

Abstract:

In this thesis, French Catholic responses to the Space Race, starting with the launch of *Sputnik I* in 1957, and ending with the moon landing of *Apollo 11* in 1969, are analysed. This is done by looking at four major Catholic newspapers. Each of these papers represented an aspect of the fragmented French Catholic society. When taken together and compared, these papers allowed for a study of the different opinions towards spaceflight in France during the Space Race. To find out whether these opinions were specific to Catholics or more generally held across society, as a point of reference, the response in the secular paper *Le Monde* are also taken into the equation.

Even though the topic is far from conventional, this study is able to provide relevant additions to several fields. These additions can be divided between more theoretical findings about the development of religion, and more practical observations regarding French history and Catholic history.

Firstly, on a more abstract level, this study questions the master narrative of secularisation. This is done by showing that the teleological framework used to explain the development of religion is not able to incorporate the way Catholics reacted to modernisation in the form of spaceflight. In other words: the classical image of the decline of religion in the face of modernity does not show from this case study.

But apart from fulfilling this negative role in this thesis, secularisation also features as an object of study. For the way French Catholics saw their

present and future was very much influenced by the spectre of secularisation. But, with the reforms of the Second Vatican Council (1962-1965), a new progressive stance was taken regarding modernisation. Spaceflight played a crucial role in this Catholic repositioning, for it was the live broadcasted Genesis-reading aboard *Apollo 8* on Christmas Eve 1968 that remystified spaceflight and space, and convinced many Catholics that scientific modernisation was not a threat to religion anymore. So even though some already saw the possibility for science and religion to integrate, after this single event, this thought became much more widespread amongst French Catholics. In abstract words, from that point on, the developments of spaceflight caused scientific progress to be definitely detached from the master narrative of secularisation in the minds of French Catholics. Moreover, the Genesis-reading greatly boosted Catholic confidence, making the secularisation seem less menacing than before.

Apart from these observations regarding the development of religion, this thesis also provides a new insight into French history and Catholic history. It for example showed that the split within French Catholic society grew during the timespan of the Space Race, but, surprisingly, that the diverse factions came closer together regarding their views on spaceflight.

Another interesting conclusion is that spaceflight influenced the way French Catholics perceived the Cold War. The Space Race was clearly seen as a struggle between the superpowers in which France, despite its relatively successful space program, had no role to play. Crucially for the image of spaceflight, the same rockets that were used for the exploration of space could also be used to carry a nuclear payload, and spacefaring therefore always remained connected to the danger of atomic warfare.

Another important conclusion is that French Catholics perceived the Cold War differently than non-Catholics. Instead of seeing the familiar Cold War between the communist Soviet Union and capitalist America, French Catholics lived through a Catholic Cold War in which Catholicism above anything struggled against anti-religiousness. And spaceflight offered a unique argument for Catholics in this confrontation, because towards the end of the Space Race, the Soviet space program was sometimes framed as a profane program, symbolising the negative, self-destructive force of communism, and atheism in general.

Lastly, by comparing the findings of this thesis with secondary literature about the responses of American believers, it turns out that French Catholics evaluated spaceflight differently than religious Americans. Whereas Americans generally had a much more positive outlook on spaceflight and saw reacted to the exploration as Americans rather than believers, while for French, this was the other way around.

The Space beyond the Heavens

French Catholic Responses to Spaceflight, from *Sputnik I* (1957) to

Apollo 11 (1969)

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Introduction

When *Apollo 11* landed on the moon on July 21 1969, many French commentators declared that Jules Verne's science fiction had become reality. But in the Catholic newspaper *La Croix*, editor Pierre Hauptmann related to Verne in a distinct way. For Hauptmann too it was clear that Verne's writings were finally 'dépassé' a century after his death.¹ But, he continued, the writings of another great Frenchman, Blaise Pascal, were not.

Pascal had famously felt a horrendous dread because '[...] il n'y a point de raison pourquoi ici plutôt que là, pourquoi à présent plutôt que lors.'² Only a century before him, the cosmos had still been ordered and finite. It had been a universe that a poet like Dante had envisioned to be moved by the force of love. But when the mathematicians and astronomers replaced the poets and theologians, the romantic geocentric cosmology of Christianity disappeared. In its place came a cold infinity, which, with the mathematically calculable models of Copernicus, had no need of Dante's love. Nevertheless, Pascal had famously remained a staunch believer in Christianity. By referring to him, Hauptmann wanted to ensure his audience that while science fiction had become "science proper", religion still stood strong.

But not everybody in the late sixties was as confident as Hauptmann that religion had a place in modern society. France and most other Western societies

¹ Pierre Hauptmann, 'Jules Verne dépassé... mais non Pascal', *La Croix*, 21-7-1969, p. 16.

² 'There is no reason why here rather than there, why now rather than when', Blaise Pascal, *Pensées* [1669] 17, 68, 102, [<http://www.penseesdepascal.fr/I/118-moderne.php>] (accessed on 12-2-2017).

saw a sharp decline in religious vocations as the new wisdom of smoking leftist and existentialist philosophers replaced the familiar Christian message. This was also a time when many replaced their quiet countryside homes for the bustling city high-rises. And even the traditional family, that famous beacon of Christian life, was reshaped as the sexual revolution made people question their core values.³ So as people sought an explanation for why so many previously filled church benches remained vacant, it was easy to draw a straight line from a religious past to a secularising present and future. Progress and modernity thereby became responsible for the disappearance of God and the decline of religion in French society.

With this in mind, it is not hard to see why people like Hauptmann felt the need to reassure believers that religion was not threatened by the hyper-modernity of spaceflight. For did mankind's ascent to the former heavens not show that biblical cosmology had been wrong? What need was there for God when human intellect seemed to be the only prerequisite for the exploration of the universe? And what role could the Church still play in a society that seemed to be accelerating ever faster into the future?

The answers French Catholics gave to these kinds of questions will be the topic of this thesis. More specifically, I look at the way French Catholics responded to the Space Race, starting with the launch of the first *Sputnik* in 1957 and the ending with American moonwalk of 1969. But, crucially, the exploration of space was never *just* a technical or scientific endeavour. It was always attached to political strategies and military projects. French Catholic responses

³ For a detailed study on modernisation in France, see: Kristin Ross, *Fast Cars, Clean Bodies: Decolonization and the Reordering of French Culture* (Cambridge, Massachusetts, 1995).

therefore also provide an insight into how people at the time perceived the politics and military dangers of the Cold War. Moreover, since the Vatican steered a very anti-communist course, and the communist Soviet Union was one of the two contenders in the race, a study of Catholic responses to spaceflight reveals the specificities of how a Catholic Cold War, revolving specifically around questions of religion, played itself out alongside the familiar struggle between the Soviet Union and the United States.

But before explaining the practicalities of how French Catholic society can be studied, the crucial background concept for this thesis must be further introduced: secularisation. In contrast with a long tradition of scholarship, in this thesis secularisation will be regarded as a master-narrative.⁴ That is, it will not be defined as the sum of empirical observations like the loss of church adherence, the disappearance of religious language in legal matters, or the drop in religious vocations, but rather as the story people tell to explain these developments. Secularisation thereby becomes the re-usable framework of the explanation for religion's decline in the face of modernity.

In the case of spaceflight, a clear example can be found in the seminal work of Steven Dick and Roger Launius, who write in their work on the societal impact of spaceflight:

Historically, not all cultures have embraced the doctrine of progress through technology. Some groups elevate the attainment of spirituality through religious faith and salvation, a perspective that exhibits mosques and cathedrals rather than rocket ships as symbols of perfection. [...] Space travel and its various spinoffs emphasize a view of progress rooted in the Age of Enlightenment and the scientific revolution that accompanied it.⁵

⁴ For an enlightening differentiation of the different kinds of narratives historians use, see: Allan Megill's *Historical Knowledge, Historical Error: A Contemporary Guide to Practice* (Chicago, 2007).

⁵ Steven Dick and Roger Launius ed., *Societal Impact of Spaceflight* (Washington, 2007), pp. 10-11.

Dick and Launius use secularisation to explain why some societies developed spaceflight and became more “advanced” than others. But other authors would use it to make sense of the decline of Christian democratic parties, while others still would use it as a frame to explain the commercialisation of religious holidays. In other words, secularisation provides the outline of the story upon which these specific narratives about religion’s development can be built.

But many historical studies have shown that the straight line through history, from a primitive religious world to a modern secularised society, is complicated when we zoom in to reveal specificity.⁶ But even though many scholars nowadays agree that history is more complex than a deterministic teleological “Whig” account allows for, the secularisation narrative proves to be very tenacious, and turns out to be *the* underlying narrative to practically all stories about the development of religion.⁷ Historian Jeffrey Cox therefore sees it as ‘one task of scholarship on modern religious history’ to unmask ‘the master narrative [of secularization]’.⁸ Similarly, the British philosopher of science John Hedley Brooke writes that many studies have ‘revealed so extraordinarily rich and complex a relationship between science and religion’ that ‘[t]he real lesson turns out to be the complexity.’⁹

One of the ambitions of this thesis is to reveal part of this complexity. This does not mean that I provide empirical data to argue whether religion did indeed

⁶ Jeffrey Cox, ‘Master narratives of long-term religious change’ in Hugh McLeod and Werner Ustorf ed., *The Decline of Christendom in Western Europe, 1750–2000* (Cambridge, 2003), pp. 205–8.

⁷ *Ibid.*, p. 208.

⁸ *Idem.*

⁹ John Hedley Brooke, *Science and Religion: Some speculations* (Cambridge, 1993), p. 5.

decline or not. Rather, it will be argued that the black-and-white version of the explanation for the decline of religion is an oversimplification of history that leaves out a fascinatingly rich world of details.

But the relevance of secularisation for this thesis does not stop there, because, as Hauptmann's defence of religion shows, a master-narrative like secularisation does not only shape our image of the past; the developmental lines also form our present and what we expect of the future. Secularisation will therefore also be an object of study in this thesis. That is to say, even though secularisation might oversimplify the story of religious development, people nevertheless responded to this narrative. This study of how French Catholics responded to spaceflight will therefore not only argue towards a negative deconstruction of the secularisation-narrative, it will also provide a positive explanation of how this story changed overtime and how the stories people told influenced their outlook on the world.

What follows from this second "world shaping" quality is that secularisation is not just an academic theory that belongs to the domain of philosophers and sociologists; the secularisation-narrative is used in everyday life by everyone explaining the development of religion, ranging from politicians and priests, to schoolteachers and recently-become atheists. So even though Daniel Steinmetz-Jenkins recently pointed out that the secularisation debate in French intellectual circles did not respond to the standard German works on secularisation until the late 70's, the fear of modernity still influenced the thoughts and action of Catholics across French society.¹⁰

¹⁰ Steinmetz-Jenkins, Daniel, 'French Laïcité and the Recent Reception of the German Secularization Debate into France', *Politics, Religion & Ideology*, 12,4 (2011), pp. 433-447, p. 434.

This prevalence of the usage of secularisation outside of academia makes it a fascinating object of study in the French Catholic context, because far from being a coherent group, French Catholic society was divided between many diverse Catholic factions.¹¹ In this thesis, a study of the Catholic media will provide an insight into this cacophony of diverging French Catholic voices. While historians sometimes tend to be sceptical towards studies based on the written press, Jacques Maitre, a Church historian writing in the sixties, tellingly proclaimed that a study of Catholic newspapers like no other source enables ‘une analyse des divers courants politiques à l'intérieur du catholicisme français.’¹²

French Catholic media are so suitable for this because they were extremely specialised and diverged widely in themes, audience, and political allegiance, thereby respectively representing all factions of Catholic society.¹³ Furthermore, even though the *presse écrite* was ‘l'un des principaux facteurs qui concourent à structure l'Église à l'échelon national’, they were also ‘l'expression la plus visible des divergences entre catholiques français’, and were practically alone in giving ‘la parole à des personnes qui ne sont pas persona grata devant la hiérarchie’.¹⁴ A study of Catholic newspapers thereby not only opens up

This is not to say that the concept was not a subject of academic debate before then. To name just a few examples: Philippe Delhave and Claude Troisfontaines ed., *La Sécularisation: Fin ou Chance du Christianisme?* (Gembloux, 1970); Christian Duquoc, *Ambiguïté des théologies de la sécularisation* (Gembloux, 1972); Langdon Gilkey, *Religion and the Scientific Future* (New York, 1970), and Jacques Grand'Maison, *Le Monde et le Sacré* (Paris, 1966).

¹¹ Michael Kelly, 'Catholicism and the Left in twentieth-century France' in Key Chadwick ed., *Catholicism, Politics and Society in Twentieth-Century France* (Liverpool, 2000), pp. 142-145.

¹² 'An analysis of the various political currents within French Catholicism', Jacques Maitre, 'La presse Catholique' in René Rémond ed., *Forces religieuses et attitudes politiques dans la France contemporaine* (Paris, 1965), p. 259.

¹³ *Ibid*, pp. 143-44.

¹⁴ 'One of the main factors contributing to the Church's structure at the national level'; 'The most visible expression of divergences between French Catholics'; 'let people who were persona non grata within the Church speak'. Jacques Maitre, 'La presse Catholique' p.290; Jean-Louis Schlegel,

otherwise concealed opinions for historical study, but by analysing this wide array of opinions, a very nuanced image of how secularisation was perceived at the time can be formed.

Concretely, the different voices will be distilled from four of the most important and widely read Catholic papers, each representing a different part of Catholic society. The first paper is *France Catholique*. This conservatively oriented, weekly newspaper generally geared towards 'le monde rural' and a 'public féminin' and had a circulation of around 150.000.¹⁵ The second source is the weekly magazine *Panorama*, which associated with a centre-leftist, popular audience and had a circulation of over 200.000.¹⁶ *Le Pèlerin*, the third paper, was a religiously more traditionalist, weekly magazine that was had a largely 'clientèle rurale' of around half a million readers.¹⁷ The last paper, *La Croix*, usually tried to steer a centre course between the conflicting factions and had a circulation of around 140.000.¹⁸ Being a daily paper, its main goal was to inform the public about everyday events.¹⁹ To be able to draw conclusions more confidently and see whether the above presented papers actually differed from the non-Catholic media in their responses, a fifth paper, *Le Monde*, one of the country's major "secular" papers, with a circulation of around 140.000,²⁰ will be used as a point of reference.

Because religious responses to spaceflight can be counted amongst history's unconventional topics, with this thesis I tread on relative unexplored

'La présence chrétienne dans les médias' in Denis Maugeness ed., *France-Allemagne: églises et société, du Concile Vatican II à nos jours* (Paris, 1988), p. 193.

¹⁵ Maitre, 'La presse Catholique' p. 290.

¹⁶ *Ibid.*, p. 270.

¹⁷ *Ibid.*, p. 267, 289.

¹⁸ *Ibid.*, p. 267.

¹⁹ Schlegel, 'La présence chrétienne dans les médias' p. 186.

²⁰ *Ibid.*, p. 189.

terrain. Nevertheless there have been plenty of studies on the history of spaceflight in general,²¹ and there are also significant amounts of theological ponderings on what spaceflight means for religion.²² But there have been virtually no historical studies on the interaction between religion and space exploration. Only in the last four years has interest with notable studies by Catherine Osborne and especially Kendrick Oliver.²³ Both show that religious Americans were partially very optimistic, but were also very aware of the nuclear danger that loomed large in the background. But, even though these studies opened up a new field of study, and recently more works have followed, these all strictly limit themselves to the American context.

This thesis can therefore firstly add a French perspective into this emerging field, thereby revealing if American believers were exceptional in their acceptance of space exploration, and showing how the context of a “different” (Catholic) Cold War shaped people’s perception of spaceflight. Secondly, it adds to both French history and Catholic history, it can open up novel perspectives into the splits within French Catholic society, and provide a new perspective of how a sense of a Catholic Cold War dominated people’s outlook. Thirdly, it will help bring the space age into the existent scholarship of the history and philosophy of religion, and religion’s relation to science, while also providing

²¹ Numerous volumes have been written on the history of spaceflight in general. Historical works on French space programs are rarer but examples are there: Durand de Jongh, *De la fusée Véronique au lanceur Ariane: une histoire d'hommes, 1945-1979* (Paris, 1998) and Claude Carlier, *Les trente premières années du CNES* (Paris, 1994).

²² In the French context the works of essayist Jacques Arnould would be the prime example of this.

²³ Catherine Osborne, ‘From Sputnik to Spaceship Earth: Religion and American Culture’, *Religion and American Culture* 25,2 (2015), pp. 218-263 and Kendrick Oliver, *To Touch the Face of God: The Sacred, the Profane, and the American Space Program, 1957-1975* (Baltimore, 2013).

new perspectives on the role the narrative of secularisation might play in these fields.

Following a chronological line along the Space Race, this thesis is divided into three distinct periods. The first chapter focuses on the early years of the Space Race, when the Soviet Union seemed to have had the upper hand and the threat of the nuclear bomb loomed large. The second chapter is dominated by the reforms imposed by the Second Vatican Council and how these reforms influenced the French Catholic perspective regarding spaceflight. The final chapter highlights the last two years of the Space Race when the moon came in sight and America clearly started pulling away from the Soviets. After these three chapters and a summary of the developments in the French Catholics' response to spaceflight, the main conclusion will be drawn.

1. *Fusée-phobie* or *fusée-philie*? - 1957-1961

On 4 October 1957 the Soviet Union blasted the hinges right off the starting gates of the Space Race by bringing *Sputnik I* into orbit around earth. The effect of this single event on public imagination is hard to fathom today, but it is telling that the great philosopher Hannah Arendt considered it to be the single most important event in world history. *Sputnik* had broken our earthly bonds, fulfilling our human desire to live in a world we ourselves created, and not in one that was given to us.¹

But even though the event itself came as a shock,² there had been long-time speculations about the possibility of spaceflight. Already before the launch of the *Sputnik*, comics and commercials in French Catholic media were filled with rockets. Like the flying machine before, rockets were now seen as a symbol of modernity.³ So despite the actual novelty of the *Sputnik*, spaceflight could be interpreted as a familiar exponent of the advance of modernity. Responses to spaceflight during its early development were therefore often framed in a known narrative of general modernisation.

The Catholic Church in France was not unfamiliar with debates on the effects of modernity. France, like most European countries, saw a sharp drop in

¹ Hannah Arendt, *The Human Condition* [1958] (2013, Chicago), p. 1.

² There are excellent studies on the shock effect of *Sputnik I*. See for America: Paul Dickson's *Sputnik: The Shock of the Century* (London, 2009), and for the British side of the story see Nicholas Barnett, 'RUSSIA WINS SPACE RACE: The British Press and the Sputnik Moment, 1957', *Media History* 19,2 (2013), pp. 182-195.

³ Michael G. Smith, *Rockets and Revolution: A Cultural History of Early Spaceflight* (Lincoln, 2014), pp. 2-4.

observant Catholic believers and religious vocations during the post-war period.⁴ The Historian Jean-Pierre Rioux writes about the status of the post-war French Church: 'there were serious financial problems [...] vocations were at a virtual standstill [...] the priests were ageing and their numbers were stagnant.'⁵ With the rise of modernity, the Church seemed to fade away into the margins of French society.

Next to this sword of Damocles that hung over Catholics, the Church in France also faced grave internal problems. Just like the French republic, French Catholics were split amongst many lines, tearing the Church apart from the inside.⁶ This division had really picked up pace after the First World War, when Catholicism's traditional links with the political right were loosened.⁷ This led believers to spread across society to form a mosaic held together in name only by a loose affiliation to the same Church.⁸

After the Second World War, political Catholicism made a brief comeback, drawing in many conservative votes as a result of the conservative party's disreputable role in Vichy France.⁹ The Catholic Democratic Party, *Movement Républicain Populaire*, became one of the leading parties after the war. Surprisingly, they even formed an alliance with the Communists, the other major party directly after the War, which lasted until 1947. This alliance made the

⁴ Even though there was a revival of religion in some Western countries in the early 50's, this had ceased as the decade ended. See: Hugh McLeod, *The religious crisis of the 1960s* (Oxford, 2007), p. 35, 82. For exact figures on France see: Jérôme Fourquet, 'ANALYSE : Le catholicisme en France en 2009', [http://www.ifop.fr/media/pressdocument/43-1-document_file.pdf] (accessed on 1 December, 2016).

⁵ Jean-Pierre Rioux, *The Fourth Republic 1944-1958* (Cambridge, 1989), p. 425.

⁶ *Ibid.*, p. 429.

⁷ James McMillan, 'France', in: Tom Buchanan and Martin Conway ed., *Political Catholicism in Europe, 1918-1965* (Oxford, 1996), p. 34.

⁸ *Ibid.*, p. 34.

⁹ Norman Ravitch, *The Catholic Church and the French Nation 1589-1989* (New York, 1990), pp. 146-147 and Philip G. Nord, *France's New Deal* (Princeton, 2010), p. 11.

French immediate post-war attitude towards communists very different from the well-known McCarthyism in America. Even though the Catholic hierarchy also played an important role in shaping the public opinion towards communists, they were ultimately never decisive in the divided French society.¹⁰ Overall, the historian Marcel Merle sums up the French Catholic attitude at this time perfectly when he writes that:

Si l'Eglise de France a brisé impitoyablement les velléités pro-communistes de son extrême-gauche progressiste, elle a simultanément refusé de cautionner les tendances à l'anticommunisme systématique que l'extrême-droite des catholiques aurait bien voulu transformer en une sorte de croisade antisoviétique.¹¹

But with the demise of the Fourth Republic, Christian democracy disappeared again. It was Charles de Gaulle who forced the Christian democrats off the political stage again.¹² For even though he was thought to be definitively passé, he made a surprising political comeback and became the figure that towered over the Fifth Republic from 1958 to 1969.

One of the most visible arenas where Catholics clashed after the Second World War was on the question how to deal with French-Algeria. The French General Bigeard had famously said that 'les dieux meurent en Algérie' and there was indeed not a lot of piousness in the systematic use of torture by French forces. But while the horrified leftist Catholics supported independence very

¹⁰ *Ibid.*, p. 325.

¹¹ 'If the Church of France has broken the pro-communist wishes of its progressive extreme left, it has simultaneously refused to endorse the tendencies towards systematic anticommunism which the Catholics extreme right would have liked to shape into a sort of Anti-Soviet crusade', Marcel Merle, 'Les Facteurs religieux de la politique extérieure française' in René Rémond ed., *Forces religieuses et attitudes politiques dans la France contemporaine* (Paris, 1965), p. 323.

¹² Blandine Chélini-Pont, 'French Catholics, Secularization, and Politics' in Alec Hargreaves, John Kelsay, and Sumner Twiss, *Politics and religion in France and the United States* (Plymouth, 2007), pp. 87-88.

early on, the right factions determinately wanted to hold on to Algeria.¹³

But far from keeping to politics, the left-right split ripped through the Church on practically all questions at hand. Regarding questions of progress and modernisation of society, the left was generally welcoming, while conservative forces tended to be far more sceptical. This traditionalist spirit was perfectly captured in pope Pius XII' 1953 Christmas message, wherein he warned against the fascination with technique, which would replace every spiritual and religious ideal. An important divergence to this trend was the way conservative right winged Catholics sometimes did support military modernisation and nuclear armament, whereas the left generally actively campaigned against this.¹⁴

This existing discourse meant that well before the launch of the *Sputnik*, more orthodox elements in French society had already adopted a techno-sceptical outlook. This shows for instance in *France Catholique*, where, on 11 January 1957, a theology professor called upon readers to reflect on what modernity does to them. By focussing solely on the modern world, he believed mankind to be at risk of becoming less a servant of God. To avoid this, Catholics should be wary not to banish theocentrism in favour of scientific thought.¹⁵ Another example of this conservative stance in *France Catholique* can be found in a special, published a few months later, devoted to the new genre of science fiction. By taking people to other worlds this kind of entertainment is said to distract Catholics from the real world.¹⁶ Furthermore, the envisioned worlds rarely feature God, and the author therefore thought this genre brought

¹³ Ravitch, *The Catholic Church and the French Nation*, pp. 137-139.

¹⁴ Jonathan Gorry, *Cold War Christians and the Spectre of Nuclear Deterrence, 1945-1959* (London, 2013), p. 145.

¹⁵ Vancourt, 'Sur les origines du monde moderne', *France Catholique*, 11-1-1957, p. 3.

¹⁶ 'Les Revues', *France Catholique*, 19-4-1957, p. 2.

insurmountable theological problems with it.

So when spaceflight became a reality with *Sputnik I*, these conservative forces explained the events in a similar fashion, and thereby perceived spaceflight as a part of the reason for the decline of the Catholic Church. Nevertheless, the conservative forces also could not ignore the magnitude and importance of the effects of the *Sputnik*, and responses were therefore rarely entirely negative.

But this is not to say all Catholics were against progress. Historian Philip Nord for example showed that Catholics were primarily responsible for the societal modernisation during the Fourth Republic.¹⁷ And especially on the liberal side of the spectrum people feared modernity less. This meant that progressive Catholics opened up more readily to spaceflight. In *Panorama chrétien* of March 1957 for example, half a year before the launch of the *Sputnik*, a large article already appeared speculating on the possibility of life on Mars and how humanity had to explore that planet in the future.¹⁸ Without considering what this meant for religious faith, the author reported that most scientists were convinced of some form of alien life on Mars.

Despite all the differences amongst French Catholics about how to respond to modernity and progress, when the 'red moon' flew bleeping across the skies, the Catholic papers covered every detail of the developments minutely. Most of these articles were technical reports and updates on the latest happenings or responses to the political and military danger. But there also appeared plenty of reflections on what this might mean for Catholicism.

¹⁷ Nord, *France's New Deal*.

¹⁸ Aimé Michel, 'ce que nous découvrirons sur la planète Mars', *Panorama chrétien*, March 1957, pp. 98-99.

These articles vary widely. In *Panorama chrétien* commentators looked towards the future ecstatically and listed all the great things that still lay in wait for humanity.¹⁹ *La Croix* remained more nuanced, covering the newest development in great detail, but also urging readers not to let the fascinating discoveries distract them from the teachings of Christianity. One article for example stated that all this modernity seemed fantastic, but that progress without Christianity was not really progress at all.²⁰

The wide variety of responses to the *Sputnik* was mirrored in the unclear response of the pope. Even though he was notoriously anti-communist, and never failed to mention that these were Soviet rockets and that people should not trust the communists, the Vatican remained relatively ambiguous towards spaceflight itself. As a result there appeared a critique of the papacy's vagueness in *La Croix*, because it caused doubt amongst believers.²¹ The dilemma was perfectly summed up in the last lines: 'nous devons voir la realite en face. Mais nous devons aussi la voir a la lumière de notre fois.'²² Clarity was needed, and after reading lines like these, it is not hard to see why less than two years later pope John XXIII would call for a reformatory council.

But despite the general enthusiasm, not everyone was enchanted by spaceflight. *Le Pèlerin* for instance largely refrained from coverage, and only mentioned the events in passing. One article hinted at interplanetary travel, but the banality shows from the first and main question if it is dangerous when the

¹⁹ Gérard Lauzun, 'Bébé Lune No 2', *Panorama chrétien*, November 1957, pp. 64-67.

²⁰ 'L'empreinte du Christ', *La Croix*, 15-10-1957, p. 1.

²¹ 'Autour de Spoutnik: Controverse dans la presse Italienne sur l'attitude de l'église face au progrès', *La Croix*, 22-10-1957, p. 4.

²² 'We must look reality in the face. But we must also take notice of the light of our times' 'Idem.

rockets fall back down towards earth.²³ Nevertheless, even though *Le Pèlerin* did not follow spaceflight with the same vigour as the rest of the world, it is telling that the cartoons printed around that time in Catholic media practically always featured rockets, aliens, or spaceships. Clearly, the collective imagination of everyone was dominated by spaceflight.

In comparison to the Catholic papers, *Le Monde* generally tended to be more univocally positive towards the dawn of the space age. As one article put it: you have to be a 'romancier pessimiste' to think there might be a bomb aboard the *Sputnik*.²⁴ That is not to say that commentators ignored the risks of increased rocket capability, and many articles pointed towards the fact that spaceflight was mostly 'un nouvel élément dans la course pour la puissance', even though it might increase humanity's well being in the long run.²⁵ Tellingly, on December 9, a page devoted to 'Les Nouveaux essais Nucléaires' followed a report on the *Sputnik*.

The Soviets reaffirmed the dawn of the space age by launching *Sputnik II* within a month after *Sputnik I*. On-board was a dog named Laika, the first living being in outer space. But as her life systems failed, she also became the first being to die in space. Laika's extra-terrestrial death sparked immediate Catholic condemnation and she became a symbol for the life-denying technological modernisation; what price was the world paying for scientific development? *France Catholique* put it most bluntly, stating that only machines had won with *Sputnik II*, and wondering whether humanity was not on course to committing

²³ Las Rodas, 'Deuxième grande naissance du siècle', *Le Pèlerin*, , 20-10-1957, pp. 14-15.

²⁴ 'L'accélération du progrès', *Le Monde*, 6/7-10-1957, p. 1.

²⁵ 'La Course à la puissance continue', *Le Monde*, 9-10-1957, p. 1.

collective suicide.²⁶ The second *Sputnik* also made it all the more clear that the Americans lagged behind the Soviet Union. More than any other perceived effect of spaceflight, the political and military danger this could pose formed the main frame through which the events were viewed. A great sigh of relief was therefore noticeable when *La Croix* was able to report that the United States had stepped up their game and increased their budget.²⁷

In his Christmas speech of 1957, a worried Pius XII also responded directly to the *Sputniks*. He declared that the Church welcomed new technological developments if they were used for the good of humanity, but also urged Catholics not to become overly confident in technology. As a negative example, in his anti-communist fashion, he pleaded the world therefore not to trust the Soviets to be developing spaceflight for peaceful purposes. Warning against the erection of a modern day tower of Babel, the pope furthermore wanted to make it clear that even though the space age universe was not organized according to Christian cosmology anymore, religion remained a privileged provider of metaphysical answers.

Most Catholic commentators in France media agreed with this message. In *France Catholique*, Jean le Cour Grandmaison for example wrote that mankind would never become master of the cosmos. People therefore had to temper their enthusiasm for the *Sputniks*, since the danger spaceflight posed could outweigh the uncertain promises of improvement.²⁸ These kinds of warnings were commonplace; it was after all clear that the same *fusée* that could bring a satellite

²⁶ Marie Winowska, 'L'air est morte... Science et révolution', *France Catholique*, 29-11-1957, p. 2.

²⁷ Roland Darcy, '*Sputnik II* provoque un nouvel élan national aux Etats-Unis', *La Croix*, 12-11-1957, p. 5.

²⁸ Jean le Cour Grandmaison, 'Étoile de Bethléem ou sputnik de Moscou?', *France Catholique*, 3-1-1958, p. 1.

into orbit could also be used to carry a nuclear payload. As Arendt noted: the entire world would have greeted the *Sputnik* 'with unmitigated joy if it had not been for the uncomfortable military and political circumstances attending it.'²⁹

Expanding on the possibility of atomic warfare, many stories appeared about rocket technology. These often contained references to both spaceflight and atomic warfare, usually mentioning them in one breath. Nicolas Vicheny for instance wrote a long article in a 1960 edition of *Panorama chrétien* in which he blamed space technology for the fact that *fusées* had become so advanced that they could not be defended against anymore.³⁰

As more rockets were launched, the dual dangers of atomic warfare and the perceived decline of religion due to societal modernisation made more commentators reflect upon Catholicism's relation to science and technology. *France Catholique* set the tone with several articles published about Catholic scientists. All of them ultimately placed religion above their profession; for even though science could explain a lot, it remained silent on the biggest questions.³¹ A series of similar articles were published in January 1959, coming to the same conclusion every week: it seems as if science can answer all questions, but ultimately it cannot. That science was still very much perceived as posing a threat to the integrity of society and religion is also noticeable by the way science fiction kept being discarded as profane in *France Catholique*. In a March special of 1958, the genre was said to aim to relieve mankind of boredom by creating a

²⁹ Arendt, *The Human Condition* p. 1.

³⁰ Nicolas Vicheny, 'La guerre Atomique: comment serait-elle Déclenchée', *Panorama chrétien*, January 1960, pp. 34-37.

³¹ See for example Garde-Guerin's 'Les savants de tous les pays confrontent leurs recherches sur les espaces infinis', *France Catholique*, 22-1-1960, p. 6.

fake world without God.³² A year later, a similar special was published, this time with a picture from a comic, wherein an alien, fishing for human specimens, angles in a warship for his collection.³³ Clearly no God-loving person should read this kind of profanity.³⁴

On April 12 1961 the world was shocked again as a Yuri Gagarin's ascent into space made humanity temporarily extra-terrestrial. Even though there had been certain successes after the *Sputniks*, these paled in comparison to Gagarin's achievement. And halfway through the race, America and the West were again shown to lag behind the Soviet Union. But whereas the *Sputnik* had come largely as a surprise, Gagarin's flight was speculated upon weeks in advance, and as *Le Monde* wrote, 'n'a pas provoqué à proprement parler de surprise.'³⁵

Nevertheless, even though there had been a series of attacks in Algeria, this was the main story for days in *La Croix*. And even though a large amount of articles were dedicated to predicting and describing the American response, a surprising amount of commentators struck a positive note. For instance, the day after the launch, A. Wenger wrote that people should praise the discovery of the universe because it provided a new way in which humanity could see God's greatness.³⁶ The radical tone of his article is striking, for Wenger went as far as to say that people should hail the endeavour, even if those who made it possible had not praised God for it, and even if they used the discoveries as an argument against religion. Noel Copin – who had obviously not heard Gagarin's anti

³² 'La science-fiction nous conduit-elle à la délivrance ou au désespoir?', *France Catholique*, 7-3-1958, p. 8.

³³ See Appendix I.

³⁴ 'Six Millions quatre cent mille lecteurs', *France Catholique*, 15-5-1959, p. 8.

³⁵ 'Le Contraste' *Le Monde*, 14-4-1961, p. 1.

³⁶ A. Wenger, 'l'Homme maître de l'univers', *La Croix*, 13-4-1961, p. 1.

religious remarks upon landing – voices a similar response and praises Gagarin for refraining from uttering atheist propaganda.³⁷

But despite plenty of positive comments, the uncertainty, which was characteristic for this period, shows clearly from the division between these and other comments. For in an article next to Copin's, R.P. François Russo warned that a scientific future was empty without Christianity.³⁸ Jean Rodhain was even more explicit when he compared Gagarin to Columbus.³⁹ Whereas Columbus discovered a new world with a cross in his hand, signalling Christianity's rise in the fifteenth century, Gagarin's discovery of a new heaven (*ciel*) signalled the advent of the *laïcité* of the twentieth century. Rodhain therefore insisted upon his readers to care about the more urgent things at hand, like the famines in Africa, arguing that the Second Vatican Council should prioritise these pressing matters over modernity and spaceflight.

Tellingly, commentators were a lot less nuanced on the days after May 8, when the Americans launched Alan Sheppard into space. Even though the Russian mission was also generally hailed as a spectacular success, like shown above, some did not approve of it. Sheppard's ascent on the other hand was univocally hailed as a positive event, and even though he was not the first person in space, his flight was celebrated as a hero's odyssey.

Mankind's symbolic escape from its earthly prison also caused a shift in the questions that were being asked. Especially in *France Catholique* the 1961 events were clearly seen through a theological frame. Half the paper after

³⁷ Noel Copin, 'Chronique', *La Croix*, 14-4-1961, p. 1.

³⁸ R.P. François Russo, 'l'Homme dans l'espace Bilan et sens d'une victoire', *La Croix*, 14-4-1961, p. 1.

³⁹ Jean Rodhain, 'billet a Gagarine', *La Croix*, 20-4-1961, p. 1.

Gagarin's return was for example dedicated to answering the questions it summoned. Some of these were relatively straightforward: 'les Martiens pourraient-ils être chrétiens?'⁴⁰ But other questions required complex theological reasoning like references to the Trinity. Most of the time the articles concluded that probably not a lot had changed, and that it might even be an opportunity to discover the infinity of God's creation and to praise him more, but the tone generally remained far from confident. Just like after the first *Sputnik*, this uncertainty was aggravated by the pope's ambiguity, which was again commented upon critically.⁴¹

And the new theological focus in *France Catholique* also showed in the surprising absence of coverage of Shappard's flight, and from certain reflections on Gagarin's achievements. André Piettre for example asked if Gagarin should be considered as a *héro ou cobaye*. He came to the conclusion that Gagarin was used as an instrument by the Soviet atheist government. In a sense, Piettre admitted he considered Gagarin to be a hero, but even if Gagarin was a hero, Christian martyrs remained a lot more important than modernity's hero's.⁴² This shows that spaceflight was still linked to the emptiness of modernity, and that modern man threatened Christianity and the sacred by focussing on irrelevant heroes.

Here a comparison with *Le Monde* is interesting, for most of its articles referred to the same (mythical) heroes like Odysseus and Columbus, and the language is sometimes surprisingly similar. That the real glory of Gagarin lay not in that he was able to leave earth, but 'd'être aussitôt revenu', could for example

⁴⁰ Roger Veylon, 'les Martiens pourraient-ils être chrétiens?', *France Catholique*, 21-4-1961, p. 2.

⁴¹ 'L'entrée dans "l'ère cosmique" modifie-t-elle la vision chrétienne du monde?', *France Catholique*, 21-4-1961, p. 1.

⁴² André Piettre, 'Gagarine, héros ou cobaye?', *France Catholique*, 28-4-1961, p. 1.

just as well have been written in a Catholic paper.⁴³ But even though *Le Monde* was not anti-religious and featured a regular small religious *rubrique*, this mystical language is consistently void of any reference to God or the divine. Whereas Catholic media frequently mentioned the necessity of metaphysical speculations when it came to the exploration of the universe, in a page long enquiry into 'les nouvelles perspectives ouvertes par l'astronautique', the author only mentioned scientific findings, and did not make any reference to the divine whatsoever.⁴⁴ *Le Monde* thereby shows that non-religious media were far less sceptical towards spaceflight and progress in general; except for the fear of the bomb, there were no comments on the dangers modernising society might pose.

In summing up the findings of this first period, it is firstly important to emphasize that French Catholics were just as captivated by spaceflight as the rest of the world. But this fascination was shaped by three kinds of insecurity. The first fear was that society and the life-world were modernising, and that this modernisation caused the dwindling influence of the Church. Since scientific progress was in this pre-Council period still often regarded as being in conflict with religion, or at least as belonging to separate spheres, especially more conservative voices linked spaceflight to the larger explanation for why religion was declining.

The second sense of insecurity arose from the disunity amongst French Catholics. The different voices each took a different stance towards spaceflight and modernity, and subsequently posed very different questions. This lack of confidence was further aggravated by the papacy's ambivalent responses to

⁴³ Robert Escarpit 'Heureux qui comme Ulysse...', *Le Monde*, 14-4-1961, p. 1.

⁴⁴ 'Les nouvelles perspectives ouvertes par l'astronautique', *Le Monde*, 15-4-1961, p. 3.

extra-terrestrial adventures. Interestingly, spaceflight at this time was mostly set on an international level, and neither the French political crisis, nor the Algerian civil war seemed to have influenced the way spaceflight was perceived profoundly.

The third and most important sense of insecurity arose from the political and the military dangers of nuclear warfare. Spaceflight was very much Janus-faced, making the rockets both menacing and fascinating. Because the Soviet Union seemed to be leading, the ugly head of rocket technology was more prominently visible and that made spaceflight seem very menacing indeed. This fear was aggravated for Catholics by the very explicit anti-Communist message from the papacy that people should not be fooled by the Soviet claim to be developing spaceflight for peaceful purposes.

2. Reform and division - 1962-1967

The rhetorical prowess of the American president John F. Kennedy profoundly influenced the Space Race. While persuading his countrymen to take a collective leap of faith, he simultaneously set the definite end goal of the Space Race: the moon. But whereas the advances in spaceflight had been followed with great interest by the French Catholic media, his “Moon speech” was sparsely covered; more pressing matters were at hand, as the Second Vatican Council (1962-65) was about to begin.

Even though the scale of the reform this Council proscribed is relatively unknown outside the Catholic world, its effects for Catholicism can hardly be overestimated. The change was needed, for as society changed, the Church seemed to become more out-dated with every passing day. The conservative course that started with Pius XII, and, despite a promising start, had continued under John XIII, was clearly not in gear with the rapidly changing outside world.¹ The Council aimed to make the Church fit for the future again by bringing it ‘dans la vie, proche du quotidien.’² Amongst others this meant adapting a new, less ambitious political role. But that this was easier said than done shows for example from the reform of the liturgies in France. Not only was the official language changed into French, services also started to deal more directly with relatable contemporary questions, and might even be held by *laïcs*. Paradoxically this meant that even though the Church aimed to step back from politics by

¹ Claire Toupin-Guyot, *Les intellectuels catholiques dans la société française: Le Centre catholique des intellectuels français (1941-1976)* (Rennes, 2002), p. 182.

² Gérard Defois, ‘En France’ in Denis Maugenest ed., *France-Allemagne: églises et société, du Concile Vatican II à nos jours* (Paris, 1988), p. 7.

adapting to the outside world, she actually opened up to new forms of political involvement.³

The more liberal France Catholics welcomed the changes with open arms because it would allow many repressed voices to speak up again. This meant that the radical reformers of the *nouvelle théologie* like Yves Congar, Henri de Lubac, and Pierre Teilhard de Chardin, which were banned by Pius XII in 1950, could once again be read.⁴ Needless to say, these radical opinions led to a deepening of the divide between the Church's liberal and conservative factions.

If Vatican II had a positive or negative effect on the French Church is therefore hard to say. Some argue that it made Catholicism as fit as possible to withstand the tumultuous era to come,⁵ while others claim it was the reforms itself that brought about crisis since they caused 'une double crise touchant à la fois sa capacité d'attraction interne et sa capacité d'influence externe.'⁶ In any case, it is clear that the Council symbolised 'un changement des esprits'.⁷ But more than anything, while the goal of Vatican II had been to update an out-dated Church and make it fit to face the future again, its biggest effect in France was a further loss of Catholic unity, or, because unity had strictly speaking already been lost before the Council, the appearance of unity.⁸ Church historian Gerard Defois even goes as far as describing this split as a 'lutte des classes dans l'Eglise.'⁹

³ Vincent Petit, *God save la France: La religion et la nation* (Paris, 2015), p. 165.

⁴ McLeod, *The religious crisis of the 1960s* p. 55.

⁵ See for example Luc Perrin's *Paris à l'heure de Vatican II* (Paris, 1997).

⁶ 'A double crisis affecting both the Church's capacity for internal attraction and its capacity for external influence' Philippe Portier, 'Les mutations du religieux dans la France contemporaine' *Social Compass* 59, 2 (2012), pp. 193-207, at 204.

⁷ Defois, 'En France' p. 6.

⁸ Ravitch, *The Catholic Church and the French Nation* p. 153.

⁹ Defois, 'En France' p. 7.

The opening up of the Church also meant that the official stance towards science and technology changed. According to the Council, Catholicism was to embrace the future and not to be afraid of scientific progress anymore. The famous professor of science Paul Germain explained this open spirit of the post-Council world when he stated in an interview that it did not mean that theologians should start doing science, but that the Church had to acknowledge the progressive role that science played in the maturation of mankind.¹⁰

The Council also referred directly to spaceflight as a reason for reform since 'technicae artes eo progrediuntur ut faciem terrae transforment et etiam spatium ultraterrestre subigere conentur'.¹¹ Tellingly, in August 1962, as the Council was about to begin, the pope praised a Soviet space success and called upon the spacefaring nations to show the greatness of God.¹² This stands in stark contrast to earlier episodes of spaceflight when both John XIII and his predecessor responded far more negatively to Soviet endeavours in space.

In more abstract terms, turning to the philosophy of science and religion, this meant that the old conflict-model, wherein religion and science opposed and threatened each other, was replaced by a model of integration, in which science and religion were presented as potentially mutually supportive.¹³ This spirit was conveyed to the French Catholic public by the media by giving straightforward examples of people who stood at the forefront of modernity, but nevertheless

¹⁰ 'Que vont faire les Catholiques après le concile?' *Panorama chrétien*, May 1966, pp. 14-15.

¹¹ 'Technology is already transforming the face of the earth and attempting to conquer outer space', 'Vatican Council II', *Pastoral Constitution on the Church in the Modern World [Gaudium et spes]*, par. 4-5, quoted from: Catherine Osborne, *From Sputnik to Spaceship Earth* p. 269.

¹² 'Les deux nouveaux cosmonautes soviétiques, précurseurs des 'escadrilles de l'espace'', *La Croix*, 14-8-1962, p. 1.

¹³ Here I follow the philosopher Ian Barbour who famously distinguishes between four models people use to describe the interaction between science and religion: (I) an inherent state of conflict, (II) a separation in separate domains, (III) a dialogue, and (IV) integration. See: Ian Barbour, *When Science meets Religion: Enemies Strangers or Partners* (London, 2000), pp. 2-3.

kept their Christian faith. In the previous period, similar articles had appeared, looking at how Catholic scientists weighed their profession and their religion. But these articles had mainly focused on showing that science did not explain everything and that religion was needed for life's most profound questions. Concretely this meant an emphasis on the integration and complementarity of science and religion, thereby replacing the former model of separation and conflict.

The most striking example of this, is *Panorama chrétien's* progressiveness in this middle period of the Space Age. The re-found confidence shows for example when a four-page special in 1962 on spaceflight started with the mentioning of Soviet propaganda after the success of the *Sputnik* and Gagarin. This is presented as the old story of secularization and religion's inevitable demise in the face of modernity. But, the author continued, was this really the case? To answer this question, he firstly showed the prevalence of Catholics amongst students and professional scientists. By comparing the conversion rates of non-believers to the amount of scientists and students who became atheists, and taking the marginal influence of Marxist thought in this area into account, he finally concludes that there is no reason why Catholicism could not be perfectly combined with science and technology.¹⁴

And *Panorama* continued this line throughout the middle period. In an interview, the famous self-proclaimed technocrat Louis Armand for example explained that he found much need for God to complement his techno-centred world.¹⁵ The great scientists of the past were also frequently enlisted as proof of

¹⁴ Maurice Colinon, 'Les ingénieurs et la foi', *Panorama chrétien*, November 1962, pp. 10-14.

¹⁵ Paul Lefèvre, '7 questions à Louis Armand', *Panorama chrétien*, March 1965, pp. 32-33.

science's commensurability with faith. For instance, in a fifteen (!) page special on 'Ceux qui ont permis la conquête de l'espace', the influences of Newton, Pascal, Copernicus and Einstein were listed. Even though it appeared to be a highly biographical story, special emphasis was placed on the important role Christianity played in the lives of these men. Obviously Pascal's famous thoughts on religion were mentioned, but also the less well-known religiousness of Einstein was shown, who is quoted describing his work as 'une étape vers la révélation d'une harmonie plus grande encore'.¹⁶

That the article even mentioned Galileo is another sign of re-found Catholic confidence. In fact, during this period of renegotiation, Galileo's name would frequently turn up. Being the most (in)famous example of the Church's response to science, he was often presented as a negative example of how the present-day Church should not deal with science. In a 1965 edition of *Panorama* there appeared for example an article asking if new Galileo-like conflicts between science and the Church might appear.¹⁷ The article concluded that this need not be the case because 'l'église est prêt à cette confrontation permanent'. As long as scientists would not try to disprove the existence of God, and the Church would refrain from dogmatic rejections and remain open to new developments, the future would give rise to fruitful interaction instead of condemning inquisitions.

A final proof of the acceptance of technological and scientific modernity in progressive circles is that it simply received a lot more attention than in the

¹⁶ Albert Ducrocq, 'Ceux qui ont permis la conquête de l'espace' *Panorama chrétien*, November 1965, pp. 34-49.

¹⁷ Lucien Guissard, 'Sommes-nous menacés par d'autres 'affaires Galilée'', *Panorama chrétien*, February 1965, pp. 26-27.

periods before. Again, *Panorama* provides the clearest example because they provided the famous scientist Albert Ducrocq with a regular column on the technological novelties of the time. The omnipresence of spaceflight shows from the fact that practically all his articles were about spaceflight. Fascinatingly, Ducrocq always stuck to technological descriptions, never feeling the need to explain social, theological or ethical conundrums. This was even the case when he speculated upon the possibility of life on the far side of the moon.¹⁸ Instead of asking *what* this meant, he explained *how* this might be the case.

Also in other the papers this new attitude was palpable. On June 29 1963, *France Catholique's* Luc Baresta for example praised the first female cosmonauts in a reflection on the new Pope Paul VI and his pro-technological stance.¹⁹ Baresta tried to unify the physical space that was being explored by spaceflight with the spaces occupied by the Holy Trinity. *La Croix* also featured more progressive articles. For instance, on March 20, 1965, next to a report on pope Paul VI, who proclaimed that the world should unite in the discovery of space because the exploration of the cosmos would show the greatness of God,²⁰ a columnist openly declared that the Soviet Union was probably not lying by proclaiming that they explored space for the greater good of humanity.²¹

But the internal division within the Church meant that not all shared this opinion regarding progress. Especially in *France Catholique* there still appeared plenty of sceptical articles. The classic lines of secularization often ran through

¹⁸ Albert Ducrocq, 'Bientôt des hommes autour de la Lune', *Panorama chrétien*, June 1966, pp. 60-61.

¹⁹ Luc Baresta, 'Des nouveaux cosmonautes au nouveau Pape La question des espaces', *France Catholique*, 29-6-1963, p. 9.

²⁰ 'Le Souverain Pontife: "que tout ce progrès rende les hommes plus unis"', *La Croix*, 20-3-1965, p. 2.

²¹ 'Le vol de "Voskhod II" sert la cause du progrès et de la paix', *La Croix*, 20-3-1965, p. 2.

these articles, prompting Jean Daniélou to condemn the dangers of the modernity that Vatican II wilfully incorporated into the holy Church.²² This more conservative stance is also reflected in interviews with scientists. Whereas the previously described interviews in *Panorama* were aimed at proving the commensurability of science and religion, *France Catholique* largely held on to the old separation and conflict models to explain science's relation to religion. One of the clearest examples of this attitude underlies an interview with physicist Louis Leprince-Ringuet, a professor at the *College de France*.²³ The professor explained that science failed to provide him with the most profound answers he longed for. He therefore professed to fall back frequently on the realm of religion, which is presented as separate from, and superior to, science.

The split between conservatives and more progressive forces also becomes visible in reports on the first spacewalk, made by a Soviet cosmonaut in 1965. This is enthusiastically greeted in *La Croix* as 'Ni rêve ni fiction: réalité d'aujourd'hui',²⁴ whereas in a comment in *France Catholique* the events are sarcastically described as 'cosmopédestrologie'.²⁵ That this scepticism was not just the result of an anti-Russian attitude becomes clear from the fact that later on, the author also explicitly criticized the amount of resources that were devoted to the American program.

This focus on the costs of spaceflight became an important objection to spaceflight during this period. Even though virtually all commentators agreed that spaceflight was not a bad thing, many argued that the funds were better

²² Jean Daniélou, 'Comment faire se rejoindre le monde technique et le sacré', *France Catholique*, 16-10-1964, p. 4.

²³ Luc Baresta, 'L'atomiste et le croyant', *France Catholique*, 20-11-1964, p. 3.

²⁴ 'La "sortie" de Leonov à télévision', *La Croix*, 19-3-1965, p. 2.

²⁵ Georges Nouvelles, 'Cosmodrome et cosmodrame', *France Catholique*, 26-3-1965, p. 2.

spent on the hungry and dying in third world countries.²⁶ This also subtly influenced the language that was being used. While the U.S. space program had first clearly represented the West in the Space Race, around this time, more emphasis was placed on the specific costs of the American program, thereby distancing the rest of the West from the project.

An explanation why the U.S. became more of an “other” than before can be found in a renewed French confidence, caused by the take-off of the French space program. As part of his mission to make France great again, de Gaulle had founded CNES (*Centre national d'études spatiales*) in 1961. In 1965 the first major success, the launch of the satellite *Astérix* on-board a *Diamante*-rocket, made France the third nation to do so. In the newspapers, the launch was presented in large colour photos, showing a rocket bursting from the desert sands of Algeria. Even *Le Pèlerin* covered the event, calling it a great national success.²⁷

The fact that the launch site was still in Algeria after its independence from France adds a special dimension to the French space program. In her influential study on modernisation and decolonisation in France, Kristin Ross argues that the trauma of the Algerian War was almost immediately repressed: ‘having decisively slammed the door to the Algerian episode, colonialism itself was made to seem like a dusty anachronism.’²⁸ In a similar fashion, it can be

²⁶ Clear examples of this can be found in: L.B.M. ‘Homais dans l’espace’, *France Catholique*, 26-3-1965, p. 2; Roland Darcy, ‘1e prix de la conquête de l’espace’, *La Croix*, 27-10-1965, p. 2; and Lucien Guissard, ‘Ne pas oublier la Terre’, *La Croix*, 19-3-1965, p. 1.

²⁷ ‘Le diamante’, *Le Pèlerin*, 5-12-1965, p. 17.

²⁸ Ross, *Fast Cars, Clean Bodies* p. 9.

argued that the fact that the Algerian base was operational until 1968,²⁹ and that all the French papers failed to mention the peculiarity of this situation, points towards the repression of trauma. Astonishingly, only days before the declaration of independence, *France Catholique* published a joyful note that a shrine of *Notre-Dame de l'Espace* was to be dedicated at the rocket base of Colomb-Béchar.³⁰

But despite the French success, spaceflight still remained primarily linked to American and Russian efforts. As *Le Monde's* Nicolas Vichney soberingly remarked: France might be the third most important space power, the *Diamante* was only the 376th rocket in space.³¹ It is furthermore interesting to note that even though the Catholic media failed to mention this, *Le Monde* explicitly referred to the propaganda value of the launch, only days from the next French presidential elections on December 5th. The success was described as being twofold: De Gaulle and his ministers had a 'succès extérieur', and they had also proven that the 'moyens considérable mis au service de la politique de grandeur n'étaient pas dépenses vaines.'³² The importance of the launch becomes even more clear when further in the same edition de Gaulle's dual reaction was published. Next to a general declaration in which he praised the people who made this 'participation à la conquête de l'espace' possible, a letter to his defence

²⁹ Only in 1968 would operations be transferred to French Guiana, see Peter Redfield's *Space in the Tropics: from convicts to rockets in French Guiana* (Berkeley, 2000) for a detailed study of the relevance of this new site.

³⁰ *France Catholique*, no.751, 21-4-1961, p. 6. See Appendix II for an image of *Notre-Dame de l'Espace*.

³¹ Nicolas Vichney, 'La France troisième puissance spatiale', *Le Monde*, 28/29-11-1965, p. 1.

³² 'Considerable means spent towards to show France's greatness were not spent in vain 'Espace et prestige' *Le Monde*, 28/29-11-1965, p. 1.

minister was printed, proclaiming that the launch of the satellite 'fait honneur à nos armées.'³³

However, the overall lack of interest in the French program shows that even though the tensions of the Cold War were declining slightly, spaceflight still remained a power struggle between the two giants. Consequently, many articles reporting on Soviet successes automatically reflected on the American response. For example, when the first cosmonaut made a spacewalk, *La Croix* devoted more words to the American response than to the spacewalk itself.³⁴

But instead of the expected quick race to the moon, 1966 proved to be relatively unsuccessful. 1967 was even worse as disaster struck both programs. Of the many failures, the burning of an entire American crew and a Russian shuttle that crashed into the earth because its parachutes failed to open, grasped people's imaginations most profoundly. But surprisingly, these deaths were not used as arguments to stop spaceflight. On the contrary, the dead were honoured and praised for their sacrifice.

However, it is important to highlight the difference between the coverage of the American and the Soviet deaths in the Catholic media. This is a clear sign of what is yet to come. For whereas the Soviet program was initially often criticized because it was Soviet and their rockets could be used to attack the West, around this time more fundamental critiques were voiced. An example of this is the way an article on the front page of *France Catholique* notifies readers that an entire Soviet crew suffocated.³⁵ These kinds of tragedies, the article claims, show the 'metaphysical emptiness' of atheism and communism. For, the

³³ 'Le General de Gaulle: Joie et fierté', *Le Monde*, 28/29-11-1965, p. 17.

³⁴ 'La "sortie" de Leonov à télévision', *La Croix*, 19-3-1965, p. 2.

³⁵ 'La mort cosmonaute soviétique', *France Catholique*, 28-4-1967, p. 1.

article went on, the Soviets were very content with their successes, and Gagarin was extremely quick in his proclamation that he had not seen God in space, but in the face of disaster, atheism can be of no help. So, just like with Laika's death in 1957, reflections on spaceflight proved to be a way in which Catholics could critique the core of the Soviet system, and atheism in general.

However, in conclusion, it is firstly important to emphasize that the major changes for French Catholic responses to spaceflight during this period were invoked from within. If the previous period can be characterized by an uncertainty about the future, Vatican II brought some sense of direction back to French Catholics during this period. However, the price of this new future was that this was not a future of unity, but of disunity. Even though many disagreed, the liberal wind that blew through the open Church doors did try to convey to people that it was possible to integrate science and religion. But in general, the worries about scientific progress as an aspect of secularization became less frequent. This reflected off on spaceflight too, making people less wary towards the endeavours. This newfound confidence, combined with the fact that the Americans were catching up with the Soviets, allowed for the development of a specific Catholic response to the Soviets as creating the "wrong kind" of space program.

Surprisingly, the coverage of the French successes in the Space Race remained marginal. There were no illusions made as to who the real players in the Space Race were. But, the French successes and the stance of De Gaulle in this period did facilitate a more middle stance for French observers of the Space Race.

3. Lunacy - 1968-1969

With a slogan like 'Soyez réalistes, demandez l'impossible', it is not surprising that there is disagreement regarding the significance of May 1968. During that month, France was gripped by protests that spread from the Université Sorbonne in Paris outwards across the country. During the height of the protests, de Gaulle even went to Germany to secure the support from the French army stationed there. Ultimately, without many direct results, France quieted down again. But despite the failure of the political revolution, the events are often described as causing a spiritual revolution.¹ The Catholic Church did not escape the upheaval untarnished either, and is a perfect example of this spiritual revolt.²

Even though Vatican II had in some way solidified the position of many of the churches in French society, 1968 was a year of religious radicals.³ Mirroring the gradual radicalization in society, especially young, more leftist oriented Catholics started to campaign for new kinds of 'engagement politique'.⁴ The religious authorities, represented by cardinal François Marty, the archbishop of Paris, refused, thereby causing a further radicalization of the leftist churchgoers.⁵ So when the protests started, this division made it equally likely for you to find French Catholics throwing bricks and mounting the barricades alongside the most radical students, as on the opposite end, sharply condemning the anarchy

¹ Philippe Artières and Michelle Zancarini-Fournel ed., *68, une histoire collective 1962-1981*, (Paris, 2008) pp. 2-4.

² René Rémond, 'La révolution de mai 68, l'évolution des moeurs, l'Eglise et les jeunes' in Denis Maugenest ed., *France-Allemagne: églises et société, du Concile Vatican II à nos jours* (Paris, 1988), pp. 30-34.

³ Perrin, *Paris à l'heure de Vatican II* p. 306.

⁴ Michelle Zancarini-Fournel, 'Le début de la fin' in Philippe Artières and Michelle Zancarini-Fournel ed., *68: Une histoire collective 1962-1981*, (Paris, 2008), p. 635.

⁵ *Ibid.*, p. 636.

caused by the godless trouble-seekers. In the vast forest of divided Catholic factions, there was therefore little agreement on anything. But, surprisingly, spaceflight was going to form a relatively unitary point for all factions.

At the start of 1968, no consensus of the kind seemed about to happen. As the lunar missions were developed, liberal Catholics who focussed on the bright side of the moon were generally as ecstatic as secular observers. On the other side of the spectrum, conservative Catholics highlighted the dark side of the moon and were not only wary of the costs of space programs, but also held spaceflight to have a negative modernising influence on believers and society. It was therefore in early 1968 still possible to read articles in *France Catholique* that spaceflight should be rejected because modern man should not try to measure himself to God.⁶

But as the year came to an end, on December 21, *Apollo 8* was launched. To people following the event, the date was clearly chosen for its propaganda value, and *Le Monde's* Alain Clément even jokingly called it a Christmas present.⁷ Americans were now able to follow the mission with their families during the Christmas holiday.⁸ Notwithstanding, *Apollo 8* was an important mission because it was the first of its kind to circle the moon; one of the final hurdles to be taken before a lunar landing could be attempted. As night fell over America, families tuned in, listening to the live voices of the crew.

What followed came as a total surprise. For the men not only spoke about

⁶ Robert Ricard, 'Une nouvelle idole qui prétend mesurer Dieu à son aune: "l'homme moderne"', *France Catholique*, 29-3-1968, p. 3.

⁷ Alain Clément, 'Trois cadeaux de Noël', *Le Monde*, 25-12-1968, p. 4.

⁸ Jean Peray, 'Apollo 8 dispose de quatre solutions de rechange en cas de incidents', *La Croix* 21-12-1968, p. 10.

their experiences, to celebrate Christmas, they also read from Genesis. Thereby bestowing upon the faithful of the earth a most precious Christmas gift.

The effect of the reading is instantaneously noticeable. In the December 20 edition of *France Catholique* Luc Baresta could still write a very long article on what it meant to celebrate Christmas when astronauts and science seemed to have demystified the moon by traveling around it at 39.600 km/h.⁹ Nostalgically he asked if the modernisation of society and the progress of science had not caused secularised Christmas to triumph over sacred Christmas? And even in *Le Monde*, in a another example of mystical language being used outside of Catholic discourse, Nicolas Vichehney wrote that the mission made the moon lose ‘encore un peu de son mystère...’¹⁰

But in the edition after Christmas, a suddenly euphoric Baresta took back his words and hailed the reading as a great triumph of religion over all those who spoke of secularisation and doubted Catholicism’s fitness in the modern age.¹¹ For Baresta, *Apollo 8* had “remystified” space again, and the mission thereby became a definite proof that progress did not automatically lead to secularisation.

Baresta was not alone. Tellingly, there was a large analysis of secularisation directly underneath his cover story.¹² Even though the idea of secularisation still haunted the Catholic mind, the article’s writer Jean Daniélou explained that secularisation was in its causes and effects social rather than

⁹ Luc Baresta, ‘Noël et le cosmonaute’, *France Catholique*, 20-12-1968, p. 10.

¹⁰ Nicolas Vichehney, ‘Les Etats-Unis tentent de battre l’U.R.S.S. dans la course à la Lune’, *Le Monde*, 21-12-1968, p. 1.

¹¹ Luc Baresta, ‘La genèse lue par les cosmonautes Paul VI accueilli par les ouvriers’, *France Catholique*, 3-1-1969, p. 1.

¹² Jean Daniélou, ‘Les Combats présents de la foi: Le sécularisme’ *France Catholique*, 3-1-1969, p. 1.

intellectual. Here visible to all, printed on the same page, was both the theory and the empirical evidence for the disconnection of scientific progress from the master-narrative of secularisation. That is to say, societal modernisation was still perceived to cause a decline in religion, but scientific progress was no longer connected to this. Thus, whereas Hannah Arendt thought the launch of *Sputnik* to be the most important event in history because she considered it to represent the deep human urge to create a new world, in a similar but opposite fashion, the reading of Genesis by *Apollo 8* showed that mankind was still bound to God, and that science should not radically reshape our life-world, but be combined with religion in a God-praising synthesis.

The evidence for this shift is superfluous. In *France Catholique* for example, L.H. Parias wrote about a Christian earth 'exploding into the galaxy'.¹³ For him Catholicism, amongst all other religions, was best suited to face the future. In *La Croix* the 1968 Christmas-reading also made a noticeable difference. Up until that time, the reports on spaceflight had been relatively dry and technical, and, like shown in the previous chapters, the critique voiced against spaceflight had at times continued in the form of traditional, anti-scientific discourse. Two days before Christmas 1968, François Saint-Pierre had still been able to write an article wherein he refuted scientific knowledge's importance by ridiculing the absurdity of the cosmonauts' atheist arguments.¹⁴ But after the Christmas-reading, such opinions would practically die out, as science and spaceflight were enlisted on the side of Catholicism.

Moreover, active dismissals of the way sociologists posit secularisation as

¹³ L.H. Parias, 'la cathédrale engloutie', *France Catholique*, 3-1-1969, p. 7.

¹⁴ François Saint-Pierre, 'Trois milliards de cosmonautes', *La Croix*, 22/23-12-1968, p. 20.

a necessary consequence of modernity and progress were more frequently and confidently published.¹⁵ So while the Church's decline was perceived to have started with the science of Galileo, Newton, and Darwin, and extremely important scientific advancements were being made, going into 1969, even though there were many articles on secularisation, plenty of them were optimistic about the future. In the straightforward words of Cardinal Jean Daniélou: 'la sécularisation n'est pas inévitable'.¹⁶

Interestingly, *Le Monde* only mentioned the Genesis-reading in passing without describing it in detail. So, while the event proved to be earth-shaking for Catholics, this was not necessarily the case for those outside the Catholic discourse. However, there is a certain shift visible in *Le Monde* in an article by Jacques Madaule. But as its title 'la terre vue de la lune' already suggests, this had nothing to do with religion, but was due to the fact that seen from the moon 'la terre se révélera notre patrie commune', thereby showing how trivial religious and national disputes were.¹⁷

By emphasising the spiritual effects of *Apollo 8*, it was easy to forget the technological achievement of the mission. But now the last hurdle was taken, the finish line came in sight, and within half a year *Apollo 11* would end the Space Race. This was not a secret, and throughout 1969 the lunar fever increased. And as summer started, the printing presses really heated up. Again, the editors of *Le Monde* found it impossible to control their excitement and their language sometimes mirrored that of the Catholic media. A great example of this is that the "Vehicle Assembly Building" at cape Kennedy is fondly described as a

¹⁵ Antoine Wenger, 'Noel sur la terre et dans le ciel', *La Croix* 27-12-1968, p. 1.

¹⁶ Jean Daniélou, 'La foi de toujours et l'homme d'aujourd'hui', *France Catholique*, 27-6-1969, p. 2.

¹⁷ Jacques Madaule, 'la terre vue de la lune', *Le Monde*, 26-12-1968, p. 1.

cathedral.¹⁸ *La Croix* and *France Catholique* also published spaceflight-related articles in virtually every edition. But, surprisingly, *Le Pèlerin* and *Panorama* fell into a cosmic silence.

For *Panorama* this can be explained by its orthodox restart as *Panorama aujourd'hui* in 1968. In the reorganisation, people like Albert Ducrocq disappeared. His technological and descriptive articles were replaced by deep reflections on social, ethical, and theological problems. Ducrocq came back once, shortly before the moon landing, to give his expert opinion on what was about to happen.¹⁹ Although he was hailed as a great man, the story struck a completely different chord than it had before. Where Ducrocq had previously explained spaceflight and all its technicalities, he now had to answer the big question which loomed in large block letters over the article: 'pourquoi faire?'. Ducrocq remained his positive self, explaining that spaceflight promised only good things like world peace, new technologies, and even the enrichment of the third world. But the questions reveal that the magazine was not completely on his hand: could it not be used as a military base, and would it not be better to spend the money elsewhere?

But whereas *Panorama* at least covered the development before the moon landing, *Le Pèlerin* practically ignored spaceflight, the sole example being a dossier called *La conquête de l'espace* in May 1969.²⁰ In six pages all the technicalities of the *Apollo 11* mission and the history of the Space Race were explained. Surprisingly, this article seemed very positive about spaceflight, calling it a heroic mission for which our extreme fascination might seem

¹⁸ Nicolas Vichney 'L'espace se conquiert sur la terre', *Le Monde*, 17-7-1969, p. 2.

¹⁹ R. Masson, 'conversation avec Albert Ducrocq', *Panorama aujourd'hui*, July 1969, pp. 16-19.

²⁰ 'Et si nous n'étions pas seuls...', *Le Pèlerin*, 18-5-1969, pp. 28-29.

obsessive to future generations. It even included a familiar popular theological reflection on the question if it was a problem for Christianity if people encountered alien life. This would not be a problem, answered the article, for God's power is infinite and he might have created life on other planets. If aliens existed, mankind simply had to bring the word of Jesus to them.

In contrast to the other two papers, *France Catholique* and *La Croix* reported on all aspects of spaceflight in the months before the launch of *Apollo 11*. Despite the advanced Soviet unmanned *Luna* program, which landed on the moon a couple of days after *Apollo 11*, no one doubted an American victory. A lot of different questions were asked: was it morally acceptable to risk astronaut's lives, and what were the biological and mental effects of weightlessness on the human body?²¹ And even though spaceflight and scientific progress were generally no longer linked to secularisation, plenty of these articles were critical in tone. In January 1969 Jean de Fabrègues for example delved deeper into the old debate about the danger of nuclear annihilation due to spaceflight.²²

But just as suddenly as it had begun, the race was over, as Neil Armstrong and Buzz Aldrin touched *luna firma*. Their live-broadcast made a collective euphoria sweep across the globe and the media ran out of superlatives to describe the importance of the events. Over the course of the following weeks, every minute detail of the mission was covered. The French Catholic papers also proudly reported how the Holy Father had praised the mission and had even provided the astronauts with a papal flag that was to be placed on the moon

²¹ G.M. Tracy 'Avant de se poser sur la Lune les Américains marquent leur désenchantement', *France Catholique*, 10-1-1969, p. 4; and Georges Nouvelles, 'Cosmonautes et réveilleurs des "3x8"', *France Catholique*, 10-1-1969, p. 3.

²² Jean de Fabrègues, 'La bombe ou le bien des homes', *France Catholique*, 24-1-1969, p. 1.

alongside the Star-Spangled Banner. This shows that in contrast to his predecessors, Paul VI tried to convey an unambiguously confident message, hoping to convince people that the Church was up to date. This was picked up in the press. On July 25 for example, parts of a papal speech are printed.²³ It is written that the pope welcomed the confrontation with science, stating that Christianity must be challenged to stay healthy and that Catholicism could confidently incorporate new findings since it was not the rusty religion of old anymore.

This confidence and optimism is discernable amongst many commentators. In an article on July 17, Lucien Guissard for example not only rejected the perceived danger military danger of spaceflight, he also explicitly claimed that the advances of spaceflight did not threaten the Catholic Church, and that the pope's enthusiasm and the reading of Genesis aboard the *Apollo 8* proved this.²⁴ A week later, Pierre Hauptmann, in the article in which he referred to Verne and Pascal, also wrote that his heart as a believer was greatly strengthened by the moon landing.²⁵ For Hauptmann, God was not a jealous God like the Greek Gods who punished Prometheus. It was the other way round, and he saw the success of humanity as a proof of God's greatness.

The contrast with *Le Monde* is again remarkable. Its editors refrained from asking any metaphysical questions whatsoever. Most telling is the way in which an entire page devoted to 'la recherché de l'origine de l'univers' did not

²³ 'L'enseignement de Paul VI: L'Église désire la confrontation entre la science et la foi', *La Croix*, 25-7-1969, p. 5.

²⁴ Lucien Guissard, 'Au seuil de l'univers', *La Croix*, 17-7-1969, p. 12.

²⁵ Pierre Hauptmann, 'Jules Verne dépassé... mais non Pascal', *La Croix*, 21-7-1969, p. 16.

contain any reference to God.²⁶ Even though the sub-articles covered subjects like the Big Bang and the origin of life, which Catholics used as arguments for the necessity of religion, in *Le Monde* the physical laws of science seemed to be the only prerequisite needed to deal with these questions.

Apart from asking metaphysical questions, many religious commentators also seized this opportunity for reflection on where to go from here. Practically everybody agreed that the mission itself showed the greatness of humanity, and thereby of the God in whose image man was created. But some remained more cautious. Guissard for example continued to urge humanity to stay united and use the technology in a good way. For he believed people should not let science and technology dominate them, as decisions have to be made by the soul, not by the computer!²⁷

Others went even further in their scepticism regarding what still lay in wait for humanity. *France Catholique's* Baresta, who was very excited after the Genesis-reading in '68, wrote several reflecting articles in the weeks after *Apollo 11*. In the first one he only reassured his readers that man would continue to hunker for God.²⁸ But in a later edition, just like commentators did after Gagarin's ascent, Baresta explicitly questioned the importance of heroes by reminding readers of the importance of Christian martyrs.²⁹ He surprised again in the next edition by asking rhetorically why people should even bother with religion now that mankind landed on the moon. Instead of arguing along the lines of the Vatican, like he previously did, that science and religion could

²⁶ 'A la recherche de l'origine de l'univers, door Dominique Verguèse, *Le Monde*, 22-7-1969, p. 6.

²⁷ Lucien Guissard, 'Les premiers pas', *La Croix*, 22-7-1969, p. 1.

²⁸ Luc Baresta, 'La danse sur la lune et la soif des hommes', *France Catholique*, 25-7-1969, p. 6.

²⁹ Luc Baresta, 'Des héros de l'espace aux martyrs de la foi', *France Catholique*, 1-9-1969, p. 1.

complement each other, he fell back to describing religion and science as belonging to different domains.³⁰ Jean Guitton in *La Croix* would have agreed with Baresta, but remained more nuanced, writing that the lunar adventure would have strengthened the fate of some, while it had troubled the fate of others.³¹ In any case, he urged all Catholics to re-examine their stance. For after the first crisis when the earth turned out to be not at the centre of the universe, and the second crisis, when time was revealed not to be biblical (he leaves out evolutionism), spaceflight had caused a third crisis: mankind was now, like God, able to bring life to a lifeless planet.

Articles like these show that not all Catholics thought that scientific progress and spaceflight were separating from the meta-narrative of secularisation. Even though it can generally be backed with plenty of evidence, throughout this period, all the different models of interaction between science and religion and the larger narrative of secularisation kept on resurfacing.

Furthermore, the discrepancy between *Le Monde* and the Catholic papers shows that even though the origin of Catholic confidence might have been self-evident for believers, it might not have been so obvious for non-believers. Interestingly, *Le Monde's* Lucien Guissard pointed exactly this out to his readers, warning that many people still saw scientific progress as a prime cause for the decline of religion.³² So even though Vatican II had made Catholicism seemed progressive for believers, Catholics still had to make sure their message did not 'sonne comme une voix d'une autre âge', lest they forwent on the possibility to

³⁰ Luc Baresta, 'd'un ciel à l'autre', *France Catholique*, 8-9-1969, p. 1.

³¹ Jean Guitton, 'La troisième', *La Croix*, 17-7-1969, p. 16.

³² Lucien Guissard, 'Chrétiens devant la conquête spatiale', *La Croix* 27/28-7-1969, p. 16.

speak beyond the bonds of their own flock.³³

And indeed, some of the interpretations by the Catholic media differed greatly from those made in *Le Monde*. This was most strikingly so in the way Catholics responded to the Soviet space program. Whereas America was effectively presented as having conquered the moon for humanity, the Soviets represented the mechanical, militaristic, and technocratic conquest of the moon.³⁴ Jean Peray especially hammered down this message in *La Croix*. After an earlier remark about Soviet unmanned spacecraft,³⁵ on July 17th he drew a clear line between the Soviet and American programs.³⁶ Whereas the Soviets opted for ‘*prudence*’, by sending a machine, the Americans, without hiding the risks involved, preferred to let humans conquer the moon. This image was repeated often – although sometimes less judiciously than expected –, thereby shaping the American success into a testimony that the automation of society had not yet made humanity superfluous.³⁷

Interestingly, whereas the editors of *Le Monde* also reported that the Soviets preferred unmanned missions, they did not attach any moral judgement to the matter. On the contrary, a Catholic commentator like Dominique Verhuesse wrote that the Russians opted for machines because they could

³³ ‘Sound like a voice of another age’, Idem.

³⁴ ‘Apollo 11: Les astronautes emmèneront les drapeaux des pays de l’ONU’, *La Croix*, 1-7-1969, p. 11.

³⁵ Jean Peray, ‘un objectif, deux méthodes’ *La Croix*, 16-7-1969, p. 1.

³⁶ Jean Peray, ‘Deux hommes’, *La Croix*, 17-7-1969, p. 1.

³⁷ See especially Lucien Guissard, ‘l’homme et l’automate’, *La Croix* 20/21-7-1969, p. 8.

Interestingly, the emphasis on manned missions played a role for Americans too. Historian Francis Dreer explains the American focus on manned missions by referring to the frontier myth; ‘a probe is not a human being and the conquest of the moon would provide new pioneers in an America seeking a new frontier.’ See Francis Dreer, *Space conquest: the complete history of manned spaceflight*, translated by Ken Smith (Sparkford, 2009), p. 5.

withstand certain challenging conditions better than human beings.³⁸ Verhuesse even nuanced the Soviet defeat, writing that the Soviets might have had 'objectives plus limités', but which might turn out to be 'plus réalistes' in the long run.

A last development that is clearly noticeable after the moon landing was that many commentators started to advocate a more down to earth approach for the future. Generally these comments were not aimed to discredit the achievements of spaceflight, but only urged humanity to focus on more pressing matters now that the race had ended. Robert Frédérick for example wanted his readers to consider that the moon landing had not concretely changed things and that people should think about what they as humanity wanted to do next.³⁹

Many followed this line of thought and started to speak of the 'conquetes a faire a la terre', and the costs that were involved in spaceflight. Guissard for example argued that people had to weigh the cost of spaceflight against the need to relieve famines on earth.⁴⁰ In a similar fashion Michel Sinniger warned that it was unwise to regard humanity as changed by the moon landing; it had been a giant leap for mankind, but we remained human, and therefore God's creations.⁴¹ Likewise, without discrediting the recent achievements, Philip Farine wrote that spaceflight showed that humanity could achieve great things on earth too, if only people set their mind to it.⁴²

The re-confessionalised *Panorama aujourd'hui* took a less nuanced stance

³⁸ Dominique Verhuesse, 'L'U.R.S.S lance une nouvelle sonde vers la Lune', *Le Monde*, 15-7-1969, p. 1.

³⁹ Robert Frédérick, 'l'après-Lune', *France Catholique*, 1-9-1969, p. 1.

⁴⁰ Lucien Guissard, 'Au seuil de l'univers', *La Croix*, 17-7-1969, p. 12.

⁴¹ Michel Sinniger, 'Les hommes après la Lune', *La Croix*, 29-7-1969, p. 16.

⁴² Philip Farine, 'Objectif terre', *Panorama aujourd'hui*, 10-9-1969, p. 29.

towards the costs of spaceflight. On September 10 for example, an article highlighted the pollution spaceflight caused and claimed that mankind spoiled its home by flying to the moon.⁴³ The editors of *Le Pèlerin* followed a similar line and only published a few photos of astronauts in preparation in the weeks before the launch. In an act that can only be described as stubborn defiance, the cover of the July 27 edition showed a Formula One driver, to whom the entire technology section was devoted. Furthermore, except for a small story about a Boston bishop and a report on the pope's reaction, the only other words devoted to the *Apollo 11* took the form of an article questioning the costs of spaceflight: why would we spend so much money on this when children in Biafra are dying?⁴⁴

But besides the negative arguments regarding the practical objections to the costs of spaceflight, the moon landing had also provided mankind with positive arguments to readjust its focus towards earth. For the photographs taken from the moon made earth look like a lush green Eden, rising over a deserted lunar lifelessness. As historian Robert Poole brilliantly shows, these pictures foreshadowed a spiritual return to earth.⁴⁵ Even though people continued to develop rockets and space stations, and schoolchildren dreamt of becoming an astronaut, with *Apollo 11*, spaceflight was in some sense normalised. The fever of the space age was therefore alleviated as soon as mankind crossed the finish, and with *Apollo 11*, human imagination returned to *terra firma*.

The main conclusion from the final years of the Space Race has to be that these years empirically proved to Catholics that science and religion could

⁴³ 'Conquérant de la Lune, L'homme détruit la terre', *Panorama aujourd'hui*, 10-9-1969, p. 11.

⁴⁴ 'A quoi sert la conquête de la Lune?', *Le Pèlerin*, 27-7-1969, p. 16.

⁴⁵ Robert Poole, *Earthrise: How Man First Saw the Earth* (Newhaven and London, 2008).

coexist. Even though there had been voices proclaiming this from the start of the space age, and it had become the official Church message after Vatican II, only with the Geneses-reading did it become clear that spaceflight had made given scientific rationality a mystical edge. The incorporation of this aspect of modernity within the Church proved to be vital for Catholic self-confidence. Furthermore, it provided a very rare common ground where most of the liberals and conservatives could come together. This acceptance of spaceflight and the American victory also allowed for the final maturation of the critique of the Soviet program as profane. Spaceflight provided Catholics with a new argument in the Catholic Cold War against communism.

Conclusion

When American President Nixon congratulated the *Apollo 11* crew in a phone call on their way back to earth, he claimed that by walking on the moon, they had made the heavens a part of man's world. Just like Hannah Arendt, Nixon therefore saw spaceflight as a proof that human beings could shape the world around them. By de-mystifying the moon and the heavens of old, humanity had gained a physical, measurable space, with which we could do with as we pleased. But this thesis has shown that for most French Catholics spaceflight had a profoundly different meaning. If anything, for them the conquest of space had shown the opposite, and should rather be considered as a re-mystifying than a demystifying force.

A first conclusion that therefore needs to be drawn, it that the secularisation narrative that dominates the historiography of spaceflight is questioned by the findings in this thesis. The teleological story of a decline of religion in the face of modernity clearly does not rhyme with the superfluous progressive Christian responses to spaceflight and modernity.

But even though the secularisation narrative is thereby discredited, the second conclusion that follows from this thesis is that spaceflight had a profound effect upon the way Catholics saw secularisation. By changing the model Catholics used to explain how religion and science interacted, spaceflight reshaped the way Catholics thought their religion was developing. Apart from detaching scientific progress from the framework of secularisation, the empirical

proof of this, in the form of the Genesis reading by *Apollo 8*, also gave French Catholic society a great boost of confidence.

In the form of a distinction between the Russian and the American program, the Space Race even provided Catholics with a clear example of how technology and science should be used. The Soviet program was cold and inhumane, driven by machines and God-less men, and would only cause mankind and religion to disappear. Opposed to this, the synthesis of man and machine in the *Apollo* missions were seen as an ideal way to advance into the future, while also showing the greatness of God.

This shows that the Catholic perception of the Cold War focussed on very different things than the standard Cold War narrative of the struggle between capitalist America and the communist Soviet Union. The distinct difference between the language used by secular and religious media when referring to the Soviet missions furthermore provides evidence that the Catholic Cold War was sometimes very different from the Cold War of their non-religious counterparts.

Moreover, this sense of a different Cold War playing itself out is further reinforced by a comparison with the religious response in America that Kendrick Oliver and Catherine Osborne presented. Whereas they reveal that American Christians often fell back on their national pride and identity in their evaluation of spaceflight, French Catholics were more influenced by their religious convictions. Furthermore, even though France had its progressive liberals, the widespread positivism that gripped Americans was of a different order altogether. So, in a sense, the standard frame of *the* Cold War does not fit the French interpretation of the Space Race very well. It is therefore better to follow historians Sylvie Le Clech and Michel Hasting, who argue that the Cold War in

France had many faces and that we should instead speak of the Cold Wars.¹

This thesis has thereby shown that the unconventional combination of spaceflight and religion offers for fascinating subject matter that is relevant to different fields of study. The French case calls for many other intriguing questions as to how de Gaulle aimed to use spaceflight for his political means, and which role spaceflight played for the relation between France and Algeria. Also, a comparison with religious responses in other European countries would provide a more solid base to see how the Cold War was interpreted differently in Europe and America.

Ultimately, the exploration of the heavens turned out to be so much more than a physical conquest. By reaching out to the space beyond the heavens, metaphysics re-entered the world of physics. And just like Pascal had found religion in the face of the cold infinity of space, with spaceflight, Catholics could also believe again.

¹ Sylvie Le Clech and Michel Hasting ed., *La France en guerre froide: Nouvelle questions*, (Dijon, 2015), p. 11.

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Appendix I

'Six Millions quatre cent mille lecteurs', *France Catholique*, 15-5-1959, p. 8



Appendix II

Sr. Mary Augustine/ Our Lady of Space (1958).

As seen in Catherine Osborne, 'From Sputnik to Spaceship Earth: Religion and American Culture', *Religion and American Culture* 25,2 (2015), pp. 218-263, at 225.

