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On the doctoral thesis of Ms Germaine (Elizabeth) Teissier

By Prof. Henri Broch

Laboratoire de Zététique Université de Nice-Sophia Antipolis, France

Rendered in English, with added comments, by Jan Willem Nienhuys

Skepsis, Netherlands e-mail: j.w.nienhuys@tue.nl

English summary in the original French version : Concerning the doctoral thesis of Ms Germaine Teissier (known as Elizabeth Teissier)

The 2001 doctoral thesis in sociology of the french astrologer Elizabeth Teissier is in fact **falsely sociological** but **a really botched-up job**; far away from the requested formal level for a doctoral work. This thesis contains dishonest quotations, many unproven allegations and some *false* ones. The great number of quite *ridiculous errors* about the movements of the celestial sphere annihilates all and any credibility concerning this mediatic star's allegations about... signs and stars.

This paper is a rapid survey of Teissier's incoherences whether mild or profound. Hence she demonstrates 1) a total *ignorance of the basis of the matter* she writes about and 2) using Mrs Teissier's own words, also her *fanaticism, intolerance and lack of humility*.

But the goal of the present text is *not* to shoot at Teissier who, very astutely, has taken advantage of **the** *intellectual weakness* **and/or** *incompetence* **of some academics**. But to be careful not to place the responsability into the wrong lap. The aim of the present text is to clearly **point the finger at the nincompoops who accepted to ratify such nonsense**.

Ms Germaine Elisabeth Hanselmann, better known as Elizabeth Teissier, has defended a doctoral dissertation in the Sorbonne (University of Paris V) on April 7, 2001. The subject was allegedly sociology, and the thesis title was *Situation épistémologique de l'astrologie à travers l'ambivalence fascination/rejet dans les sociétés postmodernes* which translates of course into : *Epistemological situation of astrology across the ambivalence fascination/rejetins*. From now on I will refrain from providing the French originals of the texts. They can be examined in the French version of this exposition.

Remark. It has been conjectured that Teissier is an artist's name, as she is not known to be married, and as she is living together since 1981 with an Austrian journalist named Gerhard Hynek.

However, on April 23, 2001, Elizabeth Teissier pointed out to *Le Monde* that Teissier is her legal married name. According to an astrological site (astrodatabank.com/NM/TeissierElizabeth.htm) she married a Mr. André Teissier le Cros in 1960, whom she divorced in 1983.

Part I of her thesis is authored by "Elizabeth Teissier", but part II is authored by "G. Elisabeth Hanselmann-Teissier".

Below I will show that Teissier is quite ignorant about astrology and that she is (to use her own words) fanatical, intolerant and immodest in presenting astrological claims.

Explanation. On page 292 Teissier implies that scientists in general are completely ignorant about astrology and on p. 758 she deplores the fanatical, intolerant and immodest attitudes of scientists. Actually she hardly uses the French word for scientist. She mostly refers to scientistics, i.e. people who are overly confident of science, suffer from scientism.

The criticisms below may seem to be directed at her, but should<u>n't</u> be interpreted that way. On the contrary. Teissier has merely taken advantage of the intellectual weakness of some French academics. Implicitly, and sometimes explicitly, **I criticize the nincompoops who accepted to ratify such nonsense**.

The members of the jury were:

- Chairman : Serge MOSCOVICI, sociologist. Retired director of studies, EHESS (Ecole des Hautes Etudes en Sciences Sociales, School of Higher Studies in Social Sciences).

- Thesis director : Michel MAFFESOLI, Professor of sociology (Paris V).
- Françoise **BONARDEL**, Professor of philosophy (Paris I).
- Patrick TACUSSEL, Professor of sociology (Montpellier III). The following persons were absent :
- Gilbert DURAND, Professor-emeritus of sociology (Grenoble II).
- Patrick WATIER, Professor of sociology (Strasbourg II).

Tacussel and Watier were charged with reading the thesis, reporting on it, and judging whether its quality, of form and content, justifies awarding a Ph. D.

I have been able to read this thesis because someone photocopied Teissier's copy for me, and I would like inform you of certain aspects of it, essentially the nonsociological parts. I will leave the sociological parts to my colleagues in sociology.

Typos and worse. Was this read at all by the jury ?

The defendant produced a shoddy piece of work. It is simply riddled with typing and spelling errors. For a doctoral thesis that is something serious. It's after all not a draft of an article for a tabloid paper. A few examples from a very long list of oddities :

- "paraitement" (should be "parfaitement")
- "nous révélent und astrologie" (should be "une astrologie")
- "toténisme" (should be "totémisme")
- "athropologiquement" (should be "anthropologiquement")
- "puisants moyens financiers" (should be "puissants")
- "signaléons en passant" (should be "signalons")

- "le ludique trime en l'occurrence" (should be "prime en l'occurrence")

- "psychiâtre" (should be "psychiatre")

- "INDEX THEMATHIQUE" (should be "THEMATIQUE")

Comment by JWN. These errors could all have been caught by using a spelling checker. We must conclude that Teissier has been too lazy to use such a programme. The following errors are harder to catch for a computer. When the author doesn't know the name of a Scottish lake or a famous American university town then it doesn't help much when the computer signals that it is an unknown word.

- "*Hrpocrate*" (should be "Hippocrate")

- "La Gnose de Prinston" (should be Princeton; the term "Gnosis of Princeton" means in France modern physics, more particularly quantum mechanics, as interpreted by the New Age.)

- "le monstre du Lockness" (should be "Loch Ness"; these are just three of many mutilated names)

- "*est*" (is) is written, when it should be "et" (and)

- "cette acceptation trinquée" (should be "tronquée"; "trinquée" suggests a clinking wine glass)

- *"le plus ancienne figuration"* (should be "la plus ...", because "figuration" has female gender, as can be seen from the choice of "ancienne")

- "*Comité belge* ... *présidée par l'astronome* ..." (should be "présidé", because "comité" has male gender)

- "*l'astrologie statique* ... font appel \dot{a} " ("astrologie" is singular, "font" doesn't match, because it is plural)

- "les claviers de la créations" ("la" indicates singular, but "créations" is plural)

- *"une évolution compléte de Zodiaque"* (should be "révolution")

- "qui étaient plus non moins" (should be "plus ou moins")

We French have a nice habit of writing oe as a ligature like in the words "cœur" (heart) "œil" (eye) and "sœur" (sister), but Teissier seems not to know this (neither do some versions of html). Her way of referring to centuries is strange and wrong.

Additional comment. In France, the second century is the "deuxième siècle". The word for "second" is also written as II^e as II^{eme} (or similar with Arabic numerals instead of Roman numerals). As French ordinals almost all end in ème the other ordinals are treated likewise. But Teissier writes IIè and XIXè etc. in her thesis.

Opening brackets, quotation marks and dashes - the ones that set apart phrases - have often no closing counterpart, which makes for hard reading. One often can't tell where one of her quotations ends. Sometimes even sentences seem not to end at all.

In the same vein, the title of the famous book by Copernicus *De revolutionibus orbium coelestium* (About the revolutions of the spheres of the heavens) is once rendered correctly and a few lines down with "orbis" ("of the sphere") rather than with "orbium" ("of the spheres").

She places Hipparchus, who lived in the second century B.C.E., in the second century C.E. One doesn't believe one's eyes reading that at first.

When she speaks about scientific discoveries, she mentions specifically the telescope of Galilei. She uses the word "télescope", which in French is used exclusively for a reflecting

telescope, i.e. with a hollow mirror (invented by Newton and Cassegrain). The telescope with lenses (used by Galilei) is called "lunette" in French (the plural of same word means spectacles).

Comment by JWN. Galilei was the first to publish about all the interesting things one can discover with a telescope when one points it at the stars, the moon, and the planets, but he didn't invent the telescope. He discovered that such an instrument was made by the Dutchman Hans Lipperhey, and then quickly made one himself after he had heard how it was constructed. He quickly made several improvements, so it is wrong but not very wrong to call him discoverer.

It is incomprehensible that the jury let such a sloppy piece of work pass.

Remark by JWN. Henri Broch is much too kind. I have had the opportunity to examine Teissier's thesis, and I found it much worse than I expected from the description given here. In some places sentences seem to end halfway a word. Typing errors such as 1) instead of p seem to indicate that parts of the thesis were obtained by scanning previously printed material, followed by not bothering to correct numerous errors of the OCR program used.

A thesis about what ?

The thesis of Teissier allegedly is about <u>sociology</u>. However, she dares to write : "Without entering a discussion about the philosophy of sociology, <u>which would be out of place here</u> ...". No comment.

The thesis is filled with many pages that only can be characterized as **pure babble**, interspersed with emotional digressions about various subjects and quotes that have nothing to do with the subject matter at that point. It's even not clearly defined what the thesis is about. The whole thing seems more meant to be an intellectual show-off (and a poor one at that) than an academic dissertation.

Comment by JWN. Another interpretation is that the whole thing has been written through a process akin to automatic writing. In automatic writing works of art (the music of Rosemary Brown, the paintings of Ossowiecki), scientific "information" (the archeology of Frederick Bligh Bond), but also large books have been produced such as *Oahspe* (1882), a kind of Bible written by John Ballou Newbrough, and also *A Course in Miracles* by Helen Shucman. The process of chanelling likewise produces endless streams of words without interference from the critical mind. Great stuff for various religions, but no dissertation material, of course. This "automatic writing" hypothesis is suggested by the absence of indications that any thinking has gone into this dissertation.

Her text is in fact **a plea for astrology**. She doesn't hesitate to display various letters and "answers", in the (wrong) supposition that this applies to the credibility of astrology.

She also goes into great detail about her relation with president François Mitterrand, apparently thinking that this will raise the status of astrology. The only effect is, however, that

it drags the name of the former president into the mud, maybe correctly so. It was Mitterrand who confused *astrology* and *astronomy* when he spoke for a meeting of scientists, and who was fascinated by talk about turning tables and poltergeists.

Teissier brags (p. 450) about how President Mitterrand had "asked her to sketch the astral portrait" of P. Bérégovoy. To me it means that the intellectual darkness during that term of Mitterrand had reached its pitch black depth. I recall that the learned calculations of professional astrologer Teissier did not foresee that prime minister Bérégovoy would commit suicide.

Should we suppose that the members of the jury have done their duty and asked the defendant to provide references that proved the validity of her statements about various politicians and heads of state ?

I ask this because Ms Teissier is not very strong in the precision department. For example, look at what she has to say on p. 639 :

"the Zetetic Club (the etymology of this name remains a mystery) ... a certain Cuniot, who is one the pillars if not the inspirer ..."

Actually it's the "Zetetic <u>Circle</u>" which Teissier tries to pass off as a sect, and Alain Cuniot is *neither* a pillar, *nor* an inspirer of this "club". If Teissier had been only a little bit curious about the meaning of "Zetetic", she could have consulted a simple dictionary, or maybe she could have read a few lines on the cover of the book by Cuniot, that <u>she quotes</u> extensively on that *same* p. 639.

Ms Teissier tries to convince her readers that the opponents of astrology are merely morons that have been overtaken by the New Scientific Spirit.

Additional comment. Teissier uses strong language, possibly because she lacks other arguments. On p. 42 (remember, in a supposedly academic treatise) : *"the aggressive rationalists who are allergic to the stars"* and on p. 767 : *"the militants of official science"*.

She does so by larding her work with various small errors, witticisms and dubious arguments. Throughout her work we find the intolerant argument "You aren't an astrologer, hence you are not competent to speak on this subject." Teissier pretends not to know that one only can discuss someone's competence in a branch of science, if there's a branch of science to begin with. Astrology simply isn't a branch of science.

Comment by JWN. The ironic flavor of this remark (Teissier pretends...) is lost in translation. Teissier thinks that astrology is a science whatever she means by that, and she is quite well aware of the protests of the fanatical and intolerant scientistics with their immodest know-all claims. The competence argument seems to be an implicit way of affirming the legitimacy of astrology as branch of reliable knowledge.

All the same she keeps insisting (like the outpouring on p. 740) : "Like many scientists, the latter allows himself to judge a discipline about which he is totally ignorant." All such remarks presuppose the validity of astrology, and hence we are seeing here one example after the other of circular logic. University freshmen should be able to detect them, but the illustrious members of the jury missed them somehow. Curiouser and curiouser...

We might smile upon such small things, but there are statements that are much worse. How can a jury accept statements like :

(p. 213) "Recent investigations have allowed us to establish a relation between cancer and even AIDS with the dissonances of these two planets [Neptune and Pluto] with respect to the natal theme."

or

(p.239) "... miscarriages, uterine cancers and other gynecological disorders are foreseeable, because they become more probable by the transit of a dissonant star sign."

Such **medical** statements, written black on white and in the public's eye validated by the university, could have bad consequences. Did the jury notice these medical claims at all ?

On p. 98 we find : "The difference between astronomy, the science of observation, and astrology, the human science, is that the latter assumes an influence of the stars on earthly life and hence can claim to be an experimental science."

So astronomy apparently is not experimental and moreover denies an influence of the stars on life on earth. In other words, astronomers deny the heat of the sun and the tides of moon and sun.

Remark by JWN. Possibly ET suffers from the misapprehension that astronomers only look at the stars and that mere observation doesn't count as experimentation. But as soon as you have sensible hypotheses that are put to any kind of sensibly constructed test one has "science". And naturally, sending carefully designed space vehicles to explore the planets is quite "experimental".

It's incredible that the jury has let such absurdities pass. Read what Teissier has to say about rationalism : (p. 191-192) : "...rationalism, which refuses all phenomena, even those that have been empirically observed, when they can't be explained scientifically... ".

This definition is totally <u>wrong</u>.

Remark by JWN. I'll risk the reproach that I'm stating the obvious. Rationalism never rejects phenomena, although it systematically doubts that they are correctly reported when the reports seem to contradict science, i.e. knowledge that is provably very secure and reliable. Paraphrasing Randi and Sagan, if someone tells you a peacock flew into his garden, there's not much that rationalism can reject, but if the reputed phenomenon is a dragon in the garage, then a rationalist would severely doubt that, even though the person reporting it said she experienced it herself.

Ms Teissier also ventures into fashionable but **fictitional archeology**.

She claims for instance that "Stonehenge was used to predict lunar and solar eclipses", and that the tunnels and slopes of the pyramids "were observation posts that helped to perform clever astronomical calculations" (p. 133). According to her "the Great Pyramid was cosmically oriented" (p. 224) and so are the megalithic constructions of Stonehenge and Carnac "which science now recognizes to be lunar and solar observatories of high precision."

Any specialist could have told her that this is rubbish. Of course these sites, like many others, *are* astronomically oriented, but they can hardly be called observatories, let alone ones with high precision.

Additional comments. The pyramids are quite carefully oriented. One will recall that the minute deviations from the exact north-south directions recently have been explained as the result of an Egyptian astronomical technique that, naturally, didn't take the precession of the equinoxes into account. Hence it was possible to assign a better date to some of the pyramids.

One could use Stonehenge to guess approximately which week is the summer solstice (if one has lost count of the days). Maybe these monuments were ever used, as giant quadrants, to perform astronomical observations. But there is no scientific evidence whatsoever for this, and much evidence that flatly contradicts it.

For example, the pyramids were tombs. How could a tunnel inside a sealed tomb serve to perform any observation, astronomical or otherwise ? The statements about Stonehenge as a kind of eclipse computer are actually the long discredited fantasies of Gerald Hawkins. That megalithic monuments could serve as precision instruments contradicts their crude outlines that would produce errors of many times the apparent diameter of the sun or moon.

Then Ms Teissier quotes Lyall Watson (*Supernature : une nouvelle histoire naturelle du surnaturel*, Albin Michel, Paris, 1988), the translation of Watson's *Supernature : The Romeo Error* (1974). This is a popular book positively brimming with errors and fantasies like pyramid models that can sharpen razorblades. Ms Teissier creates the impression that she considers the zoologist Watson to be a great scientist.

Ms Teissier borrows the most outrageous ideas from various fringe sciences and even anecdotes and calls them all "scientific". For example (p. 261) : "Certain recent experiments, like the life fields of Burr or Sheldrake, ... which show the outlines of the adult plants around the young shoots."

Remark by JWN. The ideas of Sheldrake about morphogenetic fields are highly contentious, to say the least, but compared to this rendering they almost sound like rock solid science. Let's pass over the fact that these fields aren't experiments at all. The reference to Burr is mystifying. Teissier doesn't give any further reference.

Not only does Teissier not list any works by "Burr", but in her index she mentions two pages where "Burr" supposedly occurs. P. 261 is not among them, and the pages she does list do not have any "Burr" as far as we could tell.

Harold Saxton Burr was a neurophysiologist from Yale. Born in 1889, he started reporting about tiny (20 millivolt) potential differences between parts of the human body, embryos and even plants, from 1935 on. He expanded his findings in his book *Blueprint for Immortality*. *The Electrical Patterns of Life* (1972). He was convinced that such small electrical fields were the main organizing principle of the universe and life. His views have, as far as we can determine, not made any impression on medical science. Small potential differences, much less than those between the inside of a nerve and the outside, are probably best considered as a side effect of the fact that life is not an equilibrium state of matter. Sheldrake does mention Burr in chapter 4 of *A New Science of Life* (1981), but according to Sheldrake (private commnunication) it didn't influence him very much. Sheldrake's thoughts hark back to theories about embryology of the 1920s, as he himself indicated in chapter 6 of *The Presence*

of the Past (1988). Teissier seems to confuse the ideas of Sheldrake and Burr with a distorted version of the so-called phantom leaf phenomenon in Kirlian photography. Burr's theories have vanished without a trace from regular science, but an Internet search of 'Harold Saxton Burr' will reveal that his ideas are perpetuated in New Age circles.

How could the jury accept this delirious rendering of "morphogenetic fields" as description of a scientific experiment ? How could they think that this has any relevance for sociology ?

Remark by JWN. Cultural anthropologists might record the strange myths that circulate in isolated communities that are cut off from the realm of reliable knowledge. But in doing so, they should not start to believe these myths themselves. Theoretically a hardy cultural anthropologist could penetrate the community of the superstitious pseudo-intellectual Parisians, and faithfully record their New Age myths, of course without believing any of it. Here we have a work with scientific pretenses in which these myths are actually held up as sober truths.

Fake quotes

Worse than the above is that Teissier distorts quotations.

Her chapter "The reactions", comprising pages 291-294, is entirely dedicated to an article from the *Journal du Dimanche* (a French popular Sunday magazine). The article is an interview with yours truly, which naturally roused my interest.

Ms Teissier does not refer to any of my publications. I would like to remark here that any doctoral candidate would not rely completely on an interview. Consulting one or more of the works of the interviewed person would always produce a much better and more complete exposition of the arguments presented. Judging from her thesis she is simply unaware of any publication by me, and she hasn't taken the effort to obtain them. She even doesn't give references for what she quotes, making it very hard for the average reader to check what she writes. Let me repair her omission. It's in the issue of September 13, 1998, and anyone can check the original article, because it's on the Zetetic website and can be found through www.unice.fr/zetetique/articles/index.html, both as a clear text and as a facsimile.

In that interview I argued that astrology is a pseudoscience. Teissier goes on for four pages about this interview, but she almost completely skips its contents, and naturally she presents no counterargument either. I call that manipulation.

She merely lifts some small parts from the article and tries to manipulate the information. She writes :

"Next Broch explains about the precession of the equinoxes ... He kicks in open doors and sows confusion in the mind of the reader, because unexactness in the utterances of a scientist cannot but reflect the reality of the facts in the mind of the latter."

Here "latter" means, quite ungrammatically, the reader. She continues :

"For example the physicist asserts that 'certain astrologers even don't take the last discoveries into account, such as the discovery of the planet Pluto in 1930 or Charon (E. Broch probably means Chiron; we give him the benefit of the doubt, it might be a typing error

of the journalist.) in 1978.' Apparently he doesn't know that the symbolism of Pluto has mostly come to light already and that it is used by astrologers."

Germaine (that's her *true* first name) has clearly some problem with names, which results here into a **sublime absurdity**. For example I'm Henri (not E.). The asteroid Chiron was discovered in 1977. But **the media astrologer seems not to know Charon at all**. It's Pluto's moon, or better : Pluto and Charon are two tiny planets that circle each other, which was discovered in 1978 (the name is *obviously* chosen to reflect their close relationship). Any of the jury members could have caught this error, and should have mentioned it during the thesis defense.

Comment by JWN. One doesn't have to be astrologer or astronomer to know this all of course : a single glance in any general encyclopedia would have told E.T. or the jury members the pertinent facts. Note that Chiron and Charon both are well known names from Greek mythology : Chiron was named after the wise centaur who taught Achilles and Asclepios, and Charon was the ferryman who took the departed souls across the river Styx to the Nether World, i.e. to the domain of Pluto.

To me her way of quoting is the most shocking, however, because she **intentionally cuts off** my quote at a crucial point. She slips in a remark implying that I'm not aware of the fact that the symbolism of Pluto is now largely known :

"Clearly he [Broch] doesn't know that the symbolism of Pluto has mostly come to light already, and it is used by the astrologers."

But the interview continues after "1978" as follows :

"Those that do take them into account are in serious trouble, because of the period of these planets, more precisely the time they take to go once around the sun, namely 248 years. In the 60 years that we know this planet, it hasn't completed even a single orbit, and it has only passed three signs of the zodiac. How can then the astrologers know its influence on all other signs ?"

An even more seriously butchered quote appears little below :

"In large letters one can read there actually : 'Wherever one is born in the world, one is credited with the false sign, because the zodiac has shifted. An astonishing oversight. In fact, when one counts the zodiacal signs, we find the number of the twelve constellations !' In fact, it runs through many more, and the astrologers know that."

Here the quotation is severely mangled and makes no sense at all. She refers to a caption (in large type, containing shortened sentences from different parts of the interview) surrounding a photograph of me. Instead of the last sentence she seems to quote, the caption said :

"In fact, when one counts the zodiacal signs, we find 12. However, as the Sun circles the Earth in its apparent motion, it passes in one year ... 13 constellations !"

I want emphasize that E.T.'s misquotation cannot be the result of accidentally dropping one or two lines. What about E.T.'s remark that *"it* (i.e. the Sun) *runs through many more"*? She seems hopelessly out of touch with simple facts about the sky, after all 13 is not "many more" than 12. She confuses the apparent path of the Sun, which cuts through the zodiacal constellations, with the zodiacal belt. The planets and the Moon can occupy various places in this belt. This belt passes through almost 40 constellations, but the Sun **doesn't pass** through most of them.

Any doubt about E.T.'s deficient astrological knowledge are removed when we read her ridiculous statement that the constellations are "situated *behind* the signs". Her italics!

Comment by JWN. The path of the Sun between the stars is called ecliptic. Traditionally the zodiacal belt extends 9 degrees on both sides of the ecliptic. As the orbital planes of the planets and the moon do not coincide with the Earth's orbit, one finds the planets usually not exactly on the ecliptic.

For the reader who is not familiar with the distinction between astrological signs and constellations, I will now explain in short what this is about, also because we will meet more of E.T.'s ignorance later on.

When astrology was invented in its present form, say by Ptolemy, constellations more or less coincided with signs. The apparent motion of the Sun brought it into the constellation Aries around the time of the Spring (or Vernal) Equinox, i.e. around March 21. At that date the Sun crosses the celestial equator, and consequently the day is as long as the night (hence the name Equinox). Because of the slow rotation of the axis of the Earth's rotation the celestial equator shifts position, and hence the place where the celestial equator intersects the ecliptic shifts. It is now in the constellation Pisces, and in a few centuries it will move to the constellation Aquarius (if one thinks that the boundary between the constellations Pisces and Aquarius is where the International Astronomical Union has defined it to be, the transition date is in 2614). The matter is complicated because the orbital plane of the Earth doesn't stay constant either, because of the gravitational interaction with the other planets (the motion of the Earth's axis is caused by the gravitation of Sun and Moon acting on the equatorial bulge of the Earth). Traditionally the signs corresponded to 30 degree segments on the ecliptic, counting from the Vernal Equinoctial point (also called gamma). This had the advantage that one's birth sign always was coupled to the date : the period extending from about March 21 to about April 20 always was Aries, no matter whether one was born in the 4th or the 23rd century. Astrologers who opted for this solution were said to adhere to the tropical zodiac, a zodiac more or less coupled to the flow of seasons. Most western astrologers use this method. The majority of the astrologers, namely all the ones in India, prefer to have their signs coincide roughly with the original constellations. These astrologers adhere to the socalled sidereal zodiac.

Summarising, the zodiac consists of a subdivision of the ecliptic circle into 30 degree sectors, called signs, and carrying names of zodiacal constellations. In the tropical zodiac the first of these sectors starts by definition in the vernal equinoctial point gamma, which in its turn slides slowly over the ecliptic. In the sidereal zodiac, the first sign starts at point of the ecliptic that is fixed with respect to the stars.

So the Sun is in the constellation Pisces on March 21, and will arrive in the constellation Aries a few weeks later than it arrives in the tropical sign Aries. This is maybe what E.T. refers to when she implies that the constellation is situated behind the signs.

Maybe. Later we shall see that she argues that the sidereal zodiac is not so good, because the stars are so far away, implying that the signs of the tropical zodiac are not merely in mind of the astrologer, but that they occupy a position in space, close by, at least closer by than the stars. But we will also see that it is not certain that she really understands the distinction between constellations and signs, or between tropical and sidereal zodiac.

E.T. closes this chapter with a third quotation. Do you think it is more honest than the other two quotes?

She writes :

"In her interview the journalist ventures a last question : So astrology cannot claim scientific status according to you ? Broch answers that astrology 'doesn't satisfy any of the criteria (...). To be considered as a science, astrology would have to be acceptable by any human who is able to reason and understand the steps it takes. That is not the case. (Oh?) Astrology belongs to the domain of belief, even credulity for those who hold it to be true.'

There it is, an excommunication without appeal. Did this scientist even try to understand the science of the stars ? If he had tried to experience it, he would have observed the inner coherence of the astrological system."

I am not going to dwell on my supposed lack of knowlewdge of astrology. Below we will see who knows astrology, she or I. Let's take a look at her quote. It is almost exact. The incredulous interjection "(Oh?)" is hers of course. All the same it is intellectually dishonest. Her trick is to replace an <u>essential</u> part by "(...)", namely :

"Astrology doesn't take scientific advances into account, and it is not universal, because one has Indian, Aztec or Chinese astrology. But there is no Chinese or European particle physics."

You see, I gave one of the reasons why astrology is a pseudoscience, namely because it isn't universal, a common characteristic of pseudoscience. In her "quote" it looks as if I don't give any argument.

I have discussed here only quotes that refer to me, as I happened to be familiar with them. Do you think that all other quotes are more honest ? I doubt it.

Bad astrologer

On p. 75 E.T. writes about astrology : "Its astronomical base is of an absolute rational order, it is the mathematics of the stars ...", and on p. 96 : "The astrology makes hers the precision of the astronomical computations, these are exact even to the degree and to the minute."

However, she hasn't the foggiest notion of the meaning of precision and exactness. I provide a few examples.

On p.113 we find "...calculating the axes, to wit the Ascendant and the Mid-Heaven, which are the terrestrial coordinates of the birth chart, and which are simply the eastern horizon and the meridian of the birth place."

Here E.T. confuses a point and a line. Would you think that the members of the jury fell out of their chairs when they read that ? The Ascendant is the place on the ecliptic where it is cut by the (eastern) horizon at the moment of birth. Likewise, the meridian of the place is a circle passing through the zenith, the poles of the sky and the north and south cardinal points on the horizon. The point where it intersects the ecliptic (above the horizon) is the Mid-Heaven. These two points are very important in a horoscope, but E.T. is mistaken about their nature.

Comment by JWN. If we are lenient we can interpret E.T.'s definition by assuming that for her there is nothing in the sky except the ecliptic. This is in line with astrological habits, by

the way. The planets and the moon are usually not precisely on the ecliptic, but astrologers always project the planets' positions on the ecliptic, which leads for instance to conjunctions (planets occupying nearly the same spot in the sky) and angles that can't be seen in the sky as such. In other words, astrologers live in a one-dimensional world. It simply cannot claim to be precise.

On p. 313 we find E.T. writing about an *"action of a particularly aggressive constellation"*, showing that the *tropical* astrologer Teissier doesn't know the distinction between tropical signs (30 degree sectors on the ecliptic) and constellations (regions in the sky whose names are used for the signs, but that do not coincide with the signs).

I would like to remark here that tropical *astro*logers might better be called *vacuo*logers, because their signs are arbitrary regions in the sky containing no particular stars at all, and they do not recognize any influence of any star (except the Sun which they consider a planet) at all, let alone that they accept influences of constellations.

On p. 557 : "... the division in decans (a sign consists of three decans, each covering 10 days of the astral month) yields more precision."

Isn't that fabulous ? Let's turn on our neurons for just a fraction of a second : 12 signs, each of three decans, each of 10 days... in other words, **Teissier uses a year of** *360 days*, certainly because it's so much more precise. After many years of practising astrology and perfoming learned and complicated calculations she confuses "days" and "degrees".

Comment by JWN. An alternative explanation is that she thinks it too bothersome to write "about 10 days" instead of "10 days". Almost no interpretation of this sentence can be called "precise", however. The only precision is the number 360.0000... of which many more decimals are known than of the length of the tropical year (i.e. the time between two passages of the Sun through the point gamma) of 365.2421189... days and the sidereal year (the time it takes the Earth to complete precisely one orbit around the Sun) : 365.25635439... days.

You want it bit more of this astrological precision? We read on p. 104 :

"When the Sun rises, the Ascendant equals the solar sign of the season. In other words, someone who is born under the sun sign Scorpio at 7 o'clock in the morning always has his Ascendant in the same sign, no matter the year of birth."

If we stick to E.T.'s definitions (p. 105), the Sun is in Scorpio between October 23/24 and November 22/23. So if anyone is born at 7 o'clock in the morning during these days, then he or she always has Scorpio for Ascendant ?

Teissier's Fabulous Precision has struck again ! You may wonder whether 7 o'clock means legal time or Universal Time ? It doesn't matter, because Teissier's statement is simply false.

Let's look at **Nice**, **November 20, 2000**. At 7 o'clock (Universal Time) **Sagittarius** (to be sure, the tropical Sagittarius) is rising, and *not* Scorpio, as claimed by Teissier.

Additional remark by HB. More precisely : Sunrise in this Mediterranean town was at 6 :37, in Scorpio of course. Sagittarius started rising at 6 :46.

How could media star Teissier be so wrong ? Possibly because she means legal time ? Three weeks before that, on **October 30**, *Libra* is rising in Lille at 7 o'clock legal time ; on earlier dates from October 26 on, the same holds.

Additional remark by HB. More precisely : On October 30, Scorpio starts rising at 7 :01 in the northern town Lille, close to the Belgian border, so this hypothetical birth misses having Ascendant Scorpio by a minute or so. Sunrise is at 7 :42.

If you think this has anything to do with the fateful year 2000, you're wrong. On or before **October 31, 1910** or **1950** you get the *same* result.

Maybe you think that in France only Paris counts, and that Lille and Nice are such remote provincial locations that nothing can be supposed to work properly there. Oh well, **October 27**, **1950**, saw still *Libra* rising in Paris at 7 o'clock in the morning.

Maybe you think that these modern times are nothing for you. You wish to escape from Paris, and avoid the 20th century in which the vast majority of people living now was born. But on **November 5**, in **Brest** in the year of the revolution **1789**, *Libra* was still rising at 7 o'clock in the morning. With horror you discover that Teissier still is completely wrong.

Remarks by JWN. Universal Time is more or less the same as the local time of the "mean Sun", i.e. a fictitious Sun moving with uniform speed speed through the stars. Legal time is mostly the Universal Time of a standard location, with possibly an hour or so added as Daylight Saving Time. In 1789 most locations of France used a "true sun time" as far as that could be determined. For example, until 1816 Parisian clocks were regulated by the firing of a cannon that went off automatically when the Sun passed the meridian.

Of course, it's often true a 7 o'clock birth with the Sun in Scorpio has Scorpio for Ascendant, but not always, even not in France.

Confusion of the zodiacs

Candidate Germaine Elisabeth Teissier, née Hanselmann doesn't quite understand the matter of tropical vs. sidereal zodiac. Note her pompous statement on p. 110 about astrologers "using a zodiac that takes for spatiotemporal reference frame the point gamma itself (which corresponds to the spring), in other words, a seasonal zodiac, hence this precessional movement doesn't enter in their calculations."

How could the jury let such a blunder pass ? Maybe we should be not too harsh on the jury because there are mitigating circumstances. As recently as 1998 two astro<u>nomers</u> published an article where they correctly mentioned a number of well-known problems of astrology, but they called them "the non-problems of astrology," even though they really *are* problems of astrology.

If the members of the jury would have received Teissier's thesis well in advance of the date of the defense, they could have read it with due attention, and they would have had the time to consult colleagues who knew about the details of this field. If the members of the jury did not receive the thesis well in advance, they ought to have demanded it.

Comment by JWN. Of course the precessional motion does enter in astrological computations, because the astrologer has to know where the point gamma is, to mark off the signs on the ecliptic. Here I am thinking of course of an astrologer who either does the computations all by herself from scratch or a programmer who writes an astrological program. Nowadays, with many astrological programs available, the astrologer doesn't have to know anything that remotely resembles computation. However, the error of E.T. is more subtle than is apparent at first sight.

Teissier seems not to know that if a "tropical astrologer" like her wants to use a zodiac that keeps following the seasons throughout the millennia, she *must* take the precession of the equinoxes into account, because as a matter of fact **the length of a season, for example Spring, varies with time, precisely because of this precession**. Nowadays the astronomical summer lasts 94 days, and the winter lasts only 89 days, but in only 10,000 years this is reversed.

The reason is that the Earth's orbit is not exactly circular, but *elliptic*, and the Earth has varying speed in different parts of the orbit. Seen from the Earth this translates into different speeds of the apparent motion of the Sun along the ecliptic. So when the positions of the equinoxes on the ecliptic changes, so do the lengths of the seasons.

The basic error of the "tropical" astrologers is that they try to glue something "fixed" (like their signs) onto something that is basically variable.

Comment by JWN. French readers may consult the book by **Henri Broch** titled *Au Cœur de l'Extra-Ordinaire* for more background information on the foundation of astrology and the specific implication of the precession. A completely updated version of this 1991 book is available through **Book-e-book.com**.

English-speaking readers are best informed by two books published by Prometheus Books : Roger B. Culver and Philip A. Ianna, *Astrology : true or false. A Scientific Evaluation* (1988) and Ronny Martens and Tim Trachet : *Making Sense of Astrology* (1998). Contrary to the title, the latter book mostly shows the nonsense of astrology.

E.T.'s lack of understanding becomes further apparent when we read a few lines further "... *this vernal point actually is leaving Pisces to enter into the sign of Aquarius*". People who know anything about astrology would say that the vernal point will enter into the constellation Aquarius, about *six centuries from now*.

The wrong timing isn't so ridiculous as the use of the term "sign" in Teissier's claim. By definition her tropical signs don't move at all with respect to the vernal point. Teissier has invented the *moving fixed* point. No doubt the members of the jury have appreciated this grand discovery. The University of Paris V no doubt will commemorate the event by renaming one of its lecture rooms in honor of Teissier.

Comment by JWN. The wrong date for the Age of Aquarius isn't very consequential. Various astrologers have given vastly different dates for this portentous moment, varying from 1781 to 2740 (Culver and Ianna). The anthroposophists (the followers of Steiner) date it about 60 years from now (Martens and Trachet).

The conclusion must be that Elizabeth Teissier doesn't understand the essence of the tropical zodiac, and possibly nothing whatsoever of astronomy and any matters related to calculations.

And if anyone doubts that the above may be a slip of the pen, or an unintentional oversight, here is what E.T. writes on p. 177 :

"... defending and justifying the astrology of signs (and of seasons) against the astrology of constellations (too far), because the latter is the only one that is in danger because of the phenomenon of the precession of the equinoxes." (Teissier's italics.)

Too far ? What does E.T. mean ? Are the stars too far to exert any influence ? If so, how far is her zodiac then ? She seems think after all that it is front of the stars, maybe on a transparent girdle enveloping the earth, unbeknownst to science. However the main thing that this quote shows is that **E.T. simply doesn't understand the celestial motions**.

Actually it *is* the tropical astrology that is in danger because of the precession of the equinoxes, more so than the astrology of constellations, which by definition matches the positions of signs to constellations. In this manner the astrology of constellations takes the precession of the equinoxes into account (not necessarily *correctly*, though).

The sidereal astrologer has other worries, for example how to fit in the *13th zodiacal constellation* Ophiuchus. Also the *different* sizes of the constellations creates problems for them.

Comment by JWN. If the position of the signs was kept fixed, the initial day of a sign would shift not more than one day within about 72 years, about the normal lifetime of people. So whatever system one uses, sidereal or tropical, one wouldn't notice in practice how the signs were shifting. Things are different for the astrologers who desire ever more precision, and who keep investigating lives of people who have died a long time ago.

So one could say that the only "danger" of the sidereal zodiac is that lay people can't figure out their Sun sign from their birthday using recipes that stay constant for millennia. When a sidereal astrologer knows that, say, Mars is in the constellation Capricorn, he doesn't have to know which century it is to proceed.

All the same the biggest worry of all astrologers should be not whether their computations are correct to the degree or the minute, but whether their system makes any sense whatsoever.

From <u>the beginning</u> of her thesis, <u>right until the end</u>, E.T. provides proof that she is *incompetent* in the field that she pretends to know. This is all the more remarkable because of her immodest habit of blaming others for their alleged ignorance.

--- In the beginning of her thesis she has : (p.19, footnote) : "...the vernal point takes 2176 years to traverse (backwards) one sign of 30 degrees."

That would be true if she was talking about the *sidereal* zodiac, but in her own *tropical* zodiac the vernal point stays right where it is, namely at 0 degrees Aries.

--- In the end she has a glossary, from which I extract the following pearls of foolishness :

In "Constellation" : "...result of the dividing the ecliptic, on which the zodiac is situated, into twelve parts..."

Comment by JWN. If one consults astrological sources one encounters different definitions of zodiac. Some books leave the reader with the impression that the zodiac is merely a circular diagram with the symbols for signs written in the appropriate places. The journal *Correlation*, which has scientific pretenses, defines the Zodiac to be : "the circle of signs along the ecliptic." However, Teissier refers elsewhere to the zodiac in the astronomical sense, namely the belt that extends 9 degrees north and south of the ecliptic.

In "Ecliptic" : "... on this circle (which is nothing but the zodiac)..."

The definition of Equinox : "period of the year in which the days have equal length : in spring on March 21 (0 degrees Aries) and in autumn on September 21 (0 degrees Libra)." Comment by JWN. The quote above is literal : no words have been omitted.

The Equinox is the moment when the Sun crosses the celestial equator. On that moment the time from sunrise to sunset is about equal to the time from sunset to sunrise, if we discount the effects of atmospheric refraction. Of course, all days have equal lengths throughout the year, namely 24 hours.

In "Zodiac" : "... *The zodiac is divided into twelve parts equal to 0 degrees, called signs...*" (A rather embarassing typo, if nothing else. The parts are 30 degrees.)

I was truly flabbergasted by the full definition of vernal point :

"Vernal point : intersection of the ecliptic with the celestial equator, i.e. 0 degrees Aries, beginning of spring. This point is also called **the point gamma, and it moves slowly backward on the zodiac by 72 arc seconds per year (one sign of 30 degrees in 2176 years)**; this is the precession of the equinoxes."

Please pinch yourself. You're not dreaming. Teissier's value of 72 arc seconds is wrong. It's 50 arc seconds, as one can calculate from 30 degrees in 2176 years. But again, the *tropical* zodiac of the tropical astrologer Teissier doesn't move at all with respect to the vernal equinoctial point. She is using here, without realising it, a... sidereal zodiac !

Comment by JWN, based on a long experience of tracking down curious errors in calculations. Apparently E.T. can't calculate very well. 30 degrees in 2176 years is about 1 degree in 72 years. That's 50 arc seconds per year, not 72. It just looks as if E.T. has arrived at "72" by randomly pressing 2176, 30 and the division button on her calculator, and then jotted down the result, without thinking too much about the meaning of the number on the display. However the error of for instance confusing 5 percent with one fifth, inspired no doubt by the "rule" that 10 percent equals one tenth, is not uncommon. Maybe Teissier just remembered vaguely the number 72 (years per degree) or 1/72 (degree per year) in connection with this precession and wrote it down without thinking at all, just like all the rest of her thesis, probably.

A digression

Teissier isn't the only astrologer who doesn't know much about the sky. I recall here (cf. Henri Broch, *Science & Vie* nr. 916, January 1994, p. 62-65 and Henri Broch *Enquêtes Z*, nr. 9, fall 1997, p. 3-10, p. 12-23 and p. 25-27) the case of astrologer **Suzel Fuzeau-Braesch** (who was in the front row during E.T.'s thesis defense) who has maybe contributed to making Teissier credible in certain uninformed university circles.

This biologist, honorary research director of the CNRS, has been exploring astrology for 25 years, and has pretended that she has proved the validity of astrology by studying twins. She makes the same <u>ridiculous errors</u> as her colleague.

She wrote in 1989 a little booklet in the series "Que sais-je ?", *L'astrologie*.

"Que sais-je?" is a series of popular scientific books published by the Presses Universitaires de France. In 1951 it published volume 508, titled *L'astrologie* by Paul Couderc. This book saw several revised printings, the last one in 1978, two years before Couderc died. The Fuzeau-Braesch book was number 2483 in the "Que sais-je?" series.

It is filled to the brim with various howlers. Naturally she *confuses sidereal and tropical zodiac*, *degrees and days*, she is *wrong about the point gamma* and the *associated constellations*, she gives *totally wrong periods of the planetary orbits* and she gives a completely *wrong definition of sidereal time*.

Additional remark : SFB confuses the time it takes for a planet to complete a full circle through the zodiac, i.e. the difficult to define period of the planet in a geocentric system, with the heliocentric period, which can be found in any astronomical reference.

A clock that indicates sidereal time completes 24 hours in the average time it takes for the point gamma to make a complete revolution of 360 degrees in the sky, i.e. in 23h 56m 3.4s of ordinary time. This clock indicates 0 hours at the moment that the point gamma passes the local north-south meridian. So around September 21 it coincides with the local solar time.

This "scientific" astrologer doesn't know much about celestial motions, just like Teissier.

Her book on twins, *Astrologie, la preuve par deux (Astrology, the proof by twos,* 1992) is just as comical as the "Que sais-je ?" booklet. A small inquiry after the book appeared learnt me the official birth location of the twins Florence and Carole was, according to the "exact coordinates" given by the author, *somewhere in the Mediterranean Sea*, 25 km from the coast near Nice. Even though these twins graced the cover of her book, **they could** *not* **be found in the municipal registries**. That's what the registry officials told me <u>in writing</u>.

Additional explanation. The given coordinates of birth could only correspond with Nice, as two other twins from Nice had the same (erroneous) coordinates. But the Florence-Carole births weren't registered in Nice. The parsimonious explanation is that SFB clicked on "Nice" in some astrology computer programme, because the computer didn't have the true municipality near Nice. Maybe the programme didn't have the possibility that the user enter correct coordinates herself (which can be easily obtained from a good map) and maybe the programme did have that possibility, but SFB didn't use this option. She also hasn't provided information about the true place of birth of these twins, even after having been asked to. The point is here that SFB claims to be precise enough to distinguish essential differences between the horoscopes of twins. But this precision is a figment of her imagination.

I concluded that *''on several levels her data, both texts and coordinates, are modified, erroneous or fictitious.''* In short, her work is not characterised by any special intellectual honesty.

False statistical proofs. The work of Michel Gauquelin

On p. 608 E.T. writes : "... the experiments of M. Gauquelin, which acquired - and that wasn't easy - the approval if not the blessings of the Belgian Committee for the study of paranormal facts." Let's be charitable and assume that E.T. is so muddleminded that she is incapable of understanding that this isn't mere sloppiness but **a plain lie**.

For starters, she has the name of the committee wrong. It is : *Belgian Committee for the investigation of allegedly paranormal phenomena*. This name meticulously avoids recognizing that there can be any paranormal facts. The wrong name of this Committee occurs repeatedly (e.g. also on p. 756, where she mentions its "chairman Paul Couderc"), and it's not plain ignorance, because on p. 801 she uses the correct name and there she asserts again that Paul Couderc was its president.

Remark by JWN. Maybe E.T. has forgotten that Belgium is not a part of France anymore since Napoleon was defeated, because how else can she think that a well known French astronomer in Paris could be chairman of a Belgian committee, long before ideas about European unity were common?

As a matter of fact, Paul Couderc had never an official function or task of any kind in this Belgian Committee.

This Committee published a paper titled (in English translation) : *Critical considerations on researches performed by Mr. M. Gauquelin in the field of planetary influences.* It was published in *Nouvelles Brèves*, September 1976, p. 327-343.

I will quote here the conclusions of the Committee :

"The Committee contests the validity of the various formulas used by Mr. M. Gauquelin for the theoretical frequencies..."

"Therefore the Committee cannot accept the conclusions of Mr. M. Gauquelin as long as they are based on the methods and formulas that he advocates."

E.T.'s statement that Gauquelin's experiment was approved or validated by the Belgian committee is simply a lie. Alternatively this doctoral candidate never has taken the trouble to read this fundamental text, or she has read it but misunderstood it.

Remark by JWN. The Committee also found no error in Gauquelin's data sampling or computations, and in fact they explicitly stated that they could find nothing wrong with Gauquelin's research, from his point of view. This frank admission has caused a lot of confusion. The objections of the Committee turned around a matter of comparison. If one asserts that a certain class of people contains more members than one would expect by pure chance alone, one has to explain what this "pure chance" would yield. It is customary to express the discrepancy as the probability that results such as actually found would occur "by chance". For this one needs a suitable chance model. The Committee disagreed with Gauquelin on what constituted an appropriate chance model. Whatever one thinks of the arguments of the Committee, no one in his right mind could state that they validated Gauquelin's results.

E.T. tries to increase the prestige of Michel Gauquelin by mentioning him twice (p. 715 and p. 756) as a person associated with the CNRS, the National Center for Scientific Research. But Gauquelin <u>never</u> was a member of the CNRS.

Teissier repeats her lies of p. 608 on p. 743 : "... the statistics of M. Gauquelin (already mentioned in the course of our investigation), examined by an extremely rationalistic organisation, indeed by the Belgian committee for studies of paranormal facts, under the chairmanship of the astronomer Couderc, were held up for many years before they obtained from this organisation the attest that the method used was correct and rigorous."

If this is not a lie, then what is ?

The astrologer Teissier likes these "statistical proofs" so much that she treats them extensively in an appendix titled *"Some irrefutable proofs in favor of the planetary influences."*

How could the members of the jury who read all the way to that point still think that this was a *sociological* dissertation?

This appendix is crowded with misspellings, errors and typing mistakes, but **its content is even more deplorable than its form**. It doesn't contain any properly reasoned argument nor any new argument. On the contrary, it contains old arguments that have been refuted many times. She drags in the Institute for Parapsychology in Freiburg (see my explanations about professor Bender in my book *Le Paranormal* 1985).

Remark by JWN. Another interesting source about Bender is *Poltergeister und Professoren* (1994) by the criminologist Herbert Schäfer.

The center piece of all this rubbish is the neo-astrology of Gauquelin and his statistics. Naturally she forgets to quote *The «Mars Effect»* by Benski et al. (Prometheus Books, 1996) which shows that there is no "Mars Effect", but rather a "Gauquelin Effect".

Remark by JWN. I would like to say something more about Gauquelin here. He started investigating ordinary astrology, and found that all purported statistical proofs were deficient. He collected data himself and also did experiments that showed how easily people can be deceived by flattering horoscopes. The title of his book, *Dreams and illusions of astrology* (1979) shows clearly his opinions. Meanwhile he had stumbled (1951 or possibly earlier) on a peculiarity : famous physicians seemed to be born more often when Saturn was rising or culminating than chance predicted. He became enamored with his own finding. He started

checking it, and among the 200 or more possibilities of combining occupations with planets one clearly stood out : Mars and sports. It was this combination the Belgian Committee started to check. In my view they made several major errors : (1) they did not explicitly exclude the champions already collected by Gauquelin, i.e. the champions that had served to frame the hypothesis to be tested; (2) they allowed Gauquelin a say in the choice of the data to be collected, resulting in a target population already intimately known to Gauquelin; (3) they entrusted the collection of data mostly to Gauquelin, allowing him to write to difficult to track municipalities in cases he knew a favorable birth was to be expected, and letting obviously erroneous information uncorrected when he knew that the correct information would yield an unfavorable birth.

Meanwhile Gauquelin had been doing some checking of his own hypothesis, and he had fallen into another trap, namely adjusting criteria after collection of data. Moreover, in this type of research one always ends up with "problematic" data. Gauquelin could not avoid treating these in a biased way : throwing out unreliable data when they didn't seem to support his ideas.

When the French experiment was executed in the period 1982-1991, error (1) was repeated, but (2) and (3) were meticulously avoided. This resulted in a sample that Gauquelin disliked so much that he almost felt the experimentors had actively tried to sabotage the test. Regrettably he decided to restore the balance, by using very unscientific methods. He then committed suicide for personal reasons, and he hasn't been able to comment on the final findings of the French test.

Nowadays the name of Gauquelin is championed by the German psychologist Suitbert Ertel, who, like Gauquelin, thinks classical astrology is rubbish, but who thinks that Gauquelin's Mars Effect and other planetary effects are a great scientific golden nugget amidst the worthless pebbles of astrology. However, Ertel tore down various ideas of Gauquelin, such the influence of heredity and relations between character traits and planets.

There is much more that can be said about this, but the main picture is that Gauquelin had been critical about classical astrology but not about his own pet ideas. How very human!

Teissier has a special subchapter in her appendix : "Michel Gauquelin, or the astrologer in spite of himself", where she misrepresents Gauquelin's views. She writes that Gauquelin after many efforts to disprove astrology ended up to his dismay doing the opposite. And she quotes him writing that his results must have a scientific explanation, and that they are a novel and powerful argument against this superstition [astrology]. In other words, she points at something black and says it is clearly white.

Again, the jury didn't see any reason here to criticise Teissier for so bluntly and openly misrepresenting the views of Gauquelin. On the contrary, one of the jury members is even reported to have said that this fine appendix should have been the centerpiece of the dissertation.

I want to recall for Ms. Teissier that in this neo-astrology the planets are not the cause of any qualities of new borns, but that they act by <u>triggering deliveries</u> when the planet rises or culminates.

Comment by JWN. If this "planetary midwife effect" would be merely a statistical effect caused by a planet occasionally speeding up a birth here and there, it could be detected by investigations such as Gauquelin's. But it could never lead to the exact hour and place of birth being of utmost importance for all aspects of the life of all people, and also not for the position of all planets being relevant for all people. An examination of Gauquelin's book *Birth times : a scientific investigation of the secrets of astrology* (U.S. title, published 1983 in the U.K. as *The truth about astrology*) yields no clear statement about how strong this effect would be. Gauquelin searched an enormous amount of hospital records and had to conclude that any triggering effect had to be very weak.

When one thinks that planets act by setting off people's births at their rise, and that all births are set off by one planet or another, one is in serious trouble. Paul Couderc has shown this already thirty years ago.

Comment by JWN. To the north of the polar circle parts of the ecliptic never rise : at least the point where the Sun is on the winter solstice (the start of the sign Capricorn) and at the North Pole itself fully half of the ecliptic stays below the horizon, namely the part between autumn and spring equinoctial points. When the Sun or any of the planets is there, in a non-rising part of the ecliptic, they don't rise. The outer planets (Mars, Jupiter, Saturn,...) can stay quite long in such a non-rising part of the ecliptic, because they move so slow. For example Saturn makes a full circle around the Sun in a little over 29 years.

So if the theory of Gauquelin would be correct (not in the statistical sense but in the sense of classical astrology where all people's fates are completely determined by the planets), then we would observe in Murmansk (pop. 400,000) to the north of the polar circle something very remarkable, namely **the despair of women who stay pregnant for over 50 months**.

In fact Mars can stay more than 3 months below the horizon when it is near the place where the Sun is during the winter solstice (the start of the sign Sagittarius). Likewise Jupiter can stay there about 22 months, and Saturn 4 and a half years!

Remark by JWN. In *Birth times* Gauquelin quotes exactly this passage from the 1974 edition of Couderc's book, in addition to many other problems related to his birth trigger hypothesis. Gauquelin comments that he would be interested in experimental data from Murmansk, and also quotes Couderc as saying that the trigger hypothesis is more believable than the "old" astrology, but nonetheless implausible. But finally Gauquelin concludes that he simply doesn't know : it might be an illusion but he doesn't want to take a strong stance anymore either way. That's quite different from what Teisseir attributes to him.

Conclusion

Elizabeth Teissier doesn't know much about the things she writes about, and brags about her nonexistent knowledge. She is fanatic, intolerant and she lacks humility.

Additional comment. These qualifications don't rest on one or two phrases, but on her absolute lack of any doubt, the rigidity of her opinions. The quotes on the aggressive and militant rationalists on p. 42 and p. 767 have been mentioned already. She goes on at such lengths about her tv-appearances, about her correspondence with various dignitaries, that humble is about the least applicable word for her. She denies her opponents even the right to be taken serious about astrology. She is unwilling to even quote or mention the scientific arguments. In addition to this she is a sloppy writer and an outright liar.

She has the right to be like she is. Our society tolerates people who have many more defects. However, we should not award them doctorates if their dissertations merely attest to their lack of knowledge and competence and other defects. **E.T. has cleverly exploited the intellectual** weaknesses and incompetence of certain university professors.

My criticisms are directed essentially at the people who have accepted her as student, approved her dissertation, and finally awarded her the "very honorable" mention, in short, **the moronic authorities that she outwitted for her own advancement**.

P.S. My friends often tell me that my habit of calling a spade a spade creates the impression that I'm somehow emotionally involved, and that some kind of personal emotion is behind my criticisms of people.

I don't know Teissier personally, I have never met her, debated her directly or indirectly, except of course that she has chosen to "quote" from an interview with me. I have commented on matters I know about, such as the astronomical and computational side of astrology. I feel I have a social and professional responsibility to oppose nonsense, fighting for the right of people to receive clear information and against the false sciences. The sociologists will have to discuss the sociology with their new learned colleague.

P.S. II. Elizabeth Teissier publishes every week a horoscope. My students have tested this horoscope as follows : they gave three horoscopes to people : Teissier's horoscope for the proper birthday, Teissier's horoscope for a wrong birthday and one horoscope completely made up by the student. Their subjects had to choose the one that fitted best.

Each horoscope was identified about equally often as "the correct one" by their subjects. In other words, 2/3 of the people didn't recognize their "own" horoscope, affirming again that pronouncements on basis of horoscopes are pure random processes.

P.S. by JWN. Likewise people might wonder what impelled me to spend the effort in producing this English version. The reason is that all over the world astrology is trying to gain a foothold in academe. A research fund has been set up in the U.K., business astrologers with university backing are active in Denmark and Austria, in the U.S. a kind of university in astrology has been accredited, and in India the minister of education has asked that all 200 universities offer astrology courses, offering them each 5 extra places for teaching and supporting personnel, and he has demanded that high schools all teach Vedic mathematics and astrology. Now there's the story that one of the oldest and most prestigious universities in the world has granted a well known astrologer a doctorate on what is essentially a defense of astrology (virtually nobody except the jury is fooled by the pretense that the dissertation is about sociology). This produces a lot of moral support for this worldwide trend of making astrology respectable. As rationalism is more prevalent worldwide than knowledge of French, I have thought it important to render the excellent commentary of professor Broch intelligible for a wider audience.

Original French version *A propos de la thèse de doctorat de Mme Germaine (Elizabeth) Teissier...* by Pr. Henri Broch. PDF file on the Zetetics lab web site : www.unice.fr/zetetique

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