“Astrology and the Adolescent Brain”
A United Astrology Conference Lecture
Tuesday 31 May 2018, 9:30 am Los Angeles Room

Thank you for coming to my lecture!
I’m delighted to be welcomed again to the United Astrology Conference’s family of world class astrologers to speak about a topic very close to my heart: *Astrology and the Adolescent Brain.*

Working with adolescents as a schoolteacher has opened up an enormous opportunity to make a real difference to the lives of people who need the most support: adolescents. Astrology has given me a unique insight into child development and over the years, I have developed teaching strategies that not only helped my pupils but have helped me become a happier teacher. The initial result of my observations became my first book, *Growing Pains.* I extended my research to write my second book, *The Wolf You Feed* (out later in 2018). I have also worked with behavior data to determine how to best support this very tricky age group. I discovered a few very important principles that profoundly changed how I work with adolescents:

1) Understanding Jupiter plays a key role in how children learn
2) Understanding Saturn plays a key role in strengthening the authority figure’s role in providing structure and yes, discipline.

I hope you enjoy the lecture and find this handout useful.

Please do feel free to get in contact with me if you have any questions: alex.trenoweth@gmail.com
Dismissed for their lack of precision, non-replicable results and minuscule databases, modern day astrologers are often ridiculed by their skeptics. Can astrologers step up to the scientific plate or will they go down with the pseudoscience ship?

In my role as a schoolteacher, the bias against being an astrologer was so great that I was actually threatened with dismissal should any parent complain about my interests in the subject. As I was new to the field of education, I really had no other option but to button up my astrological practice and get on with teaching. But the cosmos had very different plans.

Over several years in my capacity as a teacher, I began collecting behavior data from the school I worked in. Some of the data was analyzed by an IT specialist who made results available for all staff to use to aid in providing a bespoke education to pupils. And some of the data I saved to be used for when I had the time to analyze it at leisure.

For a few months, I bumbled along in a career that was only intended to pay for astrology courses. I experimented with the sun signs of my pupils but as a History teacher with over 400 pupils to teach over a rolling two-week rota, this was never going to be a practical way to use astrology. I could barely remember all their names and keep up with lesson plans let alone devote the time and effort it would take to utilize their sun signs—even though their birth dates were readily available. More than that, before I understood the commitment it takes to be a teacher, I actually believed I would have weekends, Christmas, Easter and a glorious long summer holiday to (secretly) devote to my astrological studies. It soon became very clear there was going to have to be a choice made between these polar opposite careers. After one particularly bad day, when I was exhausted by the energy and emotional robustness it takes to teach teenagers, I decided to leave the educational profession. And I meant it.

But then I looked out at my class and not only realized how much I enjoyed teaching (except for the paperwork—this Saturn in Pisces was never going to enjoy admin work!) but I also understood how useful astrology could be to my career as a teacher: every year group has an astrological signature based on their Jupiter and Saturn signs.

**Jupiter**

With an orbit of just under 12 years, Jupiter travels through one zodiac sign per year which meant each class I taught would share the same Jupiter sign. Non-astrologers who work in the field of education often ponder how one cohort differs so radically to another. What worked for one year may not necessarily work for another. The result is that teachers have to continually employ a trial by error method to engage their pupils before they figure out what works. But if one understands Jupiter and the sign it occupies as well as how these pupils like to learn, their planning time is dramatically reduced. It’s like getting a head start. And in classes where Jupiter changes sign mid-academic year, it would be easy to sneakily make a note of when that change happened.

Astrologically, Jupiter represents the leap of faith necessary to learn in the classroom. For example, a class of Jupiter in Aries pupils would like to learn at much faster pace than a class of Jupiter in Taurus pupils. Jupiter in Leo pupils won’t like the methodical pace of the Jupiter in Virgo pupils. And for goodness sake, the learning style of Jupiter in Sagittarius pupils would drive Jupiter in Capricorn pupils crazy. So with a little knowledge of astrology beyond sun signs, a teacher can transform their lessons into something that truly caters to the needs of their pupils. Even better, this knowledge
this knowledge (presented in non-astrological terms) helps keep the inspectors happy too. And with a better understanding of a pupil’s needs, a teacher can deliver a lesson that helps that pupil get better results. Which of course makes parents happy too.

However understanding Jupiter is more than just understanding the sign it occupies. An understanding of the cycle of Jupiter and its key stages in development is also enormously beneficial.

As Jupiter moves about one sign per academic year, it can easily be seen that about every 3 years Jupiter forms a waxing square, opposition, waning square or conjunction (return) to its natal position.

For example at 3 years old a child experience their first transiting Jupiter square. At this stage, they are usually ambulating without hindrance, toilet trained and able to speak clearly enough to be understood by someone other than their carer. How convenient this is for a parent who wants to expand their child’s horizons through travel! No more diapers, play pens or translating to distant relatives!

By the age of 6, a child has their first Jupiter opposition. At this stage, a child is usually learning how to put all those sounds of letters together to form words and sentences.

Most children have imaginary playmates but at the waning Jupiter square at around the age of 9, they begin to learn to distinguish between fantasy fears and real fears. The imaginary playmates go away.

Around the age of 11 years 8 months, children experience their first Jupiter return. To return to any place is to begin comparing their progress. Most children experience this when they start going to the “big” school where they encounter more children, teachers, subjects and others with different belief systems to theirs. Consequently, they begin to take advantage of the opportunities offered to them. Pupils of this age are expected to be a little more difficult to manage because of their abundance of energy. Indeed the data collected for this age shows that not only are they more often in trouble in general, specifically they are more often in trouble for being disruptive.\(^1\)

Neurologically, the Jupiter return also “coincides” with rapid brain development, a process that experts are only just beginning to understand. The brain of a child is far different to that of an adult because a child thinks with the limbic system, based on reflexes and immediate gratification,\(^1\) rather than the cerebral cortex which is based on logic and reasoning.\(^1\) The physical evidence of these changes are seen with the increase of folds in the brain material in the cerebral cortex.\(^4\) As this transition happens and the child begins to test this new brain of theirs, mistakes are bound to happen. It is like having a Lamborghini with a beginners’ drivers’ license.

Teachers often complain that a group of 13-14 year olds are their least favorite class to teach.\(^1\) At this age, pupils begin relying less on their parents and teachers and more on each other to form their opinions and beliefs.\(^1\) They egg each other on to take ridiculous risks and they are tempted to experiment with drugs, (cigarettes and alcohol consumption is lower amongst this age group than in previous years\(^1\)) or other potentially harmful substances and behaviors.\(^1\) Because of the adolescent brain’s unique development, the potential to become addicted is greatly increased.\(^1\) What adolescent wouldn’t want a little pick-me-up when bored out of their skulls with the kind of drivel parents and teachers insist they learn when it would be so much more fun to be with friends?

During this time not only does Jupiter form a sextile by transit to its natal position but the first
Ptolemaic aspect from an outer planet (Uranus sextile Uranus) occurs. If it is accepted that the planet Uranus pertains to our circle of friends and that the presence of Jupiter would amplify this effect at this time, then it would make perfect sense that the issues of peer influence would be greatly heightened during this time. And with friends of a similar age undergoing the same neurological changes then it only stands to reason that teaching a classroom of 30 pupils of this year group could send even the most patient and resilient teacher preparing for early retirement. My experience of teaching has led me to think that a naughty child is a bored child and that when 13-year-olds are acting up, perhaps they are telling us they need to do something a little more exciting in the classroom.

**Saturn**

Like Jupiter, Saturn has its own cycle but this time it is not measured by three years but by seven years. At seven a child experiences their first Saturn square. How do we know? Saturn ruled the “hard” parts of the body such as hair, bones, skin... and teeth. At around the age of seven, a child begins to lose their milk teeth. At around 14, during the Saturn opposition, many teenagers need orthodontics. And at 20, the average age for the emergence of wisdom teeth, there is often a need for further work to accommodate these new teeth, a development that even Aristotle took note.¹

Neurologically, the growth process of the brain around the time of the Saturn opposition begins to slow down significantly (but doesn't cease completely). This effectively “traps” bad habits into routines that have the potential to become addictions.¹ Utilized in a positive manner, a child can emerge from adolescence with useful skills such as musicianship, creative writing, martial arts or other sports or artistic skills that will serve them for a lifetime.¹ Research famous artists in any field and see how many of them found their “talents” just after their Jupiter returns. And then research how many addicts had started their bad habits of choice at the same age.

Education wise, a post Saturn opposition child is expected to “knuckle down” and focus on their future career. In the UK, children of this age are required to select exam subjects and participate in work experience where they complete a two-week training program designed to allow them to become involved in duties pertaining to a career of their choice.

Data collected shows that pupils experiencing their Saturn opposition are more often in trouble for submitted inadequate classwork or homework.¹ As pupils of this age group are preparing for exams, it stands to reason it would be more likely they would be under more intense scrutiny for work output. Intervention for lack of progress is far more likely to be put into place for this group than for the younger adolescents whose brains are blossoming and blooming at a faster rate.

**Behaviour and Lunar Phases**

Outside of astrology, the full moon has long been linked to crime, suicide, mental illness, disasters, accidents, birthrates, fertility, among other things such as lycanthropy.¹ There has been little consistent evidence to back up any claims that the full moon has a detrimental effect on human behavior. Further, the idea of difficulties happening during the full moon seems to be perpetuated by communal reinforcement rather than on scientific data.¹

Researchers outside the field of astrology concluded that: “No significant relationship was found between total violence and aggression or level of violence and aggression and any phase of the moon.”¹ Further, other studies (Little et al, 1987;
Durm et al, 1986) have failed to demonstrate any relationship between lunar phase and disruptive behaviour in mental hospitals.

But what about adolescent behavior? I had access to significant data in a specific year group and as I was aware of lunar phases, I already suspected that there might be a correlation between peaks of poor behavior and lunar phases.

To test my hypothesis, I divided the lunar phase into 4 sections as illustrated with Figure 1 above.

For the data for this project, I created my own data reports for the purpose of examining the number of behavior sheets recorded for male and female pupils on the new, first quarter, full and last quarter moons. For each date Solar and lunar celestial longitudes were obtained, and the sun-moon angle found: such that New moon was zero and Full moon, 180 degrees. Roughly each lunar quarter lasted one week, but exactly it was 90 degrees of sun-moon angle. The syzygy positions (Full and New) were centered on these 90 degree sectors. The figure shows this. Thus the Full Moon quadrant spanned 135 degrees to 225 degrees of Sun-Moon angle. For further development and research, I could choose to use a smaller arc e.g. 60 degrees.

Three axes or dimensions were investigated: (1) Full moon versus New (2) boy-girl (3) high node versus low node (i.e. whether syzygy was near or far from the node axis, => large or small lunar latitude). NB the term ‘syzygy’ means the line joining Full and New positions in the ecliptic. There was no time of day information for when the events happened, so the Sun-Moon angle is only accurate within several degrees. All the data was sorted by Sun-moon angle 0-360 degrees and thereby grouped into the four sectors.

Results - total number of discipline cases over one academic year, grouped by lunar quarter (See figure 2 right)

Summary: New Moon quarters scored more than Full Moon quarters. They also scored 16% more than the rest of the month combined.

II. Waxing versus waning
Moon: referring to the diagram, the ‘waxing Moon’ is the two-week period 0-180 degrees, then the ‘waning’ period follows on after 180-360 degrees.

During the waxing period

![Figure 1](image1.png)

![Figure 2](image2.png)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>New Moon</td>
<td>575</td>
<td>533</td>
<td>545</td>
<td>568</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>451</td>
<td>430</td>
<td>514</td>
<td>495</td>
</tr>
<tr>
<td>Full Moon</td>
<td>483</td>
<td>478</td>
<td>473</td>
<td>477</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>487</td>
<td>560</td>
<td>467</td>
<td>408</td>
</tr>
<tr>
<td>NM/FM difference</td>
<td>19%</td>
<td>24%</td>
<td>15%</td>
<td>19% =&gt; 16% overall</td>
</tr>
</tbody>
</table>
the Moon is seen to be growing in the sky then while waning it decays. No difference was found in the data.

III. Boys only - at least 3/4 of data was male.
Selecting only the dates when punishment or discipline was administered to boys, and again arbitrarily grouping them into four parts for data-analysis, then grouping by Sun-Moon angle:
(See figure 3 below)
There was a slightly smaller difference found for girls, but overall this gender effect was not significant.

IV. Moon furthest from ecliptic, in celestial latitude (This happens when the Moon is at 90 degrees to the lunar node axis). Twice yearly, as explained earlier, syzygy will coincide with the lunar node axis at the ‘eclipse seasons.’
Around these months of the year, New Moons will occur close the ecliptic, i.e. they will be of low celestial latitude. Three months later, they will be far from it. The eclipse seasons were then falling in May and November.

I selected for a large lunar latitude at syzygy (Full & New Moon), such that the angle between Sun and nodal axis was greater than 60 degrees. Twice each year, the Sun moves 60 degrees – 120 degrees away from the node axis, i.e. from either of the lunar nodes. Thereby we select about one-third of the data. For this selection-process the Sun-node angle was measured.

See figure 4 on the following page

This extra-large effect is far that one-third of the year when New moons happen ‘at high latitude’ i.e far from the ecliptic. It is a counter-intuitive result – one could expect the low-latitude New moons (when eclipses happen) to be more influential.

This node effect would really need testing over maybe a ten-year period. The present result is here offered as being suggestive and worthy of further study.

The 2009 (Sept 2009-July 2010) sample was smaller, just 1300 cases (see figure 5 next page)

The results are replicable in different years but analysis of the rest of the data is ongoing.

I concluded my research by pointing out that adolescents suffer from a disturbed circadian cycle that is exacerbated by an early morning routine that does not match the needs of their developing brains, the readily available artificial stimulants they can easily buy in any store and the opportunity to catch up on lost sleep during the new moon phase. Quite simply, pupils of this age simply have more energy to get into trouble at the New Moon than at any other time during the lunar month and perhaps the adults in charge of them also have the energy to follow through with sanctions.¹

The benefits of such preliminary results could not only improve the quality of education for pupils but could also ease the difficulties that come with

### FIGURE 3
**BOYS ONLY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Moon quarter</td>
<td>473</td>
<td>409</td>
<td>415</td>
<td>410</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>366</td>
<td>330</td>
<td>386</td>
<td>377</td>
</tr>
<tr>
<td>Full Moon</td>
<td>377</td>
<td>360</td>
<td>346</td>
<td>361</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>399</td>
<td>436</td>
<td>346</td>
<td>320</td>
</tr>
<tr>
<td>NM/FM difference</td>
<td>+25%</td>
<td>+14%</td>
<td>+20%</td>
<td>14% =&gt; 18% overall</td>
</tr>
<tr>
<td>totals:</td>
<td>1615</td>
<td>1535</td>
<td>1493</td>
<td>1468</td>
</tr>
</tbody>
</table>

### FIGURE 4

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Moon quarter</td>
<td>188</td>
<td>201</td>
<td>122</td>
<td>221</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>161</td>
<td>135</td>
<td>86</td>
<td>137</td>
</tr>
<tr>
<td>Full Moon</td>
<td>99</td>
<td>109</td>
<td>204</td>
<td>133</td>
</tr>
<tr>
<td>3rd Q</td>
<td>100</td>
<td>132</td>
<td>161</td>
<td>119</td>
</tr>
<tr>
<td>Totals:</td>
<td>548</td>
<td>577</td>
<td>673</td>
<td>610</td>
</tr>
<tr>
<td>NM/FM difference</td>
<td>90%</td>
<td>84%</td>
<td>-40%</td>
<td>66% =&gt; 34% overall</td>
</tr>
</tbody>
</table>
teaching adolescents. Imagine a school that acknowledges the fact that adolescents require more stimulation during the rapid brain development after the Jupiter return or that they are more alert during the New Moon?

When I presented my findings on brain development (the research on lunar phases was not ready at the time) all neatly triangulated with statistics, outside resources and qualitative research to the Senior Leadership Team at my school and suggested we were focusing intervention on the wrong age group, I was pretty much dismissed as a troublemaker. Or perhaps they just sensed astrology had also underlined my research. I guess I was too far ahead of them to be taken seriously!

Astrology is rich with scientific potential but to engage with our skeptics we need to tighten up our methodologies, extend our databases and eliminate variables by focusing on specific questions and research projects.

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### About the Author

Alex Trenoweth, MA (CAA), DF AstroS is a teacher, author and astrological researcher who has travelled across the globe lecturing on the topic of astrology and education. The research presented for her book “Growing Pains” won her the title of “Best International Astrologer of the Year, 2015” by the Krishnamurti Institute of Astrology. Unable to leave the classroom entirely, she continues to work where needed as a freelance tutor for children of all ages whilst maintaining her private astrological practice and lecturing for respected institutions such as Kepler College, MISPA and the International Academy of Astrology. Her second book, “The Wolf You Feed” is due for release later in the summer of 2017.

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### End Notes

1. 20,000 entries over a 10 year period shows this is consistent year after year.


5. The data was collected from a qualitative analysis of teacher responses in a survey completed by the author.


Data collected from IT manager from an anonymised London school. The database of about 20,000 entries over a 10 year period shows this is consistent year after year.

This project was first published by the American Federation of Astrology: *Journal of Research of the American Federation of Astrologers* Vol. 16 Paperback – 16 Mar 2016. The methodology and results are presented here verbatim.


Website accessed November 2015

Owen, Cathy; Tarantello, Concetta; Jones; Michael, Tennant, Christopher “Lunar Cycles and Violent Behaviour” website found in November 2015 http://anp.sagepub.com/content/32/4/496.abstract

Howard, J.M http://pb.rcpsych.org/content/pbrcpsych/13