## POPULATION AND ZODIAC RYTHMS

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56 million French people, as they were estimated in 1990 from the General Population Census, have been analysed in a descriptive way according to the signs transited by the Sun, the Moon and each of the eight planets at birth. Very large demographic concentrations appeared in most of the distritributions. Some have sociocultural origins, others are due to the retrogradation phenomenon. Beyond its tourist interest, this empirical study is mainly a universal base of work for all the researchers in astrology, so as to avoid unexpected traps (as demographic structures) or to build experimental statistical samples.

## The Sun

The French people who were born as the Sun was transiting from Pisces to Leo are more numerous than the others. The deviation reaches 2291000 people, ie $4 \%$ of the whole population.
Taurus is the most represented sign. It is followed by Gemini, Cancer and Leo of which frequencies are rather close. In a strange symmetrical way, Scorpio is the less represented sign. It is followed by Sagittarius, Capricorn and Libra. The differential between Taurus and Scorpio is worth 736000 people, ie $15 \%$ of the Taurus frequency.

Breakdown of the French population according to the longitude of Sun at birth


| zodiacal <br> sign |  | deviation <br> from the mean |
| :---: | :---: | :---: |
| 6 | Taurus | $+7.5 \%$ |
| 7 | Gemini | $+4.4 \%$ |


| 8 | Cancer | $+4.2 \%$ |
| :---: | :---: | :---: |
| 5 | Aries | $+4.1 \%$ |
| $\cong$ | Pisces | $+2.5 \%$ |
| 9 | Leo | $+1.6 \%$ |
| $?$ | Aquarius | $-0.1 \%$ |
| $:$ | Virgo | $-1.2 \%$ |
| $;$ | Libra | $-2.9 \%$ |
| $>$ | Capricorn | $-4.4 \%$ |
| $=$ | Sagittarius | $-7.6 \%$ |
| $<$ | Scorpio | $-8.2 \%$ |

mean $=\quad 4692800$

These great demographic differences seem to be linked to a seasonal rythm of French fecondity. However, the census just provides a snapshop of the population at a precise moment and cannot do more than reflecting the fecondity of the previous times; the population used in this study is made up of survivors. Actually, the census is not suitable enough to establish the reality of the seasonal rythm of births. Nevertheless, a trend can be spotted in the census data and the following graphs suggest how the fecondity varied during the XXth century ${ }^{1}$.

Evolution of the deviation from the mean for each solar sign in the French population


NB : The statistics concerning people born before 1915 (ie people over 75 at the census time) have to be used with care as they represent a very small part of the whole sample (6.8\%).

Whatever the year of birth may be, Taurus is always more represented that the other signs. Nevertheless, Aries and Pisces born on the first half of the century are as dense as Tauruses. In the whole of people born after 1960, Taurus, Gemini and Cancer are the most frequent signs.
These divergences are probably due to two different behaviours. On the one hand, the call of summer, and especially the summer holidays, which may lead to some conceptions in August and deliveries in April. On the other hand, it can be linked to some parents who were able to choose the moment for their child to be born and who preferred the cold winter days to be over.
Cancer is the most represented sign among the people born after the end of the seventies, to the detriment of Taurus. It is partly due to the legalization of the birth control means and to the legislation of work which permits women to associate maternity leaves and paid holidays in Summer.

## The Moon

French people born with the Moon in Leo are the most frequent and those who were born as the Moon was transiting Gemini are the less numerous. But the deviation between these two extremes is very light (ie 29810 people, that is $0.05 \%$ of the whole sample). So, the breakdown of the population according to the Moon sign at birth is regular.

Breakdown of the French population according to the longitude of the Moon at birth

|  | 5 | 6 | 7 | 8 | 9 | . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| percentage of the sign in the whole sample | 8.33 \% | 8.31 \% | 8.32 \% | 8.36 \% | 8.36 \% | 8.31 \% |
| deviation from the mean | -0.05 \% | -0.22 \% | -0.16 \% | +0.32 \% | +0.28 \% | -0.32 \% |
|  |  | < | $=$ | $>$ | ? | $\cong$ |
| percentage of the sign in the whole sample | 8.34 \% | 8.33 \% | 8.32 \% | 8.35 \% | 8.34 \% | 8.34 \% |
| deviation from the mean | $\begin{gathered} +0.06 \\ \% \\ \hline \end{gathered}$ | -0.09 \% | -0.21 \% | +0.21 \% | +0.04 \% | +0.13 \% |

## Mercury

The French people born as Mercury was transiting from Libra to Pisces are more frequent than the others. The deviation reaches 2563000 people, ie $4.6 \%$ of the whole population.
Aquarius is the most represented sign, as well as Capricorn at a lower level. Surprisingly, Taurus is the less represented sign as well as Cancer and Gemini. The differential between Aquarius and Taurus is worth 662800 people, ie $13 \%$ of the Aquarius frequency.

Breakdown of the French population according to the longitude of Mercury at birth


| zodiacal <br> sign | deviation <br> from the mean |
| :---: | :---: |
| $?$ | $+7.6 \%$ |
| $>$ | $+6.2 \%$ |
| $\cong$ | $+3.6 \%$ |
| $=$ | $+3.5 \%$ |
| $<$ | $+3.3 \%$ |
| $;$ | $+3.2 \%$ |
| 5 | $-1.8 \%$ |
| $:$ | $-2.4 \%$ |
| 9 | $-4.6 \%$ |
| 7 | $-5.7 \%$ |
| 8 | $-6.2 \%$ |
| 6 | $-6.6 \%$ |

mean $=4$

We saw a little while ago that Taurus is the most represented solar sign. As we know that Mercury is always close to the Sun, we could have expected that the most frequent position for Mercury would be Aries or Gemini or, of course, Taurus. But it is not.
It is mainly due to the retrogradation phenomenon. Because of this apparent movement, Mercury, and all the planets besides, seems sometimes to reduce its speed on a precise arc. Consequently, people born on this very period are more numerous than the others.
Now, the Mercury revolution varies in accordance with the sign where the Sun is. For instance, the mean duration of a Mercury «loop ${ }^{2} »$ during the XXth century is worth 57 days when the Sun is in Aquarius and is worth 55 days when the Sun is in Leo. Therefore, mechanically, we can deduct that people born as Mercury was transiting Aquarius are more frequent than those born as Mercury was transiting Leo.
Moreover, when the Sun is Capricorn, Aquarius, Pisces, Aries or Taurus, Mercury is more often transiting the previous sign than the following. It is the contrary when the Sun is in Cancer, Leo, Virgo, Libra or Scorpio.
Associated with the natality seasonality, these two characteristics generate a surplus of births when Mercury is transiting the Winter signs. People born with the Sun in Taurus are the most numerous in the French population as well as those who have Mercury in Aquarius. These two groups are different, of course.

> Breakdown of the French population according to the signs transited by the Sun and Mercury


|  |  |  | $8.1$ $8.1$ |  | $\begin{aligned} & 7.7 \\ & 7.7 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 8.3 \\ & 8.3 \end{aligned}$ |  | $\begin{array}{r} 8.6 \\ 8.6 \end{array}$ |  | $\begin{array}{r} 8.7 \\ 8.7 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 |  | 13.9 |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.2 | 8.2 | 14.0 | 1.1 |  |  |  |  |  |  |  |  |  |  |  |  |
| \#; |  | !:\#; | 50.0 | ! <\#; | 14.4 |  |  |  |  |  |  |  |  |  |  |
| 8.6 | 8.6 | 53.2 | 4.3 | 16.1 | 1.2 |  |  |  |  |  |  |  |  |  |  |

${ }^{2}$ ie when Mercury is transiting a precise arc forward, backward and forward again.

|  | 100 | ！：\＃＜ | 30.7 | ！＜\＃＜ | 50.8 | ！＝\＃＜ | 18.5 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8.6 | 8.6 | 32.7 | 2.6 | 57.1 | 4.4 | 20.7 | 1.6 |  |  |  |  |  |  |  |  |
|  | 100 |  |  |  | 23.7 |  | 52.4 |  | 23.9 |  |  |  |  |  |  |
| 8.6 | 8.6 |  |  | 26.7 | 2.0 | 58.6 | 4.5 | 25.8 | 2.1 |  |  |  |  |  |  |
| \＃＞ | 100 |  |  |  |  | ！＝\＃＞ | 17.9 | ！$>\#>$ | 51.6 | ！？\＃＞ | 30.5 |  |  |  |  |
| 8.9 | 8.9 |  |  |  |  | 20.7 | 1.6 | 57.4 | 4.6 | 32.6 | 2.7 |  |  |  |  |
|  | 100 |  |  |  |  |  |  | ！＞\＃？ | 15.0 | ！？\＃？ | 49.4 | ！ | 35.6 |  |  |
| 8.9 | 8.9 |  |  |  |  |  |  | 16.8 | 1.3 | 52.9 | 4.4 | 37.1 | 3.2 |  |  |
| \＃ | 100 |  |  |  |  |  |  |  |  | ！？\＃ミ | 13.9 | ！ミ\＃ミ | 48.3 | ！5\＃§ | 37.8 |
| 8.7 | 8.7 |  |  |  |  |  |  |  |  | 14.5 | 1.2 | 48.9 | 4.2 | 37.7 | 3.3 |

How to read this table？Each cell is composed by a precise Sun－Mercury pair in sign，an italic typed value，a bold typed value and an italic and bold typed value．That means，for instance，that the pair Sun and Mercury in Taurus represents $\mathbf{4 . 2 \%}$ of the French population，54．0\％of the French people born as Mercury was transiting Taurus and $46.9 \%$ of the French people born as the Sun was transiting Taurus．In the same way，the pair Sun－Mercury in Aquarius represents $4.4 \%$ of the population，49．4\％ of the people who have Mercury in Aquarius and $52.9 \%$ of the people who have the Sun in Aquarius． Those who have Mercury in Taurus represent 28．8\％of the «Sun in Gemini » and 17．3\％of the «Sun in Aries » when the «Mercury in Aquarius» represent 35．6\％of the «Sun in Pisces » and 15．0\％of the «Sun in Capricorn»．

## Venus

Very strong deviations exist in the French population according to the longitude of Venus at birth． Almost one person out of two was born as Venus was transiting 5 special arcs which represent barely $40 \%$ of the zodiac．The following graph is very evocative for astrologers．

Breakdown of the French population according to the longitude of Venus at birth


| zodiacal <br> sign | deviation <br> from the mean |
| :---: | :---: |
| 5 | $+17.3 \%$ |
| $?$ | $+16.0 \%$ |
| $:$ | $+13.9 \%$ |
| 8 | $+8.7 \%$ |
| $<$ | $+8.3 \%$ |
| 7 | $+5.7 \%$ |
| 6 | $-2.8 \%$ |
| $=$ | $-11.0 \%$ |
| 9 | $-11.5 \%$ |
| $>$ | $-11.8 \%$ |
| ? |  |
|  | $-13.6 \%$ |
|  | $-19.1 \%$ |

mean $=4$

By comparing the extremes, we note that around 2140000 people were born as Venus was transiting the 3rd decan of Aries when around 1250000 people were born as Venus was transiting he 3rd decan of Sagittarius. The highest value is barely equal to twice the lowest one.

These deviations are due to the very particular « loops» of Venus. They happen every 19 months in an average on a 15 degrees long arc separated from the previous loop by 210 degrees. Therefore, during the XXth century, the loops were concentrated on the 5 specific arcs we noticed on the graph. The duration of each loop is worth 3.5 months. Therefore, it is logical that a large number of people are concerned by one of these 5 arcs. Moreover, as $60 \%$ of the French population were born after 1950, some of the 5 decans are even more represented than the others.

## The Sun, Mercury and Venus

Breakdown of the population according to the Sun, Mercury and Venus neighbourhood

| Second sign preceeding | $\exists$ |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| the Sun sign |  |  |  |  |  |  |  |
| First sign preceeding |  |  |  |  |  |  |  |
| the Sun sign |  |  |  |  |  |  |  |


|  | ! | ! | $!$ | ! | ! | ! | ! | ! | $!$ | ! | ! | ! | ! | ! | ! |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\exists$ |  |  | \# | \# | \#ヨ | \# | \# |  |  | $\exists$ |  |  |
| Fisrt sign coming |  | $\exists$ |  |  |  | $\exists$ |  |  |  |  | \# | \# | \# | \# | \# |
| after the Sun sign |  |  |  |  |  |  |  |  |  |  |  |  |  | $\exists$ |  |
|  |  |  |  |  | $\exists$ |  |  |  |  | $\exists$ |  |  |  |  | $\exists$ |
| after the Sun sign |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Frequencies | 3.6\% | 6.9\% | 5.9\% | 7.6\% | 0.7\% | 4.7\% | 14.8\% | 11.9\% | 14.9\% | 4.8\% | 0.7\% | 7.5\% | 5.6\% | 6.9\% | 3.6\% |

How to read this table? Mercury and Venus are always very close to the Sun. When the Sun is transiting a given sign (Taurus, for example), we can possibly fing Mercury in the same sign (Taurus) or in the previous sign (Aries) or in the following sign (Gemini). Idem for Venus except that it can be found in the second sign preceeding or coming after the Sun sign (respectively Pisces and Cancer). Only a few people (11.9\%) were born as the Sun, Mercury and Venus were transiting the same sign. But barely $40 \%$ of the French population were born while the Sun and Mercury were in a same sign and Venus in another sign ( $4.7 \%+14.8 \%+14.9 \%+4.8 \%$ ).

Breakdown of the French population according to the longitudes of the Sun, Mercury and Venus Deviation from the mean (= 312 850)

| $!$ | $\#$ | $\exists$ | $\%$ |
| :---: | :---: | :---: | :---: |
| $>$ | $>$ | $?$ | +188.8 |
| $=$ | $=$ | $<$ | +177.0 |
| 6 | 6 | 5 | +159.0 |
| $;$ | $;$ | $:$ | +150.6 |
| 7 | 7 | 8 | +146.9 |
| $;$ | $;$ | $<$ | +145.8 |
| 9 | 9 | $:$ | +144.8 |
| 8 | 8 | 7 | +140.9 |
| $\cong$ | $\cong$ | 5 | +134.7 |
| $\cong$ | $\cong$ | $?$ | +130.6 |
| $?$ | $?$ | $?$ | +123.3 |
| $>$ | $>$ | $=$ | +122.4 |
| $=$ | $=$ | $>$ | +122.1 |


| $!$ | $\#$ | $\exists$ | $\%$ |
| :---: | :---: | :---: | :---: |
| $;$ | $;$ | $;$ | +50.8 |
| 6 | 5 | 7 | +48.5 |
| 6 | 6 | 6 | +47.4 |
| 5 | $\cong$ | $\cong$ | +46.0 |
| 9 | 9 | 9 | +44.4 |
| $:$ | $;$ | $:$ | +42.8 |
| 7 | 6 | 8 | +41.5 |
| $:$ | $;$ | $;$ | +32.5 |
| 7 | 8 | 8 | +28.9 |
| $>$ | $=$ | $?$ | +28.7 |
| 6 | 5 | 6 | +25.9 |
| 8 | 9 | 9 | +25.4 |
| $?$ | $>$ | $>$ | +24.4 |


| $!$ |  |  | $\%$ |
| :--- | :--- | :--- | :--- |
| 8 | 9 | $:$ | -22.7 |
| $<$ | $<$ | $>$ | -23.1 |
| 5 | 5 | 7 | -23.4 |
| $\cong$ | 5 | $?$ | -25.3 |
| $?$ | $\cong$ | $>$ | -25.4 |
| $?$ | $?$ | $=$ | -26.5 |
| $<$ | $;$ | $=$ | -27.4 |
| 5 | 6 | 5 | -28.2 |
| $>$ | $?$ | $=$ | -28.7 |
| 9 | 9 | 7 | -29.2 |
| $\cong$ | $\cong$ | 6 | -29.3 |
| $=$ | $<$ | $=$ | -29.5 |
|  | -30.2 |  |  |


| $!$ | $\#$ | $\exists$ | $\%$ |
| :--- | :--- | :--- | :--- |
| $>$ | $?$ | $>$ | -48.2 |
| 9 | 9 | $;$ | -48.3 |
| $=$ | $>$ | $=$ | -48.3 |
| 9 | 8 | 9 | -48.5 |
| 9 | 8 | 7 | -50.5 |
| $<$ | $;$ | $;$ | -51.8 |
| 7 | 8 | 9 | -52.0 |
| $?$ | $\cong$ | $?$ | -52.2 |
| $?$ | $\cong$ | $\cong$ | -53.8 |
| $?$ | $\cong$ | 5 | -54.0 |
| $\cong$ | 5 | $\cong$ | -56.3 |
| $;$ | $:$ | $;$ | -57.1 |
| $:$ | 9 | 9 | -58.2 |


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| $\infty$ | $\ldots$ | － | ． | の | 112 | $\ldots$ | ． | ． | $\infty$ | V | II | $\wedge$ | u | $n$ | 112 | $\bigcirc$ | V | － | V | 112 | の | V | II | ． | の | $\wedge$ |
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| － | $\wedge$ | $\wedge$ | 112 | ． | V | $\cdots$ | ur | ． | $\bigcirc$ | 112 | $\infty$ | $\bigcirc$ | の | u | $\checkmark$ | $\infty$ | $\checkmark$ | の | $\bigcirc$ | の | 112 | $\infty$ | $\cdots$ | の | $\checkmark$ | ． |
| $\begin{aligned} & \dot{\text { i}} \\ & \text { iv } \end{aligned}$ | $\dot{̣}$ | $\begin{aligned} & \text { í } \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { io } \\ & \text { or } \\ & \dot{c} \end{aligned}$ | $\begin{aligned} & \text { io } \\ & \dot{\circ} \end{aligned}$ | $\begin{aligned} & \dot{\text { i }} \\ & + \end{aligned}$ | $\begin{aligned} & \dot{6} \\ & \stackrel{\rightharpoonup}{+} \end{aligned}$ | ¢ | $\begin{aligned} & \dot{\infty} \\ & \infty \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \infty \\ & \infty \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \dot{0} \\ & \underset{\sim}{\infty} \end{aligned}$ | $\begin{aligned} & \infty \\ & \infty \\ & \infty \\ & \infty \end{aligned}$ | $\begin{aligned} & \dot{0} \\ & \underset{\sim}{0} \end{aligned}$ | $\stackrel{\infty}{\stackrel{\infty}{0}}$ | $\stackrel{\infty}{\square}$ | $\stackrel{\infty}{\stackrel{\infty}{\omega}}$ | $\stackrel{1}{4}$ | 亡 | －${ }_{\text {ir }}$ | $\begin{aligned} & \dot{6} \\ & \underset{-}{2} \end{aligned}$ | $\begin{aligned} & \text { '্ } \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \text { த } \\ & \text { M } \end{aligned}$ | $\begin{aligned} & \text { os } \\ & \text { or } \end{aligned}$ | $\begin{aligned} & \dot{\alpha} \\ & \underset{\sim}{N} \end{aligned}$ | $\begin{aligned} & \text { ' } \\ & \text { © } \\ & \text { on } \end{aligned}$ | $\begin{aligned} & \dot{\top} \\ & \dot{\omega} \end{aligned}$ | $\begin{aligned} & \text { ' } \\ & \text { ì } \end{aligned}$ |



How to read this table? The grey cells have to be considered as examples. People who have the Sun in Cancer, Mercury in Gemini and Venus in Leo correspond precisely to the mean value (312 850 people). Half this value ( $-50.5 \%$ ) corresponds to people who have the Sun in Leo, Mercury in Cancer and Venus in Gemini. A little more than twice the mean value (+103.6\%) corresponds to people who have the Sun and Mercury in Gemini and Venus in Taurus.

## Mars

Half the French people were born as Mars was transiting a large 5 -signs arc delimited by Cancer and Scorpio.
Virgo is the most represented sign according to the Mars longitude at birth (5 565000 people). In a symmetrical way, Pisces is the less represented sign. The differential between Virgo and Pisces is worth 171400 people, ie $31 \%$ of the Virgo frequency.

## Breakdown of the French population according to the longitude of Mars at birth



| zodiacal <br> sign | deviation <br> from the mean |
| :---: | :---: |
| $:$ | $+18.6 \%$ |
| 9 | $+16.7 \%$ |


| $;$ | $+14.6 \%$ |
| :---: | :---: |
| 8 | $+12.5 \%$ |
| $<$ | $+7.1 \%$ |
| 7 | $-0.1 \%$ |
| $=$ | $-5.6 \%$ |
| 6 | $-6.2 \%$ |
| 5 | $-10.9 \%$ |
| $>$ | $-11.0 \%$ |
| $?$ | $-17.6 \%$ |
|  | $-17.9 \%$ |

mean $=4$

These strong deviations are due to the «loops» of Mars. They occur every 2 years in an average, on a variable arc of 10 to 20 degrees. Their duration is worth 5 to 7 months.
The loops of Mars are much more frequent and more long-lasting in Cancer, Leo, Virgo, Libra and Scorpio than anywhere else. Between 1900 and 1990, they were twice as numerous as the dozen of loops which occured in Capricorn, Aquarius, Pisces, Aries and Taurus.

## Venus and Mars

The association of the diverse retrogradation loops of Venus and Mars generates important disparities in the population.
Considering the pairs of signs where Venus and Mars were at birth, Virgo takes up a great deal of room : 17 French people out of 1000 were born as both planets were transiting Virgo. On the contrary, 2 pairs (Venus in Virgo and Mars in Aquarius, Mars in Pisces and Venus in Leo) may seldom be met : only 1 person out of 1000 corresponds to one of these two conformations.

Breakdown of the French population according to the longitudes of Venus and Mars at birth deviation from the mean (= 391 000)

|  | $\exists 5$ | $\exists 6$ | $\exists 7$ | $\exists 8$ | $\exists 9$ | $\exists$ : | $\exists$; | $\exists<$ | $\exists=$ | $\exists>$ | $\exists$ ? | ヨ® |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \%5 | +94.7\% | +3.4\% | +24.4\% | -48.0\% | -24.2\% | -61.6\% | -73.7\% | -66.6\% | -17.1\% | -13.2\% | +30.7\% | +17.7\% |
| \%6 | +60.9\% | +74.2\% | +11.2\% | +24.0\% | -29.2\% | -29.7\% | -74.6\% | -56.3\% | -59.7\% | -36.1\% | +54.4\% | -10.2\% |
| \%7 | +74.0\% | +35.5\% | +81.7\% | +60.0\% | +8.9\% | +21.6\% | -28.4\% | -74.7\% | -76.7\% | -68.8\% | -24.2\% | -9.4\% |
| \%8 | +66.7\% | +55.7\% | +63.0\% | +98.3\% | +29.7\% | +65.0\% | -18.8\% | -35.7\% | -66.2\% | -50.1\% | -41.0\% | -15.6\% |
| \%9 | -22.5\% | +22.3\% | +79.5\% | +89.7\% | +82.6\% | +84.6\% | +11.2\% | +52.0\% | +11.0\% | -63.9\% | -76.0\% | -67.7\% |


| \%: | -37.0\% | -46.4\% | +21.4\% | +61.8\% | +41.4\% | +143.3\% | +45.5\% | +34.8\% | -8.3\% | -7.0\% | -10.7\% | -18.8\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \%; | -65.7\% | -43.7\% | -0.4\% | +15.0\% | +15.4\% | +74.7\% | +50.8\% | +110.0\% | +41.2\% | -21.8\% | +60.1\% | -62.8\% |
| \%< | -8.5\% | -35.3\% | -57.2\% | -46.0\% | +5.9\% | +46.5\% | +5.5\% | +70.0\% | +45.3\% | +59.3\% | +22.9\% | -24.6\% |
| \%= | +38.7\% | -52.2\% | -74.2\% | -66.2\% | -44.5\% | +5.3\% | +21.6\% | +36.1\% | +15.2\% | +28.8\% | +49.3\% | -25.9\% |
| \%> | -31.5\% | -27.7\% | -49.6\% | -61.8\% | -61.6\% | -32.3\% | -23.4\% | +45.1\% | +32.9\% | +13.6\% | +41.7\% | +19.7\% |
| \%? | +2.1\% | -5.6\% | -29.4\% | -36.4\% | -73.7\% | -81.3\% | -69.4\% | +29.9\% | -23.2\% | +26.4\% | +50.7\% | -1.1\% |
| $\% \cong$ | +41.5\% | -18.8\% | +10.3\% | +1.7\% | -80.4\% | -78.1\% | -76.9\% | -35.5\% | -35.1\% | -3.8\% | +33.9\% | +29.8\% |

Considering now the 1296 possible pairs of decans which could be transited by Venus and Mars at birth ( 36 decans for Mars x 36 decans for Vénus), we observe that half the French population is gathered in only 290 precise pairs. On the contrary, only a fifth of the population is gathered in about half the pairs of decans. Lastly, 88 pairs are never represented.

## Jupiter

The breakdown of the population according to sign transited by Jupiter at birth shows strong deviations. The deviations are much more huge regarding the decans transited by Jupiter. One decan out of two is characterized by a very large frequency.
So, the frequency of the 3rd decan of Scorpio, which is the most represented decan, is superior by $63 \%$ to the frequency of the 1 st decan of Taurus, which is the less represented decan.

Breakdown of the French population according to the longitude of Jupiter at birth

| zodiacal <br> sign | deviation <br> from the mean |
| :---: | :---: |
| $<$ | $+9.8 \%$ |
| $<$ | $+9.1 \%$ |



| $=$ | $+7.8 \%$ |
| :---: | :---: |
| $:$ | $+3.4 \%$ |
| $>$ | $+1.2 \%$ |
| $?$ | $-0.5 \%$ |
| 9 | $-3.7 \%$ |
| 8 | $-3.9 \%$ |
| 5 | $-4.6 \%$ |
| 7 | $-4.6 \%$ |
| $\cong$ | $-5.4 \%$ |
| 6 | $-8.5 \%$ |

mean $=4$

The «loops» of Jupiter occur every year on a $10^{\circ}$ large arc. Every 12 years, on an average, a loop occurs again on almost the same arc, with a shift of 5 degrees. The demographic concentrations linked to the Jupiter longitude are due to an adding up of different short generations born as Jupiter was looping on the same precise arc.

## Saturn

The very strong deviations that the following graph shows are due to the cycles that Saturn completed during the XXth century and to the age structure of the population. The French people who have been observed in this study were all born between 1900 and 1990. During that time, Saturn transited each astrological sign 3 times, except Capricorn (4 times as Saturn was in Capricorn in 1900 and in 1989 as well). The period of Saturn lasts 29,46 years on an average. In others words, a transit of Saturn in a given sign lasts less than 2.5 years.


| zodiacal <br> sign | deviation <br> from the mean |
| :---: | :---: |
| $=$ | $+24.8 \%$ |
| $<$ | $+20.3 \%$ |
| $>$ | $+20.2 \%$ |
| $;$ | $+17.0 \%$ |
| $:$ | $+8.5 \%$ |
| $?$ | $-9.1 \%$ |
| $\cong$ | $-9.3 \%$ |
| 9 | $-9.9 \%$ |
| 7 | $-10.4 \%$ |
| 5 | $-16.0 \%$ |
| 6 | $-16.0 \%$ |
| 8 | $-20.0 \%$ |

mean $=4$

Among the 56 million French people who were questioned on the occasion of the census in 1990, 60\% were born after 1950. Now, Saturn transited Aquarius, Pisces, Aries, Taurus, Gemini, Cancer and Leo twice between 1900 and 1950, but only once between 1950 and 1990. On the contrary, Saturn transited Libra, Scorpio and Sagittarius once before 1950 and twice after.
In the French population, one person out of two was born as Saturn was transiting an arc delimited by the 20th degree of Libra and the 20th degree of Capricorn.

## Uranus, Neptune and Pluto

Breakdown of the population according to the longitudes of Uranus, Neptune and Pluto at birth

| * | 1st <br> decan | 2nd <br> decan | 3rd <br> decan |
| :---: | :---: | :---: | :---: |
| 7 |  | -85.6 \% | -26.3 \% |
| 8 | -6.2 \% | +35.2 \% | 29.0 \% |
| 9 | +15.1 \% | +52.4 \% | 33.6 \% |
| . | +27.2 \% | +12.6 \% | 14.3 \% |
| ; | -3.1 \% | -14.8 \% | -12.9 \% |
| $<$ | -17.2 \% | -53.3 \% |  |


mean $=3519600$
mean = 2681600
mean = 1564300

Pluto and Neptune were both transiting the first half of Gemini at the beginning of the XXth century while Uranus was around $12^{\circ}$ Sagittarius. Some 90 years later, Neptune and Uranus were both transiting the first half of Capricorn while Pluto was in the middle of Scorpio. The apparent movement of these 3 planets is very slow : the period of Uranus is worth 84 years, the period of Neptune 165 years and the period of Pluto 248 years. Therefore, the route they made on the ecliptic between 1900 and 1990 is narrow : $150^{\circ}$ for Pluto, $210^{\circ}$ for Neptune and a whole cycle for Uranus.
In the French population, 1 person out of 4 was born as Pluto was transiting Leo, 1 person out of 5 was born under a Neptune transit in Scorpio.

Crossed breakdown of the French population according to the longitudes of Uranus, Neptune and Pluto at birth - Deviation from the mean (=563 100)




How to read this table? The grey cells have to be considered as examples. People who have Pluto in the 1st decan of Libra, Neptune in the 2nd decan of Sagittarius and Uranus in the 1st decan of Scorpio correspond precisely to the mean value (563 100 people). Half this value ( $-50.6 \%$ ) corresponds to people who have Pluto in the 3rd decan of Cancer, Neptune in the 3rd decan of Virgo and Uranus in the 2nd decan of Taurus.
A little less than 3 times the mean value (+198.8\%) corresponds to people who have Pluto in the 3rd decan of Libra, Neptune in the 3rd decan of Sagittarius and Uranus in the 1st decan of Sagittarius.

## A demographic outline which has to be taken into account

A census is a demographic «snapshot». It shows that a population, observed as a whole, presents various disparities according to the signs transited by the Sun and by the planets at birth. Only the Moon movement generates no significant deviations.
The disparities are due to the seasonal rythm of fecondity, to the retrogradation phenomenon and to the planets' speed.

The seasonal rythm of fecondity varies a lot according to the latitude of the place of birth as we can see by looking at some statistics of the world natality concerning the year 1993. In Sweden (Stockholm, $59^{\circ} 20$ north), where winter is so severe, Aries babies are very frequent ( $+14 \%$ in comparison with the mean). On the contrary, in Spain (Madrid, $40^{\circ} 25$ north), where the seasons changing is not really pronounced, the natality is regular all along the year. In the south hemisphere, the trend is reversed. For instance, in Chile (Santiago, $33^{\circ} 30$ south), Virgo babies are the most frequent ( $+7 \%$ in comparison with the mean). But the natality variations are not only due to climatic conditions. Nowadays in France (Paris, $48^{\circ} 52$ north), Cancer babies are the most frequent ( $+7 \%$ in comparison with the mean). One may think that this new French behaviour has to see with the birth control legislation.

The disparities linked to the retrogradation phases and to the planets' speed are universal. They concern not only the French people but any group of people, wherever they were born. They have direct implications on the astrological research. In order to avoid any interferences, it is essential they should be taken into account when a population is to be studied and when a control group or a random sample are to be constituted. The age structures have also to be respected carefully.

## Annex

## French population census




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A general population census was realized in France during March and April 1990 (decree 89-274, 26/04/1989)

The population is constituted by all the people who were living in France, whatever their nationality is. In particular, neither the French people living abroad nor the foreigners passing through France were questioned.

The total population of the European area of France is estimated to 56615155 people on the 5 th of March 1990. It is observed in order to identify demographic groups according to the zodiacal longitude of the Sun, the Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto at birth. The longitudes have been ranked in 12 astrological signs or 36 decans (one tenth of a sign).

| 5 | Aries | 9 | Leo | $=$ | Sagittarius |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Taurus | $:$ | Virgo | $>$ | Capricorn |
| 7 | Gemini | $;$ | Libra | $?$ | Aquarius |
| 8 | Cancer | $<$ | Scorpio | $\cong$ | Pisces |

In this study, the French population is limited and corrected :

- as they represent a rather scattered group, people born before 1900 are removed from the study field;
- people born on the 1st of January are distinctly more numerous than people born on another day. This particularity is due to immigration for it happens that foreigners settling in France ignore their day of birth. Therefore, it is said that they were born on the first day of the year. In this study, for each year, the frequencies of people born on the 1st of January are replaced by a mean value calculated from the $31 / 12$ and $2 / 01$ frequencies.

This limitation and this correction generate a slight error of $0.5 \%$ : the study population reaches 56313173 people.

