

UFO phenomenon and psychopathology : A case study

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Abstract

The Psychosocial Model explains the UFO phenomenon with the following mechanisms: simple mistakes, elaborate mistakes, hallucinations, false memories and hoaxes. This article will specifically focus on the topic of hallucinations in relation to UFO sightings. If illusions are perceptive distortions of an objective stimulus, hallucinations are by definition perceptions without any stimulus. Those cases are probably rare, but they do exist. Research in psychology has shown that the prevalence of psychopathologies is not bigger amongst UFO witness than the general population. Nevertheless, we also know today that people can have hallucinations, including visual hallucinations, without suffering from a psychopathology. We'll present a case study after a brief review of the literature.

The Psychosocial Model

The UFO phenomena is like a haystack: proponents of the extraterrestrial hypothesis are looking for a needle in the haystack. Even if at some point it was proven that there is after all something truly anomalous inside the haystack (for example extraterrestrial spaceships or a so far unknown kind of thunder), that anomaly would explain a very small percentage of all cases. For that simple reason, this alleged anomaly would not really explain the haystack. In the Psychosocial Model, we are interested in the haystack, not so much by the alleged anomaly inside it.

The Psychosocial Model explains the UFO phenomena with the following mechanisms: simple mistakes, elaborate mistakes, hallucinations, false memories and hoaxes. Most UFO sightings are simple mistakes with mundane stimuli (for example the moon, helicopters, skytracers, sky lanterns and so on). They are the core of the phenomena. In those cases, witnesses can describe reliably what they saw: they only fail to identify what the mundane stimulus they saw was. Elaborate mistakes include subjective distortion of what was seen. The witness don't describe what they saw reliably. Based on available cultural narratives, those distortions can happen during the sighting itself (illusion), when the memory is remembered (confabulation) or during discussions with other people (suggestibility). If illusions are perceptive distortion of an objective stimulus, hallucinations are by definition perceptions without any stimulus. Those cases are probably rare, but they do exist. Research in psychology have shown that the prevalence of psychopathologies is not bigger amongst UFO witness than the general population (Spanos & co., 1993). Nevertheless, we also know today that people can have hallucinations, including visual hallucinations, without suffering from a psychopathology. False memories are memories of events that never occurred. It is an extreme form of memory distortion. Finally, hoaxes are false testimonies.

Hallucination and UFO phenomena

Some of the people who listened to Orson Welles's radio show "The War of the Worlds" in 1938 told psychologists they had strange sensations during the event: they could smell martian gas or see the Heat-Rays. Those cases were documented at the time by Cantril and his team (Cantril & co., 1940). But can the cultural influence really go as far as generate visual

hallucinations? It seems that we can answer “yes” to this question. Nevertheless, it is a difficult subject to address since it’s a classical attack against skeptically-minded UFO researchers: “they think the witnesses are crazy”. It is a straw-man argument who is based on dated and naïve conceptions of hallucinations and psychopathology. It is also more of an ethical argument than a scientific one: the argument is, in substance, that the researcher is not respecting the witness by suggesting that they could have had a hallucination, independent of the validity of the explanatory hypothesis. In other words, it is attacking the personality of the researcher and not the real argument.

That being said, it is true that psychologist thought in the past that hallucinations were mostly symptoms of psychoses. The two were almost synonymous: if you had hallucinations, you were psychotic; and the other way around. But recently research have shown that hallucinations are much more common in the general population that we thought before (Bentall, 2013). Subjects who don’t suffer from a psychopathology can have hallucinations. For example, some people have auditory hallucinations but don’t feel the need to seek psychiatric help. Anthropologists also showed that in some cultures hallucinations belongs to the realm of normality (for example in the context of shamanic practices) and not to psychopathology. It is in the Western culture that hallucinations are perceived as a symptom of psychiatric trouble that obviously needs treatment. Another problem is that some psychopathologies, especially schizotypy (Evrard, 2014, p. 203-219), include in their diagnostic criteria elements of paranormal beliefs and exceptional experiences. That overlap makes it more likely to be diagnosed as someone suffering from a psychopathology if someone does believe in the existence of genuine paranormal processes or if someone talks about his or her own exceptional experiences.

There must be UFO cases that are explained by hallucinations. Even if those are rare, it would be the contrary that would be surprising. Unfortunately, we don’t have much information about this topic in the ufological literature. We are certainly here in front of a publication bias: if an ufologist who is a proponent of the extraterrestrial hypothesis investigate a case that happens to be a hallucination, he may not publish it. Or, and even worse, he will publish it after having remove from his report all the problematic details. The first instance is a file-drawer effect, the second one is more akin to pious fraud. After all, why talk about things that don’t support the idea of extraterrestrial visitations of our planet? Based on our participant observation of the ufological community, we do know that some cases included witnesses who were probably suffering from a psychopathology, even sometimes under medication for that very reason, but those details were nevertheless omitted from the final publication...

From a strict methodological point of view, one can never completely exclude the hallucination when there is only a single witness. For this reason, competent investigators will give a lot more importance to group sightings, especially when the different witnesses don’t know each other and didn’t talk to each other during the observation. For example, Rossoni & co. (2007, p. 397-401) proposed the hallucination explanation for the Amaranth case, a famous French case that has been presented as robust over the year because of physical elements attached to it. In that sighting, an ovoid object stayed in front of the only witness during (more or less) twenty minutes, floating at one meter above the ground. The witness said that he came very close to it in order to examine it. It is indeed extremely difficult to explain this observation by a mistake, simple or elaborate. What make this case special is that the official French UFO organisation (belonging to the “Centre national d’études spatiales”, or CNES, the French’s equivalent of NASA) found two physical effects on the vegetation: an amaranth plant was dried (hence the name of the case in the litterature) and some grass was

straighten up. But Rossoni & co. showed that there were some theoretical and methodological problems with the examination of those physical effects. If those physical effect can indeed be excluded from the discussion, then the hallucination hypothesis becomes extremely plausible for this case.

Collective hallucinations

The concept of collective hallucination is often mentioned in the context of the UFO phenomena, but much more today by journalists than scientists. As we'll see, this concept is problematic and so for several reasons. We have to distinguish two different usages in the literature: on one side collective hallucinations are sometimes used to talk about the entire UFO phenomena (or at least UFO waves), on the other side they are used only for talking about a group of witnesses in the same sighting. The French psychiatrist George Heuyer (1954) suggested for example that the UFO phenomena was a collective psychosis. We tend to avoid using this vocabulary, as well as the expression "mass hysteria". The reason is that it presents as pathological a phenomena that is only the by-product of the workings of our societies (at a sociological level) and of our psyche (at a psychological level). On top of that, it gives readers the impression that all UFO sightings are explained by hallucinations: as we have stated before, at this point research on the UFO phenomena has completely refuted this hypothesis. For those reasons, we prefer to talk about a "cultural illusion", in a similar usage of the concept of illusion used by Freud (1927) to describe religions. Nevertheless, Heuyer's point is not so far from Carl Gustav Jung's view that the UFO phenomena is a fruit of the *zeitgeist* (Jung, 1958). He would indeed argue that the UFO phenomena is born from the spirit of the time of the Cold War, especially the fear of the nuclear destruction of the World. About UFO waves, we think it is preferable to talk about "mass illusions", like in the case of "The War of the Worlds" radio broadcast. The sociological dynamic is indeed different during the normal period of the UFO phenomena and during waves. If "mass illusions" describes accurately what happens during waves (Klass, 1986, p. 304), it seems to the contrary inadequate to use to describe the normal phases.

Let's address now the question of hallucinations shared during one sighting by a group of witnesses. Interactions between the witnesses during the course of a sighting can change the nature of what is seen by suggestions. But can it generate a visual hallucination? We think that proofs in favor of this mechanisms are lacking. We are thus skeptical of the fact that it is possible for a group of subjects to share a hallucination of the same thing at the same moment. There is the shared psychotic disorder (DSM-IV: 297.3), also known as "folie à deux", in which two related persons can share the same delusion. But the "folie à deux" implies that they should be very close; for example of the same family. And even then, does that really mean that they can share a common visual hallucination? To share a delusion and to share a hallucination is not the same thing. One way to think about this question is to examine marian apparitions, which are often group visions. At Medjugorje, a group of six children (now adults because they have grown up since then) saw the Virgin Mary regularly since June 24th 1981 (Claverie, 2003). After reading the literature, it seems to us that the most economic explanatory hypothesis is that the visionaries lie when they claim to see the Virgin Mary. It is maybe not the most politically correct explanation, but we think that the proofs that they are actually seeing something are inconclusive. On the other hand, if it was possible to prove beyond doubt that they really experience a hallucination all together, aka seeing the same thing at the same moment, we would have good reasons to think that group hallucinations can occur. We are far from it. During the « miracle of the sun » at Fatima, October 13th 1917, tens of thousands of witnesses shared a strange vision. According to Meessen (2005) and Hallet

(2011), those testimonies can be explained by the fact that people looked directly at the sun, without any protection. On top of that, it seems to us, we could be in front of a suggestion effect, because one of the visionaries screamed at the crowd to look toward the sun. People were expecting a miracle. And at the end of the day, not everybody saw the miracle. Unfortunately, we don't have reliable numbers of the people who saw something by contrast to those who didn't see anything. We can only speculate that people who saw something were those who were more prone to suggestibility or were more vulnerable when it comes to watching the sun directly without any protection. Anyhow, the "miracle of the sun" seems also to be explainable without making the hypothesis of a common hallucination shared by the crowd. Those two examples show that there are good reasons to be skeptical of group hallucinations. Our own position is that we would not use this concept to explain a UFO case.

Case study: André

With André (this is not the real name of the person: we have changed it in order to preserve his anonymity.), we get to have a look at the extreme of the continuum of witnesses from a psychological perspective. It is the classical methodology in clinical psychology: to try to understand normality by looking at the pathological. That being said, we want to stress that the border between pathology and normality is not something clear and cut. Even though André is beyond the limits of normality, he's not that far away. We'll see for example that he expresses doubts concerning the objectivity of his exceptional experiences. Another reason why we wanted to present this case study is that he talks not only about UFO sightings but also about some elements similar to the abduction phenomena. Abductions are a phenomena much more typical of American culture than the European one. There are some abductees in our country, Belgium, but they are quite rare.

Sociologist Ron Westrum (1982, 2011) thinks that there really are lots of abductions everywhere in the world, including in Europe, but that those are hidden events. He claims that they are under reported because the scientific community is not interested in this phenomena. According to him, it is a kind of event that is mostly ignored by the culture. This way of thinking is based on the irreductionnist hypothesis that abductions are objective events. In other words the idea that people are literally taken by aliens. Ron Westrum told us during an informal discussion at the workshop "Collecte et l'Analyse des Informations sur les Phénomènes Aérospatiaux Non-identifiés (CAIPAN)" (Paris, France, 2014) that he was convinced that abductions are for real and cannot be explained by sociopsychological processes. It is difficult for us to agree with him on this point. In the theoretical framework of the Psychosocial Model, the prediction would be that if specialists were looking actively for more abduction reports, the risk would be that they would create more of them by suggestions.

André is typically the kind of witness that doesn't interest the ufological community. He is at the extreme of the stereotype of the "ideal witness" that ufologists are looking for. He is unemployed and his psychopathology cannot be easily dismissed. Ufologists are primarily interested in witnesses who are "honest and of good faith" (this is the typical expression used in ufological publications), especially individuals which have a social status that lends credibility to their testimonies. Amongst the profession that ufologists really trust, we can find astronauts, airplane pilots, military personnel or cops. The truth is: there are no professions that trains someone to be able to recognize every possible mundane objects someone can possibly see in the sky. Amateur astronomers are the ones who do get close to that profile because they look at the night sky a lot, but even experts can make mistakes. Contrary to what

the public often thinks, professional astronomers (by opposition to amateur astronomers) spend much more time looking at their computers than at the night sky. On top of that, the real degree of expertise inside the same profession is obviously variable. At best, one can be warranted to think that airplane pilots have good eyesight or that cops didn't drink if they had their sightings while working. That being said, the argument the ufologists make is not only in terms of the witness's objective skills, but also social prestige. It will sometimes take the form of an argument from authority: a General (to take a military personnel example) who would see a UFO would guarantee the objectivity of his sighting by the simple fact of his military rank. On the contrary, ufological books don't have a lot of witnesses who are homeless people, prostitutes or prisoners. The fact that André is at the opposite of the spectrum of the ufologist's "ideal witness" is exactly the reason why his testimony interested us.

We found André (28 years old) on an internet forum about ufology and the paranormal. The ufological community became mostly virtual at the end of the 90s. In France for example, the number of amateur research and investigation groups has considerably diminished the last few decades. We find ufologists today mostly on discussion lists, forums, Facebook groups, and so on. André went on this forum to give several testimonies of UFO sighting. Witnesses do this sometimes. Their objectives can vary. For some, the goal will be to search an explanation (mundane or not) for their sightings. They will go testify on a forum in order to find people that they think are "experts" in the UFO field. For others, it will be more about validating the fact that they indeed saw an extraterrestrial spaceship. They are already convinced before asking the question and have as a goal to make ufology "progress" by telling their stories. Others just want to share the emotions they had during their exceptional experiences, without being really interested by the explanation of what they lived.

André frequently talked about a lot of sightings. He went as far as saying that he would see UFOs every single day! His testimony contained, on top of it, unusual elements: he said that sometimes his mind was controlled by aliens. At this point we decided to meet him for an interview in a town in the North of France. He explained to me during our discussion (translated from French):

"(...) Now it's been a year that I'm on psychiatric treatment and since then I stopped seeing things (things like that and UFO sightings) and having dreams about aliens. So they really got me good with those drugs. It happened during a period of two years: during that time I saw UFOs and I saw aliens in my dreams. It lasted for two years. And it was the last two years. It's a limit in time if you want."

There is a complex relationship between psychopathology and exceptional experiences, including UFO sightings, contactees and abductees. It would be tempting in a reductionist theoretical framework to see in a style of personality (psychopathological or not) the cause of exceptional experiences. But with mostly correlative studies it is not possible to determine a causality between a style of personality and exceptional experiences. Kerns, Karcher, Raghavan & Berenbaum (2013) argues that the relationship between psychopathology and exceptional experiences can go as followed: they could be an overlap, exceptional experiences could contribute to psychopathology, the exceptional experiences could contribute to exceptional experiences and, at last, a common variable could contribute to both of them. A study by Spanos & co. (1993) concluded that UFO witnesses don't suffer from psychopathology more than the general population. This result is not at all surprising. As we have stated above, most UFO sightings are simple mistakes with mundane stimuli. They are the core of the phenomena. There is no good reason at this point to think that only people

suffering from a psychopathology would make a (simple or elaborate) mistake. Perceptual mistakes are the by-product of the human psyche. On top of that, as we have discussed before, suffering from a psychopathology and having hallucination is not synonymous.

Let's briefly talk about some examples in order to illustrate hallucinations in the context of the UFO phenomena. The first observations of Chupacabra are relatively recent. They date back to the 90s. This cryptid has been included by some ufologists into UFOlore. For example, Belgian physicist and ufologist Auguste Meessen (2000) writes (our translation from French):

“Rumor of goat-suckers, spreading all over Latin America, have been refuted by the authorities who assert that goats have been killed by wolves, dogs or coyotes. Why do authorities feel the need to refute this facts for years, instead of looking at them closely? The answer is obvious: if those authorities knew that this “unidentified animal” was from extraterrestrial origin, they would have to change their attitude toward the UFO phenomena as a whole; this link has been spontaneously made by the people and common sense observers. All of this presents again the characteristic of a sociopsychological experiment done by the aliens. What is necessary to make the authority do something about it?”.

The large majority of Chupacabra corpses that have been found, until now, are from canidae (most often coyotes) suffering from scabies. They lose all their fur because of this disease. If it is easy to recognize a coyote with its fur. The fact that the animal is without it makes identification difficult for someone who is not a specialist. According to the investigation done by psychologist Benjamin Radford (2011), Chupacabra's original sighting is based on the movie “Species” (directed by Roger Donaldson); that came out in 1995 a little bit before the sighting. The witness, Madelyne Tolentino, stated that she saw the film and that her description of the cryptid matches the look of the monster in the movie. This case is similar to the Loch Ness monster sighting by Spicer in 1933, which is largely based on the original “King Kong” movie (Loxton & Prothero, 2013, p. 130-134). In those two cases, it seems well established that the witness had a visual hallucination based on a movie they saw recently.

André explains to us his main sighting in the following way (our translation from French):

“The most... How do you call it? The closest to me. (...) At Groningen. In the North of Holland. There, I saw the closest UFOs I have ever seen. It was those. They came at (I'm not sure) maybe 20 meters from our car. They were two of them and they were emitting red and blue lights. It was weird. There was a dull sound. I was with my girlfriend, so I have another witness with me for this sighting. We saw them together.”

André uses his girlfriend to legitimate the objectivity his testimony and thus the reality of what he saw that day. We didn't have a chance to meet her in order to have her version of the event. Talking about this, André adds:

“(...) but she is also sure of what it is, to have seen UFOs. But for her, she saw them far away. She saw them more or less at 200 meters, but me I saw them, I saw them at around 20 meters. So I don't know if she saw, she didn't see the same as me, or if she found that... I don't know. We didn't have the same distance with the thing.”

It is extremely difficult to estimate the distance of an object in the sky, especially if the object is not identified by the witness. It's possible that André and his girlfriend just estimated the distance with the UFO widely differently. That being said, it is not rare in sightings with

several witness to have the main witness testify a vision with a high degree of strangeness and the others simply confirm what the first one says. That means that they would report a sighting a lot less extraordinary if they were questioned separately. We can think about this group dynamic like a minimalist form of “folie à deux” (or shared psychotic disorder) in which the main witness (the one who as “soucoupised” his sighting) impose his interpretation of the vision to the other people who are there. It seems to us that what André is talking about could be explained by this mechanism. He saw something a lot closer than his girlfriend and she only confirmed that she saw something but from a greater distance.

On top of his UFO sightings, André explains that he had some vivid dreams about Grey aliens. He considers himself a contactee and tells us that he received some telepathic communications from the extraterrestrials:

“(…) I don’t think I was abducted, but I do think I was in contact with aliens. Not abducted or anything. They didn’t make any experiments on me or anything. But I felt them in my dreams. And I saw them very well. I had the dream that was strongly inprinted in my mind. I would wake up and I would remember very clearly of everything. I had sometimes the sensation of being paralyzed when I woke up, you see, and sometimes I was paralyzed like that and I had the sensation like someone was pushing on my belly. And at that moment I saw the head of a Grey alien and – pouf – I woke up! Yeah, it was violent. But maybe it’s my brain who fabricated all that, or I don’t know what.”

He states a little bit later about his experience:

“Not more than thirty seconds. It was short. It was scary. In my case I couldn’t move. I was paralyzed, you see. I don’t know how to describe it. It was... You know : it makes you anxious. You’re there, you can’t move. You have anxiety, anxiety, anxiety building until you’re not paralyzed anymore. »

What André’s talking about here is a typical sleep paralysis episode. Sleep paralysis plays an important role in the abduction phenomena (Clancy, 2007). André isn’t sure about how to explain his experience. Instead of believing that he was physically abducted inside an alien spaceship, he seem to believe that extraterrestrials are somehow controlling him by telepathy. He doesn’t believe that his sleep paralysis is a residual memory of him being aboard a spaceship, but that Grey aliens took control of his dream, and then his body (making his body impossible to move) when he woke up.

It seems thus that André is more a contactee than an abductee. Indeed, as we saw, he doesn’t claim to have been inside the alien spaceship and doesn’t talk about surgery operations performed on him by Grey aliens. His contact is, according to him, telepathic in nature. The representation of contactees we generally have is more like George Adamski (Hallet, 2010) and Claude (aka Raël) Vorilhon. Those are individuals who tells about exceptional experiences in order to create a new religious movement around themselves. Nevertheless, psychiatrist Daniel Mavrakis (2010, p. 82-83) examined in his PhD on the UFO phenomena nine subjects who would claim to be in contact with extraterrestrials. One was claiming to be in telepathic communication with visitors from another world, when another believed he was an alien-human hybrid after his mother was made pregnant by them. He writes about them (my translation from French):

“The study of nine contactees that we could examine lead us to conclude that most of them were suffering in fact from obvious psychiatric disorders, often paranoid or paraphrenic delirium. With the exception of two patients who were hospitalized in psychiatric hospital, all the others didn’t have any known psychiatric record. (...) It is possible that they had found an equilibrium in there delirious beliefs.”

At the end of the day, it seems that there is two very different kinds of contactees: those who are trying to create a new religious movement around themselves and those who are suffering from a psychopathology. Their profiles are obviously very different from each other and André belongs to the second category.

Conclusion

Even if rare, there must be UFO sightings that are explained by hallucination. It’s the contrary which would be really surprising. However, we do lack information about those cases in the ufological literature. Based on our participant observation of the ufological community we speculate that this can be explained by a file-drawer effect (UFO sightings explainable by hallucinations don’t get published in the ufological literature) or pious fraud (UFO sightings explainable by hallucinations are published with all the details pointing to this explanation removed from the written case study). We think that more works should be done on the topic of UFO sightings explained by hallucinations. After a discussion about the role of hallucinations in the UFO phenomena, we presented the case of André, a witness who suffers from a psychiatric disorder. He feels like he is a contactee, having telepathic communication with Grey aliens. But his profile is very different from the one of famous contactees like Adamski or Raël. We thus make the hypothesis, based also on the work done previously by Mavrakis (2010) on this topic, that there is actually two different kind of contactees: those who talk about an exceptional experience in order to create a new religious movement around themselves and those who suffer from a psychopathological disorder.

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