issn 0391-111 x

UPIAR RESEARCH IN PROGRESS

EDITOR IN CHIEF
VICENTE J. BALLESTER OLMOS

AN INTERNATIONAL JOURNAL PROVIDING A FORUM FOR RAPID COMMUNICATION IN UFO RESEARCH

1982
URIP
Vol.I N.1

Cooperativa Studi e Iniziative UPIAR S.r.L.

EDITORIAL

TIMES ARE CHANGING

It is a well-known fact that the picture of scientific reporting in the framework of the UFO literature has always been poor, with a few notable exceptions. This situation, finally and hopefully, seems to be changing in the last years. Centering our comments in the specific field of the stable, periodical journals, it should be noted that nowadays Ufology avails itself with three refereed journals, what is quite indicative of the maturity already reached in the subject of UFO phenomena.

The first of such journals in the history of UFO publications was UFO PHENOMENA INTERNATIONAL ANNUAL REVIEW (UPIAR). It was started in 1976 under the capable editorship of Dr. Roberto Farabone, a physicist, and Dr. Francesco Izzo, a biochemist. Up to volume IV it was published by EDITECS, a publishing house based at Bologna, Italy. Since volume V it is published by UPIAR Cooperative Society. UPIAR, which is the parent journal of the present one, is aimed to the yearly release of long, final and in-depth reports, and it has a world-wide coverage in terms of the origin of the research contained therein.

Then, we have the JOURNAL FOR UFO STUDIES, a Center for UFO Studies (CUFOS) publication initiated in 1979, it is currently edited by Mimy Hynek, and it was formerly edited by Dr.E.M.Hendry. It is basically a tribune for scientific UFO research generated in the American continent. It goes to press once a year.

Last but not least, let us mention our own scientific journal, UPIAR RESEARCH IN PROGRESS (URIP), whose issue No.1 you are reading now. This is formally defined as an "international journal for rapid communications in UFO research". According to its definition, UPIAR RESEARCH IN PROGRESS does not intend to compete with its other two outstanding colleagues, in fact, it has been designed to complement them instead! This will be accomplished through a higher release rate (three times a year) and by providing a most needed forum for the quick reporting of latest research advances and preliminary results. This journal is willing to illustrate the lively information and research output produced today in the UFO study.

Another main goal of URIP is to improve international cooperation in this area of knowledge. It will be performed by facilitating to analysts, investigators and theorists the adequate room to publish their findings and proposal in the proper, academic way, which other respectable but narrow-minded professional journals neglect. The extent of this cooperation is global, certainly. It can be immediately recognized in the world-wide coverage of our magnificent Editorial Board, and in the very international editorship which is evident in the spatial dissociation of the Editor-in-Chief (based in Spain) and the Managing Editor (Italy).

An additional objective of the journal UPIAR RESEARCH IN PROGRESS is to help to optimize the quality of scientific papers related to the kind of anomalies we refer to as UFO phenomena: what will be done through the experienced and scholar refereeing work performed by our excellent team. The editors will scrutinize all papers with critical and professional mind before their actual release. As for the quantity of papers being available for publication, we believe it will substantially increase once the existence of this journal will be acknowledged by more and more researchers in the world.

Yet there is more. UPIAR RESEARCH IN PROGRESS expects to be the cohesive element which joins together those hundreds of scientists and engineers who are presently involved in the analysis of UFO data. We will contact with plenty of qualified individuals in order to inform them of the journal's existence and aims, but we need your direct support, which should materialize in obtaining subscriptions to the journal, but individual and Faculty's libraries subscriptions as well as papers from serious investigators for publication. We want to represent the end of isolation for so many students of the "UFO enigma", and to become a comfortable environment for scientific discussion and presentation of results. We rely on you, dear reader, to spread the voice on URIP!

The phenomena of UFOs merit serious consideration. Our thesis is that when our efforts are based on rigid, theoretical, experimental or analytical scientific procedures, we will be able in an advantageous position to disclose significant aspects of the currently obscure areas surrounding the problem of UFO observations. This approach requires both talent and means. We are convinced that the talent is abundant everywhere. And one of the means that are long needed is here to stay: the space UPIAR RESEARCH IN PROGRESS is freely contributing to researchers to report their findings, projects, and ideas. Scientific Ufology will be onwards what we want it to be. Let us not spoil this golden opportunity.

V.J.Ballester Olmos
Editor - in - Chief

SCOPE AND PURPOSE

This journal publishes original papers regarding the following fields of research:

1) PHYSICAL ASPECTS OF UFO PHENOMENA

2) GATHERING AND PROCESSING OF DATA CONCERNING UFO PHENOMENA

3) THE "CE III" (ACCORDING TO HYNEK'S TERMINOLOGY) IN THE UFO EXPERIENCE

4) PSYCHOLOGICAL AND PERCEPTIVE ASPECTS IN THE UFO EXPERIENCE

5) EPISTEMOLOGY OF THE RESEARCH ON UFO PHENOMENA

EDITORIAL POLICY

It is a fundamental condition that manuscripts submitted should have not been, simultaneously published or submitted elsewhere.

Before their potential approval all manuscripts submitted to UPIAR RESEARCH IN PROGRESS will be refereed by some members of the Editorial Board in order to insure the proper attainment of scientific reporting.

SUBSCRIPTIONS

Subscriptions should be sent to

Coop. UPIAR S.r.l.
P.O.Box 11221
I-20110 Milano (Italia)

INSTRUCTIONS TO AUTHORS

The following will be mainly taken into consideration for publication:

1) Research papers

2) Short communications stressing experimental results

3) Research projects

In addition the journal plans to consider for publication bibliographies of technical references related to UFO phenomena research.
Please inquire for related instructions.
UPIAR RESEARCH IN PROGRESS will hold the following columns for which manuscripts will also be considered:

a. Announcements: on meetings, symposia, workshops, etc. They should be sent to UPIAR address no later than January 1, May 1, and September 1, of every year.

b. Read in the Literature: reviews and criticisms of papers published elsewhere with specific scientific treatment or potential importance to UFO research. No book review will appear in such a section.

Editorial papers dealing with subjects of general informative interest are published upon request by the Editor-in-Chief.

SUBMISSION OF MANUSCRIPTS

Authors should send three (3) copies of their manuscript, typed and single-spaced on white paper to:

Coop. UPIAR S.r.l.
P.O.Box 11221
I-20110 Milano (Italia)

The original - which will be used for the conclusive print - must be very clear. The other two must be also good photostatic reproductions.
The submitted manuscript will be sent from UPIAR RESEARCH IN PROGRESS to the qualified referees. A fourth copy should be retained by the authors for their own use.

Only original papers written in English will be considered. As an exception, papers written in French will be also accepted. But, they will have a full English translation of the title and the abstract.

For the interdisciplinary nature of the journal, which is addressed to the scientific community as a whole, but also to those who are not familiar with the author's discipline, the contributors to UPIAR RESEARCH IN PROGRESS are requested not to use technical terms or jargon as well as to define the meaning of any technical term used throughout the text.

All accepted manuscripts will be published by a direct photographic reproduction process, excluding every possibility of subsequent alterations. Therefore either the form or the content of the paper should have been carefully checked to exclude the need for corrections in proof.
Thus it is fundamental to follow the above and following instructions so that unpleasant misunderstandings may be avoided.
The publisher stresses that every contribution to this journal is published free of charge.

PRESENTATION OF MANUSCRIPTS

All papers should be typed, single-spaced on one side only on good quality white paper, (the maximum length of each line must be 15 cm.), preferably of size approx. 28x22 cm. The papers should have a length of max. 2500 words with an abstract of 100-150 words.
The abstract should not be a mere summary of the work comprehensible only to people working in the area. Papers exceeding the requested length will be considered anyhow. Depending on the importance of the contribution the Editor-in-Chief will decide upon its possible approval for UPIAR RESEARCH IN PROGRESS. Authors -in this case- may be requested to pay a certain fee for extra pages. Emphasis should be given to the fact that longer papers (e.g. reviews) can be addressed for submission to UFO PHENOMENA INTERNATIONAL ANNUAL REVIEW always released by Cooperativa Studi e Iniziative UPIAR on an annual basis.

TITLE: The title should be chosen so that it conveys to the informed reader the particular nature of the contents he/she can expect from the paper. The first page of each paper should carry the title (main title underlined), the author's names and the name of Department, Institute or Association in which the research work was done.

ABSTRACTS: Each paper must include a summary of 100-150 words, as stated above. Papers in French should have also full English summary, with an English translation of the title. To expand our audience we plan to publish also full abstracts in French, German, Italian, Spanish.

KEY-WORDS: A list of 5-15 key-words for indexing purposes must be given by the Authors, after the abstract. Webster's dictionary defines key word as "..a significant word from a title or document that is used as a index to content.".

Through proper key-words authors supply within their papers both the Subject Index and the information retrieval system can be prepared accordingly.

Some scientific journals point out the index terms have to be chosen from a THESAURUS (i.e.: a list of subject headings with a cross-reference system). Thus we find the Index Medicus which collects the subject headings. All the same the Chemical Abstracts Service Source Index (American Chemical Society) is used in chemical and biochemical literatures.

In UFOlogy we lack a Thesaurus even if words as "abduction", and "entity", or "teleportation" and so on are by now widespread and therefore potential index terms. One of the UPIAR RESEARCH IN PROGRESS goals is the foundation of a uniform terminology for descriptions and evaluations of UFO reports. The creation of a Thesaurus in UFOlogy is a legitimate part of this aim.

But for the actual accomplishment of this purpose we ask for the close cooperation of both contributors and members of the journal's Editorial Board.

Suggestions and outlines in this sense are urged and should be sent to UPIAR address.

CHAPTERS: All research papers must be divided into chapters in the following order:

a) Abstract
b) Introduction
c) Material and Methods
d) Results
e) Discussion
f) References

ILLUSTRATIONS: All illustrations (photographs, diagrams or graphs) should be in the desired final size. The proportions of the printed page (12x18 cm) should be borne in mind when Authors are preparing the format of illustrations. Several figures should be grouped into a plate on one page.

LINE DRAWINGS: Submit good-quality glossy prints. The inscriptions should be clearly legible. Letters 5 mm. high are recommended.

HALF-TONE ILLUSTRATIONS: Submit well-contrasted photographic prints, trimmed at right angles. Inscriptions should be about 5 mm. high.

CAPTIONS: Each figure should be briefly and clearly described. Remarks like "For explanation, see text" should be strongly avoided.

Captions are a part of the text and should be appended to it. Any lettering or annotation should be indicated on a tracing overlay or a photocopy of the original. All figures should be numbered in sequence.

REFERENCES: References must be limited to publications quoted in the text; they must be listed in alphabetical order, according to the surname of the first author, and be cited as numbers in the text according to the quotation. For Journal Papers, the following data must be successively reported:
Surname and initial(s) of the first name(s) of the Author(s), year of publication in brackets, full title of the publication underlined (or abbreviation of it, according to international usage), volume, issue and page(s) number.

For example

Poher C.(1976) - LUMIERES DANS LA NUIT 19, No.158,3.
-- or --
Poher C.(1976) - L.D.L.N. 19,No.158,3.

When a paper with more than two authors is quoted, all authors will be mentioned in the first quotation, but afterwards the first only will be mentioned, for ex.: Schwarz et al.(1970).

For Books Citations: surname and initial(s) of the first name(s) of the Author(s), year of publication in brackets, full title of the book underlined, publisher, city of publication, and page(s) number.

For example

Webb D.(1976) "1973- YEAR OF THE HUMANOIDS" Center for UFO Studies: Evanston, 33-36.

Responsibility for accuracy of references rests with the Author(s).

SYMBOLS AND TERMINOLOGY: With regard to the abbreviations, symbols and technical terms, the Authors must use the international rules when they exist. If they do not exist, one may use the terminology of well known Authors or treatises.

The Editors of UPIAR RESEARCH IN PROGRESS strongly recommend the development of a uniform terminology for descriptions and evaluations of UFO reports. Meanwhile, Authors should always mention explicitly the terminology used, e.g. "The terminology followed is that used by...", or "According to the classification of...".

A list of uncommon abbreviations could be placed by the Author(s) as a footnote on the first page of the article.

FOOTNOTES: They should be avoided; if essential, they should appear on the first page of the article.

REPRINTS: Fifteen reprints will be sent to the Authors free of charge. Other copies will be available on request, the cost depending on the number of their pages.

PUBLICITY: UPIAR RESEARCH IN PROGRESS is opened to technical, scientific, and book advertisements, provided that they meet full approval by the Editor - in - Chief. An uptodate list of publicity rates is available and can be requested to Cooperativa Studi e Iniziative UPIAR.

CALL FOR PAPERS

Authors are kindly requested to send as soon as possible their manuscripts to be considered for publication in UPIAR RESEARCH IN PROGRESS.

Manuscripts accepted for publication will be published within 120 days from the approval date.

A careful reading and application of the Instructions to Authors is strongly recommended. In fact it will be one of basic principles used in the final approval of any paper submitted for publication in the journal.

APGLOGIZES

Since the German abstracts as well as one in Spanish did not arrive in time, they will be included in next issue of URIP. We apologize with authors and readers for this.

SECTION I

PHYSICAL ASPECTS

USAGE OF COMPUTER PHOTOGRAPHIC EVALUATION TECHNIQUES

As Applied, by GSW, to Purported UO Photographs

by William H.SPAULDING, Director, GSW, Inc.
Fred ADRIAN, Photographic Consultant to GSW, Inc.

Received August 24, 1981

ABSTRACT

Computer Image Enhancement (CIE) is a sophisticated method of electronically manipulating photographic images, via the use of high speed digital computers, to obtain additional and significant information to analyze the phenomenon of UO - (unidentified object) photographs. Pictorial information of UO's exist in great quantity and low quality. These pictures have always created an interpretation problem for researchers.

Computer Image Enhancement of the aerial phenomenon pictures is discussed and some of the major processing techniques utilized by GSW, INC are outlined, as well as examples of the benefits and limitations of this space-age electronic reprocessing technology. The goal is to reduce the subjectivity of conventional evaluation techniques. Graphic examples of the CIE methodology as applied to purported UO photographs, are illustrated.

KEYWORDS

Digitizing; pixel (picture cell); enhancement; analysis; filtering; density; grey value; Image Processing, Digital Image Processing and Signal Processing

METHODOLOGY

The initial procedure, when performing computer aided photographic analyses of purported photographs of unidentified objects (UO) is the digitization of the pictorial data. This is accomplished by scanning the picture (*1) with a device that measures the density of the image(s) as a function of position. The data thus obtained are relative photographic densities, which are defined as logarithms of brightness ratios. The scanning process transpires with use of a sensitive TV-type camera.

The technology of Computer Image Processing is based upon the same fundamental principles as visual recognition in people. Although the actual visual process is physiologically complex, the basic mechnism of vision uses the eyes and brain as an automatic information interpreting system. The eyes receive stimuli in the form of visual light and the brain processes and interprets this input for the observer of the image. The human visual system can be simulated using an electronic scanner similar to a television camera, as the eyes, and a high-speed digital computer as the brain.

This type of system can "see" images through the scanner, and by means of the programmed capabilities of the computer, it can effectively manipulate the images. This manipulation, is contributary to the extraction of desired information. These Image Processing activities may then be categorized by two primary end-products: 1)an enhanced reconstruction of the original image or 2)a numeric or graphic report which relates specific information contained in the interrogated image(s).

---

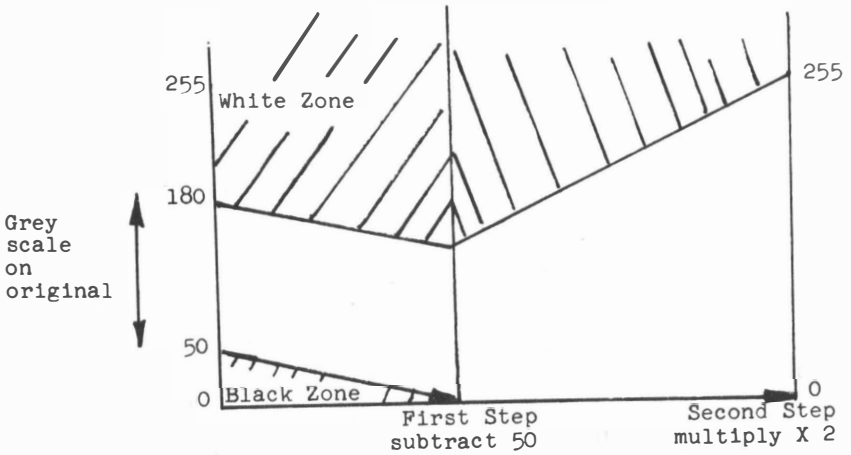
*1)The scanning is accomplished with Computer Eye (tm)TV camera. Normal scans are approximately 2mm. The resolution size, which is defined as the smallest circular or square area which density can be recorded, is between 10 to 20 microns square. Any density range much larger than the noise level of the system can be divided into 256 discrete levels. These correspond to an accuracy of 1 part in 256 or about .5 percent, which equates to 0.005 density units.

After the UO picture, or a section of the photo has been scanned, the computer has stored in its memory a digitized version of the scanned area(s). This digitized version is comparable to a checkerboard of squares known as picture elements, or pixels. The pixel is the basic element of picture resolution in the Computer Image System. The GSW system is divided into an array of 640 horizontal columns and 480 vertical rows, thus producing 307,200 equal and discrete pixels. Each pixel is then assigned a value based on the average level of grey contained in that minute portion of the photograph which it encompasses. The grey scale, or Z-value of the pixels, ranges from 0 to 255, thus resulting in 256 levels of grey. All of these Z-values are available to the System along with X and Y coordinate data on the position of the corresponding pixels.

After the photograph or the area of interest in a photograph has been digitized an array of software programs can be utilized to extract specific information relative to the evaluation. These programs range from edge enhancement to high resolution outputs. The following briefly critiques some of the more popular subroutines used in computer analysis of UO photographs:

CONTRAST EXPANSION/SUPPRESSION (E/S) - Contrast is defined as the quality of a photograph determined by the magnitude of brightness differences between adjacent parts. The human eye is sensitive to contrast and actually sees images more readily in high-contrast picture than in low-contrast photos. The operation of contrast E/S can therefore be used not only to render very low-contrast images more readable, but also to bring out details that appear "washed out" in ordinary pictures.

The computer algorithm for contrast E/S is illustrated in Drawing "A". Assume a low-contrast photo with density (Z) values in the mid-grey zone ranging between 50 and 180. This photo would be devoid of bright and dark highlights. This algorithm first lowers the darkest portion of the picture to a level of black by subtracting a constant value of 50 from each pixel element. The algorithm then multiplies each pixel by a factor of two, which increases the brightest pixels and the white zone to 255. All pixels in this high zone are displayed as white in the contrasted image. Hence, the effect of this operation is to "stretch" the grey scale from a relatively narrow, middle-range picture on the original to a full contrast image with grey values ranging all the way from 0 to 255.



Drawing "A"

To obtain contrast suppression, the converse transpires and it is possible to produce a partial and/or total binary output (Refer. Figure 2). Simply stated, the photo becomes all black and white, devoid of grey areas. This technique highlights the UO image by effectively delineating the sky/background in the picture and offers more detail to the image being interrogated.

Additional more sophisticated methods exist that include histogram classification and transformations. The histogram is a graphical plot of the grey scale distribution in the picture. The histogram is a presentation of both X & Y (vertical and horizontal) information. The vertical scale represents the grey scale (0 to 255 units) while the horizontal axis represents the total number of pixels in the picture. The curve then shows the distribution of pixels at the corresponding grey values.

A histogram can now be analyzed with reference to the original picture. A form of selective bracketing occurs when analyzing an image, whereby, areas with an abundance of white(near the 255 level) and black, at the other end of the scale, can have the contrast manipulated by suppressing the extreme values of light and dark.

SPATIAL FILTERING: A unique characteristic of images is a parameter called spatial frequency. This is defined as the number of changes per inch in grey scale across the picture. Spatial filtering is a computer operation which allows a picture to be separated into high-frequency and low-frequency components. Low-pass filtering eliminates hi-frequency interfacing lines or textures in a photograph. Hi-pass filtering can be used to enhance picture details by removing low-frequency changes caused by vignetting or uneven illumination.

A method of low pass filtering is accomplished by a computer function which calculates an average value for every pixel in the picture and then substitutes this value for the original pixel. Averaging can be calculated using a rectangular array of any number of pixels surrounding the pixel in operation.

Figure 3 is an example of processing the hi-pass filtered image in Figure 1 with a spatial filter enhancement operation. Details in the photo are now enhanced, because the low-frequency data are removed, thus manifesting the hi-frequency details. The combination on contrast enhancement and spatial filtering produce very effective results for analysis of UO pictorial information by providing data on areas that were obscure in the original.

EDGE ENHANCEMENT: For numerous applications, the most valuable information that may be derived from a picture is contained in the edges surrounding its various images and features. The edge enhancement operation delineates these edges and, thereby, makes the shapes and details comprising the image more conspicuous and much easier to analyze.

What the eye sees as pictorial edges are simple sharp changes in grey level between two or more adjacent pixels. A horizontal edge is formed when a string of horizontally connecting pixels have values different than those immediately above or below them. Similarly, a vertical edge is formed when a string of vertically connected pixels have values different than those immediately to the left or right of them. Oblique edges are generated through combinations of horizontal and vertical components.

A computer algorithm for detecting and enhancing edges operates by shifting the original picture one or more pixel elements (*2) and then testing for a difference between corresponding pixels in the original and shifted images; a middle grey value is substituted for the pixel if there is no difference, a darker value is substituted for the pixel if there is a negative difference, and a lighter value is exchanged for the pixel if there is a positive difference (Refer. Figure 4). Hence, transitions from light to dark lines. The overall result

(*2) The amount of pixel shift is under operator control from the computer's keyboard. It is a simple matter to type in the pixel shift quantity to enhance both horizontal and/or vertical pictorial data.

is an image with grey background and black and white lines surrounding the edges of all objects.

In order to utilize the above procedure for enhancing both horizontal and vertical edges, the picture must be shifted in both directions by one or more pixels. Difference values for adjacent pixels are thereby generated along both axes, and all edges in the picture are enhanced irrespective of their direction.

As explained above, it is necessary to shift a photograph in two directions in order to enhance both horizontal and vertical edges by the differentiation method of edge enhancement. This capability, on many occasions, has located linear structures suggesting supportive devices above model UO's.

PIXEL EDGE FACTORING: (a test for image distance and distortion) - Is a derivative of the Gradient sub-routine that portrays the image's edges in white outline with a black (dark) background. To use this subroutine, the computer must calculate the difference between adjacent horizontal and vertical pixels. These difference values represent the rate of change of grey levels across the picture. Gradient is then calculated as the square root of the sum of the squares of X & Y derivatives. Edges are calculated without regard to their direction on the image and the resulting picture portrays all details as white lines on a dark background.

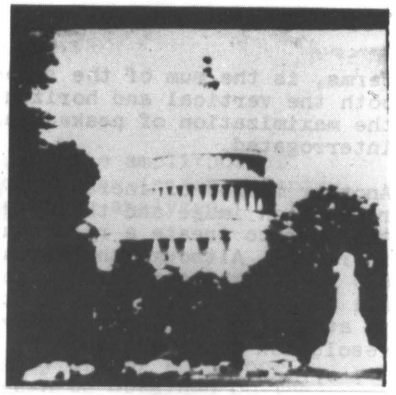
Professional photographers and analysts know edge distortion can be attributable to the following:

A) slight defocus of the camera
B) atmospheric distortion
C) photographed images positioned "inside" the infinity setting of the camera
D) image movement
E) panning
F) veiling glare or any combination of the above.

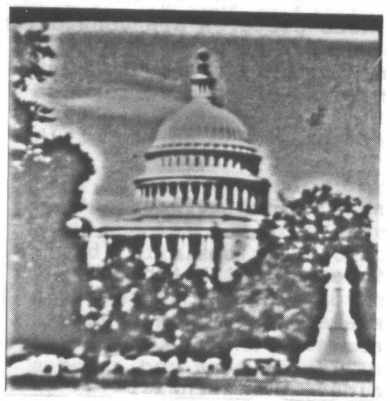
Having the capability to measure the amount of edge waviness and comparing this quantity to other features, therefore, foreground and background data, can effectively determine an approximate distance from the camera. This provides valuable information concerning the validity of the UO photograph (Refer: Figure 5).

HI-RESOLUTION (Laplacian) - This unique function of the computer system provides a natural appearing edged image and brings out pictorial features with still greater detail. The Laplacian method is based on a second-order derivative which, in mathematical

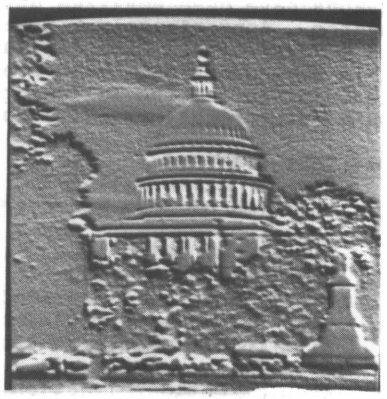
1) ORIGINAL PICTURE



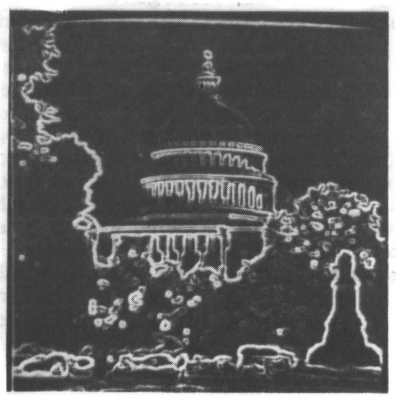
2) CONTRAST EXPANSION/SUPPRESSION



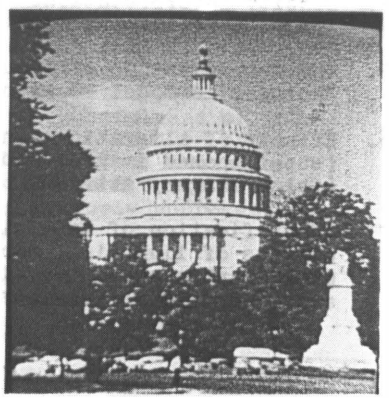
3) SPATIAL FILTERING



4) EDGE ENHANCEMENT



5) PIXEL EDGE FACTORING



6) HIGH RESOLUTION

terms, is the sum of the second partial derivatives taken in both the vertical and horizontal directions. The result is the maximization of peaked values within the image being interrogated.

Another method of increasing picture detail utilizes this hi-resolution image and the original picture. They are added together to create a resultant image which has a resolution increase. Although the actual picture resolution is still 640 x 480, the amplified edges from the subroutine accentuate all images in such a way as to cause the eye to see an increase in attractiveness, ordinarily attributable to greater picture resolution (Refer: Figure 6).

ADVANTAGES OF THE SYSTEM

As of this writing, close to one thousand purported UO photographs have been analyzed utilizing the computer enhancement system. Approximately 2.5 percent of these pictures are considered to be 'structured' images, therefore, one of substance. With this tremendous data base behind us, and during a constant learning curve, the following items can be determined during many interpretations of UO photographs.

DAYLIGHT PICTURES:

1. The time of day, as determined by shadows and reflections from the sun.

2. Proximity of UO image to camera/witness as established by relationship of foreground/background data points and the size of image in relation to the camera lens size and the film format used by the photographer.

3. Angular motion/direction as ascertained by sequential photographs or motion pictures and relationship of movement to common background images.

4. Density interpretations to establish if the interrogated image is reflecting light or producing its own light.

5. The determination of a supportive or suspended structure "holding" a model UO with high-resolution edge enhancement.

6. Effects of alterations on the photograph, such as montages (superimposed images) and identification of artifacts (false imagery attributable to improper processing).

7. Identification of natural phenomenon, such as clouds, effects of lightning, etc.. and positive identification of photographic anomalies, i.e., those related to lens flares and secondary reflections.

8. A profiling cursor graph which measures the amplitude of the density along a designated vector, which in some events may relate to the shape of the image being analyzed.

NOCTURNAL LIGHT PHOTOS:

Although many of the items mentioned in daylight pictures can be established in good quality detailed night photographs of UO images, many photographs of this category are of such poor quality that little, if any information can be obtained on the foreground/background imagery. Many nocturnal UO pictures only contain an inarticulate light on a dark background, completely void of details. However, some information can be gleaned after a careful scrutiny of the photograph as follows:

1. Micro and digital densitometry to establish the light saturation of the UO image.

2. Pseudo-coloring (density slicing) to establish light distribution across the face of the UO image.

3. Dark image programming: area of the photograph which appear totally devoid of imagery to the eye can be interrogated with special computer subroutines. These programs can "read" film emulsions that are as dark as 4.0 H&D Standard. This can be advantageous, whereas, during some previous analyses, light spill-over from the UO image were illuminating a minute portion of the superstructure of a conventional aircraft. In the same manner an individual, perpetrating a hoax, has been identified holding a flashlight, which appeared on a photograph as a bright unidentified flying object.

LIMITATIONS TO THE SYSTEM

There are those individuals who believe that computer enhancement can resolve all pictorial evidence of UO photographs. Conversely, there are many individuals that believe nothing can be gained using computer enhancement techniques. In reality, they are both half-right and polarity must go to the usefulness of this system. More photographs have been analyzed than ever before, more hoaxed photograph/movies have been identified and a computerized culling system has been established to sort the signal from-the-noise in the stacks of previously unprocessed data.

Since the effectivity of the analysis is solely predicated on the quality of the original photograph, limitations exist regarding the amount of quantifiable data that can be extracted

from a "poor" copy photograph. Although great quantities of data can be achieved, as previously delineated, overly-cropped and low resolution pictures can not be effectively interpreted.

Computer enhancement methodology is not a black-magic science, rather it is state-of-the-art technology requiring good quality photographs for optimum results. Some obvious items that cannot be determined from computer enhancement techniques (CET) include; the exact manufacture/material of an "image", although in some daylight photographs densitometry can estimate a reflection similar to a metallic surface as opposed to a dull reflective surface, the exact distance-from-the-camera in a nocturnal photograph when void of reference points and the determination of "real" imagery from the sophisticated special-effects of expert camera operators under specific conditions.

FUNDAMENTALS -THINGS TO LOOK FOR IN UO PHOTOGRAPHS

The most common question asked regarding photographic interpretations is; "do you think a picture is worth an evaluation?" As a field investigator, let's turn this question around and let the researcher understand the basic fundamentals to approach this question. There are specific items, prerequisites, that must transpire with each purported UFO photograph prior to analysis. Some general considerations follow:

1. For all practical purposes a nocturnal light appearing as a bright spot on a dark featureless background, affords no proof. It is an aircraft landing light, a flashlight, or a true unknown. Neither money or time should be wasted on this category of photograph.

2. No photograph can be scientifically analyzed without the complete camera/lens/film parameters, regardless of the analyzing method.

3. If the photographs were taken sequentially it must be verified that the film is in proper numerical order as determined from the negatives or hard copy outputs. GSW has never seen a single negative or hardcopy devoid of the standard film manufacturing/processing number system, with the exceptions of incidents when it was advantageous for the witness to remove them or in the case of a hard copy, reprint. Field investigators should verify this point by requesting to "see" the originals.

4. In all cases it is better to have the original or first generation copies made from the original for analysis purposes. In many incidents the witnesses "believes" he is helping the photographic analyzer by highly cropping the photograph and magnifying the UO image. This is the worst thing that can happen, since the entire frame is required to properly evaluate the photograph.

5. As a minimum, a report should be generated on the photographic incident that highlights specific information that is used for the analysis. This data includes; film type/speed, shutter speed, F-stop, camera/lens information, etc...

6. Photographs greater than second generation copies from print media and matte-finish pictures are discouraged for computer work.

7. Do not submit original negatives without taking precautions with the mail service/and make sure the pictorial evidence is protected from handling abuse.

We foresee within the near future additional highly-sophisticated computer programs, with improved hardware, to aid in the evaluation of photographic media.

REFERENCES

Lipkin, B.S. and Rosenfeld, A. (1970) Picture Processing and Pyschopictorics, Academic Press, NY

Rosenfeld, A.; Progress In Picture Processing; 1969-71 ACM Computer Surveys, V5, No.2, June 1973, pps 81-108

Schuldies, J. and Spaulding, W. (1977) - Radiography and Image Enhancement of Ceramics; ARPA/NAVSEA - Garrett/AiResearch Ceramics Gas Turbine Engine Demonstration Program Review, # 21-2599

Spaulding, W. (1978) - UFOlogy and the Digital Computer - Quality Magazine 17, No. 1, pps 12-18

NOTE: GSW does not solicit UFO photographs for analysis. However, for those interested in obtaining a photographic evaluation, understand that computer evaluations are expensive and depending on the workload, photographs received for analysis purposes, can be finished within one week upon receipt. All organizations, researchers and interested parties must pay the $25.00 (U.S. monies only) fee to offset these expenses. Foreign countries must include an additional $5.00 to cover air mail postage. This price structure will include up to three (3) pictures of a single event. In turn, GSW will provide a written critique and computerized output photographs.

Address: GSW Inc., 13238 N. 7th Drive, Phoenix, AZ 85029, U.S.A.

UTILIZZO DELLE TECNICHE DI VALUTAZIONE FOTOGRAFICA TRAMITE ELABORATORE
Come vengono applicate dal GSW a fotografie di pretesi UO

di William H.SPAULDING, Direttore, GSW, Inc.
Fred ADRIAN, Consulente Fotografico del GSW, Inc.

L'intensificazione dell'immagine tramite elaboratore (Computer Image Enhancement=CIE) e' un metodo sofisticato di manipolazione elettronica delle immagini fotografiche tramite l'uso di elaboratori digitali ad alta velocita' che permettono di ottenere informazioni ulteriori e significative per poter analizzare le foto degli UO (Unidentified Objects = oggetti non identificati). Di fotografie di UFO ne esistono in grande quantita', ma di scarsa qualita'. Queste immagini hanno sempre costituito un problema per l'interpretazione da parte del ricercatore.
Si discute dell'intensificazione dell'immagine tramite elaboratore applicata alle fotografie di fenomeni aerei e vengono presentate alcune delle tecniche principali usate dal GSW, Inc., cosi' come degli esempi dei vantaggi e delle limitazioni di questa tecnologia di rielaborazione elettronica dell'era spaziale. Lo scopo e' quello di ridurre la soggettivita' delle tecniche di valutazione convenzionale. Vengono illustrati degli esempi grafici della metodologia CIE, con la loro applicazione a pretese fotografie di UO.

Traduzione di Roberto FARABONE

UTILIZO DE TECNICAS DE EVALUACION FOTOGRAFICA POR ORDENADORES
como son aplicadas por el GSW a supuestas fotos de UO

por William H. SPAULDING y Fred ADRIAN, GSW,Inc.

La Mejora de Imágenes por Ordenador es un sofisticado método de manipulación electrónica de imagenes fotográficas a través del uso de ordenadores digitales de alta velocidad, para obtener información adicional y significativa, y analizar el fenómeno de las fotografías de objetos no identificados. La información gráfica de objetos no identificados siempre ha existido en gran cantidad y baja calidad. Esas fotografías han creado siempre un problema de interpretación para los investigadores.
La Mejora de Imágenes por Ordenador de fotografías de fenómenos aéreos se discute y se ponen de manifiesto algunas de las principales técnicas de proceso utilizadas por GSW, Inc., así como ejemplos de los beneficios y limitaciones de esta tecnología de reprocesado electrónico de la era espacial. La meta es reducir la subjetividad de las técnicas de evaluación convencionales. Ejemplos gráficos de la metodología de la Mejora de Imágenes por Ordenador, tal como se aplican a supuestas fotos de objetos no identificados, iustran el trabajo.

Traducción por V.-J.BALLESTER OLMOS

UTILISATION DE TECHNIQUES D'EVALUATION PHOTOGRAPHIQUE PAR ORDINATEUR
telles qu'elles sont appliquées par le GSW aux photographies de pretendus UO

par William H. SPAULDING et Fred ADRIAN - GSW, Inc.

L'amélioration des images par ordinateur (Computer Image Enhancement = CIE) est une méthode sophistiquée de manipulation électronique d'images photographiques faisant appel à des ordinateurs très rapides, dans le but d'obtenir des informations supplémentaires et significatives dans l'analyse des photographies d'UO (Unidentified Objects = objects non identifiés). Les photographies d'UFO sont nombreuses et de mauvaise qualité. Ces images ont toujours créé un problème de interpretation pour les cheurcheurs.
La discussion porte sur l'amélioration des images de phénomènes aériens par ordinateur et on présente des exemples des avantages et des limites de cette technologie de retraitement électronique de l'ère spatiale qui réduit la subjectivité des techniques d'évaluation conventionnelles. On illustre la méthodologie CIE, telle qu'elle est appliquée aux photo de prétendus UO, par des exemple graphiques.

Traduit par Marcel DELAVAL

SECTION II

GATHERING AND PROCESSING OF DATA

TIME DISTRIBUTION IN IBERIAN UFO ACTIVITY

by Fernando FERNANDES and Jose Mario FERREIRA

Received April 10, 1982

ABSTRACT:

This paper is an attempt to analyse the time distribution of the UFO phenomenon over the Iberian Peninsula. Data covering the period from 1950 to 1977 was used to explore the eventual periodicities of the reported UFO sightings. A method based on the autocorrelation function has shown several interesting features, revealing that the time structure of the Iberian data has striking similitudes with the global time structure represented by observations from all over the world.

KEY-WORDS: Autocorrelation function, Correlogram, Cyclic variations, Eleven-year cycle, Lag, Martian cycle, Seasonal variations, Time series, Trend

INTRODUCTION:

The time evolution of UFO phenomenon has always been a field of research, given the perspective of the discovery of cycles and correlations able to orient the investigation towards new directions. The aim of the following study is to search for the existence of one or several periodicities in the UFO observations reported over the Iberian Peninsula during the period from 1950 to 1977. The analysis of periodicities will be made in a simple and straightforward way through the use of the autocorrelation function.

MATERIAL AND METHODS:

The basic material used in this study was gathered from two sources:

1.- Concerning the Portuguese cases, a catalogue compiled by the authors of this paper was used.

2.- The information related to Spanish cases was provided by the CATIB catalogue, compiled by C.E.I. (Centro de Estudios Interplanetarios).

	J	F	M	A	M	J	J	A	S	O	N	D
1950	2	2	70	20	1	1	1	1				3
1951	4	1	1	1	1							
1952	1			4	5	2	3	9	7	1		3
1953	12		2		1	4	1	1	1			
1954		1			1		2		5	19	15	9
1955	4	1	1	2	1	2	1	3		3		1
1956	3	1			2			6	5	10		
1957					2	2	7	2	3	4	21	5
1958				4	1	2	3	6	1	5	2	3
1959	4		1	1	1		3	5	2	7	4	2
1960	1	2	3	2	3	6		3	1		3	
1961	4		2		1	1		1	1	2	1	1
1962		3	3	3			2		2	1	2	
1963			2		2	3	2			1	3	
1964				1	2	1	4	2	2	1	5	1
1965	2	1		4	4	1	40	37	14	6	7	4
1966	1	1	4	9	4	1	7	6	5	1	2	2
1967	4	1	2	4	9	10	15	13	16	7	9	11
1968	13	7	15	10	3	11	36	80	63	53	40	57
1969	29	49	41	17	35	14	22	28	6	9	9	9
1970	6	4	12	7	19	9	23	25	22	3	7	8
1971	8	12	7	7	12	11	5	25	13	12	3	9
1972	16	5	11	10	3	6	14	7	3	4	5	5
1973	2	3	3	4	9	10	1	7	8	7	10	10
1974	7	4	46	67	29	15	18	16	7	15	13	15
1975	18	22	15	21	14	13	38	43	15	29	22	12
1976	17	10	11	17	6	9	27	34	39	24	24	45
1977	74	17	14	8	13	11	19	36	13	37	19	19

TOTAL 2 869

Table I - Monthly number of Iberian UFO reports during the 1950/77 period

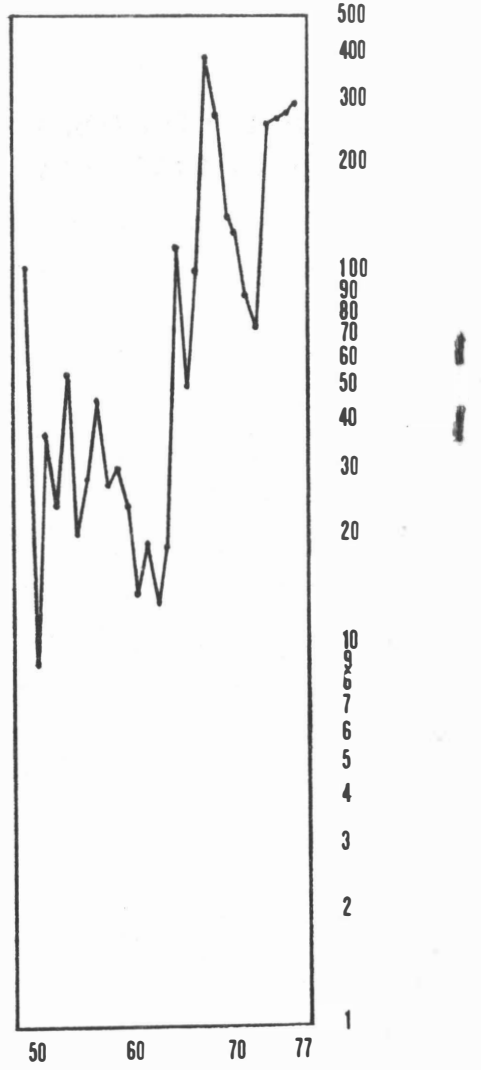


Fig. 1 - Yearly number of Iberian UFO reports during the 1950/77 period

	SEASONAL INDEX
1	0,8778
2	0,4467
3	0,9381
4	0,7575
5	0,6939
6	0,6143
7	1,1018
8	1,5314
9	1,0343
10	1,4830
11	1,3414
12	1,1799

Table II - Seasonal index of UFO data from Table I

Table I represents UFO activity (every type included, according to the classification of Jacques Vallee) over the Iberian Peninsula throughout the months of the year, during the 1950/77 period. This data will be described by a multiplicative model, suggesting that the actual time series (denoted by Y) is the product of the effects of four components:

$$Y = T.S.C.R$$

These four functions designate respectively:

T - Long-term variation or trend
S - Seasonal variations
C - Cyclic variations
R - Irregular or residual variations

As can be seen from Fig. 1, the UFO activity over the years 1950/77 shows a noticeable trend. The reasons explaining the increase of UFO sightings over the years may be found only in factors outside the phenomenon itself: progressive diffusion of the UFO phenomenon, proliferation of specialized UFO investigation groups, etc. For more detailed analysis of the leading factors, the interested readers may consult the study of Ares, Lopez and Salaverria (2). Also, from table I, it's possible to trace a seasonal component in the available data (the last 6 months of the year contribute with a larger number of cases than the first 6 months). Also, as pointed out by Ares and Lopez (1) factors outside the phenomenon may explain the seasonal structure.

According to the stated above, we need to evaluate the trend and seasonal component of the data.

To estimate the trend we fitted a third-degree polynomial to data points by least-square methods. After removing the trend, a seasonal index was found (see table II).

The division of the initial data by the trend and seasonal index gives a detrended, deseasonalized series which expresses the effect of components C and R. The R component is of reduced amplitude and is eliminated by the method we shall use to analyse the cyclical component.

The periodicity of a sequence may be analysed if we compare the sequence with itself at successive positions.

Let us consider Fig. 2, where at the topmost part a clearly periodical sequence is given and at the bottom the same sequence displaced in four units. The visual comparision of the two sequences shows a periodicity of four units.

One way of comparing two similar parts of a curve would be to break the two segments apart and fit one to the other. The goodness-of-fit, measured in some manner, would be an index to their similarity. This is in effect done by the process of autocorrelation, except the entire sequence is compared to itself at all possible positions.

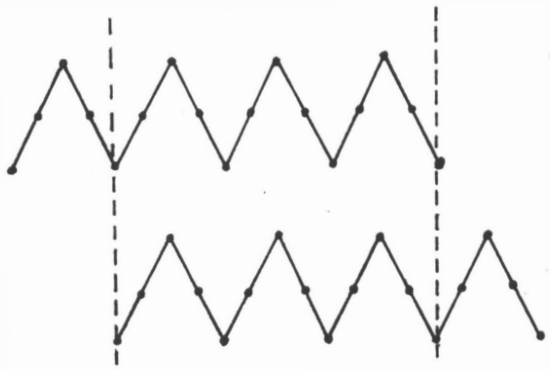


Fig. 2 - Periodical sequence compared to itself

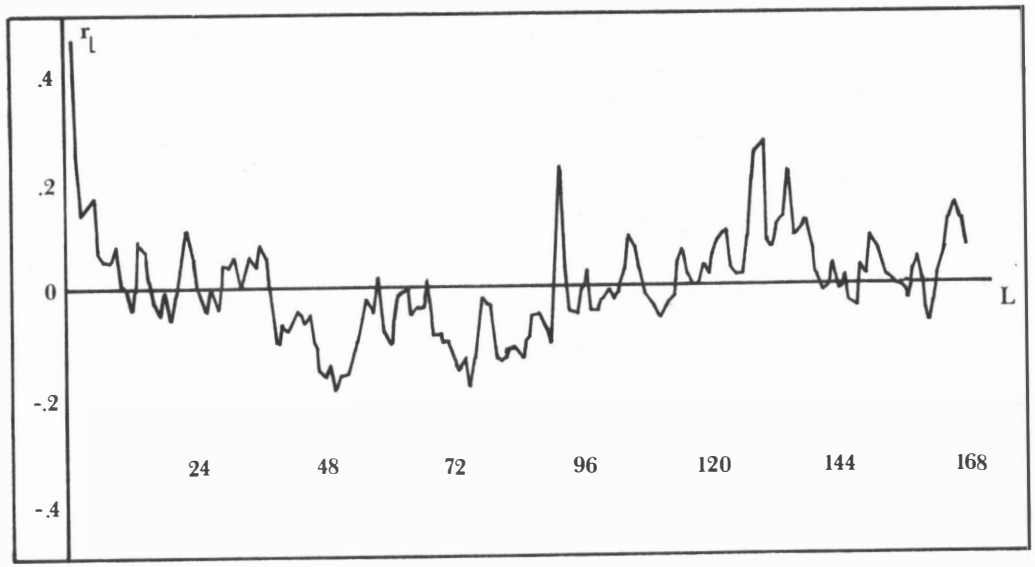


Fig. 3 - Correlogram of the cyclical component of UFO data from table I

We can perform this process by computing the autocorrelation function, defined as the linear correlation between a time series and the same series at a later interval of time. The autocorrelation of a time series at lag L is given by:

$$r_L = \frac{\mathrm{cov}(Y_i, Y_{i+L})}{S_Y^2} = \frac{((n-L)(\Sigma Y_i Y_{i+L}) - \Sigma Y_i \Sigma Y_{i+L})/(n-L)(n-L-1)}{(n\sum_{i=1}^{n} Y_i^2 - (\sum_{i=1}^{n} Y_i)^2)/n(n-1)}$$

"Lag" is the amount of offset between the two series being compared. The limits on the summations in the numerator extend, in general, from i=(1+L) to n-L.

When we have calculated the autocorrelation at every lag position, we can plot these as a correlogram, which is a diagram of the autocorrelation versus the lag. A typical correlogram will fall from a value of +1 at lag 0 possibly to negative values. At lags of near coincidence of the elements, the correlogram will show a peak of high autocorrelation. Examination of the correlogram will disclose intervals of time at which the time series has a repetitive nature.

RESULTS:

The correlogram of the cyclical component is shown in Fig. 3. It should be noted that maximum value of L equals n/2, in which n is the number of elements of the time series (28 years x 12 months). These restrictions are based on the fact that as the lag increases r_L is based on fewer and fewer observations.

Having established these conditions, we can proceed to the analysis of the correlogram in Fig. 3.

The high correlation obtained for small lags deserves to be considered. Of course such high values result from the fact that for short time periods (some months) UFO activity presents itself correlated. Even the peaks of high value are usually preceded or followed (or both) by a gradual rise of observations above the normal mean value.

Excluding the high values at the beginning of the correlogram which as we have seen are easily explained, two more interesting peaks arise: the peak of 7 years and 8 months and an area where the 10 years and 10 months and 11 years and 3 months overtop.

DISCUSSION:

The designation of "Martian cycle" atributed to the correlation between peaks of UFO activity and the oppositions of Mars is certainly known to readers.

Vallee, in 1966, using a set of 3,000 UFO reports from all

over the world (6) confirmed the existence of the "Martian cycle"(26 months) in the period 1950/56, as can be seen in Fig. 4.

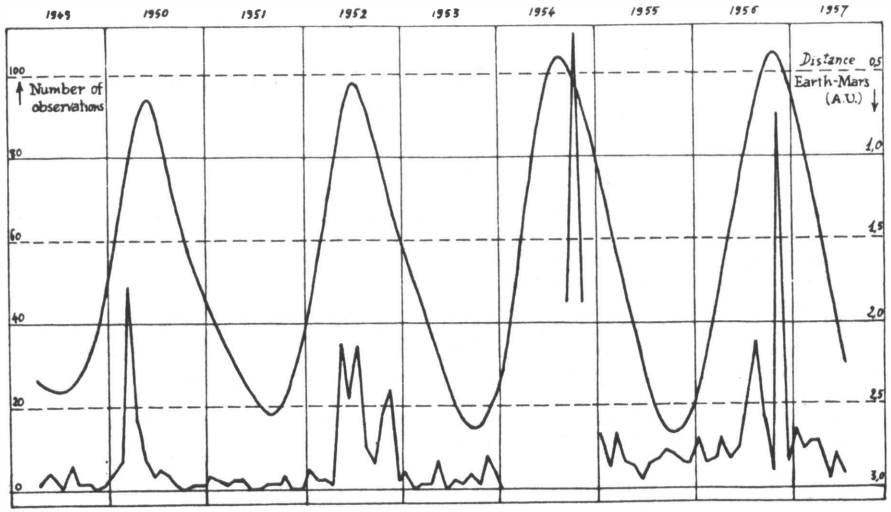


Fig. 4 - Coincidence of UFO reports with the Martian cycle, 1949/57 (from Vallee's Challenge to Science,1967)

Buelta and Brea, working only with spanish cases, have shown graphically the existence of this correlation.

In fact, there appears in the correlogram of Fig. 3, a peak of small value placed not at 26 months but at 22 months. We think that this peak, though placed a little below 26 months, represents a tendency which we can identify with the "Martian cycle".

Strictly speaking, it can't be said that there is a fit between the obtained results (22 months) and the oppositions of Mars (26 months). Anyway, it is our belief that this value inserts itself in the tendency, though not perfectly limited and rigid, which points to the UFO activity in the Iberian Peninsula, during the 50/60 decade, a periodicity around a value which can be calculated to be about two years.

An explanation to the small value presented by the peak of 22 months might be based on the fact that this component

manifest itself just for a limited period of time. The calculation of the autocorrelation function of the whole series may, through the use of values with a different structure from the one under analysis, mask the searched component.

Having this conclusion in mind, we will work through the problem by breaking the initial series in 4 groups of 7 years each and using the same method of analysis. The results are given in Fig. 5.

As we expected the correlogram's structure changed: the first two correlograms (50/56 and 57/63) present higher peaks at the previous interval. The two next groups of 7 years present an absence of correlation in the same area.

The used procedure, however, does not have sufficient resolution to detect the year from where the correlation of 22 months is no longer verified. This is mainly due to the fact that the introduction or removal of a year (twelve elements) does not affect in any remarkable way the value of r_L at a given lag, which is based on a much larger number of elements.

Anyway, Buelta found that the coincidence with the "Martian cycle" is verified for the period covering the years 1950/60.

Other remarkable features may be seen in Fig. 5. The partition of the series enhances other peaks not revealed in the initial correlogram. We consider this result to be of vital importance as it, once again, points to the notion that the UFO phenomenon is certainly not inert and that the structures appearing at a given moment may transform themselves and even disappear some time after.

As has been previously noted, the correlogram in Fig. 5 possesses several remarkable aspects: in correlogram 1 (50/56) we can note a peak at 2 years and 6 months. Correlogram 2 (57/63) presents a clear peak at 2 years and 7 months. Correlogram 3 (64/70) presents two peaks (3 years and 1 month and 3 years and 6 months). In correlogram 4 (71/77) the maximum peak is placed at 2 years and 9 months.

All these peaks express a certain periodicity of data near the value of 3 years. Although the used method gives credit to the possible correlation of UFO activity in the Iberian Peninsula near the value of 3 years, tne meaning of such result is for the moment beyond our reach.

The same may be said for the 7 years and 8 months peak of the correlogram in Fig. 3. Concerning the 10 years and 10 months and 11 years and 3 months peaks, although in the same way its concrete meaning can't be established at the moment, the situation is slightly different.

We shall now proceed to discuss the peaks of value 10 years and 10 months and 11 years and 3 months of the correlogram in Fig. 3. Both peaks are placed near 11 years what suggests some comparisons to be made. It is obvious, due to the reduced number of years, that the periodicity around 11 years

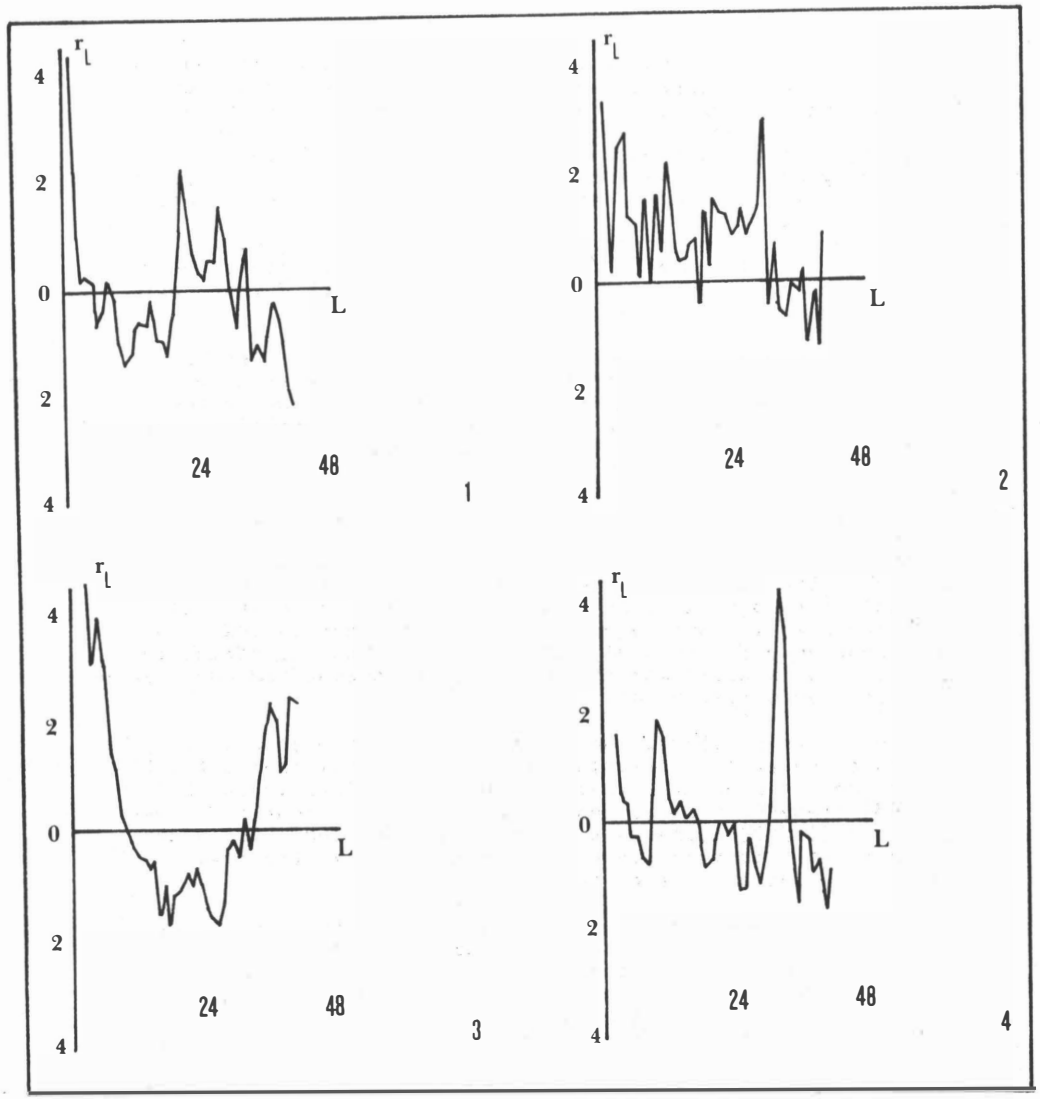


Fig. 5 - Correlograms of the seven-year sections

must be faced with restrictions. Anyway it would be interesting to review what has been published related to the possible correlation of the UFO activity, in world-wide terms, with an eleven-year cycle.

A study about the correlation between UFO phenomenon and solar activity was proposed by Wido Hoville (4). By graphical means, Hoville concluded that there is a certain similitude between UFO activity and the solar cycle, which is of aproximately 11 years.

According to his study, the UFO activity would reach its maximum when solar spots and planetary attraction put together would be at their lowest level.

In the sequence of this work, Philippe Nicolas has published an article (5) where he discusses the possible correlation UFO activity-sun spots. The base period was considerably larger (177 years). The use of reports from 1800 to 1976 allowed a larger reliability of the results.

Although the method used by Nicolas points to an opposite result to the one reached by Hoville: at the highest level of solar activity the possibility of observing the UFO phenomenon is larger, both works agree in appointing a certain periodicity of UFO activity around 11 years.

However, it will be with Eric Gregor's work (3) that a sophisticated technique is applied to the SOBEPS files (around 5,300 reports). This time the spectral analysis of data gave similar results to those obtained by Hoville. Concerning UFO activity, Eric Gregor states: " These techniques point out that for two centuries, and probably for four centuries, the UFO phenomenon seems to follow a cycle with a period oscillating around 11 years, with extreme variations of 10 to 12.5 years. "

The result we have obtained fits in these perspectives, although, as has already been stated, the limited amount of data reduces its importance.

CONCLUSIONS:

Based on the results obtained in this study, we think that some conclusions may be taken. The analysis we have done of the time structure of UFO phenomenon over the Iberian Peninsula has shown certain similarities with other studies and analysis based on different sets of data.

The observed analogies tend to identify UFO phenomenon as a coerent structure. This coerence may be seen not only in its more general manifestations, but also in its time evolution. The comparison of Fig. 1 with Fig. 6, which represents the time distribution of 60,000 UFO reports from all over the world enhances remarkably this coerence.

We think that this time identification is the result of an internal structure underlying the phenomenon itself. The major lines of variation presented at the graph in Fig. 6, as the oscillations in the fifties, the depression in the beginning of the sixties, followed by a sudden rise in the number of reports are also shown in Fig. 1.

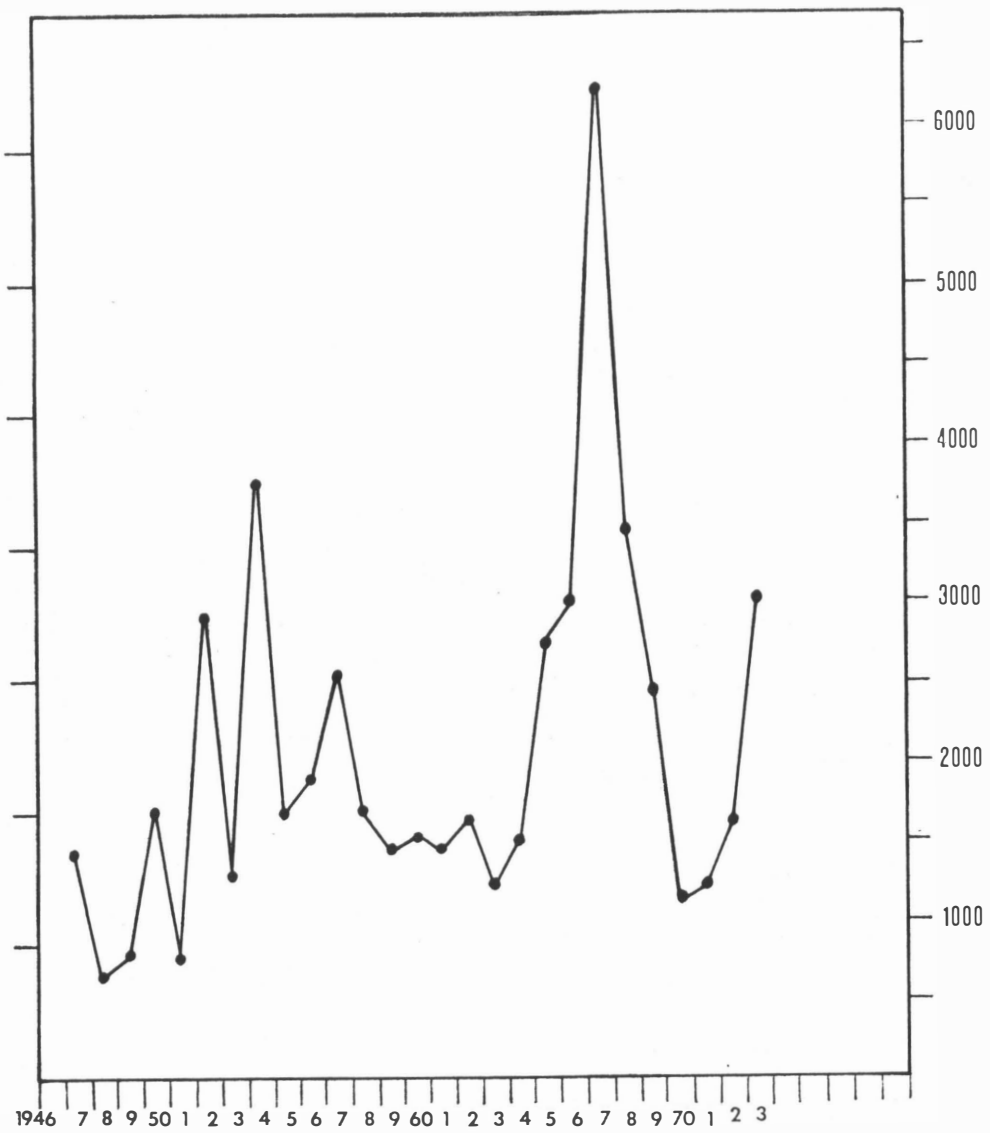


Fig. 6 - Yearly number of UFO reports, 1947/73
(from Wido Hoville's article)

Although the factors outside the phenomenon itself contribute in a large scale to the conditioning of its time structure, we think that these factors are only responsible for the growing trend presented by the phenomenon and for short variations. The determining structures, as the major lines of variation are, according to us, characteristic and intrinsic factors of the UFO phenomenon.

REFERENCES:

(1) Ares F., Lopez D. (1979) - STENDEK 10, No. 38, 36 - 39

(2) Ares F., Lopez D., Salaverria A. (1978) " ACTAS DEL PRIMER CONGRESO NACIONAL DE UFOLOGIA" CEI, Barcelona, 59-108

(3) Gregor E. (1979) - INFORESPACE 8, No. 47, 2-9

(4) Hoville W. (1979) - UFO QUEBEC, No. 17, 7-17

(5) Nicolas P. (1979) - INFORESPACE 8, No. 46, 3-6

(6) Vallee J., Vallee Ja. (1967) " CHALLENGE TO SCIENCE " Neville Spearman, London, 138-149

DISTRIBUZIONE TEMPORALE NELLA ATTIVITA' UFO IBERICA

di Fernando FERNANDES e José Mario FERREIRA

Questo lavoro presenta un tentativo di analisi della distribuzione temporale del fenomeno UFO sopra la penisola Iberica. I dati, che si riferiscono al periodo dal 1950 al 1977, sono stati utilizzati per esplorare le eventuali periodicita' degli avvistamenti UFO riportati. Un metodo basato sulla funzione di autocorrelazione ha mostrato diverse caratteristiche interessanti, rivelando che la struttura temporale dei dati Iberici, possiede un'analogia impressionante con la struttura temporale globale rappresentata dalle osservazioni provenienti da tutto il mondo.

Traduzione di Roberto FARABONE

DISTRIBUCION TEMPORAL EN LA ACTIVIDAD OVNI IBERICA

por Fernando FERNANDES y José Mario FERREIRA

Este trabajo es un intento de analizar la distribución temporal del fenómeno OVNI sobre la Península Ibérica. Datos que cubren el periodo de 1950 a 1977 se usaron por explorar eventuales periodicidades en las observaciones OVNI denunciadas. Un método basado en la función de autocorrelación ha mostrado varias características interesantes, revelando que la estructura temporal de los datos ibéricos tiene asombrosas similitudes con la estructura temporal global representada por observaciones procedentes de todo el mundo.

Traducción por V.-J.BALLESTER OLMOS

DISTRIBUTION TEMPORELLE DANS L'ACTIVITE UFOLOGIQUE IBERIQUE

par Fernando FERNANDES et José Mario FERREIRA

Ce travail tente d'analyser la distribution temporelle du phénomène UFO dans la pénisule ibérique. Les données couvrant les années 1950 à 1977 ont été utilisées dans la recherche d'éventuelles périodicités des rapports d'observations d'UFO. Une méthode basée sur la fonction d'autocorrélation a montré plusieurs aspects intéressants en révélant que la structure de temps des données ibérique présente de remarquables similitudes avec la structure globale de temps des observations mondiales.

Traduit par Marcel DELAVAL

SECTION IV

PSYCHOLOGICAL AND PERCEPTIVE ASPECTS

THE AUSTRIAN UFO WITNESS PROJECT

by Alexander G.KEUL

Abstract

The paper reports methods and results of an officially funded research project on reality control of UFO witness reports in Austria. A battery of psychological tests was given to witnesses of ten unidentified cases, the results of which seemed to confirm the considerable role played by psychopathology in the examined cases. A continuation of the analysis is announced on a more representative sample and with a control group of non-UFO witnesses and on another sample of non Austrian witnesses.

Practical consequences of my theoretical paper "The Dark Side of the UFO" (UPIAR Vol.IV,No.1) was an officially funded interdisciplinary research project "Reality control of UFO witness reports" running from April to July 1980. The research covered the area of Vienna and Lower Austria. As a meteorologist with experience in astronomy, currently studying clinical psychology, I investigated in teamwork with Andreas KRUFACK and Wolfgang WALLNER, two undergraduate psychologists and Prof.Dr.L.AMBROZI (Clinical Psychology) and Prof.Dr.O.H.ARNOLD (Psychiatry and Psychotherapy) as supervision. Project funds (about 1500 U.S.Dollars, which is somewhat less than the Condon budget) came from the Vienna Board of Education. Because of the limited funds ten physically unidentified cases, i.e. not to be solved by natural sciences and engineerings, which were reported to Vienna authorities within the last three years, were selected at random, balancing out witness age and sex roughly.

The project leader and a psychologist visited the witnesses at their homes to take down their biography with social and medical record and to give them a battery of psychological tests: a projective personality test (Rorschach), a short-term memory test (Benton), two sub-tests of the Wechsler Adult Intelligence Scale (WAIS), a suggestibility test and a psychoanalytically orientated questionnaire yielding the self-picture of the witness (Giessen). AMBROZI, who corrected the field test evaluation of KRAFACK, did not see the UFO witnesses or read their reports. After discussions, KEUL labeled the witness with X, Y or Z - X = reality-orientated, psychic stable witness, Y = moderate psychic disorders, Z = severe psychopathological disorders. The team was free to arrive on whatever conclusions appropriate.

Official project results

After the witness field studies, rather bad labels had to be used - no X, seven Y, three Z - to describe the diagnostic picture. Typical problems of Y-witnesses in the sample were: hysterical reactions, neurotic fears, confabulation tendency. Organic cerebral involution and two socially retarded, psychopathic characters on the border of schizophrenia ranked under Z.

It was also apparent that of the four more impressive cases in our sample (reported object inside a room; reported object "wide as a main street"; reported contact with UFO intelligences; reported object following a car) three were of the severely pathological type Z!

With such strong results, which were neither produced by pre-selection (an argument brought up against our study) nor incorrect testing, it seemed a valid hypothesis that psychopathology plays a considerable role in Austrian UFO cases. A weak, physically-looking core (e.g. some shape in the sky) is surrounded by a large psychosocial halo of personality disorder, suggestibility, knowledge of UFO media stories, superstition, personal belief systems, expected interest by authorities and investigators. It is detectable by psychological exploration and tests. The borderline of this approach is identical with the limits of research tools used in clinical psychology and psychiatry.

Research in progress

After close-down of the official project and issue date of the project report (3) KEUL and KRAFACK decided to continue the analysis of UFO witnesses in order to obtain a statistically more representative sample of Austrian UFO reporters. The projective test (Rorschach) gave the most detailed results. Benton, WAIS and Giessen therefore are no longer used on a routine basis. Today, June 8, 1981, we have studied 19 UFO witnesses in the field. It is planned to finish the extended project with an experimental group of 20 UFO sighters and a control group of 10 non-UFO-witnesses (who saw conventional astronomical phenomena), similar to the HAINES UFO drawing (1,2) and the LAWSON UFO abductee studies (4). 6 witnesses of the control group have already been tested. For September 1981, a cross-cultural check is planned in the London area, where 10 English witnesses will be tested.

Having received critical comments on the X, Y, Z-scheme, the project leader now uses the following classification scheme for the case/witness diagnosis:

positive reporter profile (through exploration and test) - consistent to moderately impaired reporting due to neurotic or other problems

negative reporter profile (through exploration and test) - severely impaired to irreal reporting due to psychopathological disorders in need of professional psychotherapist or neurological/psychiatric symptoms typical for psychotic events (loss of reality, hallucinations)

Test evaluated up to date yielded the following preliminary proportions:

UFO group	non-UFO group	
50 %	75 %	positive profiles
50 %	25 %	negative profiles

REFERENCES

(1) HAINES, R.F. (1977) UPIAR 2, 1, 123-151
(2) HAINES, R.F. (1978/79) UPIAR 3, 1, 259-271
(3) KEUL, A.G. (1980) "Persönlichkeitsvariable und Realitätsprüfung von ungewöhnlichen Zeugenaussagen", Projektbericht, Wien
(4) LAWSON, A.H. (1978/79) UPIAR 3, 1, 219-258

IL PROGETTO TESTIMONE UFO AUSTRIACO

di Alexander G. Keul

L'articolo riassume metodi e risultati d'un progetto di studio finanziato dal Ministero per l'Istruzione di Vienna sul controllo della realtà dei rapporti UFO. I testimoni di dieci casi non identificati austriaci sono stati sottoposti a una batteria di test psicologici ed i risultati ottenuti sembrano confermare il ruolo rilevante della psicopatologia nei casi esaminati.
Si annuncia un proseguimento dell'analisi su un campione più significativo e con un gruppo di controllo di testimoni di non-UFO ed un altro campione di testimoni non austriaci.

Traduzione di Edoardo RUSSO

LE PROJECT TEMOIN OVNI EN AUTRICHE

par Alexander G. Keul

L'article résume méthodes et résultats d'un project d'étude sur la réalité des rapports des témoins OVNI financé par le Ministère de l'Education de Vienne. Une batterie des test psychologiques a été appliquée à témoins de dix cas non identifiés autrichiens, dont les résultats semblent confirmer le rôle considérable de la psychopathologie dans les cas examinés.
On annonce la continuation de l'étude sur un échantillon plus significatif et avec un groupe-contrôle de témoins de non-OVNI et sur un autre échantillon de témoins non autrichiens.

Traduit par Edoardo RUSSO

READ IN LITERATURE

by Paolo TOSELLI

The following list results from a selection of articles published in SCIENTIFIC AMERICAN of potential importance to UFO research.

This list, which contains principally contributions in psychology and sociology, provides a graphic, easily understood survey of some witness-factors and unusual atmospheric phenomena which may help us gain some new insights into the UFO phenomenon.

Because the following articles are also offprinted in facsimile, the number preceding the articles' author and title refers to the relative offprint.

A brief article's summary follows each item.

SCIENTIFIC AMERICAN Offprints should be ordered from:

W.H. Freeman and Company,
660 Market Street,
San Francisco, California 94104, U.S.A.

or **W.H. Freeman and Company Ltd.,**
20 Beaumont Street,
Oxford OX1 2NQ, England.

405. W.H. Ittelson & F.P. Kilpatrick
EXPERIMENTS IN PERCEPTION
August 1951, Vol. 185, No. 2, pp. 50-55.
Some remarkable optical illusions show that what we perceive does not directly correspond to reality: it is a subtle blend of the external world and our past experience.

430. Woodburn Heron
THE PATHOLOGY OF BOREDOM
January 1957, Vol. 196, No. 1, pp. 52-56.
Aviators sometimes suffer hallucinations during long, monotonous flights. Similar phenomena have been reported by long-distance truck drivers. The phenomenon is illuminated by a general examination of the effect of prolonged exposure to a monotonous environment.

450. Solomon E. Asch
OPINIONS AND SOCIAL PRESSURE
November 1955, Vol. 193, No. 5, pp. 31-35.
Exactly what is the effect of the opinions of others on our own? In other words, how, and how much, do social forces constrain people's opinions and attitudes? The author describes a series of experiments which have not only confirmed the finding that group pressure can shape opinion, but also raised some interesting new questions. So, the fact that most multiple UFO experiences are social situations deserves as much attention as the contents of the report, since social factors can influence those contents.

497. Lawrence Zelic Freedman
"TRUTH" DRUGS
March 1960, Vol. 202, No. 3, pp. 145-154.
Certain drugs have been used to interrogate suspected criminals or eyewitnesses. Can they in fact elicit the truth? If truth means objective reality, the answer is no.

503. Burke M. Smith
THE POLYGRAPH
January 1967, Vol. 216, No. 1, pp. 25-31.
The use of such an instrument as a "lie detector" raises two types of question: scientific and ethical. The author describes the psychological changes that are sometimes taken as a sign that the person in whom the changes occur is not "telling the truth" and the technique of polygraph's examination. Since the polygraph as an instrument measures not lies but physiological changes, the question is how well the results of the total poligraph examination - the interrogation, the record and the interpretation of the record - correlate with objective, independent measures of deception. It is difficult to assess reliability in polygraphy because a number of potential sources of inaccuracy can influence the entire examination.

562. Robert Buckhout
EYEWITNESS TESTIMONY
December 1974, Vol. 231, No. 6, pp. 23-31.
Although such testimony is frequently challenged, it is still widely assumed to be more reliable than other kinds evidence. Numerous experiments show, however, that it is remarkably subject to error. The entire article deals with human perception, memory and its limitation, observer's expectations, recalling problems, effects of con-

formity and suggestion, and other important problems related to eyewitness testimony. Important paper.

570. Gaetano Kanizsa
SUBJECTIVE CONTOURS
April 1976, ...
Certain combinations of incomplete figures give rise to clearly visible contours even when the contours do not actually exist. It appears that such contours are supplied by the visual system. This phenomenon - which tends to cause perception of irregular patches of light or isolated light sources as part of an apparently larger structure -, placed into a ufological context, is cause of many initial UFO reports originated by meteors or satellite re-entries.

579. Ronald K. Siegel
HALLUCINATIONS
October 1977, Vol. 237, No. 10, pp. 132-140.
These false perceptions, which can occur in any of the senses, turn out to be much alike from one person to another. The paper supplies interesting samples of hallucination images that have some affinities with UFO patterns and abduction experiences.

950. T. Gold & S. Soter
THE DEEP-EARTH-GAS HYPOTHESIS
June 1980, ...
The unusual luminescent phenomena seen in the sky prior to, during, and after earthquakes and related events are interpreted by the authors as due to gas emission from the earth mantle.

3006. David K. Lynch
ATMOSPHERIC HALOS
April 1978, Vol. 238, No. 4, pp. 144-152.
Rings around the sun and moon and related apparitions in the sky are caused by myriad crystals of ice. Whenever cirrus clouds or ice fogs form, arcs of light appear overhead, woven into the veil of cirrus in a splendid variety of circles, arcs and dots. The author describes a number of them and several halos photographs accompany the paper. Because unusual atmospheric optical effects can be also cause of some initial UFO reports a knowledge of their characteristics may be potentially valuable to UFO researchers.

UFO RESEARCH BIBLIOGRAPHY

(PART I)

COMPILER: VICENTE-JUAN BALLESTER OLMOS
GUARDIA CIVIL, 9
VALENCIA-20
SPAIN

---

01 SUBJECT: THE IDENTIFICATION OF STIMULI

(On ways to diminish the noise-to-signal ratio of the raw UFO information)

01 6109 Smith, E.R.: UFOs and Artificial Satellites, FSR, VII, 5, Sept. - Oct., 6-11.

01 6509 Vallee, Jacques: How to Select Significant UFO Reports, FSR, XI, 5, Sept. - Oct., 15-18.

01 6705 Durham, A./Watkins, K.: Visual Perception of UFO's, FSR, XIII, 3, May-June, 27-29, and 4, July-August, 24-26.

01 6901 Blackmer, H. Roy: Radar and the Observation of UFO's, in Daniel S. Gillmor (Ed.): Scientific Study of Unidentified Flying Objects, N.Y.: Bantam Books, 655 - 716.

01 7106 Derache, J.: Signalisation lumineuse des avions, LDLN, XIV, 112, 19.

01 7310 Monnerie, Michel: Une lumiere dans le couchant ..., LDLN, XVI, 128, 26.

01 7407 Haines, Richard F.: General Concepts and Terms Related to Visual Observation of Aerial Objects, THE APRO BULLETIN, July - Aug., 7-8; Nov. - Dec., 7-9; 75, May, 4-6; Oct., 6; Nov., 5-6; and Dec., 4-5.

01 7408 Monnerie, Michel: Signalisation des avions, LDLN, XVII, 137, Aug. - Sept., 25.

01 7504 Haines, Richard F.: Airplanes-UFOs or IFOs, THE APRO BULLETIN, 5-6.

01 7508 Vial, M.: Un specialiste fait le point sur la signalisation aerienne des aeronefs, LDLN, XVIII, 147, Aug. / Sept., 24-25.

01 7605 Haines, Richard F.: Psychological and Biological Aspects of Viewing Very Bright Objects, in Dornbos, N. (Ed.): Proceedings of the 1976 CUFOS Conference, Evanston, Ill.: CUFOS, 89-96.

01 7712 Bougard, Michel: Nous sens: leurs possibilites et leurs limites, in INFORESPACE, first special issue, 38-55.

01 7806 Banchs, Roberto E.: Le depuracion preliminar en el tratamiento cientifico de la informacion referente a OVNIS, STENDEK, IX, 32, 42-44.

01 7812 Louange, F.: Observacion nocturna de satelites artificiales, STENDEK, IX, 34, 9.

01 79 Parniere, Marcel: OVNI, ballons/sondes ... ne confondez pas, APPROCHE, 20-21, 6-9.

01 7907 Armitage, John: Atmospheric Phenomena Log, JOURNAL OF TRANSIENT AERIAL PHENOMENA, I, 1, July - Aug., 22-23; 2, March 1980, 49-50; 3, July-Aug., 71-73; II, 1, May 1981, 17-18.

01 7912 Manen, Manuel: Las luces de los aviones y su confusion con los OVNIS, STENDEK, X, 38, 40-41.

01 80 Haines, Richard F.: Observing UFOs: An Investigative Handbook, Chicago, Illinois: Nelson-Hall Inc.

01 8009 Fuentes, Diego: Globos sonda, STENDEK, XII, 41, 36-44.

01 8010 Campos, P.: Fisiologia da visao na observacao OVNI, INSOLITO, 40, Oct.-Dec., 19-26.

01 8101 Figueiredo, Jose: OVNIS, alucinacoes e ilusoes sensoriais, INSOLITO, 41, Jan.-Mar., 4-11.

---

02 SUBJECT: THE STUDY AND HANDLING OF UFO WITNESSES

(How the researcher must approach the sighters through a rational viewpoint)

02 67 Sprinkle, R. Leo: Psychological Implications in the Investigation of UFO Reports, in Lorenzen, Jim&Coral: Flying Saucer Occupants, New York: Signet Books,160-186.

02 68 Shepard, Roger N.: Some Psychological Oriented Techniques for the Scientific Investigation of Unidentified Aerial Phenomena, in Symposium on Unidentified Flying Objects, Washington, D.C.: United States Government Printing Office, 223-235.

02 68 Walker, Sydney: Establishing Observer Creditability: A Proposed Method, in Symposium on Unidentified Flying Objects, United States Government Printing Office, Washington, D.C., 185-189.

02 66 Walker, Sydney: The Applied Assessment of Central Nervous System Integrity: A Method for Establishing the Credibility of Eye Witnesses and Other Observers, in Symposium of Unidentified Flying Objects, , Washington, D.C.: United States Government Printing Office, 152-174.

02 6901 Hartmann, William K.: Process of Perception, Conception

and Reporting, in Gillmor, Daniel S. (Ed.): Scientific Study of Unidentified Flying Objects, New York: Bantam Books, 567-590.

02 6901 Rhine, Mark W.: Psychological Aspects of UFO Reports, in Gillmor, Daniel S. (ed.): Scientific Study of Unidentified Flying Objects, New York: Bantam Books, 590-598.

02 6901 Wertheimer, Michael: Perceptual Problems, in Daniel S. Gillmor (Ed.): Scientific Study of Unidentified Flying Objects, N.Y.: Bantam Books, 559-567.

02 6909 Sprinkle, R. Leo: Some Uses of Hypnosis in UFO Research, in UFO Percipients, FSR Special Issue, No. 3, 17-19.

02 7310 NICAP: Psychological Stress Evaluator, UFO QUARTERLY REVIEW, Oct.-Dec., 12-18.

02 7403 Westrum, Ron: Reliability Assessment of Eyewitness Testimony, Eastern Michigan University, Ypsilanti, Personal communication.

02 7604 Haines, Richard F.: UFO Witnesses and Field Investigators, FSR, XXI, 6, 8-11.

02 7604 Sprinkle, R. Leo: Hypnotic and Psychic Implications in the Investigation of UFO Reports, in Lorenzen, Coral&Jim: Encounters with UFO Occupants, New York: Berkley Publishing Corporation, 256-329.

02 7605 Lawson, Alwin H.: Hypnotic Regression of Alleged CE-III Cases: Ambiguities in the Road to UFO's, in Dornbos, N. (Ed.): Proceedings of the 1976 CUFOS Conference, Evanston, Illinois: CUFOS, 141-151. FSR, XXII, 3, 1976, 18- 25.

02 7707 Lawson, Alvin H.: What Can We Learn From Hypnosis of Imaginary Abductees?, in Andrus, Walter H. (Ed.): 1977 MUFON UFO Symposium Proceedings, Seguin, Texas: MUFON, 107-134. THE MUFON UFO JOURNAL, 120, Nov. 77, 7-9; 121, Dec. 77, 7-9.

02 7708 Westrum, Ron: Eyewitness Testimony and its Problems in UFO Investigations, THE APRO BULLETIN, XXVI, 2,6-8.

02 7712 Sprinkle, R. Leo: Hypnotic Time Regression Procedures in the Investigation of UFO Experiences, in Lorenzen, Coral&Jim: Abducted, New York: Berkely Publishing Co., 191-222.

02 7802 Hall, Richard: Hypnotism and Abduction Cases, THE MUFON UFO JOURNAL, 123, 8-9.

02 7805 Blake, Joseph A.: The Social Dynamics of UFO Multiple Witness Reports: A Cautionary Note, THE MUFON UFO JOURNAL, 126, 10-13.

02 7810 Newman, Kent H.: How Can Hypnosis Be Used in UFO Abduction Cases?, APA Symposium, Toronto, 28. Aug. 1978. INTERNATIONAL UFO REPORTER, 3, 10/11, Oct. - Nov. 1978, 19.

02 79 Haines, Richard F.: Voice Stress Analysis in UFO Witnesses, THE JOURNAL FOR UFO STUDIES, I, 1, 1-7.

02 79 Hendry, Allan: Hypnosis, in The UFO Handbook, Garden City, New York: Doubleday & Company, Inc., 166-180.

02 79 Hendry, Allan: Lie Detection, in The UFO Handbook, Garden City, New York: Doubleday & Company, Inc., 181-185.

02 79 Lawson, Alvin H.: Hypnosis Imaginary UFO 'Abductees', THE JOURNAL FOR UFO STUDIES, I, 1, 8-26.

02 79 McCall, William C.: What We Can Learn From the Emotional Reactions of UFO Abductees, THE JOURNAL FOR UFO STUDIES, I, 1, 98-100.

02 79 Persinger, Michael E.: Limitations of Human Verbal Behavior In the Context of UFO-Related Stimuli, in Haines, Richard F. (Ed.): UFO Phenomena and the Behaviorial Scientist, Metuchen, New Jersey: The Scarecrow Press Inc., 164-187.

02 79 Schwarz, Berthold E.: Psychiatric and Parapsychiatric Dimensions of UFOs, in Haines, Richard F. (Ed.): UFO Phenomena and the Behaviorial Scientist, Metuchen, New Jersey: The Scarecrow Press Inc., 113-134.

02 79 Westrum, Ronald M.: Witnesses of UFOs and Other Anomalies, in Haines, Richard F. (Ed.): UFO Phenomena and the Behaviorial Scientist, Metuchen, New Jersey: The Scarecrow Press Inc., 89-112.

02 7902 Moravec, Mark: The Ethics of UFO Investigation, ACOS BULLETIN, 17, 13-16.

02 7903 Cahn, H.A.: Use of Hypnosis to Discriminate 'True' and 'False' UFO Experiences, THE APRO BULLETIN, XXVII, 9, 4-5.

02 7905 Sprinkle, R. Leo: Using Hypnosis to Decipher the Contactee 'Message', SECOND LOOK, 18-21.

02 7907 Hendry, Allan: Trance Figures, OMNI, 32 and 136.

02 7908 Schuessler, John F.: Evoked Potentials: A Better Lie Detector?, THE MUFON UFO JOURNAL, 138, 17.

02 7910 Schuessler, John F.: A Lie Detector for the Future?, THE MUFON UFO JOURNAL, 140, 16.

02 7911 Schwarz, Berthold E.: The Ethical Ufologist, MAGONIA, Autumn, 13-14.

02 7912 Parra, Javier: La Psicologia Clinica, como elemento base en la investigacion OVNI, STENDEK, X, 38, 34-35 and 39.

02 80 Lawson, Alvin H.: Hypnosis of Imaginary UFO Abductees, UFO PHENOMENA, III, 1, 1978/1979, 219-258, publ. 1980.

02 80 Sprinkle, R. Leo: Using the Pendulum Technique in the Investigation of UFO Experiences, UFO PHENOMENA, III, 1, 1978/1979, 179-218, published 1980..

02 8005 Herrera, John De: Does Hypnosis Create Contactees?, SECOND LOOK, May-June, 16-17.

02 8006 Nelson, Willard D.: Hypnosis versus UFO Realities, THE MUFON UFO JOURNAL, 148, 3-5.

02 8008 Hall, Richard: UFO Abduction Cases: A Mini/Symposium, THE MUFON UFO JOURNAL, 150, 9-12.

02 8009 Huerta, Rafael: Detector experimental de mentiras, STENDEK, XII, 41, 45-49.

---

03 SUBJECT: RESOLVING OBJECTIVE DATA FROM UFO SIGHTINGS

(Determination of factual observational data)

03 6901 Craig, Roy: Indirect Physical Evidence, in Gillmor, Daniel S. (Ed.): Scientific Study of Unidentified Flying Objects, New York: Bantam Books, 97-115.

03 6904 Monnerie, Michel: Analyse spectrale de la lumiere emise par les M.O.C., LDLN, XII, 99, 22.

03 72 Poher, Claude: Tentative d'evaluation de l'aptitude de temoin a apprecier des grandeurs objectives, in Etudes statistiques portant sur 1000 temoignages d'UFO, Toulouse: CNES, Appendix 3, 1-7.

03 7306 Adell, Alberto/Redon, Pedro: Estudio de la cinta grabada por Javier Bosque, STENDEK, IV, 13, 1973, 3-18. (s.a. 7708 Klein, 7802 Adell, 8012 ZENITH)

03 7306 Monnerie, Michel: Un goniometre de poche, LDLN, XVI, 126, June-July, 27.

03 7407 Harris, Daniel: A Note on Infrasonic UFO Detection, THE APRO BULLETIN, XXIII, 1, July-Aug., 8-9.

03 76 Webber, J.: The Alphabet of UFO Reports, in Proceedings 2nd National Research and Investigations Conference, London: BUFORA, published 1978.

03 7605 Poher, Claude: Ideas for An Experimental Approach, in Dornbos, N. (Ed.): Proceedings of the 1976 CUFOS Conference, Evanston, Illinois: CUFOS, 221-230.

03 7607 Labrique, Jean-Pierre: Analyse du son enregistre lors de l'observation d'un OVNI, INFORESPACE, VI, 28, 27-28.

03 7612 Vieroudy, Pierre: L'etude spectrographique du phenomene OVNI, LDLN, XIX, 160, 21-25. And
Vieroudy, Pierre: Les OVNIS qui annoncent le surhomme, Paris: Tchou, Sept. 1977, 227-249. And Vieroudy,

Pierre: Des spectres d'OVNI, LDLN, XXI, 172, Febr. 1978, 29-31. (s.a. 7702 Poher, 7802 Monnerie)

03 7702 Poher, Claude: Lettre ouverte a M. Vieroudy, LDLN, XX, 162, 26-27. (s.a. 7612 Vieroudy, 7802 Monnerie)

03 7705 Enqueteur 1318: Pour mesurer les hauteurs angulaires, LDLN, XX, 165, 33-34.

03 7707 Haines, Richard F.: UFO Appearance Recognition and Identification Test Procedure, UFO PHENOMENA, I, 1, 1976, 39-53, published July 1977.

03 7708 Klein, Christiano R.: Estudios de gravacao Javier Bosque, August 1977. Personal communication to STENDEK. (s.a. 7306 Klein, 7802 Adell, 8012 ZENITH)

03 7802 Adell, Alberto: Nuevos aspectos tecnicos sobre el caso de Javier Bosque, in Ponencias tecnicas del primer congreso nacional de Ufologia, Barcelona: STENDEK-CEI, 31-41. (s.a. 7306 Adell, 7708 Klein, 8012 ZENITH)

03 7802 Monnerie, Michel: Reponse de M. Monnerie, LDLN, XXI, 172, 31-32. (s.a. 7612 Vieroudy, 7702 Poher)

03 79 Shepard, Roger N.: Reconstruction of Witnesses' Experiences of Anomalous Phenomena, in Haines, Richard F. (Ed.): UFO Phenomena and the Behavioral Scientist, Metuchen, New Jersey: The Scarecrow Press Inc., 188-224.

03 7902 GEPAN: Le GEPAN et l'etude du phenomene OVNI, Toulouse.

03 7905 Reardon, Russ: How to Fingerprint An UFO And 'Hear' Its Light, THE APRO BULLETIN, XXVII, 11. And THE MUFON UFO JOURNAL, 139, September, 12-13. And "Letters", THE MUFON UFO JOURNAL, 142, December, 17.

03 7907 Laporte, Wayne: UFOs and Apparent Size, THE MUFON UFO JOURNAL, 137, 16-17.

03 7907 Regan, Dennis R./Allan, Walter H.: Investigation and Analysis of Sound Pulses Recorded During a Period of UFO Activity in Bragg Creek, Alberta, Canada, in Andrus, Walter H. (Ed.): 1979 MUFON UFO Symposium Proceedings, Seguin, Texas: MUFON, 179-206.

03 8005 N. N.: L'etude spectrographique du phenomene OVNI, LDLN, XXIII, 195, 31.

03 8010 Julien, Henry: Phenomene lumineux dans les Alpes de Haute-Provence, LDLN, XXIII, 198, 15-17.

03 8012 ZENITH: The Case of Javier Bosque: CUFOS ASSOCIATE NEWSLETTER, I, 8, 4. (s.a. 7306 Adell, 7708 Klein, 7802 Adell)

03 8103 Harris, K. Michael: Do UFOs streak off Into Outer Space At Staggering Speeds, Or do They Shrink Into Another Dimension? A Possible Answer, UFO JOURNAL, II, 4, 4-8.

03 8105 Fieffe, G.: Elements utiles a l'observateur et l'enqueteur, LDLN, XXIV, 205, 32.

03 8109 Biffiger, Beat: Le cas de Wasen, OVNI-PRESENCE, 18, 4-5 and 18.

---

04 SUBJECT: UFO MANUALS
(Textbooks on field investigation)

04 74 SOPEBS: Guide de L'enqueteur, SOBEPS, Brussels.

04 7506 Fowler, Raymond F. (Ed.): Field Investigator's Manual, Seguin, Texas: MUFON.

04 79 Adell, Alberto: Manual del ufologo, Barcelona: Editorial 7 1/2.

04 79 Hendry, Allan: The UFO Handbook, Garden City, New York: Doubleday & Co., Inc..

04 7902 Stanway, Roger/Randles, Jenny (ed.): UFO Investigation - A Field Investigator's Handbook, London: BUFORA.

04 7907 Basterfield, Keith: Basic Investigator's Guide, Australia: UFO RESEARCH.

04 80 Haines, Richard F.: Observing UFO's : An Investigative Handbook, Chicago, Illinois: Nelson-Hall Inc.

Acknowledgement

The compiler wants to thank Mr. Adolf Schneider, of Munich, West Germany, for the computer processing of the present bibliography.

SHORT COMMUNICATIONS

.... AND YET IT MOVES!

No, I'm not referring to Galileo's trial about the claimed rest of the Earth. I would only refer to the ufological milieu.

During recent years we have seen some positive evolutions:

- more trained researchers working on UFO phenomena research,

- some refereed journals dealing with UFO problems (UPIAR, Journal of UFO Studies, URIP),

- an official non-military organization devoted to the study of UFO phenomena (GEPAN),

- a Foundation whose main purpose is to stimulate and to supply a financial aid to improve UFO research world-wide (Fund for UFO Research = FUFOR).

Really we can consider this an improvement in quality with respect to ten years ago.

Even if there were a lot of difficulties, UPIAR's enterprise is achieving some results: slowly, but continuously, it draws in all those isolated researchers who decided to consider as a cornerstone the quality of research rather than the emotional content of the subject. All those common efforts are reaching a proper acknowledgement: in 1981 FUFOR awarded the first International Science Achievement Award to the journal UPIAR for the "contribution of the scientific study of UFOs and in particular for the consistently high quality found in the publication". In 1982 FUFOR has rewarded Vicente-Juan BALLESTER OLMOS (Editor in Chief and member of Consejo de Consultores de Stendek) for the validity of his research project and has granted him funds in order to complete his project.

I am very pleased to announce to URIP's readers this grant, mainly for three reasons:

1) as regards the friend Vicente-Juan, who thus sees his competence and dedication as a researcher further acknowledged;

2) as regards the researcher BALLESTER OLMOS, who, first in Europe, receives a grant from FUFOR, and consequently increases his chance to make and to accomplish a careful and invaluable research on landing phenomenon. This research will be effected by new investigations of all cases, by codifying them in order to obtain a machine-readable input and by obtaining two detailed catalogues;

3) as regards also the scope of UPIAR initiative: in this way the goals upheld are carried out and fulfilled.

I hope, and all of us will work hard in this direction, that what we have seen is only the first step towards the accomplishment of a broader and more useful research.

Roberto Farabone

FIRST
ACADEMIC
JOURNAL

UFO PHENOMENA

AN INTERNATIONAL ANNUAL REVIEW DEVOTED TO THE SCIENTIFIC STUDY OF UFO PHENOMENA

ISSN 0391 - 111X

PRINTED IN ITALY

© 1982 by "Cooperativa Studi e Iniziative UPIAR S.r.l.", Corso Vittorio Emanuele II n.108, Torino - Reg. Trib. Torino n. 2101/82 - Partita IVA n. 04146110012

URIP - UFO PHENOMENA INTERNATIONAL ANNUAL REVIEW - UPIAR RESEARCH IN PROGRESS
Direttore responsabile: Renzo Cabassi - Registrazione Tribunale di Bologna n. 4798 del 17 marzo 1980 - Stampa Litomaster, Via S.Antonio da Padova 12, Torino

Vol. I N. 1 Luglio 1982

Abbonamento L. 21.000 ($ 15.00)

UPIAR
RESEARCH IN PROGRESS

CONTENTS