Astrology started as a farming calendar thousands of years ago, when people noticed that certain stars appeared in the sky at certain times of the year and thought that there was a relationship between the star and things that happened on Earth.

The Egyptians, for example, thought that the star Sirius caused the Nile to flood every year and that if they didn't see it, the river wouldn't flood. In Tudor England it was a treasonous offence to cast the monarch's astrological chart, lest any badly placed planet result in regicide.

The idea is that the positions of the heavenly bodies at the time of your birth somehow influence your personality, physical characteristics, health, profession and future. Codified by Ptolemy in the second century AD, astrology reflects the Earth-centred nature of beliefs at that time, where everything was supposed to revolve around us, literally.

In the thousands of years since the zodiac was first drawn up, we've discovered that the Earth is not at the centre of all things. Also during that time the Earth has wobbled on its axis like a giant top. This "precession of the equinoxes", as it is called, means that the Sun is no longer in the sign of the zodiac claimed for it.

If you think you're a fiery Aries ram, you are, in fact, a wet Piscean fish! In the past 300 years, three extra planets were discovered and had to be given special ad hoc powers in the astrological scene. There are, in fact, two extra constellations within the region of the zodiac, but Cetus (the Whale) and Ophiuchus (the Serpent-Bearer) have been ignored in favour of the mystical total of 12 revered by the Babylonians.

There have been a large number of tests of astrological claims. One involved checking the birthdates of 22,000 scientists. They should have clustered in the two signs said to produce the personality type typical of scientists, but the distribution was as random as the general population.

Much has been made of the "Mars effect" claimed by French researcher Michel Gauquelin, who said that he found sportspeople and politicians were characterised by having Mars in a particular position in their charts. However, analysis indicates that the individuals in his sample sets had been selected to fit the hypothesis.

Different astrologers do star charts in different ways. Some make changes if you've been born premature or by Caesarian delivery or out of wedlock (or even if your chart doesn't suit!); they use a variety of house systems to divide up the chart.

Yet there is no physical mechanism by which the stars or planets can affect a baby -- any infinitesimal magnetic or gravitational effect would be completely swamped by nearby machines or people! Instead of having anything to do with science or astronomy, astrology has a great deal to do with psychology.

It's easy to believe the things astrologers write. Statements in astrological readings, whether newspaper columns or personalised interviews, tend to be generalisations that apply to almost everyone, positive statements that we like to identify with, or a combination of two opposites so that at least one half will be right:

You have a good sense of humour but sometimes it is unappreciated.

You can be very forgiving but can also hold a grudge for a long time.

Psychologists call this the “Barnum Effect” after US showman Phineas T. Barnum; sometimes it is called “personal validation”, where a vague, positive generalisation is taken to have a personal, specific meaning to the individual. It is almost always couched positively because people are more likely to reject a negative comment.

It is very rare for any specific statements to be made because these are easy to check or be proven wrong. The week before her death, three major UK astrologers predicted that Princess Diana would marry Dodi and have two children and a happy life!

After a major event, some astrologers will change what they had said or claim to have predicted the event beforehand. Famous astrologer Jeanne Dixon is often quoted as having predicted the assassination of US President John Kennedy in Dallas. What she was on record as having predicted in 1956 was that the 1960 election would be won by a Democrat and that he would be assassinated or would die in office, "although not necessarily in his first term". In 1960, she predicted that JFK would not win the presidency.

The "Jeanne Dixon effect" refers to the media's tendency to hype or exaggerate a few correct predictions by a psychic, guaranteeing that they will be remembered, while forgetting or ignoring the far more numerous incorrect predictions.

In personal readings, astrologers (and others, like psychics and mediums, who do these kinds of interviews) can learn a lot from your body language and responses. People will often nod or volunteer more information to a general comment, thus providing a lead which the astrologer can follow. Magicians call this "cold reading" and find it very effective in convincing people that they have psychic powers.

When astrologers find that they have said something you disagree with, they will often find something in your chart which "explains" why you are different ("Oh yes, your Moon is in Cancer, that's why you're such a home-body for a Scorpio."). It's also relatively easy to make informed guesses about a person based on their age, gender, ethnicity etc, taking advantage of the many common experiences we all share.

Some astrologers genuinely believe that they can use the stars to find out about a person or to foretell the future. Others are more consciously aware of the applied psychology involved. And there are some who are in it for the money and who will use all the tricks available. Whatever their beliefs, astrology is a form of intellectual dishonesty and stereotyping.

Things to do

Read out the horoscope for the wrong sign and see if your listener agrees with it.

If you do get a personal astrological interpretation, tape it and listen to see how much information you provided yourself and how specific the astrologer was.

Keep the New Year predictions made by astrologers, psychics and others and see how many they got right by the end of the year. Such predictions should be surprising and specific. Saying that there will be an earthquake in Hawke's Bay, is neither; saying there will be an earthquake in Invercargill in mid-March is.

Vicki Hyde studied astrophysics and cast natal horoscopes while at university; she is now Chair-entity of the NZ Skeptics.

new zealand Skeptics

Box 29-492, Christchurch http://skeptics.org.nz

New Zealand Commitee for Scientific Investigation of Claims of the Paranormal (Inc.)

the new zealand Skeptics guide to Astrology

More people know their star sign than their blood type, more newspapers carry astrology columns than astronomy columns. Our fate lies not in our stars, but in ourselves...

If you are prepared to believe that you don't get on well with, say, Scorpios, how does that differ from saying you don't like Jews or Polynesians?

Astrology is just another way of stereotyping people. If it's not acceptable to do it on the basis of skin colour or religion, why should astrology be considered "entertainment"?