

DUVERSITY NEWS no 25 2009



Dante and Beatrice by Henry Holiday
Set on the Santa Trinità Bridge in Florence

The DuVersity acknowledges its debt to the inspiration and practical methods of Gurdjieff and Bennett, while taking into account the many changes that have taken place over the last fifty years requiring us constantly re-evaluate how this inspiration and methodology can be of help to us in our various individual and social predicaments today. In an early talk I gave called 'The Mosaic of Mutual correction' [<http://www.duversity.org/archives/mosaic.html>] I presented a model of how the various teachings, philosophies, traditions, ways, methodologies that now abound might serve to 'correct' for each other's limitations and partiality. This has echoes in science where, for example, the Oxford physicist and computer scientist David Deutsch advocates a tetrad of methods able to complement each other for a total approach. There is good reason to suppose that the tetrad is the basic form of such mutual correction, but there is no space here to elaborate. Suffice it to say that no one method or teaching can ever be complete in itself. In my younger days at Bennett's centre in Coombe Springs it was evident that a lot of the people there were wide-ranging in their search and Bennett himself demonstrated an extraordinary capacity to assimilate new information and directions from diverse sources. As a physicist, Bennett well understood that no isolated system can ever evolve.

I am always grateful to Karen Stefano for striving to educate me in the ways of psychotherapy as one corrective to what has become the approach in 'the work'. She has taken on the mantle of Edith Wallace in the work with 'Collage Connection'. In this issue of the Newsletter, we have a remarkable article by Richard Heath demonstrating how Megalithic mathematics may have worked and I am also including a 1985 paper I wrote on the 'Human Actor' since theatre is certainly a powerful way into realising the human situation and one that Gurdjieff acknowledged.

Notes are added on various events I have run in Europe this year (the image above is a reference to my visit to Florence). I hope that they give the flavour of an ongoing *conversation*. One of the crucial aims in such conversation is to enable people to bring out whatever they can about their beliefs so that they can become freer of them. I think this is the

way to go rather than dictating to people what they should believe in, which is entirely useless for their understanding. The complexity of the world has gone over a threshold where the old static ways are no longer appropriate. People still look for answers while something totally different is waiting for us.

A PROPOSED ITINERARY FOR MEGALITHIC ASTRONOMICAL DEVELOPMENT

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This paper will show how megalithic culture could study astronomy and make significant discoveries without modern numerical techniques or equipment. This should overcome the natural disbelief in megalithic capabilities whilst advancing a realistic itinerary to megalithic achievements. Through the counting of natural time periods, the measurement of synodic periods, the creation of a subtle metrology and the use of simple geometrical tools such as the right angled triangle, a discovery window on the sky was possible. This produced some unfamiliar results that are of interest today and Nature is shown to have nurtured early astronomers with the provision of the 19 year Metonic period and 18 year eclipse period, the Saros, just 12 lunations shorter than this.

Introduction

Astronomical observation begins with the observation of spatial organization of stars and planets, the moon largely by night and the sun by day. The organization of time can seem quite fascinating since the sky generates changes which run parallel with those of the terrestrial environment. It has been claimed that early scratches and notches on Stone Age bones and other artifacts could represent counting of the moon's phases [MARSHAK]. The later megalithic culture was obviously able to count and so proof of this Stone Age capability any further back is not especially relevant.

The Month's Approximate Length

Whilst not the accuracy of the actual measurement the half day excess over 29 days adds up to a whole day over two periods. Such good fortune means that some astronomical measurements could be achieved quite easily and these specifics need to be taken into account when assessing any Stone Age ability to progress to the Megalithic. To achieve greater accuracy for the month's duration requires more sophisticated techniques but having a good figure brings early understandings and a subsequent search for greater accuracy, as will be seen.

The Year's Approximate Length

The next achievable goal is to measure the length of the year, which is 365.242 days long. This is also, quite accurately, 365.25 days long, a quarter day longer than 365 whole days. The quarter day manifests in the fact that, on the horizon, the rising or setting sun on the same day of the year has four different positions on the horizon in four consecutive days. This fact enables a period of four years to be counted in days so that the sun will again appear to rise or set on the same distant horizon mark almost exactly. The count would be 1461 days to give an accuracy over one part in 45,000 {1 in 45655}. However, the problem of keeping tally, that is of notating a long count must be considered in the next section.

The Problem of Notating Long Counts

It is a well established fact that cultures readily develop horizon calendars since the sun moves to north and south during the year. The width of such calendars, calibrated by features on a local horizon, grows in angular extent with increasing latitude from the tropics. It is also well demonstrated that megaliths were employed; both as central marker (from which observations are made), and also to provide long sightings to supplement natural features on the horizon.

The keeping of such long counts would require techniques for the recording of large numbers. Inevitably, sophistication must grow from marks on bone to the use of knots, counters, the use of grouping patterns and so on. In later historical cultures these developed into representational symbols and now-familiar mathematical techniques including arithmetic, techniques that have proved crucial to modern scientific culture. Records of early arithmetic exist because of the parallel development of written records paralleling writing with numerical notation on clay, stone, leather and paper media. An alternative mechanism enabling megalithic astronomers to do calculation and measurement is required, since there is no evidence of megalithic notation. It seems more likely that abstract notation arose as the megalithic period was coming to an end and so, how could numbers be handled otherwise?

One promising alternative is a development of metrology or system of measures. Every ruler and tape measure indicates numbers and a unit of measure can usefully subsume a wealth of fractional measures within it such as inches in a foot, eighths of an inch within that. A series of marks on a line or knots on a string are suggestive of numbers and indeed counting involves the notion of number. Counting is a natural precursor of metrology in which number notation is sublimated within an easily manipulated system of measures.

Once measures arise there is a natural use for them within primitive geometrical methods.

1. Measures can be subdivided into one another to achieve the division of one number by another.
2. Larger numbers of a unit can be aggregated to indicate multiplication, such as with a fathom of six feet.
3. Addition and subtraction are simply available through adding or removing a length.
4. In many respects, the concept of measure demonstrates the power of gears and clockwork, themselves an oft-used and natural metaphor of cyclic time periods.
5. There are psychological impacts too in that, knowing the relative frequency of astronomical periods allows for the notion of exact future and past celestial situations.

This proposal, that metrology enabled Stone Age calculation, is supported by the fact that metrology is found to be a chief characteristics of megalithic building. Such constructions invariably employ measures that are precise and often astronomical in their specifics. The measures found in megalithic sites prove to be directly related to the later "historical" measures, described in later periods through writing.¹

Metrological notation is a very similar technique to the aggregation found within our positional notation of numbers, in the use of miles, furlongs, fathoms, yards, cubits, feet, etc. Each larger unit consists of a known number of smaller ones that in turn contain known

¹ One clear indication is that all of our historical measures, whilst in use in various parts of the East and Europe, were clearly developed within a single interrelated system of measures: they are all related by way of integer ratios between them, ratios involving the first four or five prime numbers. The use of low prime numbers indicates that the originators of the system had appreciated the primary concern of metrology which is that of dividing one length by another. This commensurability of different lengths parallels exactly the problem posed by the division of one celestial period by another and it is likely that the need to relate celestial periods that would have been the initiating cause of this ancient metrology.

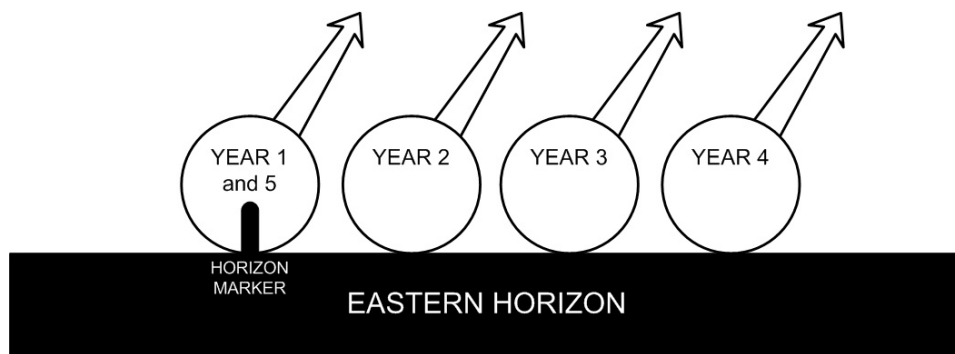
quantities of smaller units. Both horizon calendars and metrology are evident phenomena at megalithic sites.

Counting the Year's Length, again

To improve the accuracy in counting a year one can go through a series of natural steps.

Step One: One can count the days between sunrise on the same point of the horizon to realize there are 365 days in a year. Playing with the count can reveal the characteristic that 365 is 73 times 5.

By establishing the 365 day year, one has a direct relationship to the 5:8 relationship of this year to the Venus synodic period of 584 days. There are five 73 day periods in the 365 day year whilst the Venus synod is made up of eight 73-day periods making Venus and the solar year commensurate to considerable accuracy {one in 7300}. Venus is the brightest and most systematic planetary recurrence for the naked eye astronomer whose cycle has an evening star and then a morning star phase which repeats 5 times every eight years of 365 days.



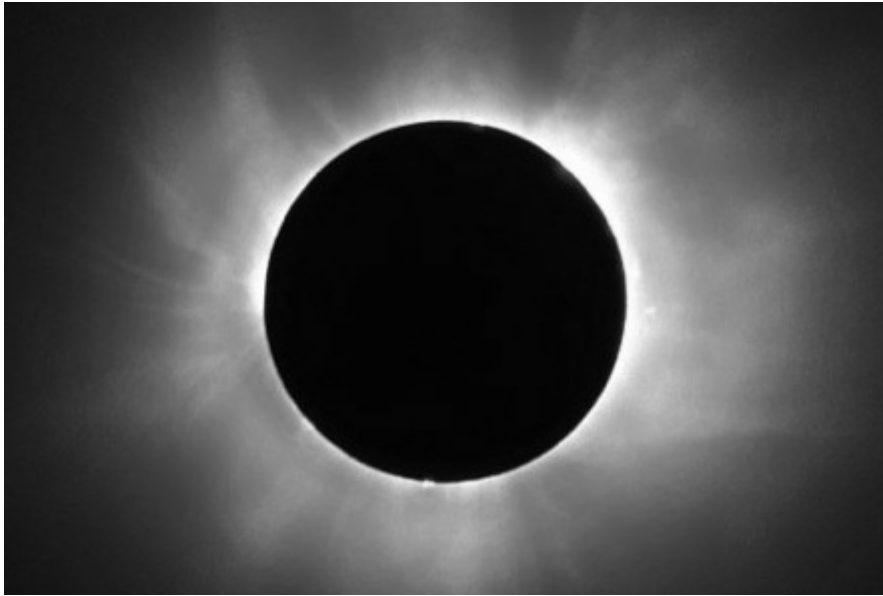
Step Two: When engaged in this activity it becomes clear that the sun “creeps” ahead slightly between years. However every four years there is a sun again on the same horizon marker.

Step Three: The visualization of 365 days, four times, plus an extra day, reveals the true length of the solar year as 365 plus a quarter day.

There is therefore no need to count four years, and in any case how would you know that every four years the sun is accurately on the same marker? It is the observations themselves that develop what to do and “four positions on the horizon” gives the clue to what to measure and how to measure it: that is to say a phenomenological approach would indicate how best to proceed. The sun returns to the same marker after four years meaning one quarter of a day extra per year.

Having achieved the improved 365.25 days as the year length, longer and more accurate measurements are available through observation of a 33 year period which yields a very respectable 365.2424 figure for the solar year as 365 plus 32/132 days.

As with modern science, mechanisms for achieving higher accuracy open the door to new discoveries. In the megalithic world it would have been the lunar month that needed to be more accurately measured and the key to this proved to be nature’s provision of a moon whose orbit creates eclipses.



The Importance of Eclipses

This is expressed very well by E.G. Richards:

“The mean synodic period [of the moon] may be measured by counting the days in a large number of lunations and taking an average. This is facilitated by the fact that the earth, moon and sun are exactly in line, during an eclipse. Thus, counting the number of days between eclipses and dividing the result by the number of new moons observed would give an accurate estimate of the average duration of the lunation or lunar month”²

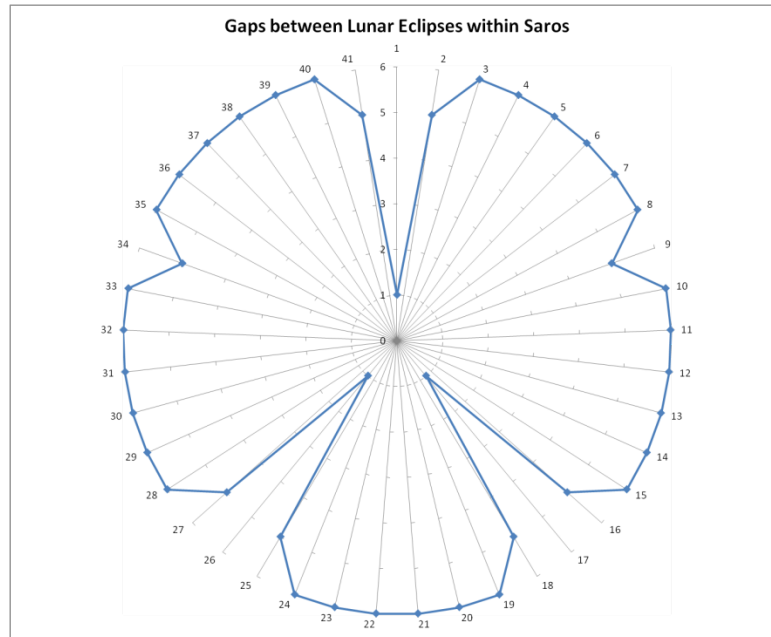
An eclipse can be of two sorts.

1. A solar eclipse, visually the most arresting, is a new moon that occurs when the moon, and hence the sun behind it, is sitting on one of the lunar orbital nodes where the sun's path crosses that of the moon. The moon then stands between the sun and the earth and the shadow created touches a region of the earth. When the moon is lower in its orbit, this can completely mask the solar disk, but only for a very limited region of the earth's surface. This makes solar eclipses quite exceptional as observations and also, quite unpredictable to megalithic astronomers.
2. A lunar eclipse places the Earth between a full moon and the sun, again with these bodies sitting on lunar nodes but one on each of the lunar nodes rather than the same one. The shadow of the earth is about three times wider than the extent of the moon and this causes regular eclipses to occur whenever the sun is near a lunar node since the moon, moving thirteen times fast, will pass through the other node during its orbit and be eclipsed when when full.

Lunar eclipses are common and are also visible when they take place on the same side of the earth as an observer. Some might be missed during the day, especially when partial or “penumbral”, that is not fully within the earth shadow. Almost every six lunations an eclipse will occur and this allows counting between eclipses as these accurately mark an opposition between sun and moon and hence the exact moment of a full moon.

As such counts were developed over many years, it would be noticed that there were either 6, 5 or 1 lunar months between them, or multiples of these (when eclipses were not observable or simply missed). A typical pattern is shown below, for 2002 to 2020.

² *Mapping Time, the Calendar and its History* by E.G. Richards, OUP, 1998



The pattern is symmetrical because of an 18 year period called the Saros, whose chief characteristic is that an eclipse, solar or lunar, at any moment will recur in similar fashion 18 years, eleven days and 8 hours later, because of the way the moon's tilted orbit precesses. In any recurring cycle, what happens at the beginning is mirrored by what happens at the end and fortunately the 5 and 1 month eclipse gaps allow there to be a recognition, using symmetry, that the pattern of eclipses repeats.

The Saros pattern of lunar eclipses is created by the fact that the sun meets a node every 173.31 days whilst six months add up to 177.18354 days. An eclipse at one node, opposite the sun, can only happen once after which the sun will have to move to the other node before a further eclipse can occur. However, six lunar months are four days longer than the time the sun will take to change node, and this leads to a gradual advance in where the two bodies will stand opposite each other again.

If the six month period is going to overshoot the eclipse condition, a fifth month's full moon will instead manifest an eclipse, usually generating a partial eclipse instead. If this happens early enough, the sixth month can also find a partial eclipse condition, leading to the occasional incidence of just one month between eclipses. If an eclipse occurs after just one month then a further 5 month gap will bring the moon and sun to the opposite nodes in suitable condition to being a further set of six, mainly total eclipses.

Another benefit in viewing lunar eclipses arises when they occur at night for at that time the location of a lunar node can be determined relative to the familiar star constellations, specifically relative to the ecliptic and the sun's yearly path. After counting the eclipse periods, in lunations and in days, over 36 to 55 years it would become apparent that there was some sort of order in them, because of the gaps of 5 and just 1 month, that punctuate the series as the difference between six lunations and half an eclipse year is naturally adjusted for.

When the Saros period is thereby resolved, a whole number of lunar months can be defined for its duration of 223 lunar months, made up from five sets of 6 month gaps, eight 5 month gaps and just 3 1 month gaps; $180 + 40 + 3 = 223$.

Having reached such a point then not only would the duration of the lunar month have been accurately measured but also, a predictable schedule of expected eclipses would be available and the total length of the Saros would be known, the knowledge of which being passed down to later astronomers.

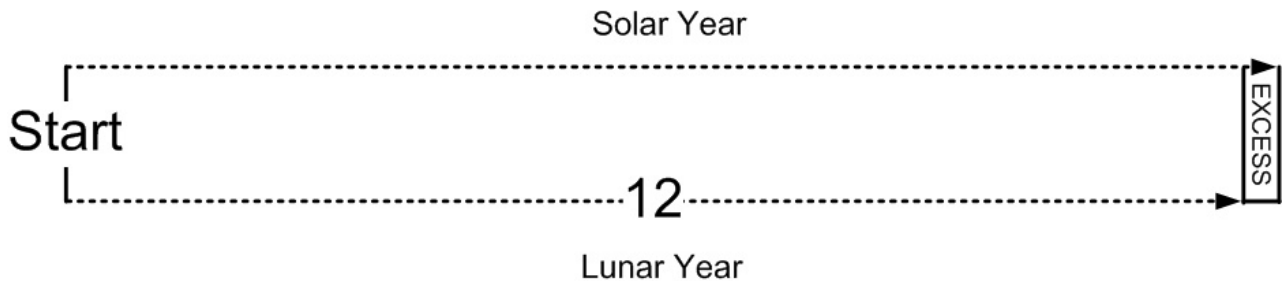
Around 500 BCE a Babylonian called Naburinos published an estimate for the lunar month of 29.530614 days using the Saros period. The figure of 29.53058885 used today is little different showing the high degree of accuracy possible. There is no reason to think that such accuracy was not possible in prehistory using long counts of days and the counting of lunar months in between eclipses. Sufficient accuracy is probably just one hundredth of a day's length, because 29.5300 is only one part in 50,000 different from the actual figure, relaxing the accuracy required for long counts between the many Saros eclipses

It is easy to establish that there are twelve lunar months in the year which we call the lunar year. Nearly eleven days difference exists between the lunar and solar years. This extra part of a month is nearly a third meaning that in three years there are 36 plus one lunar months, i.e. 37.³ This initial approximation of 12 and one third months in a year can be improved on through conducting long counts between Saros eclipses.

The Importance of Right Angled Triangles

To achieve more accuracy in the relation of the month to the year, attention must focus on this excess of the solar over the lunar year. Having developed an accurate measure for the lunar year then metrology can represent the count for the lunar year as a length that can be superimposed upon the day count of the solar year as a length.

The number of months in a year is then 12.36855 months, in modern positional notation not available during the megalithic. Instead, this could have been expressed by employing the properties of right angled triangles and megalithic metrology which is naturally suited to defining and measuring the side lengths of such triangles. If the year is established in day lengths, as a baseline, then it is possible to measure, as lengths, the twelve months of the lunar year from one end. This then leaves the excess of the solar over the lunar year, exposed as a length which can be measured in days.

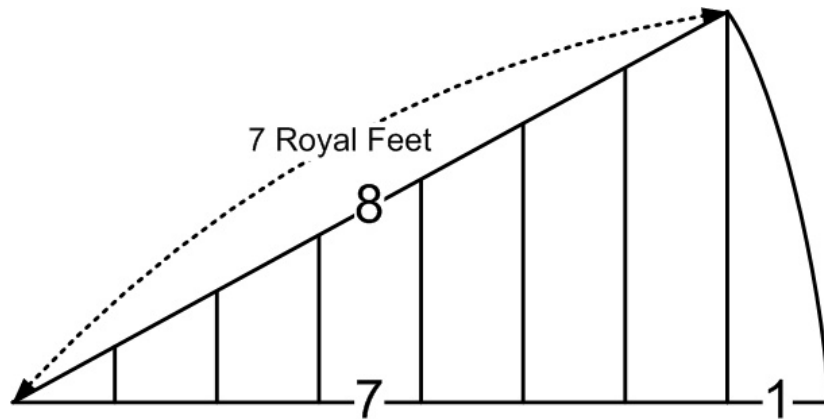


The question then arises: how does the excess compare with the month?⁴ By dividing the excess length into the month length, two whole excesses leave just less than $\frac{3}{4}$ of the excess but more than $\frac{5}{8}$ ths or $\frac{2}{3}$ rds of it. Logically, to find a closer division invites us to try $\frac{5}{7}$ ths and to do this a method to obtain sevenths of a unit of measure has to be available.⁵

³ This relation has been noted by Robin Heath as the median diameter of the Sarsen Circle of Stonehenge which is 37.10 megalithic yards.

⁴ We can preempt the discussion by noting that the lunar excess is, in days, closely 10.875 which as a fraction is $\frac{87}{8}$ days whilst the month as 29.5 days is $\frac{236}{8}$. The $\frac{236}{87} = 2.713$ which is close to $\frac{19}{7}$ to one part in 1652 and this, it turns out, is the very accurate whole number relation to be found here.

⁵ Such simple fractions are to be preferred before advancing to division by larger numbers, partly because the simplest ratios, where possible, are the most representative.



Metrology and triangular geometry make this possible because the interdivision of numbers within measures can be achieved by creating a base and hypotenuse in the same unit. If the base is seven units and the hypotenuse eight units as in the above figure, then the base divisions, *at points directly above each division*, divide up the hypotenuse in seven parts because of the proportionality between the two lengths. Seven feet on the base would generate seven royal feet of $8/7$ feet in an 8 foot hypotenuse, causing the required $1/7^{\text{th}}$ of a foot to emerge on the hypotenuse between the first foot and the one seventh division projected upwards from the base of seven feet.

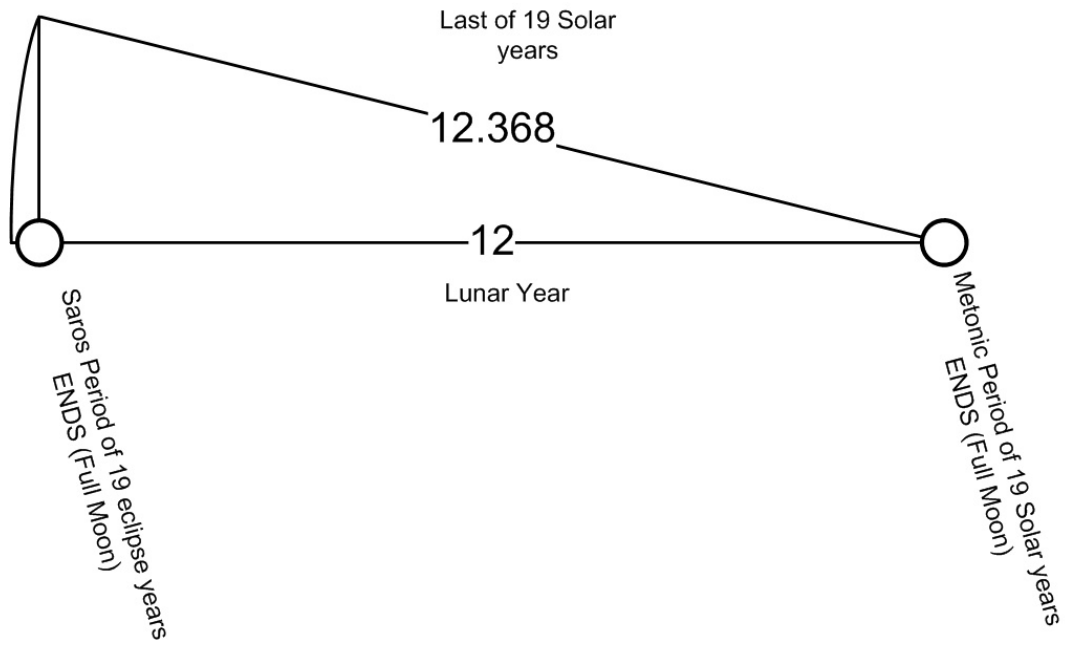
The month as a length would then be revealed as being $2 \text{ and } 5/7^{\text{th}}$ units in terms of the lunar excess per year or $19/7$ to a high accuracy. The excess is then revealed as being the inverse or $7/19^{\text{th}}$ of a month which is 0.368 of it. The month can then be seen as 19 units long and the excess as 7 units long. The required unit is known as the megalithic yard identified as being about $19/7$ English feet long.⁶ The lunar year of 12 months is added as 12 times 19 over 19 or $228/19$ and the metrological result is a year seen in units of length as $235/19$ feet or 12.368 megalithic yards equivalent to 12.368 months per year.

The Importance of Nineteen

Something extraordinary is revealed: that in 19 years the sun, moon and stars return to the same relative configuration within 19 years. This period was known to Greek astronomers as the Metonic period but it is far less obvious than the Saros period because the Saros announces itself in spectacular form with eclipses whilst the Metonic period requires a more attentive *noticing*, that the lunar phase and its starry backdrop are identical to how they were nineteen years ago. It therefore seems most likely that numerical counting to determine accurately the lengths of solar year and lunar month revealed the existence of the Metonic period.

Once the Metonic period of 19 years is known, then a lunar eclipse at any (suitable) moment will ensure a full moon (and similar lunar eclipse) after the Saros period of eighteen years and, further, a full moon, if not an eclipse, at the end of the Metonic period of nineteen years. Should counts have been established to accurately predict eclipses, it would soon become clear that there were exactly twelve lunar months between the ending of the Saros and the ending of the Metonic, relative to the starting point. That is, an exact lunar year separates the Saros from the end of the 19 year Metonic; for $235 - 223 = 12$.

⁶ The term English foot refers to its location in historical times as being in use in England.



The triangle above can be constructed to represent this, the last year of any Metonic period. It recapitulates the aforementioned activity that leads to establishing the excess of the solar over the lunar year based upon 7/19. This triangle illustrates the end of the Metonic, it's last year, very clearly. It is unavoidable that the phase of the moon at the end of the Saros and Metonic periods will be same as its initial phase and it is surprising that a full lunar year should lie between them and even more unlikely that the moon should have a synodic return with the sun exactly on the nineteenth anniversary. Heed must be given to what is a fortunate circumstance for an astronomy using counting and hence for megalithic achievements..

For the Saros to happen, a lunar node has to have reached a position, twelve lunar months before the Metonic. In fact it takes just less than 18.618 years for the nodes to retrograde fully around the ecliptic and as the nodes return to their starting position for a given Saros, the sun meets with the node responsible for an initial eclipse as it has nearly completed one orbit, 11 days and 8 hours into the 19th year of solar motion.

We have already established that lunar eclipses happen whenever the sun, moon and nodes are aligned, during eclipse seasons that last many days, if the sun is crossing a node and the moon goes through either one of its nodes. These nodal points came to be called dragon points because of the idea that sun or moon could be swallowed in some way.

Because the nodes retrograde and the sun defines forward motion in the sky, a node and the sun meet again in less than a year, a type of year called the eclipse year (of 346.62 days). Because there are two nodes there are two eclipse seasons in a year, each marking the minimum time possible between two eclipses.

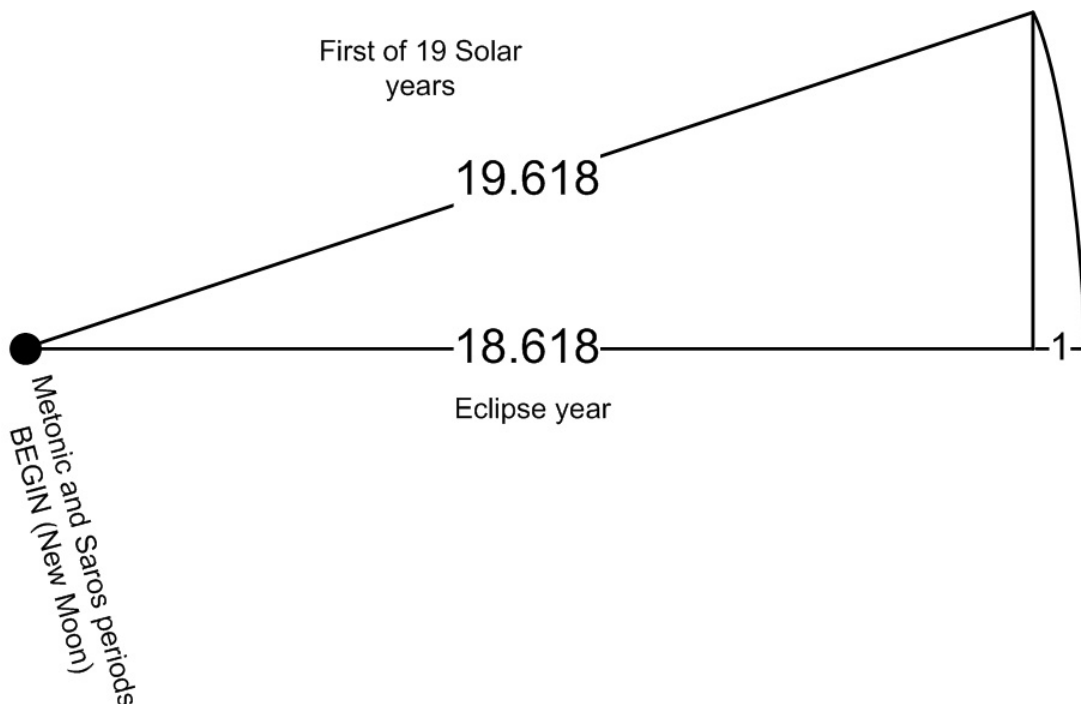
Since prehistoric people counted eclipses, this behavior and these seasons could be inferred despite the fact that the nodes themselves cannot be seen. Because of the occasional nature of suitable eclipse conditions, it is very easy to deduce that the number of eclipse years in the Saros has to be exactly 19 eclipse years.

At this point, there is a very significant structure to time appearing, that after 19 eclipse years there is a lunar year before the end of 19 solar years. As happened with the solar year and the lunar month, it is inevitable that the movement of the nodes themselves would become a subject deserving accurate measurements. The counting of days between eclipses yields a known and accurate number of lunations in between. Even though eclipses are sporadic, the common unit (of half an eclipse year) would soon become clear and known using the time of day for an observable eclipse to estimate within at least 1/8th of a day. In

fact, determining the length of the eclipse year is the complementary aspect of measuring the length of the lunar month from eclipses.

Once the length of the eclipse year is established to this accuracy, then the same technique used above for the lunar excess can be applied to establishing how much shorter the eclipse year is than the solar year. This figure is about 18 days and 5/8th of a day which is 149/8 days. The eclipse year is about 346 and 5/8th days which plus 18 and 5/8th days equals a 365 and 1/5th day solar year which is slightly short of 365.2424 days.

Constructing a triangle for the eclipse and solar year reveals something extraordinary if the triangle is normalized according to the unit of difference between the two years. To do this the unit (in this case, the excess of 18.625 days) is divided into both the base and the hypotenuse leaving the difference as “one”, the unit within which the triangle is now calibrated.



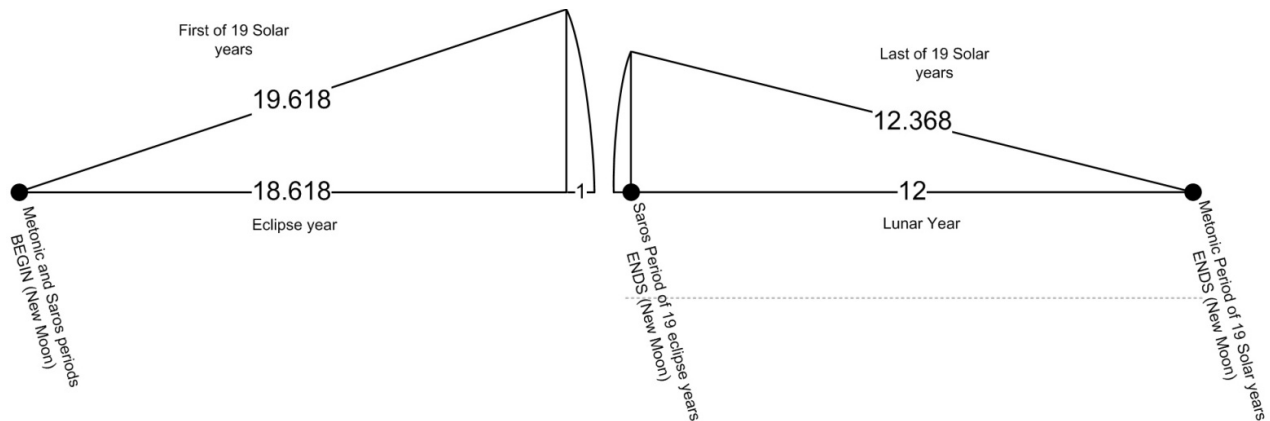
The result would be a triangle with a hypotenuse 19.625 long and base 18.625 or thereabouts. Of immediate interest would be the fact that the eclipse year divided by the unit of 18.625 yields 18.625, meaning that the eclipse year, in days, is the square of the unit whilst also being the “one” that makes the solar year 19.625 rather than 18.625.

These figures could have been improved upon so that they would approach the true figure of 18.618 days as the natural unit of the normalized triangle. For the eclipse year to be the square of the difference between the years, the unit involved must be slightly smaller and is found to be slightly less than 18.618.

The mysterious nature of this triangle emerges from the fact that the moon’s nodes move one DAY in angle during 18.618 days or 18.618 DAYS of solar motion. This DAY in angular motion is the earth rotation required to catch up with the sun so as to begin every day at the same solar time on earth.⁷ The whole Metonic period can be summarized with these two triangles, the 18.618/19.618 at the start showing the Node day relationship in the year and

⁷ It is important to note that DAYS of angle are the natural units for a people who count astronomical periods whilst the later degree system is natural for a people who measure angles directly using equipment that can be calibrated. The use of 360 degrees obfuscates the natural structure of time measure in the same way that using the non-native metre measure obfuscates the numerical content of megalithic sites.

the 12:12.368 triangle at the end to see the last lunar year that separate the Saros and Metonic completions, as below.



Some simple number relations then emerge. The lunar excess is, as shown, closely $7/19$ whilst this new length of 18.618 days is $12/19$ of the lunar month and also $12/7$ of the lunar runon. Both these new relations are useful but inaccurate in the opposite sense { one in 750}.

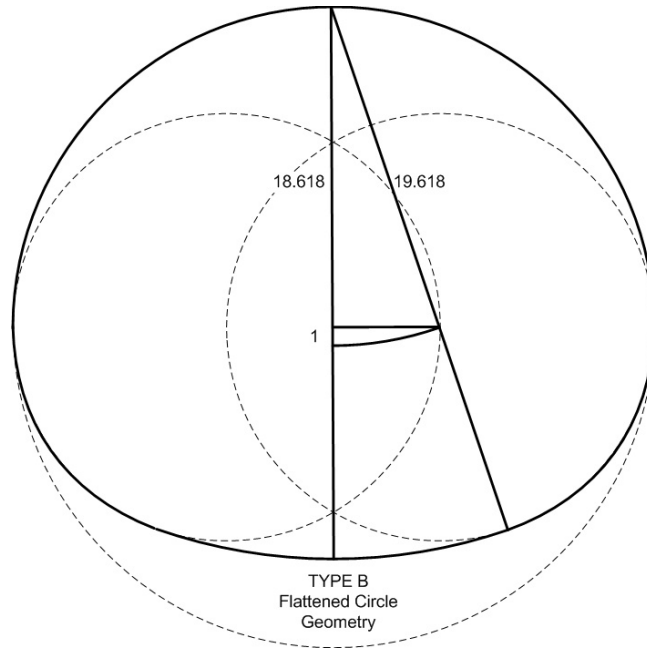
This carries great meaning with regard to historically received measures. If one developed a base measure and subdivided it into seven parts, then $19/7$, that is nineteen such parts, this would make a measure that then, naturally, operates to enable the lunar excess and the lunar month to co-habit in the right hand triangle. Moving on to the unit 18.618, which can usefully be called the Node Day, then in the same context it can be shown with a unit $12/7$.

These two values are found in historical measures as the royal cubit of $12/7$ feet and the Drusian step (of 2.5 Drusian feet) whose value is close to $19/7$ (being $19.008/7$) and is within the range of measures found for the “megalithic yard” by Thom and verified since at various sites. The $7/7^{\text{th}}$ of a foot is the English foot itself, which appears to have been the root unit for a developed metrological system around which fractional variations were created (such as the Drusian foot of $27/25$ feet). It has been found recently that almost all of the known historical length measures were based of the English foot with the implication that metrology was originally developed in pre-history. The applicability of megalithic measures to their astronomical activities whilst being present within megalithic constructions fairly confirms such a lineage for metrology and points, in the absence of other evidence, to the innovation of metrology in the megalithic.

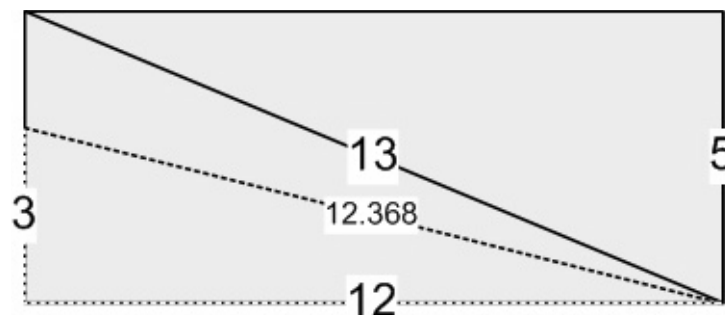
The Importance of Geometrical Symbolism

With regard to the Node Day of 18.618 which manifests in the $(18.618)^2$ eclipse year and 18.618 year nodal orbital period, the 18.618:19.618 triangle has been discovered⁸ within the Type B flattened circles built by megalithic peoples in Britain and Brittany. The radius of the non-flattened semicircle can be taken to be 18.618 units long whereupon the central vesica construction has a half width that then defines a hypotenuse of 19.618. The “eclipse triangle” is therefore available through the Type B construction, demonstrating (a) that the triangle was likely known by the builders and that (b) through geometrical flattening of a circle, an origin for such a triangle was found by them, in pure geometrical terms.

⁸ Robin Heath, Sun, Moon and Earth pp 54-55, Walker, NY, 1999.



The same story of geometric discovery is true of the 12:12.368 lunation triangle, whose third side is three units. The Station Stone rectangle is 12 units by 5 units in size and if the 5 side is divided at the 3:2 point then an intermediate hypotenuse forms this “lunation triangle”. Meanwhile, the diagonals of the Station Stone rectangle are 13 units long and form the second Pythagorean triangle having 12:13:5 side lengths. Since the Station Stone rectangle is 96 by 40 megalithic yards, then the twelve side is already available in units of 8 megalithic yards and these yards are closely 19/7 feet long.



Also at Stonehenge I and around the Station Stones is an out-scribed circle, the Aubrey Holes within which the Station Stone rectangle was constructed⁹.

This has been shown to be capable of operating a sidereal clock in which the sun, moon and lunar nodes are moved according to a simple schedule based upon the moon. The ring represents the ecliptic and the nodal positions can be progressed based on the movements of the moon so that, alignments of sun and moon with the nodes can be identified directly and even predicted through an artificial advancement in the schedule of movement.

⁹ Illustration From John Wood's *Sun, Moon and Standing Stones* OUP 1978. See also the original work *On Stonehenge* by Fred Hoyle. For further development of this idea see *Sun, Moon and Stonehenge* by Robin Heath, Bluestone , 1998

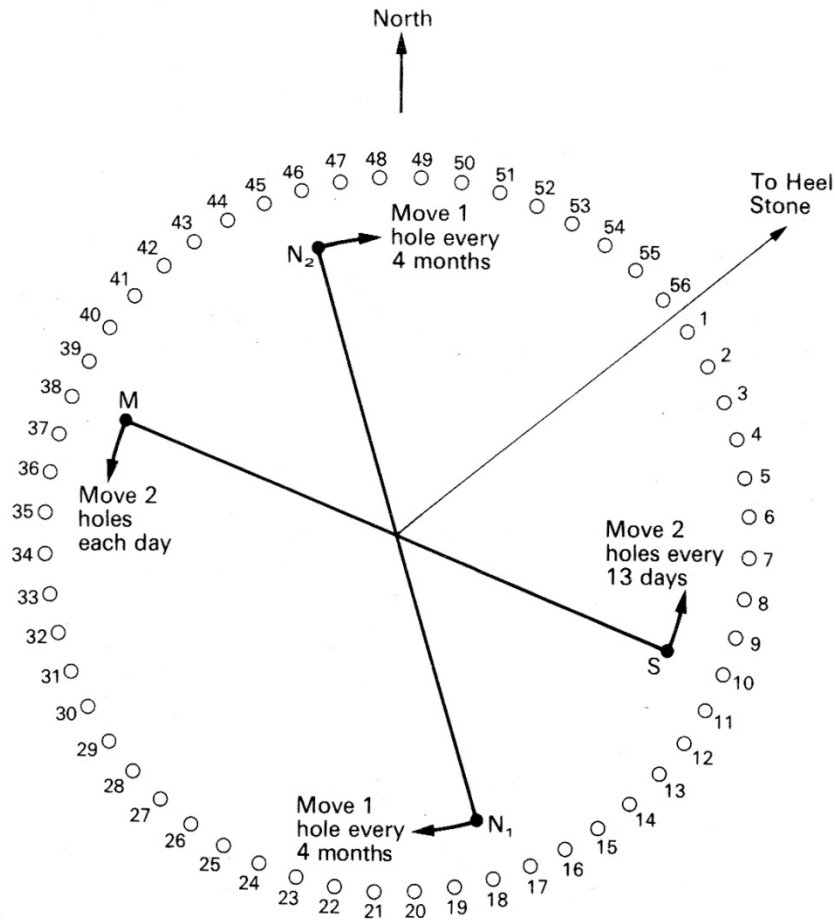


FIG. 4.11 Hoyle's method of using the Aubrey Holes as an eclipse predictor

Conclusions

It has therefore been found that accurate geometrical constructions, the Type B flattened circle and the Station Stone rectangle, contain frameworks for building the two triangles that best characterize the Saros/Metonic periods of 19 eclipse and solar years. The primary unit of length measure used in megalithic times to build these structures, the megalithic yard, is found to exhibit exactly the ratio required to map in lengths, within such triangles, the ratio of the lunar month to the excess of the solar over the lunar year which is 7/19 lunations. By using a 19/7 foot "yard", the excess becomes the root measure, the English foot by cancellation.

There can be little doubt therefore that metrology applied to geometry enabled the counting of celestial periods to be transformed into an exact science without the mediation of later numerical techniques. This science would of necessity have been literalistic since it was not able to abstract numerical measures but could only translate them, from time counting into length measures. However, the right angled triangle enabled equivalents to multiplication and division so that the system of fractional measures could contain all manner of divisions and aggregations based on different prime number bases. Problems of relative length could be solved geometrically or through simple division of a given measure by different units of measure so as to discover common units, that is to find these commensurate and rational with respect to each other.

The problems in accepting the full range of astronomical capabilities demonstrated in megalithic monuments and their alignments has been the absence of an itinerary to explain how Neolithic peoples could have developed such sophistication. The reporting of concrete

proofs of achievement has caused those reporting them to be accused of proposing an anachronistic flowering of abstract mathematics in prehistory. Meanwhile, the proposal that an ancient metrology existed as a precursor to historical metrology similarly presents hard to accept assumptions.

This is a Neolithic itinerary whereby the Megalithic could achieve what it did without later mathematical methods. The hypothesis *requires* an evolution of metrology so as to notate counting, develop counts as accurate lengths, find differences between astronomical periods and develop geometrical techniques to identify numerical relationships between these periods. This *requirement* then fits with the evidence within monuments and their geometries containing exactly the right measures and system of metrology.



THE HUMAN ACTOR

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The theatre portrays man to himself. The actors act on behalf of the audience, to show them something of themselves. Even in the most bland entertainment, the audience is called into an unusual condition, far removed from ordinary life, in which their empathy has to be tempered with detachment, their identification with observation. If the theatre is to teach, then it has to touch and awaken what we have already seen in ourselves and in others, especially in observing ourselves in our dramatic existence, composed of the unexpected, of conflict and the burden and crisis of choice. The link between observation of ourselves and observation of others is the key to the significant character of the theatre. It is based on the uncertainties of communication and the awareness of a whole action. In the ordinary state of life, the uncertainties are obscured by emotion and the awareness of the whole is fragmented by thought. The theatre goes beyond the lonely perspective of a 'mind'; it touches us in the raw, because it takes place *now*. Now is the time of self-observation; there is no other.

Entertainment and teaching are not necessarily opposed, though the former is designed for 'losing oneself' and the latter for 'finding oneself': to find, we must first lose. That is why the 'framework' of a play needs to bypass the conditioned framework of the audience, to pose the mature members of the audience a problem they cannot resolve save by entering into what is shown to them and awakened in them. There is no intrinsic need of grossly dramatic devices such as the portrayal of hate, murder, treachery or supernatural events. The material of ordinary life can be enough if some central dilemma is activated in the audience, something strong enough to bring to the surface issues which have been buried in the realm of 'what is irrelevant and inexplicable'.

But, how can a play show forth something of the enigma of human life, depending as this does not only on the spoken word, the articulate thought or feeling, but also on the unspoken observation of a moment of consciousness? Has there ever been in the whole history of the theatre a scene in which a character has to proclaim: "I am awake! Now, I see what is going on. This is the truth." Perhaps some examples might be found; but in these, no doubt, we would simply experience the manifestation of an individual private realization bound by the same laws of relationship and limitation out of which the whole play is constructed. Otherwise, the play would *cease to exist* at that point. God would have spoken. In a sense, that is how it is at certain points in the Greek tragedies, in *Peer Gynt*, in *Faust* and so on. At such points, the play ceases to be a play. We may witness a metaphysical dialogue, but not a play. The archetypal consequence of a burst of consciousness on the stage is "The rest is silence" of Hamlet. The unspoken word of all plays is the awareness of the actors, the characters and the audience.

To stretch a point, we might say that 'what follows' on from the emergence of consciousness is the comic. Tragedy rests on lack of consciousness and, in its highest form, on consciousness been raised up through suffering. When the tragic is transcended, there is comedy. The traditional background for such a thought is obvious enough: in literature, with the 'Divine Comedy' of Dante and, in eastern religions with the *lila* or 'sport' of God. There is also a shift of psychological centre. In comedy, the opposites are shown together, the appeal is more to the intellect and laughter follows. As Rudolf Steiner explains, weeping comes from the feeling centre and laughter from the intellectual. [1] This is how it is in life, for when a man has some self-observation, typically, he learns to *laugh at himself*. This ability to laugh at oneself is rare, indeed, amongst the characters created for the stage. Even if proposed, such a character would demand a *tour de force* of acting to portray. Such a character would approximate to a *conscious man*, able to be aware of what he is doing and why; that is, someone energised and constantly awakened by his inner contradictions. Such a character could not be shown precisely because consciousness cannot be shown. Stuart Holroyd made an attempt in his play around the character Gurdensky, modelled after Kenneth Walker's account of the mage Gurdjieff. Holroyd's device was to portray Gurdensky engaged in *improbable acts*. Another device might be to have the other characters show improbable responses to the conscious character. He himself would be unable to show anything of his essential content. There is no escaping the ultimate fact that *consciousness cannot be imitated*.

The dramatic art requires the portrayal of *lack* of consciousness, working through the forms of ignorance, self-deception, emotional identification and the like. It is not surprising that John Osborne at one point made a passionate defence of Tennessee Williams, pointing out that his 'neurotic' and 'emotionally crippled' characters were really the *norm* of human life. The audience is given a pseudo elevation to a conscious role; but they are liable to miss the point unless they are able to enter into the stress of actual involvement in the course of events. Observation without involvement is a false detachment. That is why the dramatist plays with the audience, allows a partial awakening in his characters (usually just one of them) which throws out of gear the mechanical expectations of the passive audience and enables these more in touch with themselves to see something of how things are in man. The course of events *deviates* from the predictable line established by the framework. There is something inexplicable, unknown at work. The Void peers through the drama at the audience and suggests that they do not know how to live or what their existence is about. [2]

Both audience and playwright take this play of deviations as far as they can within the limits of their cultural conditioning. For the most powerful working of the central action of awakening, audience and writer have to be in intimate relation and also dissolve their roles into the actors'. For the ultimate condition is that of *metatheatre* [3], theatre actually in life in the moment, directed by consciousness. Metatheatre is the prerogative of the spiritual master, the teacher of consciousness (and conscience). It is totally dissimilar from random events or 'happenings'. It is an ancient method. It is an inevitable method considering the nature of man and his life.

For ordinary man is already an actor in life and the whole artifice of the drama is inspired by nothing less than the aim to transcend the unconscious state of pretence to attain a real existence. We weep and we laugh as we learn to sympathise more deeply and see more clearly. The various modern theatrical cults - of the 'absurd', the 'cruel', 'alienation', etc. - are the only to be expected fall-out of the primary aim, attempts to imitate the real thing! The primary aim is a conscious one, which cannot be imitated. In so far as we are conscious, or touched by consciousness - though usually in a fragmented and not-graspable way - thus far we will have the aim of awakening consciousness in our dramatic art. And thus we can easily see that all the aims proposed for the theatre are to some degree dishonest, proposals made for the lack of consciousness.

All this puts the actor into an unenviable situation (if he is not a sleeper entertaining sleeping people). He has little basis for understanding what might be implied in his art. He is pulled into a transition stage, from the ordinary life of pretence to the authentic life of a conscious being, in which his own self pretence may *grow worse*. He has to take risks. He may well grow more deceitful, more fragmented, more at variance with his own purpose rather than less. At the very least, he has to find a way of *assimilating* the experiences generated through acting so that they may enhance his learning of the lesson that life brings. The theatre is a laboratory for investigating life that is out of control and dangerous for the technicians (the actors) who are drawn to it.

Why act? Is it not something to do with the following thoughts: "There is, of course, the amazing pull of the response of an audience, of actually being successful at making a communication even though it is not really my own, of overcoming the pain of speech and the loneliness of my mind. But acting also gives me a chance of creating myself by beginning to enable me to be free of myself, by enabling me to learn how to direct my manifestations as *I intend*."? That many actors act badly and others who do not often suffer trauma and disintegration do not vitiate this promise. But, it is only a promise. The way is strewn with obstacles and perversions, the greatest of which is the lack of any real aim capable of transcending what might be possible in the public domain of theatre, hide-bound as this must be by the frameworks of the general culture with all its limitations and distortions.

The actor also has to face the dilemma that a truly 'conscious theatre' is not possible in the public space and yet it is just this that he needs. There have been attempts, such as that of Peter Brook in Africa, to create a kind of metatheatre through an extraordinary encounter between actors and audience that cuts across the cultural frameworks; but the conscious theatre requires a more conscious audience, one more prepared to take the risks of a deeper involvement in the action and more capable of registering what they observe in the place of their own self-observation. [4] An unprepared 'audience' taking part in true metatheatre might well be traumatized to the point of madness (or they would flee the 'stage'). Conscious theatre cannot be a matter of public display, but of private participation. Effective observation nearly always requires crisis. Indeed, the spiritual teacher teaches by way of crises which he directs.

There is a pure theatre of contemplation in which the presentation alone of certain human phenomena and events suffices to enable the conscious observer to realize certain facts and laws. [5] Such are hinted at in religious rituals which are themselves failed or transitional modes of theatre strung between ordinary and conscious life. The great Epics and their attendant rituals are merely relics of an attempt to educate local cultures in *universal ideas* about the condition of man; usually, with time, perverted into an indoctrination to reinforce local prejudice when it descends into a crude identification with partial ideals. Just as individual men and women play out their pretences, encountering inevitable suffering and failure or the absurdities of good fortune, so it is with cultures, peoples and nations. The presence of these collectivities in human life is carried by myths and symbols, profane and sacred; images of the hero, the leader and the traitor through which the collective life is portrayed in a dramatically intelligible form. In other words, history is dramatic and the playwright is always something of an historian whether his mind is set in the ways of

providence, the dialectic or contingency The framework of a play is usually historical and such a framework is required for the action of the individual characters. [6]

The 'historical framework' is the framework of the *collective* whole within which the protagonists are embedded even when the action of the play is but a matter of days or even hours. The protagonists have an option of transcendence; otherwise they will appear as mere puppets - unless, that is, the author intends to show his characters are mere puppets *in spite of what they feel and think*, as could be argued in the case of the Greeks.

The stage, then, is a symbol of the world in which we exist and challenges every member of the theatre (the audience included) by its vast potential, all to be realized in a few hours on a few square metres of board. The meagre quantity of physical space should not over-occupy our attention, however, since the audience brings into the theatre its mind, full of the doings of the world, which is rejected by their *concentration* into an enhanced kind of space. Martin Buber speaks of the higher space of the theatre and how *what is not shown* can become vividly present. The actors and the audience meet in the penumbric space around the stage (or, even in the action *hidden* on the stage) that is, in the implicit space of the world. This is something often caricatured by actors mingling with the audience in the bar of the theatre.

The Actor on the Stage

The actor has to make the character 'work'. Is this entirely a matter of making the character appear believable? The character also needs to be interesting and revealing in spite of the fact that the majority of people as they are experienced by us in life are neither. We need to consider the fact that if an average person were realistically portrayed on the stage we might not believe in them! What would such a being be doing in a play?

There are some inherent requirements of 'characters' such as being portrayed in *a* condition of near-exposure, of being forced to reveal some unresolved contradiction or absurdity, of being near the edge of some shift in identity, and the like. (Needless to say, all this might apply only to the central character, the others acting as reference points of 'normality'). All this might be called the condition of 'enhanced perturbation' where the fact that they are not what they appear to be is about to be seen. Of course, it is never truly seen once and for all. As we have said, consciousness can come in only so far otherwise the play will collapse and the actor break down in *his role as an actor*. Whatever disclosures are made, they must be of the nature to veil a deeper deception. This is strongly indicated by the 'play within a play' staged by Hamlet to bring things to a head and disclose the murderer. It makes Hamlet the more enigmatic.

The actor, then, is portraying a man or woman who enters crisis, who is being forced to reveal something previously hidden. The forcing out of the revelation is accompanied by suffering and the act of disclosure itself *releases energy*. Both suffering and energy (and suffering is a kind of energy) are minimised in life where crisis is treated as abnormal. We do not want what we hide to be shown, precisely because we have been committed to hiding it. Psychological frameworks are almost irrelevant here; what are important are the psychological facts. The state of crisis is a perturbation outside the norm. Hence we can say that actors are concerned with portraying the 'abnormal state' - as we like to consider it - in which 'control' of life fails. Thus Oedipus, Hamlet, Brand, Blanche, and so on.

The crisis, the breakdown, reveals something to us about what is going on all the time, in that interval of 'failure' we can see what has been hidden by success. We can observe how we are *divided against ourselves*. [7]

Thus, we think one way and act another. Our thoughts do not penetrate where our feelings go. Even when a crisis comes through ignorance, this is ultimately revealed as due to a lack of enquiry, a holding to assumptions which we were never compelled to do. The character who says, "I never knew. He never told me." is, essentially, deceiving himself. He requires of the other what he himself is incapable of.

The project for the actor is implicitly terrifying. It is that of entering into a mode of disintegration. This is often obscured in acting technique by over-concentration on *emotion* - which is like dealing in the symptoms and avoiding the question of the disease itself. Someone has to burst into an angry attack on another, but the other is not the cause of the anger, which is coming out of an inner breakdown of previously separated mental states, *inner* antagonism. Does the actor have to get himself into a similar breakdown to be 'authentic'? The answer is 'yes' if he is stuck at the level of emotion. But, if he can enter the 'logic' of the situation more consciously he can go in a quite different way and observe in himself dispassionately the very same phenomenon in a spirit of *integration*. If the anger is created from a deeper level than the anger is *felt*, then there is freedom and the anger is even an aid to consciousness. After all, a very common characteristic of the spiritual masters capable of metatheatres is their power of 'conscious anger', more convincing and compelling than the most masterly stage performance can ever be. Gurdjieff, for example, was renowned for outbursts of rage capable of chilling his victims to the bone; but, in a moment, it could be 'switched-off' to be replaced by a state of gentle cordiality. Mastery of emotions in this sense is no mere 'acting' but an enrichment of the range of experience. The main distinguishing characteristic is *purposefulness* - ordinary anger is merely a reaction. There is in mastered emotion an intent over and above any emotional state. True detachment is, in fact, not to be found in a life of bland and neutral communication but in a highly charged and complex emotional manifestation which can be used as naturally as we use our tone of voice.

The poor actor who leaves the stage to row with his director or wife may, on the contrary be suffering a double disorder. His temptation, an awesome one, is to fall into believing that his ability to show emotional states is the same as mastering them.

Levels of Existence

It is a dilemma of human existence that everything we do can be seen as merely the functioning of a mechanism, the result of a programming interacting with an environment in time and space, in spite of any conviction we might feel that we are free and 'original' in our actions. The dilemma has been for millennia but no final conclusions can be reached since *the dilemma itself is real* and argument is incapable of dissolving it away. There is a line of approach which can give us a provisional basis for further enquiry. Very simply, what can be seen or observed *has* to be programmed; but, what sees or observes *cannot*. The two poles are inextricably bound up together and are essential in their unbroken linkage for our existence as potentially conscious beings. Our conscious flows out of the fire of the realization of the central dilemma. Our existence is on many levels and there is a recognized law that a higher level is capable of observing a lower just because the higher level is not programmed to the same degree as the lower one. [8]

Also, the higher the range in which the levels are brought into experiential juncture, the more sharp and *urgent* is the experience of the dual reality, until some most central confrontation is reached, the point of explosive separation, the primal energy of *shakti*.

Our primitive sense of the dualism of mind and body is a weak and vague version of the primary experience, but allows us to gain some understanding and is crucial for our force to live. The old theme of mind and body which has dominated philosophy for so long in the West does become a real personal issue once we do realize that what we think and what we say are not the same even when we want to say what we think. In ordinary life, this elementary fact is obscured through the very programming of social behaviour which is strongly permeated by hypocrisy. More to the point, our speech is in the world of others and, we feel, determined by them. Our minds appear to us as private and concealed. Vast absurdities of human life stem from this. Nearly all human misunderstanding is based, as J. G. Bennett pointed out [9] on judging others by what they say (and do) and ourselves by what we *intend*. Does not every play rest on this misunderstanding?

The endless frustration of speech in life creates in us a tremendous poignancy when we are enabled to be aware of the hidden thought of a character on the stage - of what he

cannot, or will not, say but which gives the meaning to what he is in fact saying. [10] The hidden, private 'speech' of a character is a central concern of every mature actor (simply in terms of, "What is he thinking when he says that?") He cannot only speak the written words; because the character is observing others and has a potential for self-observation in his presence to himself. The failure to 'speak the mind' amounts to living in a world of dreams, a state that has the power to wreck havoc in dealings with others. The act of communication between significant characters always borders or crosses into the condition of crisis. The positive drama revolves around the question of whether the communication will create a meaning, a mutual disclosure.

The separation of mind and behaviour, the contrast of actual dialogue with the pseudo 'inner' dialogue, is only the lowest form of the dualism that marks human existence. What is called 'the mind' has a range of meanings from the banality of inner dialogue to the most subtle feelings and images. Basically, it is the world of dreams. It, in its turn can be observed. Confusion arises when the mind is considered to be conscious. No traditional psychology considers it so, attributing consciousness to a higher level still, to the realm which includes, in contemporary terms, the 'unconscious' and the sources of motivation which arise from within the person himself. Compared with this higher level, the mind is inert, programmed and unconscious. From the higher level, the mind can be seen as the dream body in which our thoughts and feelings flow. It is really out of this perception that the power of acting comes. The inner states of our private world are programmes of response. Only from the perspective of the higher - the 'soul', the 'intellect' or the 'ego' according the aspect we select - can the vagaries of the mind and its dreams be understood and realized to be no more private than the body is. Mind is manifest not only in words but also in tone of voice and gesture and in patterns of response to others. For those who can observe there is no need of any mysterious telepathy - as every profound actor learns - to realize and transmit mental content. The mind has one of its main centres in *reaction to others*.

Above the mind is the centre of the *search* for oneself. This search takes on many forms and extends right down to the drives impelling us to achieve ideals, ambitions to be realized in the world around us amongst others, as well as attaining the higher, the Void. Again, we refer to the concept of the *divided self*. The seeking of this 'self' is both 'up' and 'down', inwards and outwards. This expresses the central characteristic of the core perturbation, the nexus of contradiction which is the axis of our existence in the world with its concerns and dilemmas. Of all dramatists, Shakespeare was the master observer of the divided self. Emotional representation is totally inadequate for the portrayal of his characters.

The Divided Self is the Human Actor.

At the level of the divided self, the actor passes beyond the separation of imitation and reality and enters into his own, natural acting state by which he plays himself.

However, the question of the divided self first arises for the actor when he asks, "How did this character arrive at this point?" This is to ask for far more than an imaginary history up to the point at which the play begins. It is to ask after the events of a higher dimension or level from which the particular, visible, existential dilemma came and through which he is *to experience himself*. The victim of circumstance has made himself vulnerable to circumstance because he needs to go through that. The character is his own friend, communicant and enemy.

The actor, of course has not to follow any particular doctrine about the reasons for the existentialist crises of any of his characters - or even of himself. But, he does have to face the issue in his own way. Standing in front of (or within) a character who is in a condition of breakdown (from the standpoint of the lower levels of programming) he must ask: "What does this mean? How is this possible in reality? How do I confront this possibility in myself?" For one actor, this may result in a welling up of a deep mythic sense -since the divided self exists in a world of archetypes and patterns more than in a world of people and things - and, for another, in an existentialist crisis of the pain of choice. The existentialist and the

essentialist (the mythologist) are equally in confrontation and need not be in exclusion of each other.

The question arises of the authentic performance when, whatever is written by the author cannot determine how the character is to be played or even what he means. This is given over to 'interpretation'. The actor has this to create and he creates it *out of his own meaning*. When the actor's meaning does not grow by his acting, the actor is diminished and trivialized in himself and is borne inexorably to his own crisis to be taught the lesson in an extreme form. The lesson is simply to face the question, take it seriously, bear with the issue.

The levels beyond the divided self hardly concern us here since they are beyond the scope of theatre. They involve questions to do with our very planetary existence and how consciousness is shaped into specific life-forms.

The drama of the theatre is therefore more than the drama that is written for the theatre. It is a drama for the actors - who are at risk. Unsurprisingly, at certain periods actors were socially avoided as undesirable people, perverted by their self inflicted debasement of meaning. Of course, the societies of these periods were also themselves hypocritical, debased in their own meaning by a collective pretence; but the point should be registered. The actor is faced with an issue of sincerity which, if he avoids it, will worsen his condition. Acting, the profession of pretence, can corrupt or liberate depending on whether it is pretending to pretend or learning to see. In this light, we can say that the real actor is one who no longer acts; he simply performs according to his observation for an audience capable of self-observation. He expresses human existence through consciousness of contradiction on all levels at once. His consciousness and his manifestations are whole and undivided.

Gurdjieff's Babylonian Saturdays

Two of this century's instructors in consciousness, people taking on the role of bridging between some more conscious state and ordinary life, were experts of the theatre. In all visible respects however they were poles apart - and this exemplifies the principle that the higher, the more individual and unique the man. Only the relatively awakened people Gurdjieff caricatured as 'stupid saints' are boringly alike - and that only in terms of public propaganda. The two 'instructors' were Rudolf Steiner and George Gurdjieff. Their interest for us lies in their claim to know the *original purpose* of theatre, to understand its modern distortions and also the way in which an actor can work consciously. Whereas Steiner spent several years as a theatre director, Gurdjieff's own 'performances' were directed in life, as the various accounts of his pupils show. It was Gurdjieff who, in his outlandish 'science-fiction' novel depicting human life from a cosmic perspective, gave an account of conscious acting that strikes to the core of the dilemma of the human actor.

The novel, called *All and Everything* (or 'Beelzebub's Tales to His Grandson') spans more than two millennia of earth history, and in the chapter on 'Art', he describes the work of a special society in Babylon concerned with researching into the transmission of significant insights to future generations in times of increasing degeneration. On Saturdays, the society met to create and witness performances which could be produced and understood only by people capable of knowing their own inner states and able to concentrate on specific sequences in their own flow of experiencing. They were experts in the fusion of observation and self-observation, with the *will* to manifest along chosen lines. Gurdjieff digresses to deliver various diatribes against the state of contemporary man in general and contemporary actors and writers in particular. His standpoint is similar to the one we have adopted in pointing out how the performance (in the form of the sequences) arises out of the inner contradictions which prevent our lives being purposeful and direct, coherent and developmental.

"... there just proceeds in them that particularity of their common presence which is that with one part of their essence they always intend to wish one thing; at the same time with another part they definitely wish something else; and thanks to a third part, they already do something quite the contrary." p.487

This state of ordinary contemporary man is contrasted with that of the ancient Babylonian actors. The real actor is able to generate a performance from within himself. He has first to listen to the totality of his various flows of experiencing all-at-once. There is no quietening of the mind in the ordinary sense of blanking out. It is attentiveness with no suppression that makes available to the actor a movement within himself. The second stage is to create a framework for action, which requires the exercise of Reason, a term used by Gurdjieff for the intellect that is above the medley of thoughts and the mechanisms of calculation, an instrument that is capable of an almost instantaneous grasping of a logic and its implications. The third stage requires the ability to concentrate on a certain unfolding of subjective experiencings. [11]

We need not suppose that these three stages are necessarily consecutive. We have to grasp that Gurdjieff is bringing up directly the issue of freedom and mechanicality. He recognizes that anything 'proceeding in us' is programmed but that there is an option of freedom in how we manifest. In more familiar guise, we could present the issue as one of *the deliberate act of spontaneity*, in which, of course, the actor is to *participate* with both his feeling (second level) and his consciousness (third level), his states and his Reason, as well as by exercise of the bodily powers. As a further element in this mysterious process, the members of the society were able to deviate deliberately from the mechanical flow of psychic events so that, in the intervals of the unexpected, something could be 'inserted' which conveys a truth. This is the practical equivalent to our supposed 'moment of truth' in which we imagined a character who awoke and told us (in the form of the other characters) what was going on in reality. In our speculation, we saw that this would mean the ending of the play. In Gurdjieff's method, the play continues along the mechanical line and consciousness is conveyed indirectly. What it is like is suggested by the unexpected modulation in a symphonic work. Subtly and instantaneously, we are lifted into an unspecified degree of freedom which just as quickly gives way to the new order, the new key (or framework). It is experiencing this kind of thing in ourselves that teaches us, for the teaching here is not of merely external information.

In the public theatre, we find that the dramatist and the actor, each in their own way, instinctively find themselves introducing 'inconsistencies' in the line of a character. Without this, the play is dead. It is both taking account of the self contradictions of a human existence and also conveying the essential truth of our freedom in mechanicality; just as the sudden transition in our own line of thinking signifies a moment of insight even/the line remains recognizably 'the same', as 'ours'? So, too, the character on the stage fractures the seam of his type at the critical moments without which he would appear as entirely a robot or puppet.

The perturbations in the unfolding of our lines of manifestation - our 'lives' -are the opportunities of awakening. These are the psychological source of the dramatic not, as it appears, the clash of emotions which is already a 'decayed state of the dramatic', an aftermath, a mere semblance of authentic crisis. Gurdjieff himself devoted a great deal of attention to the question of the cosmic origin of the human drama of psychology with its attendant questions of Reality and God.

In conscious acting, the actor puts his mechanicality to work, allowing to manifest what it is intended to manifest, the teaching of the 'unseen', the 'other', that which sustains human life and informs it, the source of meanings.

The Psychological Theatre

There are surprising resonances between the practical techniques of Stanislavsky for actors and those of Gurdjieff for some of the training of his pupils. Further, Stanislavsky once spoke like this: "Only the actor whose development proceeds along harmonious lines can, quite independently and through his own acquired experience, raise himself step by step to a wider consciousness".

This has suggested to some a debt of Stanislavsky to Gurdjieff and, to others, the reverse. James Webb in *The Harmonious Circle* points out other possible points of contact between

Gurdjieff's ideas and those of other eastern Europeans such as Moreno (who wrote *The Theatre of Spontaneity*) and Evreimoff (who wrote *The Theatre of Life*) the inventor of monodrama in which the conflicting impulses of a single character are played out on the stage. Interestingly enough, Moreno's starting point was the conflict experienced by actors between their interpretation of a character and the one fixed in the dramatic text by the author; and, in particular, he took as his example the actress Eleanora Duse.

Gurdjieff's greatest contribution to the theatre, however, was the performance of his own life. His self-avowed approach to life was "Outwardly play role; inwardly not identify." In other words, he lived life intentionally as he chose to live it and not as the ordinary man, compelled to act out some pretence obscure even to himself. The very nexus of social relationships is an artificial construct in which it is all too easy to become a blind protagonist. Three people meeting together will create a situation that is unknown to any of them. It is on this that the theatre relies for its material. Yet, at the same time, the actor must play his part *knowing* that this is so. This knowing of his is the element that can ruin everything. If the actor is to attain a wholeness, the energy and quality of his knowing must enter into the performance; it cannot be annihilated by some crude 'dulling out' of knowledge by drowning in the movements and the emotions of the character. Yet, how can an actor, an ordinary man who in his life continues to be a slave of circumstances and relationships, a slave blind to the mechanics of his own psyche, realize with effect the simple knowledge he has on the stage that he is 'playing a part'? The actor who is shocked in his essence by this realization is becoming conscious through his acting.

There is an ancient teaching that often put forth by those who believe in reincarnation that a man lives life after life playing different roles until he reaches the point at which it begins to dawn on him that he is doing just that, he is simply playing a role, that is, acting or pretending. Then he is on the way to discovering what is in the core of his existence, what is driving him again and again to repeat performances of being human. If the ordinary man has to wake up to the fact that he is playing a role, the actor has to wake up to the fact that what he can do on the stage can never be more than what he can do in life. [12] In a certain sense, the actor is imitating and performing himself and his own situation. It may seem that he plays the character through himself but, equally, he plays himself through the characters. The only distinguishing characteristic throughout is the degree of consciousness of the performance, in life or on the stage. Can the actor see that in his life he also has a script and a character to play almost as fixed as the one he might study to play a part on the stage?

This extraordinary issue is rarely energized to the point at which it matters to the actor. Actors can be so concerned with the results of their performances - approval and applause - or with their repertoire of techniques that the issue need never arise in them. Then, they can 'sleep' on the stage, cushioned by the play of emotions engendered by habits of imitation life.

The Subject

In thought we have the thought of the object and so on, but in consciousness we have the object. Sometimes we express this by saying that we are conscious of the 'existence' of the object, meaning that the primary experience is not of any particular mode of apprehension, simply that it is 'there'. Consciousness gives us the purest objectivity.

The question of the subject has not been broached, even. The reason for this is that the subject appears in this discussion *only if he chooses to*. We have looked at perception, thought and consciousness; communication and common sense; intelligibility and opacity - but in none of these will the subject appear unless he decides to. The subject does not exist unless he says that he does or shows that he does; and, any such moves make him appear rather like an object. It is this that has led certain philosophers such as Husserl to start talking about the 'transcendental subject', meaning the subject behind the appearances of the object. It is even questionable whether or not the subject can appear authentically to himself. Certainly, he cannot in intentional consciousness. Yet, the fact of his reality can be ascertained by any subject who decides. He cannot be made to appear - although all the

psychological apparatus, the complex of mental objects, say, can be roused to action by external pressure -but he can agree to appear. The subject first of all appears to himself in himself without reference to any order of object. Since this is independent of intentional consciousness, such an appearance is not an event of knowledge in any sense of the term that involves objects.

A 'naked subject' is as impossible in this world as a point singularity in physics: it would mean unlimited energy. It is something like this; the instant the subject appears, he disappears. He does nothing, changes nothing, is nothing objective; endures not. He is not subject to the rules of existence as objects are. In certain ancient metaphysics the recognition of these features led to the notion of a passive 'witness consciousness' as a definition of the subject. But this entangles us with intentional consciousness; or, at least, asks of us that we speak of a consciousness behind empirical consciousness (consciousness-of). The subject is not divided from the world; he is always implicit in every object. He is commanded by nothing but, since he changes nothing, his freedom breaks no laws.

Notes

[1] Rudolf Steiner, *Speech and Drama*, p. 247

[2] The science or study of 'deviations' was a particular strength of Gurdjieff as we will touch on once more at later point. For those of theoretical bent, J. G. Bennett's books *Hazard* and *Enneagram Studies* are useful.

[3] The idea of metatheatre was popularised by John Fowles in his novel *The Magus*. This book has been interpreted as an indication of the actual methods by Sufi brotherhoods at present working in the West: see C. Scott *People of the Secret*.

[4] Peter Brook, himself, is a kind of follower of the ideas of G. I. Gurdjieff as was brought out by his involvement in the making of the film *Meetings with Remarkable Men*, a portrayal of the early life of Gurdjieff, a testament, however, to the problems of portraying conscious men producing, in the end, a caricature.

[5] Francis Yates in her book *The Art of Memory* discusses the metaphysical symbolism of the theatre in Renaissance times as a device for the contemplation of ideas.

[6] One might be tempted to say that there are no 'timeless plays' but Samuel Beckett has approached very near.

[7] R. D. Laing and J.G. Bennett have both recognized the significance of the 'divided self' though from utterly different standpoints.

[8] Lilly's important work on levels of programming does not address itself to the central issue here, which he himself was trying to resolve.

[9] Reported in Schumacher's *Guide to the Perplexed*

[10] The director Peter Brook and the poet Ted Hughes have explored some of the issues here in terms of a scale of expression in which overt and covert speech are only the two most superficial levels.

[11] Throughout, in the original text, Gurdjieff uses bizarre neologisms such as 'Darthehlustnian state' to both irritate and bypass the common tendency, on the other hand, of unconscious indoctrination. Having the word is not the same as having the concept and having the concept is not the same as having the realization of it for oneself. Whether one 'understands' these terms in the ordinary sense is irrelevant. Reason, or conscious thinking requires consciousness.

[12] In his book *Transformation*, J. G. Bennett recounts his own experience at role playing in life, during the process of putting into practice the indications of Gurdjieff concerning conscious life. For him, the experience was traumatic.

EVENTS IN EUROPE

Italy April 14-21

England June 4-7

Austria June 11-16

France July 15-Aug 9

Wales August 12-14

Italy September 18-27

Anthony Blake

This year I have been following up on our historical involvement with the fourth way and the work of J G Bennett, responding to requests as they came and without any overall plan. Unfortunately, opportunities for collaborative programmes between Karen and myself have barely surfaced. The one exception was our event in Stroud, UK, in June where we implemented our new orientation to 'transformative practice'.

The events have been in Europe, starting with Italy in April. I was invited to give a talk on Transformative Practice in the 21st Century and speak with members of a fourth way group based near Rimini. I had an audience of about 70 people, with some interesting conversations afterwards in a nearby café. This marked the beginning of this cycle of engagements which were all predicated on conversation rather than teaching and, in the case of Vienna in particular, enabled me to introduce and practice the dialogue process.

In Stroud we had a very international gathering with participants from Ireland, Bosnia/Germany, Estonia/Norway, Germany/France, the Netherlands, as well as the UK. The emphasis was on bringing awareness into basic functions such as talking and moving, thinking and expressing, listening and sensing. The aim was to provide tastes of how to be more in *being* in the midst of action and to do this without any formal teaching. We made a significant move towards bringing into play the particular individual backgrounds and needs of the participants – it is always a dilemma when offering a programme that each person comes at in a different way to the others.

This point needs some elaboration. During my years with Bennett I observed how powerful and effective he was in bringing beginners into some tangible experience of inner practice. Yet, I also observed that even he encountered problems in making 'another step'. I have come to reflect that this is due to two main factors. Firstly, that there is no laid down series of steps with lessons of graded difficulty (as there is in academia and the physical arts) so the meaning of 'next step' is not clear-cut. Secondly, if there is something like a progression – as Gurdjieff intimated in his language of exoteric, mesoteric and esoteric – the deeper it goes, the *more individual* it has to be. Gurdjieff spoke of a *staircase* connecting life with the 'way' but added that once the staircase had been climbed it becomes irrelevant. Once on the 'way' guidance comes from within and it is specific to the individual.

Bennett spoke of people who are seeking change in themselves – however they do so and whatever it means for them – as *psychokinetic* but made it clear that such people are 'between two stools' and in a very uncomfortable position being neither one thing or the other. This makes them vulnerable to self-doubt and exploitation by the unscrupulous and also quite uncertain about how to progress because they do not yet understand what it means.

In Vienna I had a chance to do two things very important for me. The first was to focus almost exclusively on dialogue. I cannot overemphasise the importance I give to this practice, even though relatively few people see its potential benefits. I would go so far as to assert that one of the greatest needs these days is for people to *become able to speak from themselves*. Unless they do that, no amount of instruction or knowledge can be of use to them – in a strict sense, because they do not know what is *meaningful* for them. The second benefit was that I was able to further the project of recording the chapters of *Beelzebub's Tales*. It is difficult to find people who can follow the text as well as perform the technical functions of editing and I was blessed with the help of Thomas Glasser (who attended our

Psyche Integration event in Brighton in 2007) and his friends. The new recordings, which include the chapter 'The Bokharian Dervish' (together with music performed by Wim van Dullemen), will be available soon.



Recording *Beelzebub's Tales* in Vienna

We managed to have four dialogues, one in German; but also we experimented with mona-logue (one person speaking) and tria-logue (three people speaking) on the lines sketched out in my book *The Supreme Art of Dialogue* and which I have no space to discuss here.



Ilana and Tim Nevill at lunch in the Pyrenees during our seminar

Next came France in July and the hospitality of my dear friends Tim and Ilana Nevill. Again I had two purposes. One was to work with Tim on finishing my book on higher intelligence. The other was to work with Ilana on bringing together elements of the Feldenkrais method (see 'Mind and Body' in *Systematics*, Vol 2, No 1, 1964) and dialogue. Moshe Feldenkrais was a friend of John Bennett and a great admirer of Gurdjieff and there are many such links between what might be called albeit crudely 'body work' and the inner and outer practices transmitted from Gurdjieff. There was a small group of about seven people, including one person who spoke no English necessitating pauses for translation, but we had three dialogues that had some impact. It is always interesting to

see how some people can make the transition from the 'normal' world in which everything is explained and people are engaged in persuading each other about some opinion or other, to the creative and uncertain world of dialogue where meaning emerges 'of itself'. It is a considerable jump to make, but one thing dialogue can usually reveal is that we 'normally' hardly talk to each other outside narrow channels of communication.

The meeting in Wales was of great personal significance since it gave me a chance to reconnect with George Bennett and others I had been with at Sherborne (site of Bennett's International Academy for Continuous Education) including Robert Fripp. The occasion was the yearly gathering of people following Bennett's work and I had been invited to meet with the organisers and take part as I chose in the event itself. It was a good opportunity for me to introduce dialogue once more and, this time, with a group of around 30 people. One important thing that surfaced was that important issues had not been raised in this group for all the years they had met. This was predictable since the organisation of the event, albeit well-intentioned and even democratic in spirit, had not ever allowed for people just to talk with each other. It is, of course, not generally understood that 'just to talk' is a big thing and requires special conditions (quite different from going to the local pub).



Robert Fripp



Elan Sicroff George Bennett

One of the outcomes of meeting friends in Wales was a potential re-activation of the project I outlined many years ago to perform all of the 39 movements of the series of 39 created by Gurdjieff.



In touch with direct experience in Italy

Back in Italy in September, this time with a different group than before, I had a chance to converse with people about the meaning of the fourth way. For me, the subject could have been anything, anything that is that could connect with direct experience in some form. (The photo here of Quinto doing 'arms our sideways' is unfortunately not clear enough to show his grin!) My hosts were impeccable, guiding me round Florence and Rome, paying homage to the Sistine chapel and ending with the fulfilment of my childhood dream of seeing the leaning tower of Pisa. During this time, they told me of the ongoing authoritarian and exploitative versions of 'the work' they know of that continue to flourish and distract and torment seekers, particular those vulnerable to the prospects of 'enlightenment'. They were delighted to meet someone who could just talk with them as a friend. While in Italy, I sketched out a short section to add to my book on higher intelligence and, in draft form, it is given here.

TEACHERS

There are people who attain something special and those who help others to attain, who are called teachers. People use the word primarily for those who educate children in the ways of the world. Gurdjieff used his own word *oskianotsner* for those who educate children in the ways of the soul and the concept can be extended to all those who provide help and guidance for the attainment of inner reality. The general population looks to special people in such guises as artists, scientists, athletes, political leaders and the stars of entertainment. All such special people are highly visible in society and make their mark of excellence in some

specialised field. There is another class of special people who are not so visible and may not have any commonly accepted mark of excellence but who play a significant role in the lives of people who are seeking some inner change in themselves. Such people form a class of seekers for what is within, clearly not something visible, for whom John Bennett coined the term psychokinetic, because their psyche is in flux and not fixed as it is in the much larger class of psychostatic people, which can include most of those who make their mark on the world.

Psychokinetic people have a special problem because they are neither the one thing nor the other, they are seeking but have not found. Their path is hazardous particularly because, in a precise sense, they do not know what they are doing and can only do so when they have arrived or made the transition from ordinary life where they are driven by external forces to another position in which they are guided from within. Because of this uncertainty, they have to rely on people who claim to have gone further and found at least something. It is unlikely that such people have completed the transition themselves. There is yet another class of people whom Bennett called psychotelios, those who have arrived, but they may be quite invisible in society and have tasks we do not understand and rarely teach.

The psychokinetic seeker has no way of knowing for sure whether the teachers they meet know something that can help them. Consequently, they are highly vulnerable to exploitation and are often deceived. They may become slavish followers of some charlatan and reject someone who can give them practical help. There is no explicit structure of learning equivalent to that for academic studies, mainly because there are no external measurements of accomplishment for the inner search and the subjective feelings and judgments of the seeker are obviously unreliable.

The idea of making a major step from external to internal life can be expanded into a picture of a series of steps. Gurdjieff referred to this in terms of a *staircase* bridging between the two worlds. Along the various steps in this staircase, the seeker will find people who, though they have not attained a final realisation of themselves nevertheless know and even understand something that can be useful to relative beginners. Gurdjieff elaborated on the metaphor of the staircase to say that each step or place in it should be occupied by someone who can help those on lower levels, just as in the ancient scheme of the Great Chain of Being that bridges between nature and God. And, if someone makes a step up the staircase, he has a duty to bring someone up to take his place.

Gurdjieff's model gives us a way of representing the known phenomena of seekers, cults, spiritual schools, esoteric groups, mysterious teachers, black and white magic, mystical communities and so on as the visible appearance of an inward process that is not so visible, that is generating a psychokinetic society which, in any particular detail, can always go wrong. The image of the staircase raises a question because the reality and logic of where one starts from and the reality and logic of where one might arrive are so different that they can even contradict each other. Gurdjieff sometimes spoke of humanity being divided into two streams, from Sumerian times, having almost nothing to do with each other. This means that the staircase cannot be constructed in a straight line and might well be more appropriately modelled by modern complexity theory. Cynics might well imagine the staircase to be akin to a labyrinth or maze and certainly many experience it twisting and turning upon itself.

The people appearing on the staircase as teachers or helpers to the seeker are, for good or ill, representatives of the realm of freedom that beckons them on. But, the further up the staircase the special person, the possible teacher, is the less likely he or she is to be of practical help, because the seeker will not be able to make use of their insight and incapable of following their logic. There are many stories about this in the Islamic tradition and Gurdjieff himself caustically remarked that everyone wants to be taught by Jesus Christ while hardly anyone can be, as clearly indicated in the Gospel saying of Christ, He who has ears let him hear! Christ taught the multitude in parables or stories as, even today, we learn something indirectly through literature, but not the practical way that requires some deeply personal

transaction between the seeker and the teacher that does not follow any formula. A twentieth century teacher in his own right, Rudolf Steiner, met one his teachers, a herb seller, on a train only once and was told to read a certain book in a certain way.



The toe of St Peter jutting into the street to link us with the higher world (in Florence)

The teacher is special relative to the seeker. When real practical help is transacted, the teacher plays the role of higher intelligence in relation to the seeker and should in turn seek a higher intelligence still. The teacher can obscure what is beyond him or her and then be a false god, or serve as a doorway to the truth that is sought within. He or she is imperfect and will make mistakes, but they can do what the angels cannot, because they know what it is to be human as the angels with all their shining intellect never can.

COLLAGE CONNECTION

This August Karen Stefano convened a 5 day Collage Connection Playshop in Santa Fe, New Mexico. As well as collage making, movements, meditation, story telling and being in nature, the group of participants delved deeply into such themes as loss, grief and transformation both on an individual and a collective level. For the second year in a row, on our last night we had a visitation by a very large black bear which reminded us of the awesome beauty of nature. The next playshop in Santa Fe is booked for July 18 - 21, 2010.

FORTHCOMING

Systematics Gathering March 26-8, 2010, West Virginia

Transformative Practice June 4-7, 2010, UK

Collage Connection July 18-21, 2010, Santa Fe

POSTSCRIPT

In talking with a friend from South Africa this morning, the conversation brought me to itemise three factors that bedevil our practical understanding of anything: that most of us do not calculate probabilities, hence are constantly surprised by mysterious patterns and look for magical explanations; that we tend to look for special powers in people and want them for ourselves as a way out of our problems when we do not even attempt to practice the rational, linear thought that emotional people condemn the west for, and that we are extremely suggestible. Instead of working on these serious matters, which are the root causes of most of our problems, many people 'in the work' (supposedly of Gurdjieff) presume they already understand what is needed and the pursue lines of activity that can yield nothing.