BOOK REVIEW

Belgium in UFO Photographs, Volume 1 (1950–1988), FOTOCAT Report #7 by Vicente-Juan Ballester Olmos and Wim van Utrecht. Turin, Italy: UPIAR, 2017. 400 + xii large pages, 366 pictures. €40 (paperback). http://www.upiar.com/index.cfm?language=en&artID=191&st=1

Both authors of this important book, Vicente-Juan Ballester Olmos and Wim van Utrecht, are well-known and highly regarded in the field of ufology for the solid work they have done over decades. Van Utrecht has conducted many field investigations, co-founded an ongoing reportmonitoring operation in Belgium (Belgisch UFO-meldpunt), and notably is the architect and custodian of the mighty CAELESTIA online research resource. Ballester Olmos has authored hundreds of articles and books, almost single-handedly mediated the declassification of Spanish Air Force UFO archives in the 1990s, and today maintains the colossal FOTOCAT Project database that is the foundation of this book.

Belgium in UFO Photographs is the first of a pair of volumes that together will form an exhaustive history of Belgian UFO photography from its inception. A chronological catalog of individual cases (84 in this volume) is followed by statistical breakdowns and some discussion of the quality and meaning of the evidence. As the authors immediately acknowledge, most readers will dismiss the majority of UFO photographs out of hand as merely plates and frisbees, birds, lens flares, stars, and the like. But they take nothing for granted:

The million-dollar question, of course, is to know if there are any images left that are not explainable as hoaxes or misinterpretations? It is the main goal of our project to find that out.

Volume 1 covers the years 1950–1988. Part 1 occupies the bulk of the book and contains the catalog of events, divided into three chapters: Chapter 1, 1950–1971, When UFOs Were Still Flying Saucers; Chapter 2, 1972–1980, Sightings Peak; and Chapter 3, 1981–1988, Calm Before the Storm. Part 2, Reviewing the Data, contains Chapter 4, 1950–1988, Statistics and Conclusions. There are 413 pages in total including Contents, Dedication, a Foreword by space journalist James Oberg, Bibliography, List of Acronyms, Acknowledgments, and an Appendix listing all the columns and codes in the FOTOCAT database spreadsheet.

The production standard of a UPIAR (UFO Phenomena International Annual Review) monograph is always excellent, and the graphics here (by van Utrecht) deserve special mention for their ingenuity and clarity. Overall, the presentation is first rate. Neither author's first language is English, but their writing is generally a model of grammatical propriety and clarity that would put some native speakers to shame

Let's look now at how the authors approach their task. The first point to make is that they use (to employ an apt photographic metaphor) both wideangle and close-focus macro lenses to examine the topic. The wide-angle view means they take their material from every possible source, and they are scrupulous to give equal prima facie weight to all data—even to claims it would be easy, but lazy, to dismiss as obviously trivial. They then switch lenses to test each claim, even the most outlandish, with equal thoroughness. This is by no means wasted effort. It is about having proper respect for the process, and I applaud this philosophy wholeheartedly.

The first surprise in the catalog is that there is no extant record of a Belgian UFO snap prior to 1950. The honor of being number one goes to a photo dated March 31, 1950, of a landed spaceship which according to the newspaper *Burgerwelzyn* had brought 26 one-eyed Martians to the town of Bruges—as luck would have it, just in time to celebrate April Fool's Day. The last is a photo from April 23, 1987, which the authors are able to explain, more tentatively, as a visitation of bugs. In between we are treated to a cavalcade of mystifying, and often deeply obscure, images that exercise the considerable ingenuity of the authors (and their consultants—the name of Chilean analyst Andrés Duarte, in particular, occurs a number of times) through nearly 390 entertaining and instructive pages. Two or three cases are quite well-known, but the bulk will be completely unfamiliar to most readers.

One relatively well-known case crops up quite early on page 12. This is a pair of photos taken by professional **photographer Herman Chermanne near Bouffioulx in May, 1953, of something resembling a bright fried egg, or a flower at the top of a long, twisting stem of vapor** rising over some woods, suggestive of an exploding missile, perhaps, but with a curious appearance. The authors have collected several versions including the firstknown published prints and meticulously traced their provenance, noting quite dramatic variations in shape and contrast from source to source, and the presence of crude retouching even on the first newspaper copies.

Such problems, combined with the absence of original negatives and certain inconsistencies in the collateral evidence, make it very difficult to prove anything with certainty. But a careful comparison of the two prints, allegedly taken some seconds apart, shows that the wispy detail in the twisted smoke or exhaust trail is identical in both. The authors point out that a trail so stable from shot to shot is somewhat in tension with the witness's claim that it was sown by a spinning, soaring, exploding ellipsoid and that it dispersed in moments, suggesting that two copies of one original photograph—perhaps of an interesting but mundane vapor trail—have been adapted to create a fake pair of UFO shots.

This draws attention back to the retouching. Why—the authors ask would a newspaper so crudely corrupt images it describes as "extraordinary" and as possibly the first meteor to have been photographed with such "remarkable precision"? One answer is that it would have been routine in the days of letterpress printing for ill-defined photographs to be airbrushed and/or hand-painted, and for halftone plates to be selectively masked with a 'resist' when being etched, all to improve contrast and detail. Retouchers and etchers were highly skilled and could work on conventional subjects quite discreetly, but if the nature of the original image was itself unclear the results might be crude and involve some guesswork. Editors had no real interest in scientific accuracy in such a case and would look for impact on their front page.

But that said, there is another factor.

The authors show that the moon ought to have appeared in the shot, very close to the trail, unless it just happens to have been obscured by the exploding UFO. And when they go on to demonstrate that a very good match to the strange "fried egg" effect can be created by chemical or thermal damage to a film negative, this starts to look like a rather convenient coincidence. Was the photographer attracted to a dramatic shot of the aircraft contrail crossing the moon? Did disappointment with the result lead to a botched attempt to retouch or fake-up the moon? Did he then realize he could pass off the failure as a UFO? Proof is lacking, but in the end an opportunistic hoax is a good theory which fits a broad range of facts.

The Namur case of June 1955 (see p. 38) is even better-known and will interest many readers. This series of photographs of a disc apparently cavorting in a clear sky, sometimes enveloped in its own vapor trail, was always, for my money, one of the most challenging photo cases, even in the absence of original negatives ("lost in the post"). Truly excellent work here leads to a fairly convincing explanation, not conclusive because the lapse of years does not permit it, but quite satisfying, particularly so because it preserves intact the instinctive impression of "this looks real" one has when seeing these pictures for the first time. If the authors are right, it was a real and rather extraordinary flying object, but I won't spoil the story by saying what it was. A fine example of the authors' ingenuity and tenacity is the **March 24**, **1973, Borgerhout photo of a bright object high in the sky** which, seen through binoculars, doubled in apparent size as it climbed, then disappeared (p. 183). The authors' hypothesis is that the witness observed the bursting at an altitude of >29,000 m of a rawinsonde balloon launched from the Royal Meteorological Institute at Uccle, Brussels. They offer an excellent reconstruction of the ascent using upper wind data from this very balloon showing that it would bring the balloon into a position where it could appear in the sky south of Borgerhout. Illuminated by the low sun in the East it could show as a bright spot like that seen and photographed by the witness.

So far, so good. However, the angular scale given by the house roof at a known distance immediately indicates a problem because the object in the photo would clearly be several tens of times the angular size of a 6-m radiosonde at a burst-height of 29,000 m, even allowing for glare and blurring. The balloon, some 45 km slant range from the camera, would be at best a tiny speck. The theory looks in trouble.

But we find the authors are ahead of us. Not only have they seen and addressed this issue, they have compounded the problem by noticing that the angular scale of the photo is inconsistent with the type of lens reportedly used, and correcting for this worsens the problem significantly: Not only does it make the size discrepancy even larger, the true angular elevation of the object means that it was near the zenith in the wrong part of the sky entirely. They correctly conclude that the object in the photo cannot after all have been the balloon.

But rather than giving up and recording a verdict of "unidentified," as less assiduous ufologists might have done, this setback only sends them back to the photo for a deeper look; and when FOTOCAT consultant Andrés Duarte examines the image he finds that the UFO spot does not exhibit the same distinctive motion blur as do other objects in the photo. Conclusion: the spot on the print is not an optically formed image at all. It is a coincidental defect in the emulsion.

Without the misleading photo to confuse things, the mystery is reduced to a simple visual sighting of a spot of light which may after all have been the Uccle weather balloon.

Some cases are less easy to tackle with the exact tools of geometry and optics. **On March 20, 1973, in Tarcienne (Namur), a lighted object was seen and photographed** by a 60-year-old lady from the window of her house. She also observed it through an optical device, an old brass WWI 'trench periscope' owned by her late husband, through which she allegedly discerned a 'man' or occupant inside the UFO, silhouetted against the light (p. 174).

The authors show that the strange-looking photo of a dome with an 'antenna' published in the press was a cropped and inverted image from an original negative which they argue shows a streetlight and its mounting bracket blurred by considerable camera motion during a long handheld exposure. They identify a type of streetlight bracket which may have been in use locally at the time. The photographer's description of the flight of the object across the sky with its blinking lights and humanoid occupant is "littered with inconsistencies" and is put in the same category as her claim to have witnessed other 'spaceships' on numerous occasions (including another 25 that very night!).

One can cavil at small details of any analysis. For example the authors' identification of certain photo features as reflections in window glass sounds reasonable, except that their argument for a closed window (that it would probably have been closed on what was a chilly night) is weakened by the report that the witness was "closing the shutters on the outside" at the time she spotted the object, implying the window was—initially at least—still open.

Howsoever, we only have her word for it that she was even near a window. In general, given that a convincing case is made for something on the borderline between hoax and delusion having little relation to anything outside the witness's head at the time, what may or may not have been outside her window is perhaps academic. Nevertheless, it is proper to consider the evidence from all angles without favor, as the authors do.

These are just a few of the many types of explanation applied to the 84 cases in this volume, bringing in knowledge from fields as disparate as astronomy, meteorology, organic textiles, and entomology, one of the "best" being saved for last. Perhaps the prize for most unusual natural explanation goes to the **April 23, 1987, photo taken at rural Moorslede (West Flanders), which at first glance resembles a faint "light pillar."** The authors consider various possibilities such as smoke or a contrail, but in the end they identify it as probably an "insect pillar," a column of thousands of mosquitoes assembling for their evening mating dance over some woodland pool or other and illuminated by ground lights from a nearby farm (p. 366).

There are a few cases where this reviewer has some minor reservations about the treatment, with the emphases on few and minor. I'll say a few words about these.

October, 1954, La Docherie (p. 34). A 'big ball of fire' like a 'second sun' was seen, initially far from the sun and 'high in the sky', which then moved abruptly to superimpose itself in a curiously obfuscatory fashion over the real sun (which at the time would have been low in the west), spinning and throwing out showers of sparks. As many as a hundred

witnesses gathered to watch. A movie was made, but was taken away by authorities. The authors indict a parhelion or 'mock sun' and afterimages of the true sun on the tired retinas of the viewers.

A poor still image taken from the movie was published in a local paper. The authors think this is inconsistent with the photographer's story that his film was confiscated before he could process it. The documentation is disappointingly sketchy and the details vague. But I did not follow this argument.

The photographer claimed that a pair of 'security' men who visited him and took the film were accompanied by a man he believed to have been an 'astronomer' from 'Uccle Observatory'. A detailed analysis of the film was later published in a professional journal by a scientist from Uccle Meteorological Institute, which is collocated with the Observatory. It seems possible that the 'astronomer' was this meteorologist, Prof. L. Poncelet, or an associate, and that this was the route by which the film itself entered this Institute, where it did indeed vanish from public ken. Although Poncelet's article explains that the images were not good enough for the journal, this does not mean poor prints were not made or that one could not have got out to the local paper, which duly published a blob. All of which does quite consistently explain the witness's story and the final destination of the film.

As for what was seen, the authors point out that Poncelet's theory of a 46° parhelion is mistaken, inasmuch as no such halo exists. They plausibly speculate that he may have meant 44° , where a very rare halo can be found; but this is hardly exculpatory since, as they also point out, this halo is invariably very faint and could hardly explain a 'ball of fire' that was 'blinding' like a 'second sun'. All in all, a disappointingly incoherent outcome for a professional evaluation based on what were claimed by Poncelet as 'precise indications' of the sighting geometry.

Discounting Poncelet's precisely indicated 46° , our authors gamely propose that the object was most probably a 22° halo or sundog. They adduce in support of Poncelet's own statement that a colleague had that very same day seen 'a classic 22° sundog' from Bassily, 44 km away. But by emphasizing that Poncelet seems to have understood the difference between 22° and 46° , this statement rather puts another twist into the contortion we are obliged to make in order to accommodate the 'precision' of those positional 'indications'. In short the evidence is a mess.

Unfortunately, there is no record at all of this object, whatever it was, because the film was exposed only during the 'second phase' of the event, when the true sun acquired a peculiar appearance after being obscured by the 'second sun', changing color and flinging out sparks; and the only record of *that* is a very poor photocopy of a newspaper reproduction of one frame

showing a blob. The description of this effect is not without precedent. Actually there is quite a history of related cases.

As the authors point out, the most famous examples are so-called 'Miracles of the Sun' like the 1917 event at Fatima, Portugal, but there are dozens of similar records that have no overt religious context, being found around the world and throughout history. There are hints of an ocular component to these visions in many cases, and of conventional atmospheric–optical components, too; but the proper explanation of all their class properties is in this writer's opinion not yet certain. So for this reason the La Docherie case, though vague and very ill-documented, is still of minor interest to some of us.¹

July 19, 1972, Faymonville (p. 99). This incident was triggered by a sighting of a fuzzy, red, point of light in the southern sky which appeared to climb and approach before disappearing into the west. Momentarily what was interpreted as the same light reappeared in the west, now much bigger, fiery red, and looking like a pear, an oval, or a bar. A witness managed to obtain two blurred photographs before the object seemed to dissolve and vanish. From these photographs our authors were able to persuasively explain this latter object as the setting Moon, probably distorted by cloud.

They still needed to explain the light originally seen approaching from the southern horizon, which could not have been the moon. They suggest it was the planet Jupiter which was unusually bright at this time. Variable haze could make it brighten and appear to approach. Of course Jupiter's change in elevation over the duration of the sighting would have been imperceptible (especially being near the meridian), yet the reported change in elevation of the 'UFO' was very large, between 25° and 30°, or 5 to 6 times the original horizon elevation estimated by both sets of witnesses. Jupiter or not, this large ratio is awkward to explain as an illusion. Moreover, the most reliable estimate of the light's azimuth comes (arguably) from a witness who fixed it by its proximity to the prominent village church tower southwest of his home, measured at 195° (18° away from Jupiter), and the authors acknowledge that the consistently reported low initial elevation of the light is in itself difficult to square with Jupiter, inasmuch as witnesses almost invariably overestimate elevation angles-they do not dramatically underestimate them.

They still favor Jupiter, though. "Mr. Giet's estimate of 30/35° would match Jupiter's true elevation much better," they suggest (it was actually 16°), but "faced with two different sets of elevations for what is supposed to be the same sighting" they despair of proving it. I wonder if they are being slightly disingenuous here. I do not see "two different sets of elevations." I see one set of elevations from one witness group—"first seen at an elevation

of 5°. After it approached, its elevation was estimated to have been 30 or 35°"—and from the other group an initial estimate of "more or less 4 to 5 degrees" followed by the qualitative statement that it "approached at a constant pace" and after 10 to 20 seconds "it had approached considerably."

Of course these subjective impressions prove little, and might testify to nothing more than a shared delusion on the part of susceptible people primed by the recent rash of UFO stories in the papers. And the authors' focus is on the photo, which they explain successfully. In any case, a simple moving light is hardly something for us to get excited about. But it would be honest to say that, while it may be possible to construe the two descriptions of this light in ways that imply an inconsistency, positions and motions reported are still in tension with the Jupiter theory. Indeed, the authors do conscientiously admit that they cannot be sure of the Jupiter identification.

So it is slightly unfortunate that James Oberg in his Foreword happens to focus on this particular detail of this very story as a paradigm of how "a plausible astronomical explanation" (Jupiter) accounts for a puzzling witness statement caused by "premature interpretation of visual stimuli." However, this is a tiny criticism and not very material. Otherwise, the authors' logical and photogrammetric dissection of the evidence is inventive and seems impeccable.

September 10, 1973 (p. 224). An anomaly in the form of two lights, apparently on the Moon, was photographed by an amateur astronomer, identified only as J. E., in Embourg (Liège), using an astronomical telescope. The photographer's report, written up nine days later and submitted along with several prints, is a model of clarity. J. E. is today a "respected science and space writer" and still has no idea what it was he observed and recorded. Unfortunately, the photos themselves are not extant, and since J. E. naturally thought it superfluous to describe the attached prints in words we have little information about what they showed. So the authors' commentary is limited.

Events like this are called Transient Lunar Phenomena (TLP) and have been recorded since at least the 6th century, but their origins and significance remain controversial. Not all apparent TLPs are really on the moon at all. Therefore, to seek corroboration for a real TLP the authors checked 'the latest catalogue' of TLP events, but they report finding no other corresponding record of a TLP event for that day.

They are correct. The source they reference (Winifred Sawtell Cameron, Lunar Transient Phenomena, Catalog Extension, July 2006) contains no record for September 10, 1973, and indeed none at all for the entire year of 1973. However, this is an 'Extension' to the main catalog first published in 1978, consisting mostly of events since that date with only a few pre-1978 additions. And of course it is possible for events on two consecutive dateseither side of midnight—to be closer together than two events on the same calendar day.

The main NASA catalog² does have an entry (p. 105) for an observation recorded on September 11, 1973, 0223 UTC, or just 7 hours after J. E.'s event (which was "about 8:30 p.m." local, Sep 10 = 1930 UTC). This was an observation of unusual variations in color and brightness in the crater Grimaldi, suspected to be a possible gas emission. Grimaldi is not near the Mare Crisium, however it is an interesting coincidence. This is the only record of any kind in the catalog for the month of September 1973.

But even this catalog of 1,468 reports is admitted to be far from exhaustive. In another specialist catalog published in 1984 and devoted specifically to the years 1972 and 1973,³ we find observation #88 by Pasternak, in the crater Aristarchus on September 11, 1973, 2048-2106 UTC. Aristarchus is not in the Mare Crisium either, but again it is interesting that this is the only event in the catalog for that month and it was within about 24 hours of J. E.'s observation.

These findings fall well short of corroboration but might be considered suggestive.

This is a potentially interesting case, and here I think the authors let themselves down a little. They acknowledge a range of proposed physical mechanisms for lunar anomalies including "volcanic eruptions, meteorite impacts, glints of sunlight on raised crater rims, pockets of gas released through tidal stresses, and friction in dust-clouds causing electrostatic glow discharges," but then dismiss these in favor of what we might call a psychosocial theory of selenology, saying "[we] feel that a more plausible explanation is that those who report these sightings have been duped" by film flaws, telescope defects, and a range of coincidental phenomena in our own atmosphere.

At this point a faint alarm rings in the mind of this reader. TLPs clearly have a spectrum of causes, and it is widely recognized that some of these are probably mundane—not excluding wishful thinking by some over-excitable observers, and even outright fantasy (c.f. p. 277 & p. 283 of the book under review, discussing Willy de Groof's January 1975 and March 1975 photos of, respectively, a lunar "dome" and a "bright white ball," and several sightings of glowing craters; see also April 22, 1975, p. 287). But the insouciance with which the authors would consign hundreds of professional observations and a body of serious academic study to the same epistemological bin as the bulk of saucer photos feels a little overweening.

For example, bright meteorite impacts certainly have been observed on the moon, as have surprising lighting effects on crater rims, etc. And there is no doubt that clouds of gaseous and/or particulate media of

various possible origins have been detected above the lunar surface, and might plausibly fluoresce, or scatter sunlight, especially at low angles of illumination-which fits a strong correlation between TLPs and lunar terminator conditions, usually at sunrise. As for proper lunar vulcanism, it is regarded as highly unlikely today; nevertheless, as selenology advances, the assumed complete geological inertia of the moon becomes less, not more, certain. The distribution of TLPs is very strongly correlated with a relatively small number of areas and types of terrain. This may be partly accounted for by observers being attracted to certain prominent features, and/or by the fact that random Earth-based artefacts in the line of sight may be more noticeable against smooth mare backgrounds than against chaotic, cratered terrain. But this does not convincingly explain an underlying correlation with radioactive radon outgassing sites, or area photometric anomalies, or the clustering of observations in time by independent observers, or observations by astronauts far beyond Earth's atmosphere, occasionally coinciding with sightings from Earth. There is also a hint of a correlation between some area-brightening events and solar activity.

Whatever the explanation of the (missing) Embourg photos—and the authors are entirely right to shelve the case as "insufficient information"—I feel that we should not be so dismissive of TLPs in general. This is the first hint in the book of what a pro-UFO anomalist might see as an underlying mindset more cynical than skeptical, the approach of men with a tried-and-tested hammer to whom every problem starts to look like an inviting nail.

Coming now to Part 2, Reviewing the Data, we find statistical distributions by year, month, day, time, geography, age, and number of witnesses, etc. There is some discussion, but one understands that this is in the nature of a preliminary sketch, the first part of a work in progress.

The meaning of most of the distributions seems likely to be trivial. But at one point in Chapter 7 (p. 381), when comparing the age distribution of photographers to that of the general Belgian population, the authors report a Pearson correlation coefficient of +0.044 which they say shows there is "no correlation" (there clearly is a degree of very broad correlation, however it is indeed a small result). The proportion of photographers under about 40 is far above expectation. They say this is a "significant bias and should be taken into consideration when evaluating the claims of UFO photographers." I'm not sure precisely what this means. Nearly a third of the cases were hoaxes, and clearly a heightened tendency for children and adolescents to indulge in pranks is not unexpected. But clearly this is not the whole of the effect. Do they suggest something can be inferred more generally about a future claim from the age of the claimant?

Some unpacking of the implications would be useful, in particular

a discussion of possible selection factors affecting the test dataset. For example, many of the cases come from poorly compiled newspaper stories and the like, so that the photographer's age is not given at all in 42% of cases. Might there be a greater fastidiousness in discovering and/or specifying a witness's age if he or she (usually he) is below the age of majority? That would not help with the anomalous peak in the 20–39 year bracket, but there may be other factors here. The oldest reporters may be disproportionately coy about divulging their age, for example, especially in the decades of the 20th century under examination, when there may also have been be an age-related likelihood of owning and operating a functional camera (as there is probably also a gender-related likelihood). The probability of reporting might also be related to age.

It would perhaps be useful to have the correlation tested against populations of general UFO reporters, and of people in other specialinterest news sectors as well as the general population, paying attention to some of these other possible variables. Likewise it would be interesting to know how the 30% proportion of photographic hoaxes compares with the proportion of hoaxes in the general UFO report population. One suspects the latter percentage is very much smaller, and it would be interesting to probe the psychosociology of such a difference. Perhaps Volume 2 will go a little deeper when the complete catalog is available.

Another striking bias coming out of the statistics is that "In over one-third of all cases, we are dealing with photographers who claim to have spotted UFOs on more than one occasion," which, say the authors, "inevitably raises questions about the fantasy-proneness of these individuals." I would say there is certainly merit in this observation as applied to a database weighted with 30% hoaxers, but like any rule of thumb we need to be careful with it as a general principle because if we allow (for the sake of argument) that a person has had one opportunity to observe or photograph something they genuinely think exciting, it is quite reasonable to suppose they might be more alert and more inclined to notice/record/report similar phenomena in the future. This psychosocial effect does not presuppose anything about the nature of the stimuli. It would be consistent both with the authors' inference in this book, and also with a scenario where an original stimulus that is truly remarkable sensitizes an observer to be on the alert, leading to a trail of ambiguous or illusory sightings. That is not to say that any of the 'repeater' cases in this book fit this latter profile. But there may be such cases.

As mentioned, of 84 cases fully 30% turn out to be hoaxes, with most of the rest being film and camera artefacts (emulsion flaws, crimp marks, reflections, and the like), astronomical objects, or aircraft. Slightly unexpectedly, only 2 cases are resolved as natural "atmospheric

phenomena." Tables and charts graphically display the various proportions. But the bottom-line figure for many ufologists will be the residuum labeled "unidentified." One could say that the figure in this column is zero, but it would be more accurate—and revealing of the authors' investigative philosophy—to observe that it is not *even* zero. They do not recognize such a category at all.

From one point of view this is not noteworthy. A rump of 7 cases (8%) remains without plausible resolution, but the authors are clear that this is only because they contain "insufficient information to attempt a classification." The authors claim that their purpose is to hunt for 'pay dirt', and their objectivity in addressing the evidence here is hard to fault, even if one feels they do not expect to find any pay, only dirt. So why bother to list a category that has zero entries?

From another point of view, however, the omission shines like a supernova, and I think signifies a conscious wish to reframe the debate in terms that discourage the traditional dichotomy between 'skeptics' and 'believers'. I think that for them 'unidentified' is a semantic trap, in that it fosters an illusion of qualitative difference, of settled status, where there may be only the intractable tail-end of a continuous distribution of random errors, or—just possibly—a few rare phenomena on or beyond the margins of current science that may have no common class-property other than the one we impose on them with the collective term 'unidentified'. In the absence of proof to the contrary, this remains the rational position.

Looking at it the other way around, the analyst who does expect 'UFOs' of some type is invited to look within that 8% 'insufficient information'. Are they there? Given the type of unpromising material on offer here, one would have to say that the hope is very slim.

In his Foreword, James Oberg observes that the evidence in this book "does not unambiguously require the existence of ANY new phenomena." I tend to agree. Indeed I would go so far as to say that none, considered alone, requires a "new phenomenon" even ambiguously. But with reference to comments made previously about the "miracle-of-the-sun" type case (p. 34) and the possible Transient Lunar Phenomena of September 10, 1973 (p. 224), there is always a chance of small clues here assuming significance in the context of some wider investigation. So I would elect to keep a door open, if only because (by analogy with cosmology's mediocrity principle, according to which one assumes we occupy no very atypical, special, or privileged position in space or time) it feels improbable to me that we should happen to find ourselves living, for the first time, in a moment of history at which there truly are no 'new' phenomena (with all the sociological, semantic, and epistemological caveats the adjective implies) in our everyday environment.

It may be argued that such a moment must come some day, and why should it not come now? However, I am not so sure that the ages-old pattern of discovery through anomalies of direct human experience has been—or, perhaps, ever will be—broken for good. Recent novelties like sprites, elves, and jets, thunderstorm crown flash, and the still-unresolved enigmas of ball lightning, earthquake luminescence, and so forth, give some comfort to this point of view. And let us not forget that where Belgian photographic evidence is concerned we are still at Volume 1. As the authors point out,

whether or not we will find real pay dirt (i.e. unexplained images accompanied by reliable eye-witness testimony) in the complete collection of reported data remains to be seen when we present the results of our analysis performed on the Belgian reports from after 1988. Up to the present, we have reviewed approximately one-third of all reported photo cases for the 1950–2005 period.

The title of Chapter 3, 1981–1988, Calm Before the Storm, alerts knowing readers to what to expect as the curtain-raiser in Volume 2. The great Belgian wave of 1989 unleashed hundreds of sightings of 'flying triangles' and other objects, famous photographs, exciting radar trackings, and fighter interceptions, bringing UFOs once again to prominence across the world in newspapers, books, and TV. After this comes the start of the commercial digital age, with the digital SLR supplanting the film camera during the 1990s, followed by the exponential growth of the Internet and the ubiquitous phone camera sweeping the world in the first decade of the new millenium. It was a new world for UFO photography:

The key question that will be addressed in our second and last volume is whether the abundance of modern cameras has actually produced better evidence for the existence of new phenomena not yet understood by science, or if this latest photographic revolution has only muddled the water further.

Of course this is something of a tease. I venture to predict that Volume 2 will add very considerably to the mud, and that no one is more aware of this than the authors! But it is equally safe to predict, on the evidence of Volume 1, that we will find very little mud indeed in the thinking of Ballester Olmos and van Utrecht.

Their respect for the process of objective analysis, as a worthy end, in and of itself, is an example to other researchers: This is how we keep our tools oiled and honed, and by the way it is how we demonstrate to scientists in conventional disciplines that thoroughly sound work really can be done in ufology. The acuity of their investigation is forensic, the clarity of their analysis is salutary, and the quality of its presentation in this book is virtually impeccable. I recommend it to all who want to know what UFO photographs are really worth, and to those who simply want to see the best of 'citizen science' in action.

Notes

- ¹ See Martin Shough & Chris Aubeck, *Invasion Of the Solar Bubbles: A Catalogue for Researchers*, 2013, 85 p. (privately distributed).
- ² NSSDC/WDC-A-R&S78-03, Lunar Transient Phenomena Catalog, Winifred Sawtell Cameron, July 1978, National Space Science Data Center (NSSDC) / World Data Center A for Rockets and Satellites (WDC-A-R&S), NASA Goddard Space Flight Centre, Greenbelt, Maryland 20771. https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19780022214.pdf
- ³ Hilbrecht, H., & Küveler, G., Observations of Lunar Transient Phenomena (LTP) in 1972 and 1973, Earth, Moon, and Planets (ISSN 0167-9295), vol. 30, Feb. 1984, p. 53–61 (see p. 56). http://adsabs.harvard.edu/full/1984EM%26P...30...53H

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