

Vol.1, No4 September 1983
CONTENTS
Editorial ..... 3
Letters from our readers ..... 4
Research :
The research with the Starword Program, by Terence Dwyer ..... 6
The Biggest Astrology Priza, by Geoffrey Dean \& Arthur Mather ..... 10
Methodology :
Methodological errors by Critics of Astro-logical Claims, by Hans Eysenck14
Identification of an artefact in Cosmo- plenetary Research, by Guy Le Clerca ..... 18
Time Changes in Austria, by Maria Prager ..... 20 ..... 20
Discussion Forum :
Vrug Mddiction and Horascopes, W. Martinek ..... 21
Comments, by Françoise Gauquelin ..... 26 ..... 26
Two notes for discussion, by J. Reverchon ..... 29
The two risks with statistics, F. Gauquelin ..... 32
Book and Article reviews, Marie Schneider ..... 34

## BOARD OF RGFEREES

Hans Bender, professor of psychology, Germany
Hans Eysenck, professor of psychology, England
Martin Fiebert, professor of psyciology, U.S.A.
Ulrich Mees, professor of psycinolozy, Germany
Alan Smithers, professor of psychology, Bigland
Eberhard Bamer, PhD in psychology, editor
"Zeitschrift firr Parapsychologie", Germany
Patrick Curry, MS philosophy of Science, England
Peter Niehenke, Ni in psychology, Germany
Thomas Shanks, IIA in psychology and Conputer Analysis
"Astro-Psychological Problems" welcomes articles reporting empirical research into astrology. Manuscript and correspondence should be sent to Marie Schneider, B.P.317, 75229 PARIS CEDEX 05 (France)

It is issued in ilarch, June, September, December, and is available by subscription. Rate for 1984 : UK \& 6.- II US \$8.- (+ \$4.- airmail).
Please make cheques payable to the order of :
Françoise Gauquelin, 8 rue Amyot, 75005 Paris (Fr.)
(c) Cooyrighi 1984 by 5. Gauçuelin. Ail rigits reserved.

# ASTRO- PSYCHOLOGICAL PROBLEMS 

a quarterly research journal

Director : Françoise Gauquelin
Volume 1, № 4

Editor : Marie Schneider
September 1983

## EDITORIAL

This is the fourth issue of our quarterly jourfal, which completes thus its first year of existence. It is still very young, too young for us to predict what its future will be. But it has already a few points to its credit : - some articles from internationally known specialists, most of all professor Hans Eysenck, who accepted to discuss for us methodological problems and allowed us to publish excerpts from his lecture about "Happiness in marriage".

- our contributors belong to various countries from Europe, the U.S.A, even Australia, New Zealand and (in the next issue) U.S.S.R., making out of it a really international medium.
- our readers do not remain passive, but write for giving their opinion; this allowsus to devote a double page to remarks of general interest from their letters. We deeply regret that the break-up of the collaboration between Michel and Françoise Gauquelin deprives us from interesting papers by Michel. But other authorities in the field have accepted to become referees of the publication, raising thus its scientific level.
Its external appearance, very modest until now, has also to improve, sustained by the slow but steady increse of subscribers. A more glossy and better printed cover is already planned for the next issues.

Will we thus succeed to maintain your interest and keep you all as active readers ? even as friends ? A kind reader writes that exchanging news through A.P.P. is for him:"like saỹing 'bonjour! to an old friend, although we have never met !" We certainly feel like this too.

## LETTERS FROM OUR READERS

Françoise,
I am amazed that you do not mention the Ascendant and its ruler (which is the chart ruler). They are generally given pride of place both in assessing appearance and personality.

After all, 'personality' comes from 'persona' or 'mask'; it is generally accepted, I think, that everything in the horoscope has to pass through the ascendant in order to manifest in the world, so that the ascendant becomes the 'mask' or 'persona' for all that is in the chart. The Sun is surely the heart of the matter, the essential life purpose - not the personality !

Zach Matthews, B.Sc.D.F.Astrol.S.

ANSWER:
Dear Zach,
I read carefully your note commenting my study of character traits and the planets. It is interesting that you think it unjustified from me not to have mentioned the Ascendant and its ruler.

Your reasons for emphasizing them are philosophical, or analogical, or astrological. My reason for not mentioning them together with my results with the planets are statistical : each time we have studied the Ascendant and its traditional interpretations, no result showed up, while with the planets there were results.

You can find our statistical studies with the astrologers' own key-words :

1) for the planets, in our Scientific Document № 7,
2) for the Sun-sign, Moon-sign and Ascending-sign, in our Scientific Document № 8.
(both are still available and can be ordered from us; see last page of this journal)

Françoise Gauquelin

## Dear Françoise,

Againg like Zip Dobyns, I am highly suspicious of taking one factor in the ehart and submitting it to rigorous analysis, when we all know it is the holism of the complete chart that accounts for the person ! Kery best wishes,

Dear Ms. Schneider:

Your comment on the temperament of an Astrologer described in Bob Dijkstra's article 'The Practice of Astrology', I think, somewhat misses the point. An intuitive Astrologer is a spiritually developed person. Any temperament can be highly developed spiritually. As a person develops spiritually, he becomes more sensitive to others. He becomes a more real person and so commands respect. He works more closely with spiritual beings, which gives him ideas on what to do.

Frank Jakabowsky

ANSWER :

Dear Frank Jakubowsky:

You seem to be interested in spiritual growth of the individual, but not in research about what is working and what is not working among the numerous factors one can interpret in a chart. My comment, at the end of Bob Dijkstra's article, concerned this second point of view, the only one treated in our journal.

What I tried to point out was that Bob Dijkstra seens a spiritually highly developed personality rather than a scientifically minded person. for he presents the successes in his practice as proofs of the validity of traditional interpretations of a chart, which a scientist would not do : his article clearly shows that they are the result of his aptitude for sympathy toward the problems of his clients, and of his practical sense for devising the right solution for them. His psychological intuition, not what he read in the charts, explains all the story.

This, in our opinion, makes him a perfect "astrologer", that is someone who has to care for clients in distress. And he happens to have $w$ exactly the planets predicted by our results for that.

Now, despite the fact that you are not interested in scientific answers, would you, as an astrologer, like to know what these planets are? Write us your guess, and we will give jou the answer of the statistics.

results of the research with the starword program<br>Terence Dwyer ${ }^{1}$

ABSTRACT
In the preceding issue of this Journal, I explained how I wrote a computer program called STARWORD, able to give verbal interpretations of charts. While making this procram, I becane involved into what was and was not valid in delineating personality. It is this research and its important outcomes which will be comnented on here.

I want to make clear how most of my research for the STARWORD program proceeded. I had a list of about 30 people (myself, family and friends) of whose characteristics I believed I had a fair idea, but also who were prepared to look at my preliminary findings, and report back to me just how accurate they were. I'm told by psychologists that, in spite of the apparent reliability of various standard personality tests, the most reliable of all is the simple method of self-assessment, checked by a friend; and that was precisely the method I adopted throughout. Though the number 30 may seem small, it should be remembered that $I$ was testing a complete birthchart, not one factor, and the fact that I got quick feedback at every stage of experiment gave.me the confidence to continue.

## The Planets in Signs

(Thanks to the program) we know what sign our planet is in, we know its strength factor ${ }^{2}$, we know whether the planet is well-aspected, afflicted or neutral, and we have a lookup table of all the traits associated with that sign placing. So a score defining these things is sent to all the traitslots which are waiting for them.

Notice carefully that a strong planet will send higher scores than a weaker planet ${ }^{3}$. Now let's look at how this strength is scored. The well-known researches of Michel and Françoise Gauquelin have shown that planets are most powerful when near the four angles, or to be more precise, when they are several degrees before the angle in the zodiac. Not only are they stronger in those positions, they are wea-

[^0]ker in between, and there is a fairly smooth transition between all these points. All I had to do, then, was to set up scores corresponding with this important curve. Now, the computer gives them to the planets according to where they find themselves in a chart.

Unfortunately the Gauquelins' researches have been confined to the Moon, Mars, Jupiter and Saturn, with the recent addition of Venus. We have as yet no evidence from them as to whether this works with the Sun, Mercury, and the three outer planets ${ }^{1}$. Because $I$ couldn't wait several years for them to get round to this, I have taken a perhaps weak-kneed compromise for the time being : I have let the strength of the five Gauquelin planets depend entirely on angularity, and the strength of the remaining ones to be, as it were; halfaffected by it; trying to get the best of both worlds.

John Addey's approach
Incidentally, I am very aware of the important work which John Addey was doing on this same question. His approach, though, was not to talk about strength as we go round the diurnal circle; rather to say that a planet's CHARACTER changed from point to point. But it seems clear to me that the meanings of the planets AS TRADITIONALLY UNDERSTOOD does depend on being near the angles. One day, we will understand this whole matter thoroughly, perhaps. Until then, my definition of "strength" is "the extent to which a planet fulfils its traditional description with noticeable exterior effect"2.

The three outer planets don't work
Many writers have cautioned against taking these too seriously, because they change so slowly, causing whole generations to share them. This does not say that they have no meaning, only that the meaning is a background, or of slight influence, or only works in a mass effect rather than in a personal way. As I normally omit their interpretation when I do a chart by hand, I tried the same now in the STARWORD program. The result was clear - they are better left out. So now $I$ used signs only for the Ascendant and the first seven planets.

## The next to go was retrograde motion

I had noticed that the interpretation which the authors gave for a retrograde planet in a given sign or house was

[^1]virtually identical to the normal meanings, i.e.non-retrograde, and that by adding a meaning in my program, I was guilty of duplication and thus over-emphasis. I couldn't easily swallow, either, that a retrograde planet implies a subconscious or internal working, or a difficulty in dealing with the planet's energies. This theory is based on the symbolic concept that retrograde motion runs counter to the normal. Frankly this is poppycock : retrograde motion is as normal to planets as direct motion. If planets happen from time to time to run in a loop at various parts of their heavenly progress, then that is normal. In particular, Neptune and Pluto spend about $40 \%$ of their time in retrograde motion (...). Less than 8 \% of all charts have no planets retrograde, and most of us have 2 or 3 retrogrades at least; are most of us repressed and unable to cope ?

I did a careful survey of retrogrades in charts of people known to me, and I came to the conclusion that retrograde motion, as such, is meaningless. I ejected it from my computer program, in spite of all the trouble I had gone to, to set up a special database for it.

## The Houses too would be better left out

Surely houses are one of the most basic things in astrology, belonging to the holy trinity of "signs, house and aspect". Yet we know it is the most controversial area. Surely if houses were valid, the correct system of division would have emerged long ago ? Yet houses have not always been a part of astrology, which flourished 2000 years before houses were ever thought of. Then in the 1 st or 2 nd century A.D. an attempt was made to create the house structure as a deliberate parallel to the zodiac; and we've been stuck with it ever since.

Until Ebertin, that is, whose system of so-called cosmobiology, based largely on midpoints, rejects houses completely. It was interesting to hear Jeff Mayo, that doughty proponent of the Equal House system, say in his Carter Memorial lecture that the older he got, the less he thought there was to houses.

If houses are invalid, we no longer have to worry about which system is correct, because they!d all be incorrect. This would explain a lot ! So I took the plunge; holding my breath, I removed houses from the STARWORD program and tested the results. Without a doubt, better. In order to make sure that the blame didn't lie with my schame of diminishing values through the house, I changed that scheme to one in which a blanet scored the same, no matter whereabouts in the house it was. Same results .- better off with houses. The conclusion is obvious $:$ it seems that we don't need houses. In fact, we not only don't need them, they positively hamper us.

## Conclusion

My investigation into natal interpretation had led me to the point that I had rejected many sacred astrological concepts one by one, till all I had left was the sign on the Ascendant, the signs of the first seven planets, and the interplanetary aspects. Nothing else ? Was it sufficient ?

What seems essential is to begin by assessing the planets' strength by angularity. The Ascendant is given a fixed score equivalent to the average of the planets. Step by step the program has shown that it works better without all the other paraphernalia we are accustomed to using. It gets these good results by being thorough and systematic with the jobs it does carry out.

I have assessed the accuracy of the results at $90 \%$ on the average, which, whilst it is perhaps not so good as an ewpert human, is certainly better than a mediocre run-of-the-mill astrologer. In practice, some charts seem to come out worse, and some better, but a few have brought forth a virtual $100 \%$ agreement from the native. I have noticed that the most accurate results seem to be with young people in their 20's. Maybe this shows that we grow out of our charts as we get older. You might like to think about this.

So the computer is showing us that, in the last resort, what counts in astrology is not theories and not traditions, but theories and traditions which can be tested - quickly with interpretative output and feedback, so that we may be spared from blundering on with erroneous methods, as so often in the past. In making this quick feedback possible, the computer is going to prove more and more useful. What with this and its phenomenal ability to calculate planetary positions, aspects, progressions and all the other mecanics of chartwork, it has got to be the best thing to happen to astrology since the invention of the telescope !

## REFEREYCES

Voliguine, A. (1973) : The Kuler of the Nativity (AST Publ. Inc., New York). Gauquelin, M. (1973) : Cosmic Influences on Human Behavior (Stein \& Day Publ., IVew York).

# DID ANYONE WIN THE WORLD'S BIGGEST ASTROLOGY PRIZE? The results - - and a new bigger superprize Geoffrey Dean ${ }^{1}$ and Arthur Mather ${ }^{2}$ 

## Prize $\mathrm{N}^{0} 1$

In 1980 the world's then biggest astrology prize of $\$ 1000$ (about $\mathbf{L}^{500}$ ) was offered by us to anybody who could demonstrate the validity of signs. Details were circulated via journal articles to over 10,000 astrologers and students in the U.K., U.S.A., Australia and N.Z.
Six entries were received, none of them successful. Comments about this outcome were : 1) signs cannot be proven, 2) other factors will mask sign effects, 3) there was not enough time for evidence to be collected, and 4) surely we knew our money was safe. In effect our response to all of these was: what then is the point of using signs ? Or, to put it another way, are signs worth having if they are non-falsifiable ?

## Prize $\mathrm{N}^{0} 2$

To accomodate those who wanted more time or more money or less of a race, we offered a bigger $\$ 2000$ prize, with revised rules. The new prize was for a demonstration that the tropical sign hypothesis is true.
To avoid the accusation that the hypothesis was rigged, we adopted the hypothesis as given by Margaret Hone in her Modern Textbook of Astrology, page 37. This has been the basic text for the Faculty of Astrological Studies for 30 years, and is rated by many as still the best single textbook on astrology; hence we considered her description to be authoritative: "The astrological hypothesis is that each sign is of a different nature. People born with one or other of these signs prominent in their charts will be very much of the nature of these signs."
The rules required that the demonstration be capable of replication, be unambiguous, be the entrant's own work, and be submitted by the end of 1982. Notice of intention to enter was required by the end of 1981. As in the previous prize, Zach Matthews, editor of the Astrological Journal, was the independent third party to ensure fair play. For this report he has kindly provided the following statement: "The description of the letters of intention received, and gf the entries received and not received, is correct."
Comments rec̀eived subsequently about both prizes are as follows:
A few peiple felt that the words 'prominent' and 'nature' were vagtue and undefined. However other textbooks were even more vague in defining what signs are. For example "The

[^2]Only Way To Learn Astrology", page 10, says: "each sign is a field of action in which the planetary forces operate". Other books, for example "Basic Astrology, a Guide for Teachers and Students" and the "Larousse Encyclopedia of Astrology" have no definition at all which could form the basis of a hypothesis. No doubt, if we had attempted to impose definitions on Hone's wording, we would have incurred the very accusation that we sought to avoid, namely of loading the dice. In any event, the entrants obviously did not feel this to be a problem.
Pat Davis, of Florida, winner of the consolation prize for Prize No 1, gives in "Mercury Hour" (October 1981, pages 7-8) the reasons why she should have won. To her the root problem was "the apparent lack of long-term experience in actual horoscope work by those judging the contest". Fortunately this will not be a problem to anybody else, since those who judged her entry included Charles Harvey, President of the Astrological Association and one of the U.K.'s most experienced professional astrologers.
Her overall conclusion was that "the judges are not ready yet to conduct a truly meaningful and realistic contest to validate sign influences" and that "a prejudice in favor of a statistical approach... will be a major hurdle to overcome". This misses the point. Her entry showed that charts match events, and in her eyes this should have been sufficient to win the prize. However what she should have done, but didn't, was to check whether the matching could be explained by chance. This point is crucial because, given a series of events and a series of unrelated chart indications (as for example from an unrelated chart), some match between event and indication is bound to arise purely by chance. So before anyone can claim that signs are valid because a match exists between charts and events, they have to show that the match cannot be explained by chance.

Unfortunately, as shown in our article of 1981, Davis's results can easily be explained by chance. Hence she did not win the prize. Of course, it may be that her approach could be shown to perform better than chance using methods other than the statistical approach which she eschews. In which case why didn't she do so ? After all, those who feel that a particular scientific approach is inadequate are quite at liberty to devise something better.

A new even biqger superprize for 1983-1984
$\$$ US $5000^{\circ}$ (roughly $f 3000$ ) are provided jointly by the following sponsors. Australia: Astrosearch Computer Services, Recent Advances...Canada: Phenomena Publications. U.K.: British Astrology. U.S.A.: Astro Computing Services, AstroGraphics Services, Marguerite dar Boggia, International Society for Astrological Reséarch, Marion March, Matrix Software, Polakoff Foundation, Ledr David Williams.
The prize money is the highest ever offered for the advancement of astrology. It compares more than favorably with the
prize money (typically $\$ 1000$ ) of the several hundred eash awards and prizes for outstanding achievement (other than winning contests) made each year around the world at national and international level.

The superprize is not a race and all entries will be considered. If more than one entry qualifies, the superprize will be shared. If no entry qualifies, a consolation prize of $\$ 100$ will be awarded for best entry. If there are several best entries, the consolation prize will be shared.

## Aim of the Superprize

Nowhere in the entire astrological and related scientific literature is there a single convincing demonstration that the most fundamental astrological product of all, namely the chart interpretations, are true for the right reasons. Without such a demonstration, 1) astrology will never gain professional recognition, and 2) the entire ethic of astrological practice is open to question. The superprize is an attempt to rectify the situation.
It will be awarded for convincing evidence that the accuracy of chart interpretations cannot be explained by non-astrological factors. For the present purpose, 'convincing evidence' is that which is convincing to the judges.
The non-astrological factors which could apply are surprisingly numerous; and in principle they are sufficient to explain why astrology seems to work. Examples are: universal validity of interpretations, gullibility, belief, and statistical artifacts. There are many others. The aim of each entrant will be to demonstrate that non-astrological factors are in fact not sufficient, and that the only genuine explanation of why astrology works is the reality of astrological effects.

## Rules

1. All entries must be received by 31 December 1984. Notice of your intention to enter must be received by 31 December 1983.
2. Entries must be typewritten single-spaced in English, French, German, or Spanish, must contain a detailed summary in English like those under Results for Prize $2^{*}$ and must be the entrant's own work. Four copies are required.
3. The charts must be of ordinary people typical of those who visit astrologers.
There are no other rules. The interpretations can be of any kind such as character or life events, using any method whether recognised or not. Entries may be made by individuals

[^3]or groups from any country. There are no restrictions on style, format or approach. In principle, entrants can do whatever they like in whatever way they like.

## Judges

Entries will be judged by the following panel of judges, chosen for their interest in astrology (nearly all have written extensively on astrology) and for their expertise in relevant disciplines. This is easily the most expert panel ever assembled for the purpose of assessing astrological claims:
Prof Roger Culver, Colorado State University (astronomy) Prof Hans Eysenck, University of London (psychology) Dr David Nias, University of London (psychology) Prof Ivan Kelly, University of Saskatchewan (ed.psychology) Prof Marcello Truzzi, E Michigan University (sociology) Dr Michel Gauquelin, LERRCP Paris (cosmic infl.) Charles Harvey, President A.A. London (astrology) Dr Henry Krips, University of Melbourne (phil.science)
A copy of each entry is sent to the three most relevant judges. If the entry passes two out of three, it will be sent to another three judges for confirmation. The final outcome will be decided by consensus. The entrant will receive the judges' comments in full.

How to enter

1. Send a letter indicating your intention to enter, plus a brief outline of your intended approach (which will be kept confidential), to Dr Geoffrey Dean, Astrology Superprize, P.O.Box 466, Subiaco 6008, Western Australia, to arrive before 31 December 1983. A copy should also be sent to Mr Zach Matthews, BSc DFAstrolS, Dakfield, Goose Rye Road, Worplesdon, Surrey GU3 3RJ, England.
2. When your entry is ready, send a copy to Geoffrey Dean to arrive before 31 December 1984. A copy of the summary should also be sent to Mr Zach Matthews. You will then be sent the addresses of the three judges to whom the other three copies of your entry should be sent.
3. Queries should be sent to Geoffrey Dean.

Because astrologers object to restrictions being made on their astrology, this superprize (unlike previous RA prizes) doesn't have any. To win the superprize, all you have to do is convince the judges that you deserve it. How you do this is strictly up to you.
However please note that the failures of previous RA prize entries (other than those due to negative results) have all resulted from faulty experimental design. Entrants not familiar with the requirements of technical investigation and reporting should therefore seek independent help to ensure that their entries are of acceptable standard.
Notice of the superprize is appearing in astrology journals around the world. Full details of the outcome will appear in the same places.

METHODOLOGICAL ERRORS BY CRITICS OF ASTROLOGICAL CLAIMS H. J. Eysenck ${ }^{1}$

## ABSTRACT

Summary of the opening lecture given by professor Eysenck at the Third Institute of Psychiatry Conference organized in May 1983 by the Astrological Association of London.
In their book "Astrology, Science or Superstition ?" H.J. Bysenck and D.K.B. Nias drew attention to the fact that most astrological research was marred by errors in methodology and statistical treatment.
It would seem that such methodological errors are made not only by astrologers, but equally by critics who attempt to disprove astrological claims.

A recent large-scale study (unpublished) used the matching technique, in which the astrologer is given detailed personality assessments of a number of persons, as well as their birth dates and times, and is asked to match the resulting horoscope with the personality description.

In another variant, the astrologer uses the horoscope to write a personality description of a person whose birth date and time is given to him; and the person himself has then to pick out the appropriate astrological description from a number of irrelevant ones ${ }^{2}$.

The study in question was done on a very large scale and with many appropriate controls and safeguards. Its outcome was completely negative, in that neither the astrologer; nor the subjects managed to perform the matching at a better than chance level. The author concluded that this disproved the claims of astrology. Had the study not included a serious methodological error, it would have been difficult to argue against such a conclusion.

## Inappropriate use of a personality inventory

However, the author had used a psychological personality inventory which was inappropriate for the purpose of the experiment. Ft contained a number of scales which had not been validated by proper statistical analysis (e.g. factor analysis); the naming of the seales was rather arbitrary, and did not always bear much relation to the items making up the scales; finally, the information contained

1 - Professor at the Institute of Psychiatry, Chairman Department of Psychology, Denmark Hill, London SE5 8AF, U.K.
2- The matching technique is more likely than most atomistic techniques to give the astrologer a chance to show his abilities, some of which may lie in combining the different types of information given by the many atomistic relationships posited in astrological textbooks.
in the questionnaire was given in the form of a personality profile, using these rather arbitrary and sometimes incomprehensible trait names.

As part of his controls, the experimenter had individuals in a control group pick out their personality profile from several others. They found this impossible to do ! This shows in other words, that what the astrologer was asked to do was impossible. He would not be expected to do better than a person asked to recognise his own personality profile !

In matters of this kind, expert psychological advice should always be sought; for the selection of this particular inventory was clearly an error which invalidated the whole experiment.

## A way to avoid the accusation of cheating

The controversy that has arisen in recent years concerning the work of the Gauquelins is also replete with methodological problems. The discussion of these problems with experts could perhaps have facilitated the achievement of greater agreement among proponents.

Thus Kurtz and his colleagues have taken exception to the way Gauquelin originally selected his sports champions, suggesting that perhaps this selection was not unbiased, and even implying that in making the selection Gauquelin might have cheated (The Skeptical Inquirer, Vol.IV, $N^{0} 2$ ).

I would personally dismiss such a suggestion outright. But in view of the likelihood of such suggestions being made after the event, it might have been better had Gauquelin from the beginning allowed the choice of sports champions (as well as leading actors, scientists, etc.) to be made by an independent group of sportsmen (or actors, or scientists) so that any possibility of bias might have been omitted.

Then the critics have made a selection of sportsmen in their own work. And this in turn was criticised by Gauquelin, who suggested that those chosen were not always in the front rank. Again the inclusion on the experiment of an independent expert panel of sportsmen (or writers on sport) entrusted with the choice of whom to include, would truly have obviated this problem.

Even in retrospect, it might be possible to arrive at some agreed conclusion by throwing together all the data collected by Gauquelin, the Belgian Para Committee, and the Americian group, and then getting an independent group of sportsmen and critics familiar with the various types of sport involved, to grade each sportsman included as : "absolutely outstanding", "outstanding" and "less famous".

If this were done, we would have not only an overall assessment of the Mars effect, but also the probability of a declining Mars effect from group 1 to group 3. As the decisions would be made by an independent committee, it would not be possible for either of the contending parties to query that decision, and a final agreed conclusion could be arrived at.

## Use the relevant psychological litterature

It has been doubted whether the real top sportsmen could possibly differ in personality from those only very slightly below them in excellence. But, as Eysenck et al. (1982b) have shown, it is possible to find differences (e.g. in neuroticism or emotional instability) between the A team and the $B$ team representing a given country.

Astrological studies, and their interpretations, are thus often done without reference to the large psychological literature relevant to the planning and the interpretation. Here again, it would be useful if psychologists were always included at the planning stage, and perhaps also consulted in the final stages of writing up.

## Use of indirect indices proving the subjects ${ }^{\text {P }}$ good faith

A last point concerning methodology relates to the use of indirect indices. These are often more impressive than direct evidence, because they are less liable to the charge of faking; and they may make more sense in terms of general psychological laws.

Years after Rhine and his colleagues had published their data on ESP, in which subjects tried to guess symbols on cards which were hidden from them, it was found that there was an apparent fatigue effect, in the sense that most people had high scores at the beginning, lower scores in the middle, and still lower scores at the end. This fatigue effect is in good accord with psychological principles. And not having been anticipated by the original authors, but discovered later, in going through their records, they could hardly have been due to deliberate falsification or chance errors.

In the same way", it would seem to me that even if the original data or the Mars, Jupiter and Saturn effect had resulted from some slight bias in the selection of the studied subjects, the later work on the relationship between their personality and the planetary positions at their birth (Gauquelin et al., 1979, 1981), which gave even higher correlations than had been obtained originally with only professional criteria, could not have been produced by any such bias.

I feel that this type of evidence may be more conclusive in some ways than the direct evidence originally presented. But who else than a neutral panel of experts could give such a verdict ?

## Conclusion

Methodological questions in relation to astrological research should be discussed with neutral judges prior to any experimentation. This is, I believe, of fundamental importance

- because the methodology adopted dictates the conclusions which can be arrived at, - because errors in methodology fatally prejudice the outcome of any scientific investigation.

It seems therefore desirable that a Committee of experts from various fields should be formed for the supervision of experiments in astrology. It would offer astrologers unfamiliar with the research litterature, as well as psychologists unfamiliar with astrology, the access to expert advice.

REFHRBITCES

Eysenck, H.J. \& Nias, D.K.B. (1982) : Astrology - Science or Superstition? (Maurice Temple Smith, London).

Eysenck, H.J., Niias, D.K.B. \& Cox, D.N. (1982 b) : Sport and Personality. Advances in Behaviour Research \& Therapy, Vol.4, №l, 1-56.

Gauquelin, M., Gauquelin, F. \& Eysenck, S.B.G. (1979) : Personality and positions of the planets at birth; an empirical study. British Journal of Social and Clinical Psychology, 18, 71-75.
Gauquelin, M., Gauquelin, F. \& Eysenck, S.B.G. (1981) : Eysenck's personality analysis and position of the planets at birth: a replication on American subjects.
Personality and Individual Differences, 2, 346-350.

# IDENTIFICATION OF AN ARTEFACT IN COSMOPLANETARY RESEARCH Guy Le Clercq 

ABSTRÁCT
The author shows how the unsuspecting use of rounded birth times produces spurious harmonics in the distribution of SO - MC angles

Having calculated with the computer the positions of the cosmic factors at the birth of 813 French writers from the Gauquelin collection, I applied a computer program established by Philippe Cracco for classifying, degree by degree, the angular values 50 - MC ${ }^{2}$.

When reporting these values on a diagram (Figure 1), we see that, with the exception of the zone around 180 degrees, there are peaks around every angle multiple of 15 degrees.

## A 24th harmonic of 15 deqress

The multiples of 30 degrees are said to be important according to the astrological tradition; and several schools of astrology emphasize the importance of the multiples of $15^{\prime}$ degrees (Johndra) or multiples of 7 degrees 30 minutes (Landscheidt). Therefore a true believer would be sure that he has proven the importance of the angles which are multiples of 15 degrees between the Sun and the Midheaven.

In Figure 1, you will find the observed values, for the 813 writers, of Sun position minus MC position. Figure 2 shows the same result plotted as multiples of one hour, by adding degree by degree the first fifteen degrees to the following fifteen degrees, and so on, 24 times. The relevant totals are reproduced in Table I.

These values can then be used for calculating Chi squares by comparing them to the average of 54.2 corresponding to 813 divided by 15. An addition of the obtained Chi squares gives a total of 205.9 with 14 degrees of freedom. This is a superlative high result.

## How must it be interpreted?

Is this result the testimony of mysterious cosmic influences ? Dr can a simple, terrestrial factor explain it ?

We must rememfer that the births of this group were registered in local time before 1891, in Paris time between March 15, 1891 and March 10, 1911, and either in Greenwich time, either in Summer time after March 10, 1911. Most of them took place before 1911 : there are 663 births ( $=81.55 \%$ )

[^4]between 1795 and 1910; and only $150(=18.45 \%)$ between 1911 and 1941. Most births are therefore registered in local time or Paris time, close to local time.

In terms of local time, the Sun is near the Midheaven at noon; near MC $\pm 15$ degrees at 11 a.m. or 1 p.m.; near MC $\pm 30$ degrees at $10 \mathrm{a.m}$. or $2 \mathrm{p.m.} ,\mathrm{and} \mathrm{so} \mathrm{on}$. of the birth times of the collection are rounded off to whole hours like these.

So the peaks found at every $15^{\text {th }}$ degree can be explained by the rounded off whole hours of the birth time collection instead of a mysterious cosmic factor related to the 24 th harmonic. If the birth times were given with an accuracy to the minute, these 15 degrees peaks would not appear.


Table I
Cumulation by 15 -degrees of the angular values SO-MC

| Degrees | 0 | 1 | 2 | 3 | 4 | 5 | . | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cumulated <br> values | 98 | 69 | 65 | 61 | 39 | 22 | 20 | 27 | 34 | 25 | 38 | 57 | 76 | 69 | 113 |

## TIME CHANGES IN AUSTRIA <br> Maria Prager 1

A) Introduction of the Gregorian Calender : 16 October 1582
B) Local Time : in use until the National Time is adopted.
C) National Time : on the lst October 1891, adoption of"Middle European Time (i.e. GMT + 1 hour) by the railroads. But most of the towns and rural areas continued using the Local Mean Time.

Since the lst April 1893, extension of the Middle European Time to the smaller towns.
D) Daylight Saving Time : GMT + 2 hours, applied during the following periods:


1 - The time indicated at the beginning of Daylight Saving Time is always the time in use until then, and one hour must be added to it for converting it to Daylight Saving Time. Example : on Sunday, 30 April 1916, at 23:00, all the clocks were put one hour ahead, the time being then Monday, 1st of May 1916, at 00:00.

2 - The time indicated at the end of Daylight Saving Time must be put one hour back for converting it again to Middle European Time. Example : on Sunday, the lst of 0ctober 1916, at 01:00, all the clocks were put one hour back, at 00:00.

3 - On the l2th April 1945 Vienna was occupied by the Soviet Army, and the rest of Austria also until the 23 of April. Therefore the author did not find any legal decree published in Vienna about the Daylight Saving Time for this year. Austria followed the Soviet time during this period. However, according to Maria Prager, no double Summertime was applied in Austria like in other Soviet occupied areas.

4-24:00 of one day is the same as 00:00 of the next day.

[^5]EXCERPTS FROM :
DRUG ADDICTION AND HOROSCOPES

by Wolfgang Martinek ${ }^{1}$


#### Abstract

In a lecture delivered on the 3rd December 1981 to the Österreichische Astrologische Gesellschaft, and published in the September issue of their magazine "Qualität der Zeit", the author examines the horoscopes of 812 drug addicts ( 116 with the birthtime). We cannot reproduce here the entire lecture, but shall give his results with planets and cardinal points in signs, with planets in houses, and his general comaents. Interested readers can write to him for more.


## Fundamentals

The problem of drug addiction today does not concern some individuals only, but our whole society. In other times or places, the intake of drug was part of religious rites, reaction to inhuman conditions of work or of war, or it was a way to solve the problems of isolated individuals, like artists, ill people, etc.). Today, our highly technical mass-societyhas converted the phenomenon of drug addiction into a more general problem. In particular, when youngsters become addicted to hard drugs like the opium derivate heroin, they claim to do it less out of materialistic than spiritual needs, less for religious reasons than nihilism. As we all know, economic and political interests lurk also behind the trade of narcotics and the commerce of legal drugs like alcohol or nicotine. In this context, whether an individual will become a drug addict or not depends in part on his surrounding, in part on his innate predispositions.

Therefore a correct interpretation of horoscopes from drug addicts must take into consideration the far ranging constellations with a collective meaning. We will not conder only individual features of the horoscopes, but point also to their correlations with time-qualities beyond the single cases.

In this endeavor, let me acknowledge the invaluable help of Dr. GUnther Pernhaupt, head of the drug addiction ward Kalksburge and Dipl.-Arch. Sandor Belcsak, for collecting (anonymous) birthdata; let me thank also the firm Susy-Austria, Mr. Karl Gauster, Mrs Silvia Chitta, for their support in the analysis of the data.

[^6]
## Planets in Houses

116 cases, including $80 \%$ hard drug addicts, $20 \%$ soft drug addicts.

| HoUSES |  | 1 | 11 | 11 | IV | v | VI | VII | VIII | IX | $\dot{\text { x }}$ | XI | XII |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUN | + | 10 | 12 | 9 | 13 | 6 | 5 | 6 | 18 | 6 | 13 | 10 | 8 |
| Moon |  | 9 | 16 | 9 | 11 | 5 | 9 | 6 | 8 | 7 | 16 | 9 | 11 |
| MERCS. |  | 17 | 9 | 8 | 9 | 9 | 5 | 7 | 17 | 8 | 8 | 13 | 6 |
| Venus |  | 6 | 12 | 13 | 8 | 7 | 13 | 9 | 5 | 9 | 11 | 12 | 11 |
| MARS | + | 8 | 17 | 7 | 8 | 8 | 5 | 8 | 11 | 12 | 11 | 18 | 3 |
| jup. |  | 8 | 11 | 8 | 17 | 12 | 15 | 4 | 7 | 7 | 11 | 6 | 10 |
| SAT. |  | 12 | 10 | . 10 | 12 | 16 | 13 | 4 | 15 | 8 | 4 | 5 | $\div$ |
| UR. |  | 4 | 6 | 6 | 10 | 8 | 5 | 10 | 11 | 11 | 13 | 16 | 16 |
| NEPT: | + | 13 | 19 | 14 | 9 | 9 | 10 | 7 | 5 | 7 | 6 | 11 | 0 |
| Pluso |  | 12 | 4 | 8 | 6 | 10 | 7 | 4 | 11 | 12 | 11 | 15 | 16 |
| TOTAL: | + | 99 | 116 | 92 | 103 | 40 | 87 | (6) | 108 | 87 | 104 | 115 | 4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

+ Probability of chance result $10-5 \%$ : nearly significant.
+ Probability of chance result $5-1 \%$ : significant
\& HERR : ruled by Venus. $\phi=9.7$ : arithmetical mean for each planet.

With drug addiction, we are in the field of selfdestruction. This can be seen in the dominance of the 8th House, commonly called the "House of Death", i.e. the House of transgression of boundaries, of visions, of regeneration from "the abyss of fear". Thanks to their strong 8th House, Charles Baudelaire, Stephan Georg and Alfred Kubin (who were taking narcotics) became creative.

Notealso the surprisingly weak occupation of the 7 th House pointing to an underemphasis of communisative skill. An underoccupied 7th House, dominated by the transsaturnian Neptune, shows a tendency to transgress limits by means of communicationsa Let us express it in the following way : drug addicts suffer originally from a deficit of receptiveness, of the skill to make contacts; they seek the mediation of drugs for overcoming this problem.

Virgo, Taurus and Libra ara signs in which Venus sxteriorises its nature in an extreme way, being in fall in Virge, in its domicile in Taurus and Libra, in detriment in Seorpio. And Taurus, Libra and Scorpio correspond to the
above mentioned Houses 2, 7 and 8. Venus is also frequent in 6, corresponding to Virgo.

If we consider the accumulations of planets in succedent Houses, we find that they are more frequent there than in the angular ones. For instance, the occurence of Neptune in the 2 nd House exceeds the mean at $95 \%$.(see Figure 1).


Figure 1 : Drug addiction and Planets in Houses
Addition of the ten bodies of the solar system, corresponding to the last line of Table I. 'The arithmetical mean, 96.7 , is indicated by a continuous circle, and does not include astrononic or denographic corrections (note of the Editor).

## Cardinal points in Signs

With drug addicts, the cardinal points appear in labil Signs. There is an accumulation particularly for those who have their ASC and MC in these signs. This is all the more remarkable as the Pisces-ASC happens to be underrepresented in this group for astronomical reasons, as a control-group has schown (F. Schwab, 1933).

Table II - Cardinal points in Signs
116 drug addicts, including $80 \%$ hard drugs, $20 \%$ soft drugs. + Probability of chance result $10-5 \%$ : nearly significant, + Probability of chance result 5-1 \% : significant.

| SIGNS | $r$ | $\checkmark$ | III | 69 | 8 | $\underline{m}$ | $\Omega$ | $m \mathrm{~m}$ | $x^{4}$ | \% | سِّ | $天$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asc. | 5 | ; | 9 | 10 | 13 | 21 | 14 | 14 | 13 | 4 | + | 2 |  |
| M.C | 4 | 13 | 18 | 12 | 8 | 14 | ; | 4 | 6 | 10 | 11 | 9 |  |
| Total | 9 | 20 | 27 | 22 | 21 | 35 | 21 | 18 | 19 | 14 | 15 | 11 |  |
| SIGNS | $r$ | $\gamma$ | III | 69 | Q | m | $\Omega$ | M | $\sim^{7}$ | 6 | \% | $\circledast$ |  |
| meat fo Ace | 4.5 | 5.5 | 9.0 | 12.6 | 14.2 | 12.3 | 12.6 | 13.9 | 12.9 | 9.0 | 5.5 | 4.2 |  |
| meanf.MC | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 |  |
| Gen.mean | 14.2 | 15.2 | 18.7 | 22.3 | 23.9 | 22.0 | 22.3 | 23.6 | 22.6 | 18.7 | 15.2 | 13.9 |  |



Figure 2 : Drug addiction and Cardinal Points in Signs Graphic illustration of the above table.

## Planets in Siqns

| SIGNS | $\boldsymbol{r}$ | $\gamma$ | II | 69 | $\Omega$ | mp | $\Omega$ | mp | ${ }^{\prime}$ | 8 | 200 | $\mathfrak{X}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun | 69 | 62 | 87 | 57 | 9 | 59 | 75 | 53 | 60 | 55 | 72 | 7 | H |
| MOON | 77 | 67 | 66 | 64 | 71 | 71 | ${ }^{60}$ | 67 | 60 | 71 | 65 | 67 |  |
| MERC. | 69 | 47 | 79 | 54 | 68 | 79 | 74 | 58 | 77 | 51 | 78 | 78 |  |
| VENUS | 74 | 64 | 78 | 79 | 60 | 91 | (12) | 71 | 57 | 59 | 76 | 61 | t+ |
| MARS | 43 | 87 | 73 | 82 | 69 | 68 | 45 | 77 | 63 | 70 | 45 | ¢ |  |
| TOTAL: | 332 | 327 | 383 | 336 | 358 | 368 | 296 | 326 | 323 | 306 | 336 | 369 | + |

The distribution of the rapidly moving planets Moon to Mars indicates a remarkable analogy to the positions of the cardinal points. The labil signs are dominant, and among them especially those under the rulership of Mercury. The most frequent sign is Gemini, also a leader at the MC. It is followed by Virgo and the Neptune sign Pisces.

The deficit in cardinal elements corresponds to the lack of energy and will-power so frequent among drug addicts.

In the same way as planets avoid the 7 th House, they also avoid the sign Libra. In particular Venus in Libra represents an absolute minimum. We find thus with drug addicts a weak Venus principle. The Moon too has its lowest frequency in this sign. F. Schwab (1933) has shown that a Libra Moon appears seldom with mentally ill patients, proving in this way that it represents rather a factor of stability.

## Conclusion

Drug problems take their origin in a disturbed Venus principle, related to the accumulation of tensions which impede the free manifestation of the predispositions. The following constellations are characteristic of this situation:
a) Venus predominates in an extreme position related to Neptune;
b) Pluto in Virgo and Mars in Pisces or Taurus oppose Venus;
c) Emphasis of the axis 2-8;
d) Venus most frequent in aspect to Neptune and in conjunction with Pluto.
e) The extreme Neptune-related positions of Venus reinforced by:

- Virgo-Pisces emphasized by most of the planets,
- Virgo-Pisces emphasized by most of the cardinal points,
- Libra underrepresented,
- The 6th House, in analogy with Libra, often underrepresented. often ruled by Neptune; also DSC in Pisces.


## RHPHRENCES

SCHWAB, F. (1933) : Sternennächte und Mensch. Zeulenroda in Thuringen.

by Françoise Gauquelin

## ABSTRACT

One of :olfgang Martinek's results with drug addicts is of great interest: the four "Cadent Houses" are significantly underrepresented and the four "Succedent Houses" overrepresented in this group, in striking contrast to the exactly opposite results obtained by us at the birth of prominent personalities.
With "Cardinal Points" and with Planets in Signs however, his curves are similar to those of successful and unsuccessful people, pointing to a cause that is not related to drug addiction.

The collection of drug addicts of Wolfgang Martinek is valuable for the number of cases with precision of the birthtime, and for the thorough analysis the author conducted. He had also the thoughtfulness to send us his original documents, in order to facilitate verifications. We had thus the possibility to examine carefully the methodology, and to make interesting comparisons, for which we thank him. The conclusions we reach on these bases partly agree and partly disagree with his own observations.

## Planets in Houses

What attracted our interest in Wolfgang Martinek's investigation is his Figure 1 (see page 23). His peaks in "Succedent Houses" with drug addicts are in obvious contrast to the low frequencies in "Cadent Houses" (our "key-sectors" numbered 1, 4, 7 and 10, in the direction of the daily motion of the planets). With prominent professional notabilities, we obtain the exactly reversed graph (see continuous line in our Figure 1). This "anticorrelation" is statistically significant. And it finds its causal justification in the personality differences of both groups, the successful celebrities obtaining recognition by fighting efficaciously the difficulties of life, and the drug addicts receding from these difficulties to the blissful oblivion of narcotics.


## A similar contrast in our professional groups

There is a result, in our professional groups, which offers a similar contrast (see our Figure 2) : the painters, musicians and poets form a group of artists oriented more toward contemplation than action, while the sports champions and military men prefer action to contemplation; their planetary results on the whole show the same "anticorrelation" as the drug addicts compared to the successful celebrities; and the anticorrelation reaches its maximum if we consider the results with the planet Mars (Figure 2).

This is in agreement with the remark of Wolfgang Martinek that artists are more susceptible than other groups to resort to narcotics. It would be interesting to study the personality profile of drug addicts and artists compared to more active groups. We would most probably find there clues to their contrasting planetary results.

## The cardinal points in Signs

The distributions of "cardinal points in signs" published by Wolfgang Martinek for his 116 drug addicts (see his Fig.2) is obviously also quite significant. Can we therefore accept the link he establishes between these distributions and drug addiction : "With drug addicts, the cardinal points appear mainly in labil signs..." ? (see page 23)

No, for he has omitted to include an important terrestrial factor to his calculations, and this factor explains the distributions of cardinal points without the interference of astrological hypotheses. Our Figure 3 explains the problem : on the frequencies observed by Wolfgang Martinek with drug addicts (continuous line), we have added the corresponding expected frequencies he has published in his Table II. His expected frequencies for the ASC take into account the annual rhythm of births he has found in a reference book (F. Schwab, 1933): in our region and epoch, there is a maximum of birth in May and a minimum in November. Thanks to this correction, he considers the very irregular ASC-distribution as normal, and he is right : other groups than drug addicts show the same irregularities, in particular all our professional notabilities. But, amazingly, he has not done the same corrections for his MC-distribution。 for which he compares the observed frequencies to a flat arithmetical mean of 9.7 in each sign. This is incorrect. Had the included the seasonal variation of births also in the calculation of expected frequencies for the MC, he would have concluder, like for the ASC, that the group of drug addicts did not differ from the general population in this respect : his maximum in Gemini fits exactly the maximum of births in May, and his miñimum in Scorpio the minimum of births in OctoberNovember, \& are thus clearly related to the seasons, not to astrology.


Figure 3: The seasonal effect is calculated for the ASC, but it is omitted for the MC; hence its incorrectly high Chi square result.

## The planets in Siqns

Similar considerations apply to the distributions of Sun and planets in Signs, in a more complex way, explained in details in our "Scientific Document\#3" (Gauquelin, 1978).

In the case of the aspects, also investigated by Wolgang Martinek, such necessary corrections are doubled and quite complex, for they have to include the demographic and astronomical problems of several heavenly bodies at the same time.

Even in Houses, a demographic and astronomical correction of the arithmetical mean should have been calculated for each planetary distribution (Gauquelin, 1957). It is apparent, in Figure 1, that the lef.t side of the graph contains more births than the right side, due to these problems. But on 116 cases their incidence is weak enough not to alter the conclusions the author has reached concerning the significantly high frequencies in the four "Succedent Houses".

## Conclusion

Before looking for astrological interpretations of statistical irregularities with planets, signs, aspects, etc... it is always necessary to examine carefully the annual and diurnal birth distributions of the corresponding general population for the same country and the same period of time. Very often the incidence of these demographic factors explain in asimple, terrestrial way, strongly significant results which unexperienced researchers tend to consider erroneously as astrological facts.

## REFEREMCES

Gauquelin F. \& Gaúquèlin M. (1957) :..Méthodes pour étudier la répartition des Astres dans le nouvement diurne. L.E.R.R.C.P., Paris.
Gauquelin M. \& Gauquelin F. (1972) : Birth and Planetary Data gathered since 1949, Series C, Volune l : Results of Series A \& B. L.E.'R.R.C.P., Paris.
Gauquelin M. \& Gauquelin F. (1978) : Statistical Tests of Zodiacal Influences, Book I Profession \& Heredity. L.E.R.R.C.P., Paris.

## TWO NOTES FOR DISCUSSION

1
by J. Reverchon

## ABSTRACT

Jacques Reverchon has dedicated his life to investigating new hypotheses into astrology. He offered his much appreciated help to the Gauquelins at the - not so remote - time when all their data had to be calculated by hand on index cards. He is therefore particularly well informed about the beginnings of their research, and is welcome to add comments and criticisms to their results... which he does in the following two short notes, one bringing unexpected positive results, and the other one unexpected negative results.

## I - Note about some demoqraphic peculiarities

A collection of birthdata of renowned specialists in various professions was published in six volumes, from 1970 to 1972 , by M. \& F. Gauquelin. This collection contains the data, confirmed at the Registry Office, of several thousands of persons born in western Europe between the beginning of the XIXth and the middle of the XXth century.

The chronological order reveals, in each profession, accumulations of births around eertain dates. Thus, in Volume 1 (2086 Sportschampions), 1886 births occurred between January 1869 and August 1943 in 511 months containing more thab one birth. In 191 of these months, we have found 253 intervals of 36 hours containing at least two births. On the whole, these 191 months contain 977 births instead of the normal proportion of 191/511 from 1886 = 705; and they provided 11 times 1 comparison of two dates, 34 times 3 comparisons, 39 times 6 comparisons, 31 times 10 comparisons, 34 times 15 comparisons, 23 times 21 comparisons, 9 times 28 comparisons, 3 times 36 comparisons, 4 times 45 comparisons and 1 time 66, 105 and 120 comparisons (in the interval of one month).

The classical formula 1 - $Q^{n}$ ( $Q$ being $1-36 / 365.25$ and $n$ the number of comparisons) gives the probability that several dates of the month (at least 2) belong to the same interval of 36 hours. With this formula, the expected frequency should be 114, but we observe a frequency of 253.

Furthermore, a Poisson distribution with the average 191/511 would provide theoretically, within a month, 351.6 times no occurence of two births or more within 36 h. , 131.4 times ons such occurrence 24.6 times two such occurences 3.1 times three such occurences 0.3 times four such occurences or more...

[^7]while the observed numbers are : 320, 155, 35, 9 and 3. The evaluation of Chi square with the two first numbers and the addition of the three last ones, gives 17, with two degress of freedom. This corresponds to a probability inferior to .01. We can therefore conclude that there is a clear discrepancy between the facts and their mathematical justification through the Poisson distribution.

## Replication of the phenomenon

Such accumulations of births around certain days are not exceptional : they can be found in other professional groups published by the Gauquelins. For instance, in the cass of 2457 physicians (Series A, Volume 2, LERRCP), 204 months contain more than one birth within intervals of 36 hours for a total of 965 births versus 398 months without accumulations of births within 36 hours, for a total of 1086 births. The difference between the frequencies 204/965 and 398/1086 exceeds seven and a half times the standard deviation, similarly to the difference between 191/977 and 320/909 observed with the sportschampions. The phenomemnon appears thus to be replicable. The Poisson distribution confirms the similarity of the results with observed frequencies 42, 5, 1, 1 versus expected frequencies $24.6,2.8,0.2$, providing a Chi square value of 19.4 with two degress of freedom. The probability level is again below .Ol.

We replicated the experiment with one further group, the Military Men (Series A, Volume 3, LERRCP, 3047 births); with quite similar outcomes. All details about these studies can be provided on request.

## Conclusions

a) The observed results do not seem to be attributable to chance.
b) They suggest that, around the normal end of gestation, the birth process would be triggered specifically, for brief periods of time, by the adjustment to a presently undefinable "time factor" which is not necessarily included in the framework of traditional astrology.
c) The phenomenon seems to provide a correlation between the manifested activity - practiced comptently and efficaciously - and the momentary characteristics of the surrounding at the time of birth.

But what seems to us the most astonishing in this affair is that such an evidence, contained since generations in the annals of the registry offices, was never recognized by the scientists. Did this happen because they keep their curiosity only for what seems to them retionally possible ?

## REFERENCES

Gauquelin, M. \& Gauquelin, F.": Data collected since 1949 (Series A s Professional Notabilities, Volume 1 Sports Chame pions, Volume 2 Men of Science, Volume 3 Military Men). published by the Laboratoire d'Etude des Relations entre Rythmes Cosmiques et Psychophysiologiques, Paris, 1970.

## II - Note about the planetary heredity

In the Gauquelin publications about heredity, the hypothesis was that a heavenly body occupying House IX or XII at the birth of one of the parents would be more likely to occupy the same Houses at the birth of their child. Now, if we consider Volume 2 of the Series about Heredity, we find that 249 similarities of this kind appear among : 400 times 1 comparison of the same heavenly body in IX/XII for one of the parents ${ }^{1}$ and its position for the child; 338 times 2 comparisons...
144 times 3 comparisons...
36 times 4 comparisons...
6 times 5 comparisons...
Theoretically we should find for the same cases successively: $400(1-5 / 6)=66.8 ; 338(0.306)=103.4 ; 144$ (0.421) $=60.6 ; 36(0.518)=18.6$ and $6(0.598)=3.6$; giving a total of 253, with a standard deviation of 13.2

Such a result is disappointing. It remains so, if we present it, like in the Gauquelin publications, in the form of a little array:

| little array : | Parent + | Parent - |  |
| :--- | :---: | :---: | ---: |
| Child + | 291 | 1450 | 1741 |
| Child - | $\frac{1546}{1836}$ | $\frac{7727}{9177}$ | $\frac{9273}{11014}$ |

The Chi square with one degree of freedom is practically null. In other words, when the experimental scheme is adjustedcloser to the biological reality, the planetary effect in heredity disappears... It would be interesting to debate this publicly.

[^8]
## THE TWO RISKS WITH STATISTICS

Answer by Fr. Gauquelin

When I received the notes of Jacques Reverchon, my first reaction was the usual one for skeptics : "Statistics can lie". For probabilities are elusive. When Jacques says, after his first experiment, that his Chi square value is significant, we all know that one significant case can mean a new law of nature, but that it can also be the product of pure chance, with nothing permanent behind it. After reading his second note, I thought the same in the reversed direction : Michel and I having discovered very significant effects in heredity, by comparing the planetary positions at the birth of parents and children, we know how weak the effect is, about half the one with professional celebrities only, and how much more cases had to be collected for seriously demonstrating it, ten thousands instead of thousands of birthdata. A limited sample taken out of the total could be an "unlucky series" without impeding the discovered general effect to be real. Such "lucky" or "unlucky" series without lasting meaning are the two risks a statistician must take into account when he calculates "significant" test values.

But then I realized that this was not a sufficient answer to the mork of Jacques Reverchon. His researches were more complex and deserved a more detailed analysis.

## Three successful replications

Indeed his first note does not describe one isolated positive result when he studies accumulations of births around certain dates; he made three replications of the same study with. the same outcomes. How were they obtained?

A disconcerting faturs of most researches of astrologers is the complexity of their starting hypotheses. Accustomed to discuss single charts, which are extremely complex indeed, they fesl less the need for simple, clear-cut definitions than scientists. This can be said also of Jacques Reverchon's hypotheses in his first note : he looks for intervals of one month in which he cuts out intervals of 36 hours, when these contain two or more births. These interconnected conditions are not easy to evaluate statistically. Jacques Reverchon compares them to a Poisson distribution, a very special case among all possible binomial distributions, the use of which he does not try to justify. The difference between his findings and the Poisson distribution does not prove that the time series he has studied contain abnormal clusters of data. It proves only that he has selected as many elusters as possible. But then, there are always some clusters of data in a time series; it can never be completely flat :

## A negative outcome in his second research

In his second note, Jacques' starting hypothesis seems simpler ; he describes it as exactly the same as ours in all our experiments in heredity z when a planet occupies a Gauquelin key sector (i.e. the Placidus. Houses IX or XII) at the birth of a group of parents, does i.t occupy the same sectors at the birth of their children more often than chance would have it ? But then, Jacques Reverchon fails to find the positive correlation between parents and childreñ we discovered on the same data. What happened ?

One sentence at the end of his note hints to a more complex starting hypothesis than the one Jacques described : "When the experimental scheme is adjusted closer to the biological reality..." Closer than what ?.. But then we see that he divides his analysis in parts corresponding to so many comparisons (1, 2, 3...) of heavenly bodies. So again he studies a complex idea. More informations about it are needed. For there lies probably the reason for the discrepancy between his results and ours.

## Conclusion

Complex hypotheses are interesting, but very difficult to handle properly in statistical research. Why not start from very simple ones? They are eaisier to understand for abl parties involved, and less likely to lead toward erroneous statistical judgments. A French philosopher of the past centuries expressed it once in a nice way: "What is well conceived can be clearly explained, and the words come easily for describing it." Innumerable published or unpublished studies I have had lately the opportunity to read would have been more profitable if they had followed this advice.

BOOK AND ARTICLE REVIEWS

Radical Astrology, a set of discussion papers : Astrology and Theory. by Martin Budd, Graham Douglas, Patrick Curry and Bernie Jaye. Publication of the Radical Astrology Group, 17 Granville Road, Iondon.

The four authors offer us historical, philosophical and logical discussions of the essence of astrology today.
Martin Budd describes first astrology from a historical point-of view "in keeping with Michel Foucault's approach, which attempts a systematic description of the 'what', before asking 'how' ". A second chapter from this author compares astrology to Semiology as Ferdinand de Saussure has defined it: "a system of signs". Graham Douglas contimues the comparison with Semiotics as C.S. Pierce saw it : "another name for logic, to be studied as the necessary foundation of all Sciences". He builds up analogies between notions of thermodynamics and astrology. In an "aporia for astrology", Patrick Curry describes the four main attitudes he perceives in contemporary astrology : the Hermeneutic, the Psychological, the Scientific and the Structuralist attitude.
Bernie Jay, the only feminine person of the group, investigates whether even astrologers are participating in the "oppression of women" through an analysis of several books of renowned authors : Liz Greene, Noel Tyl, Stephen Arroyo, Betty Lunsted, etc. She compares their sayings with some present socio-political tendencies.
These texts contain many original thoughts expressed in a clear, though often abstract language. They are well structured, each difficult word is carefully defined, and a wealth of references are listed at the end of each paper. In this way, the authors hope to promote constructive discussions and invite their readers to send comments and criticisms.

Belief in astrology: a symptom of maladjustment? by Michael Startup
published in the journal "Personality and Individual Differences", Volume 4, № 3, pp. 343-345, 1983.

Statements condemning astrology often suggest that the belief in it is symptomatic of maladjustment, and two recent studies by psychologists come to the same conclusion. But here the question was : are the astrologers themselves maladjusted persons ? This does not seem the case in a study conducted by Michael Startup on 66 astrologers and 66 psychology students with two personality questionnaires, the EPQ and the 16 PF. The group profile of the astrologers was similar to the profile of the psychology students and different from various neurotic groups. This allows the author to conclude that "while the majority who profess a belief in astrology may be poorly adjusted and socially deprived, those who carry their belief into dedicated study do not have these characteristies." An interesting conclusion, showing that the astrologer may be a positive moral help to persons experiencing difficulties in life, and this quite independently of the mach discussed problem of the reality, or absence of reality, of cosmic influences.


[^0]:    l - Second extract from "The Art of Synthesis", lecture delivered at the A.A.Conference 1982 in Canterbury by Terence Dwyer, 53 Loughborough Road, Quorn, Loughborough LETİ 8DU, U.K.

    2-See Astro-Psychoīozical Problems Vol.1, Nr 3, p. 24 : "The point system".
    3-To assess planetary strength, I tested (by computer projects) all the criteria described by Volguine in "The Ruler of the Nativity" and found that none of them (including rulership) worked, except angularity.

[^1]:    1 - Hote of the Editor : the author ienores the publications fron the Gaucuelin Laboratory which sive amole evidence that the Sun, Fiercury, and tiee tinree outer planets do not provide significunt results (Gauquelin 1972, 1978, 1950; 。

    2-To cive an idea of the runge of scores, the weakest lanet could be as low is 7 wid t:e iniviest could be about 2 ; the iveruye is 15 ;ointe.

[^2]:    1 - PhD in Analytical Chenistry, P.O.Box 466, Subiaco 6008, W.Australia.
    2 - Infornation Scientist and istrologer, Monquhanuy Shapinsay, Orkney, Scotland KWI7 2DZ.

[^3]:    - This is a condensed version. The complete article, with all the details entitled "Results for Prize 2", will be published in the "Astrological Journal" of Summer i983. Intending entrants should read the full article.

[^4]:    1 - Director Cosmoplanetary Research Center, Rue du Cardinal Lavigerie 35, Brussels, Belgium.
    2 - i.e. angular distance between Sun (SOL) and upper culmination (MC) in each chart.

[^5]:    1 - Astrologer, Bossigasse 57, 1130 Vienna, Austria.

[^6]:    1 - Astrologer, menber of the Usterreichische Astrologische Gesellschaft, Franklinstrasse $20 / 12 / 17$, 1210 Vienna, Austria.

[^7]:    1 - Astrologer, Massoins, par 06710 VILLARS/VAR, France

[^8]:    1 - without differenciating between the cases in which the heavenly body is in IX/XII for one or for both parents
    (16 cases with the same body in Plus Zones for both parents and the child versus 88 cases with no body in Plus Zones for parent and child).

