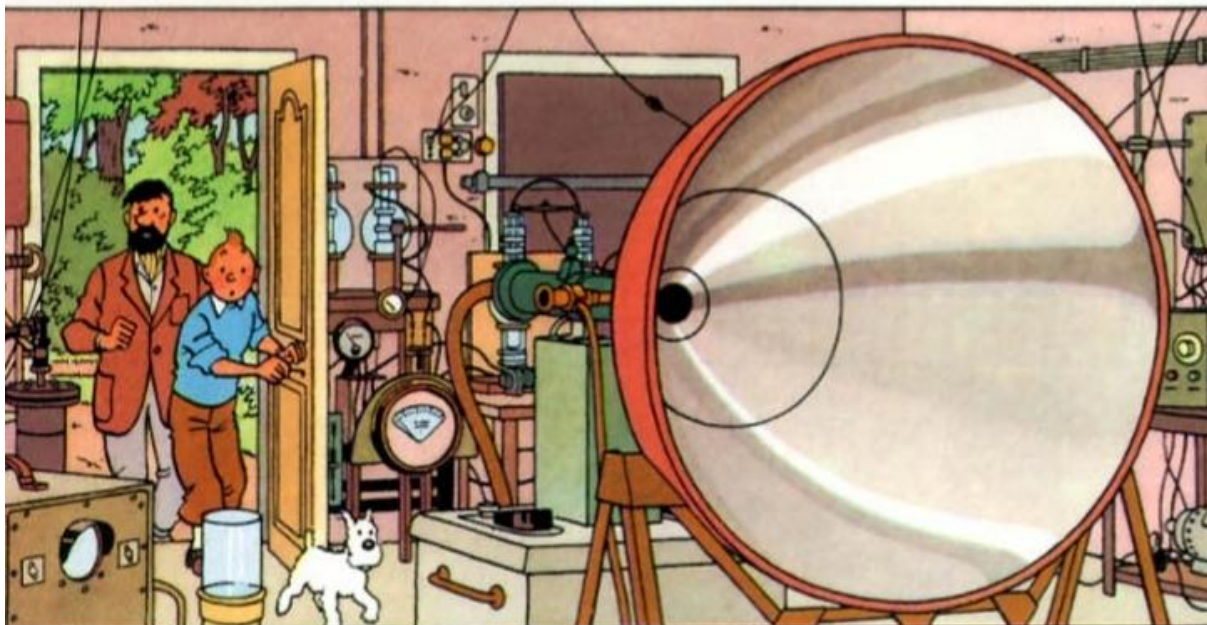


Tintin, Captain Haddock, Snowy and the Moon Rocket on the surface of the moon.

The design of the rocket is inspired by the German V2 rocket of the Nazi rocket programme, developed by Wernher von Braun at the Peenemunde research centre. The



Spordj Atomic Research Centre and the nuclear motor powering the Moon Rocket are testimonies to the fact that atomic research and nuclear power was becoming the chief object of scientific research as well as site of contestation among the foremost nations of the world. Herge was meticulous about his work as he got the detailed model of the moon rocket examined by Professor Alexandre Ananoff (the author of *L'astronautique*) for final approval. The space suits, the ergonomic bunks, the lunar reconnaissance tanks are examples of Herge's precision and emphasis on detail. In *The Calculus Affair*, Herge introduces us to the parabolic ultrasound transmitter. The Nazis had conducted research in the field of ultrasonics under the supervision of Albert Speer, Hitler's Armaments Minister to check the potential of ultrasonic sound as the ultimate weapon to destroy cities. Herge takes this subject from Leslie E. Simon's book *German Research in World War II* which appears on the table of Professor Topolino, with the only difference being the swastika missing on the book's outer cover in Herge's version. Tintin's lunar expedition is definitely a celebration of unprecedented scientific advancements and the limitless potential of mankind, especially after the devastation and unmitigated carnage that humanity got to witness during World War II. In *The Calculus Affair*, the ultrasound transmitter is a possible harbinger of destruction. It reminds us of the atomic bombings of Hiroshima and Nagasaki by the Harry S. Truman led US government. Herge's sceptical outlook towards science is visible in bits and pieces throughout the moon adventures, but in *The Calculus Affair*, he questions the moral and ethical responsibilities of a scientist and speculates over the catastrophic ramifications that await mankind if a deadly superweapon like the one created by Professor Calculus passes into the hands of power-hungry nations such as Borduria and Syldavia.



The parabolic ultrasound transmitter in Professor Calculus' lab



A small-scale and yet effective demonstration of the destructive potential of the ultrasound transmitter

The Cold War provides a crucial backdrop for the moon adventures and the subsequent *The Calculus Affair*. Herge's *Destination Moon* and *Explorers on the Moon* in many ways presage the 'Space Race', a neck-to-neck competition between USA and USSR to conquer the final frontier—the cosmos itself. The Sprodj Atomic Centre maintains the utmost confidentiality while conducting research on the moon rocket. Espionage became a major feature of global politics as First World Nations spied on each other to gain vital information and get one step closer to global supremacy. The fall of the once omnipotent and seemingly invincible British Empire in the wake of World War II led to the USA and USSR taking centre stage in a struggle for global supremacy. The first high-profile case of espionage is considered to be that of Klaus Fuchs, the German theoretical physicist who was a major member of the Manhattan Project's Los Alamos laboratory under the leadership of Dr J. Robert Oppenheimer. In January 1950, Fuchs made a confession that he had passed on information to the USSR regarding the Atomic Bomb project over a period of seven years beginning in 1942. He was apprehended in Britain and sentenced to fourteen years of imprisonment. The scientist-as-traitor figure is none other than Frank Wolff, who like Fuchs, passed on valuable information to the rival party and worked in cahoots with Colonel Boris Jorgen to sabotage the moon rocket and take it back to Earth without Tintin and his friends. In *Destination Moon* and *Explorers on the Moon*, we find the spy-cum-saboteur figure named Colonel Boris Jorgen, a vengeful ghost from Tintin's illustrious past returning to settle some old scores with the boy reporter. Last seen in *King Ottokar's Sceptre*, trying to dethrone King Muskar XII and annex the then peaceful territory of Syldavia to the rivalling nation of Borduria, Jorgen is back as the scheming traitor figure eager to achieve his goals at all costs. He becomes the central figure in an international conspiracy hatched to sabotage and steal the Moon Rocket developed by Professor Calculus at the Sprodj Atomic Centre. Just like the betrayal of King Muskar, Jorgen knows only money and can betray even his countrymen to



reach his goal. But it is to be noted that Jorgen is a pawn, a man-for-hire. He is a part of a larger conspiracy which is represented by the figure of a supposedly American ‘gentleman’ Mr Miller, a product of Herge’s cynical and sceptical attitude towards the Americans. Miller tries to sabotage first the experimental moon rocket X-FLR6 and then commissions Jorgen to capture the manned moon rocket with the help of Wolff, whose weakness for gambling makes him vulnerable. All their nefarious schemes are foiled by Tintin, the ultimate saviour figure.



Tintin, the saviour after capturing Col. Jorgen and Frank Wolff

The Calculus Affair is a political as well as a spy thriller. Things breaking and cracking up all of a sudden, gunshots being fired outside Marlinspike Hall, a mysterious visitor (Jolyon Wagg), Calculus leaving for a congress on nuclear physics in Geneva, an intruder entering Professor Calculus’ lab; the stage is set for a thrilling fun ride. It is interesting to note that Syldavia, once a peaceful and tranquil country, joins the arms race with its political rival, Borduria. In King Ottokar’s Sceptre, Syldavia was the weak Austria being threatened by the strong and dictatorial Borduria reminiscent of Nazi Germany and its aggressive expansionist policies under Hitler. In The Calculus Affair, Syldavia and Borduria represent the rivalling factions of the Cold War—the USA and the USSR. One extremely telling illustration is presented in the panel where the Syldavian and Bordurian spies engage in a dogfight to claim the right to Professor Calculus and his weapon of mass destruction, i.e. the parabolic ultrasound transmitter.



A struggle to get hold of Professor Calculus between the Syldavian and Bordurianspies.Initially procured by the Syldavians, Professor Calculus is captured by the Bordurians when the plane carrying him is brought down by the Bordurian Air Ministry. Colonel Sponz, the leader of the ZEP secret police reminds one of the Soviet KGB. The whiskers of the autocratic Marshal Kurvi-Tasch, the ubiquitous symbol of the country, reminds one of the Soviet dictator, Joseph Stalin's pronounced moustache. Sponz confesses to the Italian soprano, Bianca Castafiore about bringing in a 'foreign professor' (Calculus) whose secret weapon shall give world supremacy to the Bordurian regime. Like any quintessential villain, Sponz reveals that his coat contains the passes required to release Calculus and this coat was hanging in the wardrobe where Tintin and Haddock were hidden. Tintin and Haddock beat the Bordurians at their own game of espionage by rescuing the Professor and restoring peace at the end.

One thing is noticeable in the moon adventures as well as The Calculus Affair; a reconciliation between the unstoppable progress of science and the ethico-moral concern of such progress is achieved. At the end of Explorers on the Moon, Herge voices his concern for such a perilous endeavour through the voice of Captain Haddock as he proclaims, "May I be turned into a bollard, blistering barnacles, if I so much as set foot in your flying coffin again... MAN'S PROPER PLACE IS ON DEAR OLD EARTH." It is evident that there is a perfect balance between the optimism related to scientific progress and scepticism regarding the recklessness and unknown peril that scientific progress can bring. In The Calculus Affair, the microfilms containing the designs of the parabolic ultrasound transmitter are burned and destroyed by Professor Calculus who foresees the catastrophic consequences caused by the very existence of such an invention after being himself at the centre of a political tussle between Syldavia and Borduria. This realisation comes in the friendly company of Tintin and the ever-rambunctious Captain Haddock as Herge passes on the message of creation on the part of the aspiring scientist.

Underlying Herge's treatment of science and technology lies a cynical approach towards humanity's lust for power and glory. Modern science is undoubtedly a boon for

human civilization, but unfortunately, man's corrupt nature degrades it to a tool of gaining power and supremacy over the world. The moon rocket in Destination Moon and Explorers on the Moon becomes a site of contestation between political powers, instead of these nations working in solidarity to open up wider vistas of scientific research. Similarly in The Calculus Affair, the sole ulterior motive of the political powers is to use the parabolic ultrasound transmitter as a potent weapon for world domination. This in turn leads to a series of spying incidents, abductions, murder attempts, premeditated accidents and much more. And it is in this regard that Tintin emerges as the saviour figure and Herge's champion of humanity. He is an embodiment of justice and moral uprightness and presents a constant ideal of truth in a world full of trickery, corruption and violence. Ultimately, it is through Tintin that Herge protects the marvel called modern science from the evils of sinful humanity.

### REFERENCES

1. Herge. Destination Moon. London. Egmont UK Limited, 2002. Print
2. Herge. Explorers on the Moon. London. Egmont UK Limited, 2002. Print
3. Herge. The Calculus Affair. London. Egmont UK Limited, 2002. Print
4. Peeters, Benoit. Tintin and the World of Herge. London: Methuen Childrens' Books, 1989. Print
5. Farr, Michael. TintinThe Complete Companion. London: John Murray Publishers Limited, 2001. Print
6. "The First Men in the Moon." Wikipedia, Wikimedia Foundation, 20<sup>th</sup> November 2023, [https://en.wikipedia.org/wiki/The\\_First\\_Men\\_in\\_the\\_Moon](https://en.wikipedia.org/wiki/The_First_Men_in_the_Moon)
7. "Cold War espionage." Wikipedia, Wikimedia Foundation, 17<sup>th</sup> January 2024, [https://en.m.wikipedia.org/wiki/Cold\\_War\\_espionage](https://en.m.wikipedia.org/wiki/Cold_War_espionage)
8. Ampton. "Ampton Read: The Calculus Affair." Wordpress, 10 Sept 2019, <https://ampton.wordpress.com/2019/09/10/ampton-reads-the-calculus-affair/>