

# Fraknoi's Complaint

*Answers by Jack Fertig & Bob Marks respectively*

Andrew Fraknoi, an astronomer in San Francisco, has a tough time as a prominent astronomer who vehemently disbelieves in astrology in a region where it is widely accepted. His frustrations seem to be creeping into his methodology.

Professor Fraknoi speaks with any number of scholastic and civic groups and likes to offer them "10 embarrassing questions" that they should ask astrologers. The slightest thought about any of these questions would reveal that they can only be embarrassing to the person silly enough to ask them.

## **1. What is the likelihood that one-twelfth of the world's population is having the same kind of day?**

**JF:** That depends on how broadly you describe "the same kind of day". You seem to be referring to Sun Sign astrology that attempts to describe daily experience solely by sun sign. This is astrology at its lowest common denominator, even when those newspaper columns are written by qualified astrologers. Few of them are. A complete horoscope is much more personalized, considering the position of the Sun, Moon, and planets calculated to the minute of a degree at the moment of birth and from the perspective of the birthplace.

**BM:** Well this one I agree with. Those so-called horoscope columns in the newspapers were designed as a publicity stunt to increase circulation. Unfortunately, that worked. As a result, most people think that all there is to astrology is to know about your "sign". Absolutely untrue. Sun-sign columns are most emphatically not real astrology. I denounce them at every turn, and I do so again here. However, Dr. Fraknoi would know this if he were familiar with the field.

## **2. Why is the moment of birth, rather than conception, crucial for astrology? (*I suspect that the reason astrologers still adhere to the moment of birth has little to do with astrological theory. Almost every client knows when he or she was born, but it is difficult...to identify a person's moment of conception...*)**

**JF:** Because, as we've seen from thousands of years of empirical observation, it works. The time of birth is identifiable, and marks the beginning of life as an autonomous human being - unlike the moment of conception, which is rarely identifiable. (And as for when a zygote becomes a viable life form, this is a question that has gone back and forth on the whole question of abortion. Nobody has a clear answer, and it seems to be a philosophical, rather than a scientific, question about the very nature and meaning of the beginning of life.)

**BM:** The reason astrologers use the time of birth is because birth gives us a completely formed human being. After conception, all we have is a fertilized egg. But notice the subtle shift here. The real issue is "Does astrology work and can the assertions of astrologers be tested". Dr. Fraknoi

seems to change this to “Well, it doesn’t sound right so it must not be true”. When quantum mechanics was first proposed, it didn’t sound right either. It took years for it to be accepted. Opponents called it “Quacker Mechanics”. Whether something sounds right or not is not proof one way or another.

### **3. If the mother's womb can keep out astrological influences until birth, can we do the same with a cubicle of steak?**

**JF:** If a cubicle of steak could be devised to provide full life support so that the individual inside had no need for independent breath, food, elimination, cleaning, etc. that might be an interesting experiment. But then a person living in such a vegetative state would not be able to make the choices or have the experiences that astrology is used to help with.

Actually the research of Michel Gauquelin shows astrological patterns within families. (I've seen this in my own work, and other astrologers see it regularly, but unlike our "anecdotal experience" Gauquelin has applied scientific standards of statistical methodology.) He sees this as suggesting that astrological influences may trigger the birth, so the child may well be susceptible to astrological influences in the womb well before birth.

**BM:** This is a complex question fallacy, the most famous example of which is the question “Do you still beat your wife?”. The question itself assumes facts not in evidence. Dr. Fraknoi’s apparent procedure is to first ask why the moment of birth has an effect, and then to propose a ridiculous reason which he has no trouble ridiculing. So he is making a second error here as well: the strawman fallacy. Please notice that this question contradicts the previous one. If the moment of conception is important, then the mother’s body cannot act as a shield, and vice versa. The proper procedure is to investigate first and see if there is any effect at all. Then, if there is, one looks for a reason as to why. By reversing the order, Dr. Fraknoi comes to the conclusion that astrology can’t work because he cannot think of a good reason why it should. For decades, no one could explain how bumblebees could fly. They seemed to violate all known laws of aerodynamics. Following Dr. Fraknoi’s procedure, one would have to conclude that the bees really didn’t fly and it must have been some form of illusion.

### **4. If astrologers are as good as they claim, why aren't they richer?**

**JF:** Many of us began the study of astrology as a spiritual pursuit rather than a commercial one. The field is predominant with people who consider philosophical and spiritual wealth far more important than money. Still, most of us are indeed richer than we would be without astrology, both financially and philosophically. There are many branches of astrology and very few astrologers use astrology for financial investments - usually because skills and interests lie in other fields. Some astrologers can see that they have no chart for making money, but may help those who do. As J. P. Morgan said: "Millionaires don't use astrologers. Billionaires do."

**BM:** Really Dr. Fraknoi, doesn't that sound like the question "If you're so smart, why aren't you rich?" that uneducated relatives always seem to ask college graduates at family gatherings? The answer is that knowing something valuable and making money off of it are two different skills entirely. You could ask the same question of economists and financial analysts. Not a billionaire among them. Bill Gates and Michael Dell, on the other hand, are dropouts. And by the way, this question is an ad hominum fallacy. If you can't refute an opponent, slander them. The main questions are, I repeat, "Does astrology work" and "Can it be tested?"

## **5. Are all horoscopes done before the discovery of the three outermost planets incorrect?**

**JF:** Was astronomy incorrect before the Hubble Telescope? Every body of knowledge that is worth anything is constantly expanding, gaining new information, re-evaluating old theories in light of new evidence. Certainly horoscopes including the three outermost planets contain more information.

**BM:** Is all physics done before the discovery of relativity and quantum mechanics "incorrect"? Does the discovery of a new element invalidate all previous knowledge in chemistry? Yes, horoscopes in past centuries were less complete. Yes, some things were missing. No, they were not totally wrong. The knowledge that doctors have today dwarfs that of doctors 200 years ago. Are all the cures doctors achieved in 1800 somehow "wrong" because they didn't know as much as we do today? Will all the cures doctors achieve this year be "wrong" if new knowledge is discovered in the future?

**6. Shouldn't we condemn astrology as a form of bigotry? Isn't refusing to date a Leo or hire a Virgo as bad as refusing to date a Catholic or hire a black person? (*In a civilized society we deplore all systems that judge individuals by sex, skin color, national origin, or other accidents of birth. Yet astrologers boast that they can evaluate people based on another accident of birth – the positions of celestial objects. Isn't refusing to date a Leo or hire a Virgo as bad as refusing to date a Catholic or hire a black person?*)**

**JF:** Bigotry is pre-judging a person by skin color, religion, gender, sexual orientation, national origin, or other factors that have nothing to do with the substance of his/her character. Astrology is a manner of assessing the substance of his/her character. A simplistic approach -- i.e. Aquarians are good people, Scorpios are evil -- is indeed a form of bigotry. A full chart analysis could actually help people into the jobs where they would be most satisfied and productive. (I might want a Virgo for an accountant, but not if s/he has a Sun-Neptune conjunction in the 6th house on the apex of a t-square between Jupiter and Mars -- although that person might make an excellent EMT.)

As for whom you choose to date, that's a highly personal matter. If you don't want to date Catholics, I'm one RC who won't snap your mackerel, but respect your right to choose your dates as you wish. Now Fraknoi is going from telling us how we should think to how we should love.

Moreover he repeats the same questions ad nauseum and ignores the answers. This is as narrow-minded a prejudice as any form of religious bigotry. Besides which, it is the opposite of science.

**BM:** This is another clear example of the error called the argumentum ad hominum, or what can better be called the argument by insult. Does astrology work or not? Never mind that. Astrologers are BAD! Why they are just like bigots, so don't listen to them. Tell me doctor Fraknoi, can genetics be used to determine the probability of people getting certain diseases? Is that also not due to an "accident of birth"? Can this knowledge be used by insurance companies, for instance, to deny coverage? Why then, by the same argument, the doctors who perform those procedures should also be condemned as "bigots".

**7. Why do different schools of astrology disagree so strongly with each other?** (*Astrologers seem to disagree on the most fundamental issues of their craft: whether to account for the precession of the Earth's axis, ...how many planets and other celestial objects should be included, and – most importantly – which personality traits go with which cosmic phenomena. Read ten different astrology columns, or have a reading done by ten different astrologers, and you will probably get ten different interpretations. "If astrology is a science, as its proponents claim, why are its practitioners not converging on a consensus theory after thousands of years..." (complex question fallacy again, Dr. Fraknoi; you are assuming facts not in evidence). Scientific ideas generally converge over time as they are tested against laboratory or other evidence. In contrast, systems based on superstition or personal belief tend to diverge as their practitioners carve out separate niches while jockeying for power, income, or prestige.*)

**JF:** There are disagreements within any discipline of knowledge. Within a large group of astronomers there will also be disagreements. It is this writer's opinion, though, that those sciences which have been supported by universities, governments, and large corporations have had the great opportunities and funding to test more fully many theories, some of which have been proven wrong, some right, some still in contention. Astrologers have no such support and rely more on personal, indeed, anecdotal experience. Also as a field where there is no established consistent code of credentials and protocols there is inevitably more variation of thought. Some of us regard this diversity as a great opportunity; some consider it a gateway to sloppy research, theorizing, and interpretation.

**BM:** If that is the case, Dr. Fraknoi, when a doctor tells you that an operation is needed, why bother to get a second opinion? Medicine is a science, isn't it? First of all, there are disagreements in every field. Secondly, the disagreements between astrologers are not nearly as great as you make them out to be. Thirdly, there has been, until recently, no certification of astrologers. Anyone can call themselves an astrologer after reading a book or two, or even without any knowledge of the field at all. By way of contrast, imagine the chaos in the health field if anyone could call themselves a doctor and there were no way to tell the difference between a Harvard graduate and someone who just decided to

hang up a shingle. This situation is slowly being remedied. There are now two astrological organizations, the AFA and the NCGR, that provide certification by examination.

As far as the differing opinions about “which personality traits go with which cosmic phenomena”, there is very, very little of that. I believe I talk to other astrologers more than you do, so I am most likely in a better position to know. Your comment about not “converging on a consensus” has been partially true only because anyone can call themselves an astrologer. That situation, as I have mentioned above, is changing.

That last part, however, about practitioners carving out “separate niches while jockeying for power, income, and prestige”, well it took me a while to think of an answer because I had to stop laughing first. Most astrologers work part time for little pay. Research is done for no pay at all (other than the small sums offered for magazine articles). Most of us work for the love of the field. If money were the first consideration, we would all start .com companies. And now, it is my turn to play sceptic and ask for evidence. Tell us Dr. Fraknoi, based on the research you did in order to pose these questions, what are the names of these practitioners who are carving out those “separate niches”, and just how much “power, income, or prestige” are they achieving?

**8. If the astrological influence is carried by a known force, why do the planets dominate?** (*“If the effects of astrology can be attributed to gravity, tidal forces, or magnetism (each is invoked by a different astrological school), even a beginning physics student can make the calculations necessary to see what really affects a newborn baby. These are worked out for many different cases in Roger Culver and Philip Ianna’s book ‘Astrology: True or False’ ...For example, the obstetrician who delivers the child turns out to have about six times the gravitational pull of Mars and about two thousand billion times its tidal force...”*)

**JF:** Astrological influence is not carried by a known force. If it were, the scientific community would have no choice but to accept its validity.

**BM:** So who says that gravitation or tidal effects are the forces that are operational here? Yes, some astrologers have wrongly postulated that they are what makes astrology work. But the fact that they were wrong in identifying the source does not show that there is no effect. And this was done by individual astrologers, not “different astrological schools” as Dr. Fraknoi suggests.

And once again, Dr. Fraknoi is putting the cart before the horse. Instead of investigating to see if there is in fact an astrological phenomenon, he says, in effect, that there cannot be because he can’t think of a good reason why there should. In a similar fashion, Simon Newcomb, a famous mathematician, “proved” that a heavier-than-air machine could not fly. He, of course, was proved wrong by two bicycle mechanics who did not read his “proof”. Subjectivity like this has no place in science. The proper scientific procedure is to first check if something is so, and then to find a reason why.

**9. If astrological influence is carried by an unknown force, why is it independent of distance?**

*(“All the long range forces we know in the universe get weaker as objects get farther apart. But, as you might expect in an Earth-centered system made thousands of years ago, astrological influences do not depend on distance at all. The importance of Mars in your horoscope is identical whether the planet is on the same side of the Sun as the Earth or seven times further away on the other side. A force not dependent on distance would be a revolutionary discovery for science, changing many of our fundamental notions.”)*

**JF:** How can one judge the properties of an unknown force?

**BM:** I agree that such a force would be “a revolutionary discovery for science, changing many of our fundamental notions”. What is the point here Dr. Fraknoi? Are scientists supposed to be afraid of this? Quantum mechanics overthrew fundamental notions too. Would you have advised Max Planck to back off publishing his results for that reason? Is the purpose of science to advance knowledge, or to defend “fundamental notions”? I would really like to hear your answer to this one.

**10. If astrological influences don't depend on distance, why is there no astrology of stars, galaxies, and quasars?**

**JF:** There is, although it is practiced by a small minority of astrologers. But more to the point, we don't know to what extent distance is or is not a factor in astrological influence. I subscribe to the theory that astrology deals exclusively with influences of our Sun, Moon, and the planets, an interactive matrix of influences entirely within our solar system. The stars of the zodiac are only markers -- relatively unmoving guides against which we can measure planetary, solar, and lunar motion.

**BM:** THERE IS AN ASTROLOGY OF STARS, AND THERE HAS BEEN FOR THOUSANDS OF YEARS! Furthermore, there are books on the subject in print. The fact that you even ask this question shows a lack of familiarity with the subject that you are criticizing. Please study first and criticize later.

**Post Script** - Reviewing these questions one can easily see that they have no scientific basis, that they are intended to bait rather than to investigate. They are reflective of a narrow mind trying to ridicule what it does not understand, rather than making the scientific admission of humble ignorance as a starting point in the pursuit of knowledge. That anybody would pose such questions in the name of science should embarrass real scientists.