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Editorial

How Space is Getting Closer to Us

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On 26 June 2021, the UFO topic made it onto the front page of the renowned weekly German magazine *Der Spiegel*. Beneath a UFO picture taken by a US fighter jet over the Atlantic near Florida in 2015 was the headline: "Are we still alone? The Pentagon's UFO files and the search for life in space." The article is factual, thought-provoking in tone and reports on the latest developments in the USA in relation to the UFO issue. It is emphasized that there are serious sightings of unknown flying objects by US fighter pilots whose origin cannot yet be explained. The possibility that this is extraterrestrial technology is explicitly not ruled out in the *Spiegel* article:

Or are the unexplained flying objects – this question is no longer taboo in the USA – something completely different, namely vehicles of extraterrestrial origin? Are they the explorers of a highly technical super-civilization from an unimaginable distance, from outside the solar system, many light years away from Earth? Sure, it all sounds far-fetched, like science fiction – but the question of extraterrestrial life is actually a mega-topic of current space research. (Evers, 2021, p. 86)

The article is paradigmatic for a remarkable discursive dynamic regarding the UFO topic. For a long time, the UFO phenomenon was hardly taken seriously or even ridiculed by the established media, dismissed as a pseudo-scientific fringe issue or simply as a crank, but today it is discussed very seriously and openly in public discourse (cf. Anton & Vugrin, 2022). This change is – as the *Spiegel* article quite rightly points out – embedded in a growing public and scientific interest in the question of extraterrestrial life and intelligence over the past few years. This in turn is linked to various discoveries and findings in astronomy, astrophysics and astrobiology that have attracted public attention: It has been known for some years that planetary systems are the norm rather than the exception (Cassan et al., 2012). At the time this text was written, 5558 exoplanets were known – and new ones are being added almost every day. According to statistical analyses based on data from the Kepler mission, there could be 40 billion Earth-like planets in the Milky Way that lie in the habitable zone of their stars and are therefore potentially hospitable to life (Petigura et al., 2013). We have known for decades that organic chemical compounds, which are the basic building blocks of life, are present in space in such large quantities that they can be described as "mass products of the cosmos" (Herrmann, 1988, p. 165). Astro-

biological findings on extremophile organisms on Earth show that life, once it has developed, is extremely robust and adaptable. There is almost no place on Earth where signs of life have not yet been discovered. All of this together makes it seem more likely than ever that Earth is not the only planet with life and that humanity is not the only intelligent species in the universe.

In 1950, the book *The Flying Saucers are Real* by the well-known UFO researcher Donald E. Keyhoe was released (1950), which is considered to be the first book on the modern UFO phenomenon. In 1954, the German version of a revised edition was published with the title *Der Weltraum rückt uns näher* [Space is getting closer to us] (Keyhoe, 1954). I have based the title of this editorial on this book title for two reasons: Firstly, this title is a meeting metaphorical description of our new knowledge of space and the increased interest in the question of extraterrestrial life; and if you look at the fascinating images from the *James Webb* and *Euclid* space telescopes, you might indeed think that space has moved *closer* to us. On the other hand, the debates of the 1950s on the subject of UFOs, which Keyhoe was significant in shaping, bear an almost irritating resemblance to the current situation. Keyhoe was convinced that UFOs were controlled by alien intelligence and that the US military was aware of this. However, this information would be kept secret for fear of mass panic. Today, over 70 years later, this is exactly the discussion we are having again.

2017 was the beginning of a new chapter in the history of UFO phenomena in the USA. Despite the US government's declarations over decades that there was no government interest in the UFO topic, media reports in December 2017 revealed that the Defense Intelligence Agency (DIA) ran a secret UFO research program called the *Advanced Aerospace Threat Identification Program* (AATIP) from 2007 to 2012 (Cooper et al., 2017) and US Navy videos of alleged unidentified flying objects were published, which went around the world and can now be considered iconic. In his article, Ingbert Jüdt sheds light on the exact political background that led to the creation of this programme (Jüdt, 2023). Interestingly, the beginnings of AATIP lie in the first privately and then state-funded research into various paranormal phenomena as part of the *Advanced Aerospace Threat Identification Program* (AAWSAP). These investigations, for example at the legendary *Skinwalker Ranch*, seem curious. However, there are indeed some overlaps between the UFO phenomenon on the one hand and various paranormal phenomena on the other (not only phenomenologically), which Michael Nahm systematically analyses in his article "Concordant Deviance: Commonalties of Unidentified Anomalous Phenomena (UAP) and Psi Phenomena" (Nahm, 2023).

Almost at the same time as the media reports about the UFO research program in the USA were released, an interstellar object was discovered that also made headlines around the world. 'Oumuamua (Hawaiian for explorer) is not only the first interstellar object observed within our solar system, but also has a whole series of strange characteristics: The little data that could be obtained from 'Oumuamua's transit of the solar system indicates that the object has an unusual, flat shape. In addition, 'Oumuamua had an unexpected trajectory around the sun, which was

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caused by the object accelerating away from the sun. However, there is currently no explanation for this acceleration, as no outgassing (as with comets) could be observed. These anomalous properties led the renowned Harvard astronomer Avi Loeb to hypothesize that 'Oumuamua could be an artificial object created by an extraterrestrial intelligence (Loeb, 2021). Loeb's main argument is that the unusual characteristics of 'Oumuamua are best explained by assuming that it is an artificially created object. According to Loeb, the probability that it is a natural object such as a comet or asteroid is almost zero (pp. 111-113). Loeb's provocative analyses met with a mixed response, ranging from enthusiasm about his intellectual curiosity to rejection due to the perceived overly speculative nature of his conclusions. However, there are still no conclusive explanations for the peculiar characteristics of 'Oumuamua. The discussions about 'Oumuamua give a little boost to a search strategy for extraterrestrial intelligence that has been known in science for decades, but has so far stimulated very few concrete research projects: The search for extraterrestrial artefacts, or SETA for short, on which Rüdiger Vaas' article "Außerirdische Artefakte. Die Suche nach fremden Technosignaturen im All" [Extraterrestrial artefacts. The search for alien technosignatures in space] focuses on. As Vaas emphasizes, the aim is not to replace SETI research with SETA research, but to combine both and other approaches into a comprehensive search for extraterrestrial technosignatures.

The reports about the secret UFO research program in the USA triggered a veritable wave of reporting from the end of 2017. One example is an article from the *Washington Post* from 28 May 2019. Under the remarkable headline "UFOs exist and everyone needs to adjust to that fact," it says: "What appears to be happening is that official organs of the state are now acknowledging that UFOs exist, even if they are not literally using the term. They are doing so because enough pilots are reporting UFOs and near-air collisions so as to warrant better record-keeping. They are not saying that these UFOs are extraterrestrials, but they are trying to destigmatize the reporting of a UFO" (Drezner, 2019). The basic tenor of the article, that the UFO topic should be taken seriously, can also be found in many other reports in leading US media.

This change in reporting on the UFO topic also reached Germany in 2021 at the latest, as the *Spiegel* article mentioned at the beginning shows. Two events in particular were decisive for this: In May 2021, former US President Barack Obama made a public statement on the UFO topic during a television show. When he was asked about these "damn aliens" that everyone was talking about at the moment, Obama replied: "But what is true, and I'm actually being serious here, is that there is footage and records of objects in the skies that we don't know exactly what they are. We can't explain how they move their trajectory. They did not have an easily explainable pattern. And so you know, I think that people still take seriously trying to investigate and figure out what that is. [...]." At the end of June 2021, the report of the so-called *UAP Task*

¹ See https://www.youtube.com/watch?v=xp6Ph5iTIgc

Force, a working group set up under the Trump administration with the aim of systematically collecting and analyzing information on the subject of UFOs, was released. The name of the task force refers to the fact that instead of 'UFO' the abbreviation 'UAP' was now established in official terminology, which initially stood for *Unidentified Aerial Phenomena*, but means now *Unidentified Anomalous Phenomena*. For the report, 144 military reports on sightings of unidentified celestial phenomena between 2004 and 2021 were analyzed. In 80 cases, flying objects were detected simultaneously with various sensors (e. g. via radar, infrared, electro-optical sensors, weapon detectors), in 18 cases unusual movement patterns or flight characteristics were reported and in eleven cases pilots even reported near-collisions with UAP.² Although the report did not provide any definitive evidence of extraterrestrial activity, it intensified the debate and increased the desire for more transparency and research into UAP sightings.

The establishment of the UAP task force, which today operates under the name *All-domain Anomaly Resolution Office* (AARO), marks a remarkable turning point in the official US approach to the topic of UFOs or UAP: around half a century after *Blue Book* was canceled, the largest project to date to investigate UFOs, there is official government UFO research in the USA again. US policymakers are taking the issue seriously, as demonstrated by the fact that a hearing was held before the US Congress on 17 May 2022 to discuss UAP and their potential threat to US national security. At the end of 2022, the budget plan for defense in 2023 was passed. There is a UAP legislation included to this plan, that calls for, among other things, the establishment of a structured reporting process for information on UAP, including information on material procurement, material analysis, reverse engineering and research. In addition, the law contains protective measures for whistleblowers to ensure that they do not have to fear negative consequences if they pass on relevant information on UAP to the authorities.³

As if all this wasn't spectacular enough, in June 2023, war veteran and former intelligence officer David Charles Grusch goes public and claims that the US government has been running a top-secret UFO research program for many decades and is in possession of extraterrestrial or "non-human" artefacts. He even talks about recovered bodies ("dead pilots"). He later repeated his statements under oath at another hearing on the UAP issue at the US Congress. Although Grusch has not yet been able to prove his claims, there are several people, including intelligence officers, military personnel and politicians, who support Grusch's statements. These have added an extra dimension to the UAP debate in the USA: Whereas previously the main focus was on the reality of UAP, on the fact that there are repeated sightings of strange flying objects in the USA that (so far) cannot be attributed to any conventional explanation, the discussion is

² The report is available online: https://www.dni.gov/files/ODNI/documents/assessments/Prelima-ry-Assessment-UAP-20210625.pdf

 $^{{\}it 3} \quad {\it Online available: https://docs.house.gov/billsthisweek/20221205/BILLS-117 hres-SUS.pdf}$

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now also centered on the question of whether it is actually possible that the US (and other governments) have been in possession of wreckage or even intact aircraft of non-human origin for decades. As bizarre as this all sounds, this discussion is currently being conducted very seriously at the highest political level in the USA, as evidenced by the controversy surrounding the latest UAP legislation as part of the 2024 budget (Guo, 2023).

All the developments described above have led to a situation where public discourse on the topics of extraterrestrial intelligence and UFOs is now much more open, unbiased and objective than it was a few years ago. From a scientific point of view, this development is extremely welcome, as the UFO topic in particular was associated with a kind of stigma with considerable impact for a long time. The changed discursive framework conditions have already had concrete effects in the scientific field. In recent years, a whole series of projects have emerged that are dedicated to the topic of extraterrestrial intelligence and/or UFOs. To name just a few examples: Since June 2021, Harvard University has been home to the Galileo Project, led by Avi Loeb, an international scientific research project to systematically search for extraterrestrial intelligence or alien technology and to identify the nature of anomalous unidentified flying objects.⁴ Since February 2022, UFOs have been an official research topic at the Interdisziplinäres Forschungszentrum für Extraterrestrik [Interdisciplinary Research Centre for Extraterrestrial Studies – IFEX] at the University of Würzburg in Germany.⁵ In June 2022, NASA announced its own UAP study and published a report on the results in September 2023.⁶ At the end of 2022, the SETI Post-Detection Hub was established at the University of St Andrews in UK, a network of scientists from a wide range of disciplines who are systematically investigating the question of what consequences the discovery of extraterrestrial life or even extraterrestrial intelligence would have for humanity.⁷

In June 2022, the *Gesellschaft für Anomalistik* [Society for Anomalistics] organized a conference in Marburg entitled "Da draußen. Neue Entwicklungen in der SETI-, SETA- und UFO-Forschung" [Out there. New developments in SETI, SETA and UFO research]. The main goal of the conference was to reflect on the significance of the events and processes mentioned and to discuss possible scientific perspectives arising from them. The contributions to the conference are now available in written form in this special issue of the *Journal of Anomalistics*. Furthermore, recordings of the presentations at the conference can be viewed on the *Youtube* channel of the *Gesellschaft für Anomalistik*.⁸ In addition to the speakers at the conference, we

⁴ See https://projects.iq.harvard.edu/galileo/home

⁵ See https://www.uni-wuerzburg.de/ifex/

⁶ See https://science.nasa.gov/uap/

⁷ See https://seti.wp.st-andrews.ac.uk/

⁸ https://www.youtube.com/@gesellschaftfuranomalistik8999

were able to win further authors for this issue whose contributions deal with the topic of extraterrestrial intelligence or UFOs. I would like to thank all the authors very much!

In closing, it should be noted that although the developments of recent years have not yet brought any scientific breakthroughs – we know as much or as little about extraterrestrial intelligence and UAP today as we did in previous years –, but at least the framework conditions for possible breakthroughs have been improved.

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