

Is There Really a Mars Effect?

by Michel Gauquelin

Since the publication of my first book *L'Influence des Astres* (The Influence of the Stars) in 1955, I have published numerous works regarding my discovery of a series of highly significant statistical correlations between planetary positions and the birth times of eminently successful people. One of the strongest correlations I have observed is that champion athletes tend to be born when the planet Mars is either rising or culminating in the sky much more often than it does for ordinary people (see figure 1). This particular observation, later called "the Mars effect" by researchers who have investigated it, has been verified by the experiments of other scientists. In this presentation I wish to summarize:

1) how the Belgian Comité Para found the Mars effect in data that they gathered independently (1976);

2) how American Professors Abell, Kurtz & Zelen eventually concluded that "Gauquelin adequately allowed for demographic and astronomical factors in predicting the expected distribution of Mars" (1983); and

3) how German Professor Ertel demonstrated the validity of the "eminence effect", supporting my assertion since the beginning of my planetary work that, for example, the more famous the athletes, the stronger the correlation to Mars (1986).

Initially, my findings were met with incredulity and skepticism from the scientific community. Some authors claimed that my results—the Mars effect in particular—are due entirely to astronomical or demographic artifacts (for example, Jerome, 1973). However, over the years, independent studies by scientists have

verified my methods and results. These studies can be divided into two categories: theoretical analysis and empirical control of the experiment.

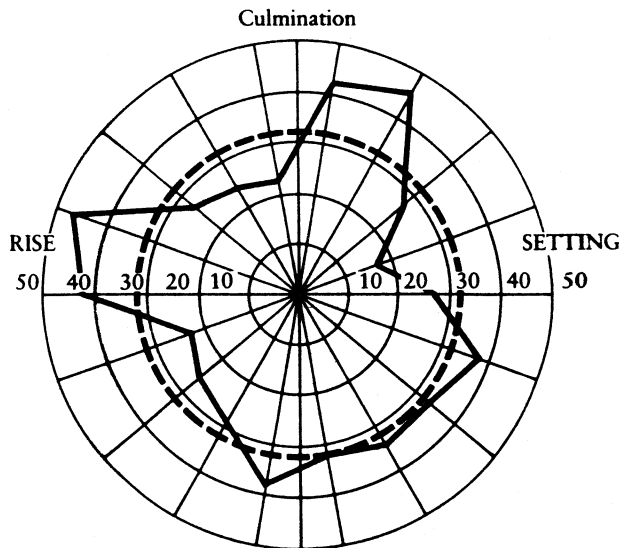
Two skeptical scientists examined my methodology on theoretical grounds. Dr. Jean Porte, Administrator at the Institut National de la Statistique et des Etudes Economiques (INSEE), Paris, carefully examined my approach in the finding for Mars and champion athletes. He states decisively in the foreword to our volume on methods: "I have looked for errors in the present work—and I have found none" (Porte, 1957). Twenty years later, skeptic astronomer Dennis Rawlins produced a memorandum in which he investigated the main methodological objection against the Mars effect—the demographic computation, which Rawlins called "the dawn factor." Rawlins rejects the dawn factor objection on the basis of astronomical computations. He states: "Therefore, one concludes that Gauquelin has made fair allowance for the effect under investigation" (Rawlins, 1978).

The controls of the expected frequencies of the Mars effect have an empirical basis, and this is the other area which skeptical observers examined. Generally, these observers were unaware of the numerous controls I had already made, or they were not convinced of them. They wanted to carry out controls for themselves using their own procedures and this desire gave birth to the Comité Para experiment and the Zelen test.

The Comité Para Replication

The Belgian Committee for the Scientific Investigation of Alleged Paranormal Phenomena (Comité Para) is composed of scientists, including astronomers, demographers and statisticians. This committee is strongly opposed to the recognition of any paranormal phenomena, and the Mars effect appeared to them to be a paranormal claim. Not convinced by the statistical proofs I had provided, they decided to gather a fresh group of 535 champion athletes from which they obtained quite similar results (see Figure 2).

Considering that there has been much misunderstanding of the Comité Para's successful replication of the Mars effect, I here include a copy of the table published in the Comité's own report (Comité Para, 1976) (Table 1).



	RISE	CULMIN.	SET.
Sectors	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18		
Actual	41 47 28 24 23 42 46 27 18 26 37 33 33 32 37 29 25 22		
Expected	33 34 33 33 32 31 31 31 30 30 30 30 31 31 32 32 33 33		

Figure 1. Michel Gauquelin's first discovery of "the Mars effect" at the birth of 570 French champion athletes. *Solid line*: Actual frequencies. *Dotted line*: Expected frequencies. Champion athletes were born more often than ordinary people after the rise of Mars (Mars in the 12th house) and after the culmination of Mars (Mars in the 9th house). This figure is taken from Michel Gauquelin's first book *L'Influence des Astres* published in 1955 in French.

The table compares the observed distribution of Mars in each of the 12 chart sectors for the Comité Para sample (535 champions) compared with the expected distribution, showing the noticeable difference between the two. This difference gives a X^2 of 26.66 which, with 11 degrees of freedom, is significant at the .01 level of $X^2 = 24.7$.

The Comité Para report states unequivocally (p. 331): "The distribution of the actual frequencies of Mars is far from uniform, and displays the same general pattern found by M. M. Gauquelin in samples of other champion athletes. The main characteristic of this pattern is a clear predominance in sector "1" (rising) above all the others. The Comité therefore gives its agreement on this point with the results of M. M. Gauquelin" (Comité Para, 1976).

The Comité Para was very surprised by its own positive results. Jean Dath, Professor of Engineering at the Ecole Royale Militaire of Brussels, and Jean Dommanget, an astronomer at the Brussels Royal Observatory who had worked actively on the project, began to doubt my methods, even though they had accepted them six years earlier. A discussion then ensued on the value of the calculation of expected frequencies which the Comité Para suspected had a flaw, probably of demographic origin, which could account for the Mars effect by some "normal" cause. The Comité Para thus undertook several counter-experiments as a test. The following is the most effective of these experiments.

Comité Para Counter-Experiment

A crucial test for judging any hypothetical demographic or astronomical bias is to use the same distribution as that of the champions' births (i.e. the same year, month, day, place and time of birth), but to shuffle the times of birth. Each champion keeps his real birth date and place, but is given the birth time of the preceding champion according to alphabetical order. Thus, the test group has exactly the same demographic and astronomical data as the champions' group with real birth times.

The Comité Para repeated this test nine times, each time assigning each champion the birth time of the next previous champion in the original sequence. For example, in the first control test, champion number two keeps his birth date and place, but receives the birth time of champion number one whereas champion number one receives the birth time of champion number 535, and so on. In the second control test each champion is shifted back two spots in the original sequence so that champion number two receives the birth time of champion number 535, and so on. The results of the test are given in Table 2

(taken from Dommanget, 1970; see also Gauquelin, 1972, 1982).

The results show that the Mars distributions for the nine counter-experiments significantly differ from the distribution of Mars for the real birth times of the champions. In conclusion, it is demonstrated that the Mars effect, replicated and tested by the Comité Para, cannot be considered

to be an artifact or a demographic error. Moreover, the values found in Table 2 column f_(i) are very close to the theoretical (expected) values I calculated by my methodology, which were used previously by the Comité Para itself (see Table 1, third column).

Surprisingly, this was not the final conclusion of the Comité Para report. In its

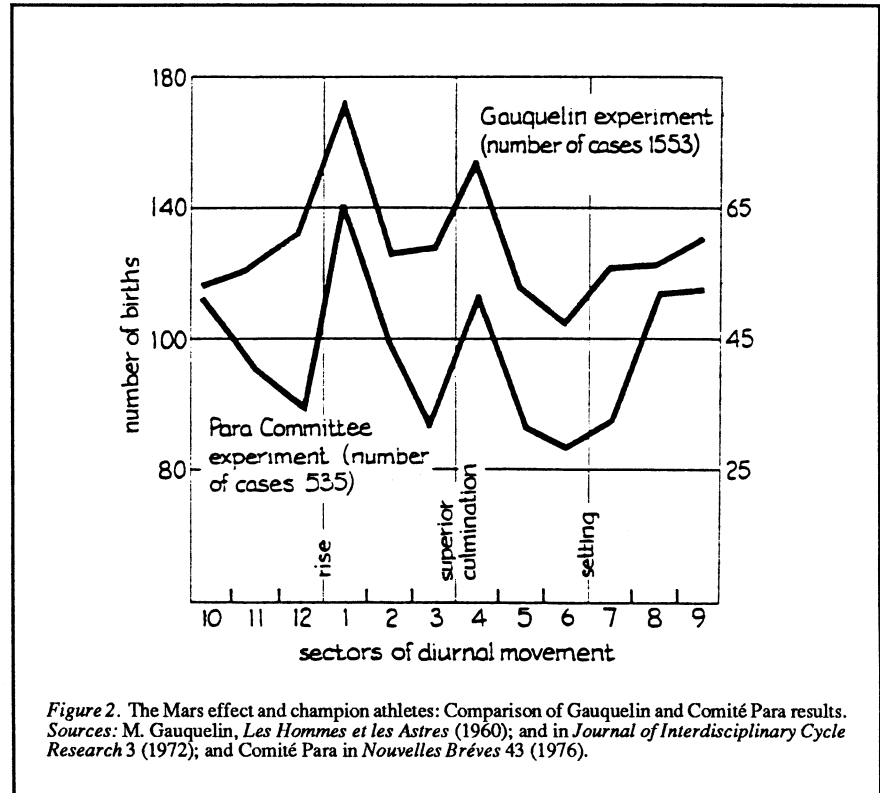


Figure 2. The Mars effect and champion athletes: Comparison of Gauquelin and Comité Para results. Sources: M. Gauquelin, *Les Hommes et les Astres* (1960); and in *Journal of Interdisciplinary Cycle Research* 3 (1972); and Comité Para in *Nouvelles Brèves* 43 (1976).

Classe (i)	Fréquence observée $f_{(i)}^o$	Fréquence calculée $f_{(i)}^{th}$	$\Delta f = f_{(i)}^o - f_{(i)}^{th}$	$\frac{(\Delta f)^2}{f_{(i)}^{th}}$
1	68	47.7	+20.3	8.64
2	47	46.9	+0.1	0.00
3	36	45.3	-9.3	1.91
4	51	44.0	+7.0	1.11
5	36	43.2	-7.2	1.20
6	30	42.7	-12.7	3.78
7	36	41.6	-5.6	0.75
8	50	42.2	+7.8	1.44
9	53	43.7	+9.3	1.98
10	54	45.2	+8.8	1.71
11	40	46.2	-6.2	0.83
12	34	46.4	-12.4	3.31
Total :	535	535.1		26.66 = χ^2

Table 1. Comité Para's Replication: Distribution of Mars at the birth of 535 champion athletes. This is an exact reproduction of Table 1 published in the Comité Para's report (in French). Explanation of the Table, from left to right: 1st column: Classe means Sector; 2nd column: Fréquence observée means observed frequency; 3rd column: Fréquence calculée means expected frequency; 4th column: difference between observed and expected frequency; 5th column: square of the difference. For comments, see text. (from Para Committee, 1976, p. 330)

