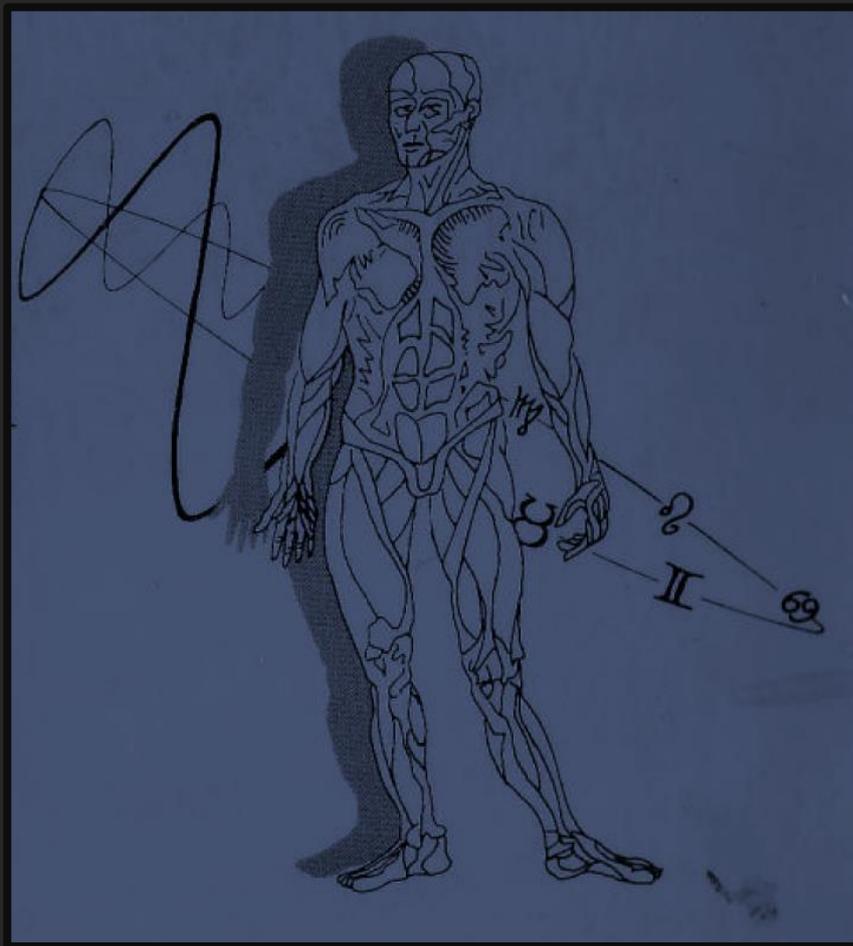


HARMONICS IN ASTROLOGY

*An Introductory Textbook
to the New Understanding of
an Old Science*

By



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Re-edited by Chistabo, A.D. 2019

Editor's note

Changes done in this re-edited version are: language changed from UK to US version. All my additions and comments are in [square brackets]. I did my best to faithfully reproduce this very interesting book, but some graphics from 'original' pdf scan are extremely low quality, and I had to improvise. Not much, though. You can contact me at chistabo@gmail.com.

Simon aka Omchi

Acknowledgements

My indebtedness to others in the writing of this book, and more particularly in the years of research of which it is the fruit, is so extensive that it would be quite impossible to acknowledge all the help I have received. Some have contributed ideas and suggestions, some have helped me to understand matters which were unfamiliar to me, many have devoted countless hours to the extraction and tabulation of astrological data. Some have been my friends and associates throughout this work, others have been more or less birds of passage who alighted for a time to make their contribution before flying on. To all these, although I cannot thank them individually, I have made what amends I can in the Dedication.

In the production of the book itself I am indebted to E. R. Dewey of The Foundation for the Study of Cycles for permission to print the diagram and accompanying table in Chapter 21, to Colin Bishop and other members of the Astrological Association's Research Section for advice in the writing of Appendix II, to James Buchanan and Michael Southgate for drawing the diagrams, to Peggy Lance and Gladys Backmann for typing, to Marcy Emmer Graham for the cover design, to Charles M. Graham for proofreading and indexing, to Dr. Jim and Betty Williamsen for getting it onto the bookstands and, above all, to my wife for standing by for all emergencies and coping so well for so long.

For the Cambridge Circle edition of *Harmonics in Astrology*, considerable editorial work has been done on the original manuscript with a view to improving its readability and usefulness as a textbook. I am indebted to Dr. Williamsen and Mr. Graham for this work.

J.M.A.

March, 1976

Publisher's note: In this second printing minor corrections have been made. The navamsa example on p. 97 has been changed from the original one involving Lenin and the Russian Revolution. The replacement concerns Enrico Fermi and the atomic bomb.

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PART ONE

THE GENERAL THEORY

1. WHAT THIS BOOK IS ABOUT

Throughout the twentieth century a steady revival has been taking place in the study of astrology. At the same time there has naturally, and quite properly, been a movement towards the reassessment and reformulation of the old teachings. But the traditional knowledge of this subject and the concepts handed down to us for the expression of astrological ideas and relationships are elaborate and do not lend themselves to anything like 'patching up' or piecemeal adjustment; that would be a case of new wine in old bottles. What was needed was some new insight which would allow us to see better just how astrology worked and what sort of laws and principles we were dealing with. If such an insight could be found and if it were to be securely based on the realities of our science, then one could expect it to illuminate the whole field of astrology, straightening out misconceptions, making good deficiencies and shedding new light on problems which have long perplexed us.

It is only in the past fifteen or twenty years that this new picture has begun to emerge and even now the new concepts, which will certainly revolutionise the study and pave the way for a period of new growth, are still in their infancy and are not understood by the great majority of students.

The reason for this lack of understanding may be partly due to the ineptitude of those presenting the new concepts but there is a much more valid reason.

There is nothing harder than to see old and thoroughly familiar ideas in a new and strange light or to accept that the truths we have acquired by diligent study and tested in practice with care may yet, whilst they contain much truth and have a sound underlying basis, have become distorted or oversimplified in the course of long centuries of transmission in good times and bad, by competent and incompetent teachers, and through epochs when man had neither the means nor the inclination for radical research and reassessment.

No doubt some will feel that astrology is perfectly all right as it is and needs no radical re-examination. Yet the truth is that no science or body of knowledge can be effectively applied unless and until its constituent elements can be clearly distinguished and defined, and this state of affairs does not yet apply in the field of astrology. In this sense we are all, or should be, as astrologers, engaged in the building of a science, a science which, of course, has a practical application as an art. But what are the "stones" with which this science is to be built? This is an important question, for before any science can be truly unfolded, so as to realise its full potentialities, it must first be reduced to its fundamental concepts, to the simple units of which it is really composed. This is absolutely vital. A man who tries to build up a science without first finding the real units with which it is to be built is like a man who must try to build a house out of the rubble from other buildings. Every time he picks up a brick he finds part of another brick sticking to it, and probably part of the original brick missing as well. The pieces are the wrong shape and mixed up with other, non-essential elements. They are not flexible enough; they help him but they hinder him at the same time.

One can find plenty of examples of this in the history of science. Until the true basis of a science is found nothing quite "fits" and each new discovery only raises fresh problems. Once it is found everything falls into place and each new discovery confirms what is already known¹.

¹ These comments are adapted from Addey, John and Peter Roberts, "The Basis of Astrology", parts 1 & 2, *Astrological Journal* (Astrological Association, London) VI (1964), nos. 3 & 4. The article also appears in *John Addey*:

Because I hope that this book will be read by those whose knowledge of astrology is not extensive, I am reluctant at this stage to enter upon the discussion of details. Yet those who know astrology well will acknowledge, if they are perceptive and honest, that our present "building materials" are uncertain and ill-defined. There are disputes (and they cut deep) about the "right" Zodiac to be used; there are pronounced differences between the Eastern and Western traditions which are tactfully ignored. The houses are a notorious battleground of disagreement; quite apart from the rival systems there are divergent views about cusps as boundaries or centres of houses, even about the correct *number* of houses!

On the face of it, aspects would at least seem to be definite enough but they are not really so. Even putting aside the important question of "minor" aspects and glossing over the problem of "orbs" (for which we can do no better than propound quite arbitrary rules which seem "about right"), we are still left with the whole difficulty of interpreting aspects.

Our rough and ready division into "good or bad" (or "hard or soft" or "harmonious or inharmonious") is really only serviceable for as long as one does not look too closely at it. In reality, just as each sign is not simply "good" or "bad" but embodies a definite principle, so too does each aspect embody a definite principle which can operate to our advantage (even the square) or disadvantage (even the trine). These principles are in need of clear delineation. One could go on and take each and every factor in use in present-day astrology and show it to be surrounded by a host of uncertainties.

Of course, those who practice astrology must make up their minds how they are going to deal with these uncertainties. They must, and do, adopt whatever plan of practical procedure seems best and most sensible to them. One admires them for this and must be grateful that there are those who, despite the difficulties, usually manage to produce something useful out of this rather patchwork science.

Still, there is a time for taking stock of our deficiencies. The very fact that the same problems have been debated in the same inconclusive terms for three-quarters of a century can only mean that the issues are not clearly seen, and that the real criteria have not been laid bare so that the answers, or the keys to the answers, are self-evident to all.

What is needed is a vision of the underlying realities of our science in the light of which astrological concepts can be *coordinated, simplified and unified*. Now at last we appear to be in sight of such a vision. And it is not one that has been devised by speculation or armchair theorising. Rather, it has emerged from *long and painstaking study of astrological data* so that the truth has emerged to force itself, unexpected and even at first and in some ways scarcely recognisable, upon our understanding.

The picture that has so emerged is one of the *harmonics*, that is, the rhythms and sub-rhythms of cosmic periods, which can be demonstrated to provide the basis of all astrological doctrine both ancient and modern. It is a picture, furthermore, which can be seen to be in harmony not only with the purest traditions of Western (and, indeed, Oriental) philosophy, but also with the most illuminating discoveries of modern science, and especially with present-day studies of biological and other rhythms in man and nature.

This book attempts to explain as simply as possible the new picture which has emerged, or is emerging, to give illustrative examples of the scientific results on which it is based, to point to some of the ways in which a revision of traditional ideas is implied, and to suggest some of the applications (immediate and potential) in terms of practical horoscopy which the new knowledge affords.

Above all, perhaps, since we are dealing with a developing field of research, I have tried to convey the sort of information and feeling for the subject which will allow students who are so inclined to

pursue researches of their own, and enable them to think about astrological problems for themselves in the light of the emerging concepts. I have also drawn attention to some of the long-standing problems in astrology to which the new ideas seem to yield, or to promise, solutions.

Two warnings: First, I am always conscious of the fact that there is a type of student - often possessed of a perceptive mind in other respects - who is frightened to death by the sight of what he conceives to be scientific graphs and diagrams, and who is convinced that if the whole thing depends on mathematics then he might as well give up straight away.

Now it so happens that not one person in twenty who reads this book will fit more firmly into this category than does the author. This is literally true and, indeed, I ought perhaps to begin the book with an apology to experienced mathematicians and statisticians for my very naive and elementary approach to this aspect of the work, and my indifferent grasp of matters which will seem to them important. From the outset I have had to struggle to understand my own work in mathematical terms and if I had not had the help and guidance of able mathematicians and scientists, I should not have been able to unravel the problems involved. Fortunately, the issues dealt with do not *really* depend upon any but the very simplest arithmetical processes, and by dint of asking myself questions, finding out the answers and then drawing diagrams of what my own results and those of others told me, I have been able to arrive at a reasonably coherent picture.

I mention this partly to reassure those who are like myself, that it *can* be done and that they may in fact benefit from having a teacher who fully shares their own difficulties, and partly to emphasise that the plurality of diagrams which follow are designed to *help* and should be regarded as friends and not enemies. Similarly, my primary purpose in the book is not the detailed scientific justification of harmonics in astrology (this is something which I am not scientifically qualified to attempt and in any case they are now making their own way in life and providing their own justification in practice), but simply to explain the subject as well as I can to those who now wish to understand it better. The relative lack of anything like mathematical or astronomical finesse is not of great consequence from this point of view. The broad idea of harmonics is very simple and, as I have already had the opportunity to observe, it is more important to develop a feeling for the broad perspective than to be an expert in the mathematics of the subject. These, indeed, are essential to future development but their lack is not an impediment to an understanding of the general theory and practice.

My second warning is addressed to all: *make no mistake*, you will *not* be able to read through this book and feel that you understand its implications straight away. Again and again you will be able to understand the explanations (I hope) at their face value but you will need time to digest their significance. This will probably apply even more - not less - to those who are accustomed to assimilating scientific data (and this is where the student who is better at looking below the surface of things comes into his own). The problem is not one of mathematics or physics or the like though some may see it in those terms at first. Basically, it is one of the dynamics of number symbolism. Be content to go slowly if necessary; be willing to put the book down, even put it away, for a time and think about what it is telling you. Let the new ideas sink in and then return to tackle the next chapter.

It is important to emphasise that this is an introductory textbook. There are aspects of the subject which I have not attempted to deal with and there are others where, in groping for answers to some of the problems raised, I realise that I have not always been very lucid or consistent. I have even made suggestions in some parts of the book which are incompatible - or may at first seem so - with suggestions put forward in other parts. I make no apology for these anomalies; they are part of the process of exploring the new concepts.

Those students who are already familiar with astrology will constantly feel that they want to translate the new way of looking at things into the old familiar terms. They will find that this is not always easy or possible, though where it can be done I have given some help. It is better to learn to think harmonically.

Finally, what kind of student will benefit most from this book?

It is true that those who persevere will find that they acquire techniques and insights which are eminently applicable in practical work and greatly extend their grasp of horoscopic symbolism, but it is also true, I believe, that the students who will benefit most are those who love astrology for its own sake, who are not content with rules of thumb which they can immediately rush to apply to the horoscope but who desire to penetrate into the mysteries and beauties of the subject, who want to see more clearly the real principles which underlie astrology (including those who are interested in astrological research) and, especially, those who can suspend for a time their desire to crystallise their thought prematurely and can allow the fuller picture to take shape in their minds by degrees. Those who can adopt this approach will find that they gradually unfold an altogether wider and deeper comprehension of the subject as a whole.

I have come to the conclusion, somewhat at the last moment, that a further passage needs to be added to this introductory chapter.

Up to the time of the Renaissance the prevailing world view was firmly based upon spiritual realities and upon a vision of the universe as a manifest expression of an inner and higher order of truth. But because that world view tended, in practice, to look too exclusively at noumenal aspects of truth and to pay too little attention to the phenomenal world, there was a reaction which rejected the spiritual (and truly rational) basis of scientific thought in favour of a strictly empirical and generally materialistic approach².

The *evil* consequences of this reaction no longer need restatement; the results are all around us. Essentially, the effect was to deprive all knowledge of real meaning and content, to render it mechanistic and soulless in the sense that the qualitative significance of phenomena depend upon the inner spiritual realities of which they are an expression. The *good* which this movement did was to stimulate men to observe the cosmos - the "written" Word of God - much more carefully and to develop and cultivate, to a far higher degree than formerly, observational methods for extracting truth from the phenomenal world.

There is some tendency, now, to react again and to equate these very valuable observational methods (including statistical procedures) with the world view which stimulated their development, and to think that the scientific method of making observations is the same thing as the misinterpretation and misapplication of the results of those observations by materialistic minds. This is a mistake; the two things are not inseparable and should be distinguished. To reject the most important benefit to come out of the scientific revolution can only lead to obscurantism and superstition, and would be as disastrous in the long run as the earlier rejection of the spiritual basis of knowledge. The methods of making observations, as such, are neutral; it has been the viewpoint of those who have misinterpreted the results of observation which has caused all the trouble. The same sort of observations can, and should, be the starting point for spiritually orientated thought. What is now needed is a synthesis of what was best in both movements.

Nor is it true, as is sometimes said at present, that scientific methods as such tend to ignore the individual and deal only with people in the mass. What *is* true is that it is Astrology-as-an-art which is applied in the service of people, individually and collectively, but the art of astrology depends upon Astrology-as-a-science, the office and function of which is to arrive at a clear understanding of the laws and principles of the subject. The art and the science are interdependent in this field as in all others.

Therefore, the purpose in using statistical procedures in astrological studies is simply to make careful observations in order that we can improve the knowledge of how astrology works so that practitioners can use it more effectively. In this book, although the author is not a trained scientist (as will no doubt be apparent), full use has been made of statistical studies, avoiding, as far as

² For a fuller discussion of this see my monograph, *Astrology Reborn*, Green Bay, Wi.: Cambridge Circle, 1975. (Previous editions in 1971 and 1972 by Astrological Association, London.)

possible, technicalities, rejecting the materialistic standpoint with which such studies have commonly been associated in the past 300 years, but trying to clarify the laws of astrology so that they can be applied with greater understanding, in conformity with a spiritually orientated world view, for the benefit of mankind both individually and collectively.

Thus, I have drawn upon statistical evidence where this was appropriate, I have tried to indicate something of the philosophical context in which I believe such evidence should be assessed, and I have shown how the results of such studies can be applied to the individual horoscope in practice. I hope this explanation will remove misunderstandings and enable the reader to see what is being aimed at.

2. INTRODUCING WAVES

Throughout this book we shall be dealing with waves. It is therefore important from the outset that the reader should know something about waves and wave forms. Thus, Chapters 2 and 3 provide a simple guide to this subject. There are one or two references to astrological points but these two chapters can be read without any special regard to the astrological context in which we shall later apply this knowledge.

As a matter of fact the kind of waves we shall be dealing with are called sine waves. There is no need to go in for elaborate definitions. Sine waves are just those which are produced by simple harmonic motion such as is produced by a swinging pendulum or a tuning fork or the motion of light waves.

There are three things we shall need to know about waves and they are all quite easy to understand; it is largely a question of learning the terms used.

1. The first thing is *length*.

'Long' and 'short' are relative terms but it is obvious that if we have two waves in a given period or distance, each of them will be longer than six waves in the same period (Fig. 1). So it is a question of *how many* waves there are in the period. The more waves there are the shorter they will be.

Now if two waves fit exactly into a given period – they must go *exactly* – then they may be said to represent the 2^{nd} harmonic of that period (Fig. 1a). If six waves are exactly completed in the period (Fig. 1b), they represent the 6^{th} harmonic. If there is one wave, it may be said to be the first harmonic and sometimes called the *fundamental* of that period.

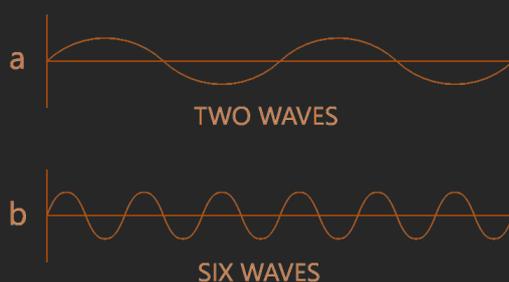


Fig. 1

Actually there are 2 places in this chapter, and this is one of them, where I have departed from accepted or traditional usage - in this case from accepted musical terminology. If the string of a musical instrument is plucked and allowed to vibrate along its *whole length* (one wave, so to speak), this gives the fundamental note. If it is touched exactly halfway along its length, then the two halves of the string will vibrate separately (two waves), and it is *this* which in musical terms is called the first harmonic. It is an octave higher than the fundamental. However, it seems better to adopt the practice of equating the number of the harmonic with the number into which the whole length is divided.

Thus we see that the 2nd harmonic of a period divides it exactly into 2, the 3rd divides it into 3, and so on.

Now in this book we shall always be dealing with the *harmonics of a circle*. This makes it easy: the period we shall be dealing with is always the same - 1 complete circle of 360°.

We illustrate some of these in Fig. 2: 2a shows the 3rd harmonic of a circle, 2b shows the 4th, 2c the 12th.

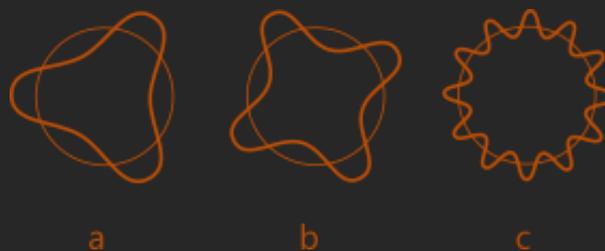


Fig. 2

We can now see that the number of the harmonic is the number by which the circle is divided and this determines the length of the wave. The more numerous the waves (the higher the number of the harmonic) the shorter the waves become. Thus the 3rd harmonic of a circle has 3 waves of 120° each in length; the 4th has 4 waves each of 90° in length; the 12th harmonic has 12 waves of 30° each, and so on. There is no limit to the number of waves one might have; for example, the 120th harmonic has 120 waves each 3° in length.

Of course, some harmonics will give a very 'awkward' wave length. We have just said that the 120th harmonic gives a wave of 3°, but the 125th, for example (which, of course divides the circle into 125 parts) gives a wave of 2° 52.8'.

So much for the *length* of the wave.

2. The second thing which interests us is *amplitude*.

This again is easily shown (Fig. 3). The amplitude is the amount by which the wave rises and falls above or below the mean. The two waves in Fig. 3 have the same length but the amplitude of the first is large, that of the second is small.

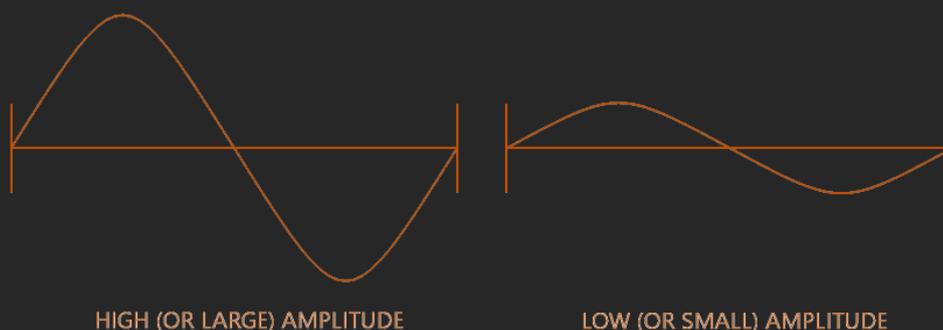


Fig. 3

If the string of a musical instrument is plucked gently, the amplitude of its vibration is small and it gives out a *quiet* sound. If it is plucked vigorously, the amplitude of the vibration is large and it gives out a *loud* sound. In other words the amplitude of the wave represents the strength or vigour of the phenomenon measured. Again, by way of example, if one is measuring the action of some force which rhythmically increases and decreases, one can express the increase and decrease as a percentage of its average or mean strength.

In Fig. 4 the mean is represented by 100. The wave rises to 120 at its highest point and falls to 80 at its lowest. So its amplitude is 20 %. In this book the amplitude of the wave is always expressed in this way.

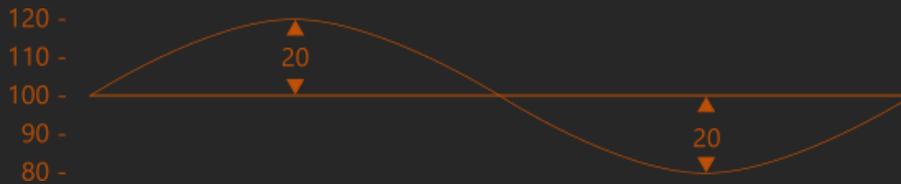


Fig. 4

It is easy to see the percentage rise and fall when the mean is 100. If the mean is some other number, say 55, we may have to do a little arithmetic to find out the percentage rise and fall of the wave.

In Fig. 5, the mean is 65, the wave rises to 78 and falls to 52; a rise and fall of 13. Thus we have a simple proportion sum:

13 is to 65 as ? is to 100.

13 is one fifth of 65; one fifth of 100 is 20. So the amplitude of the wave in Fig. 5 is still 20 %.

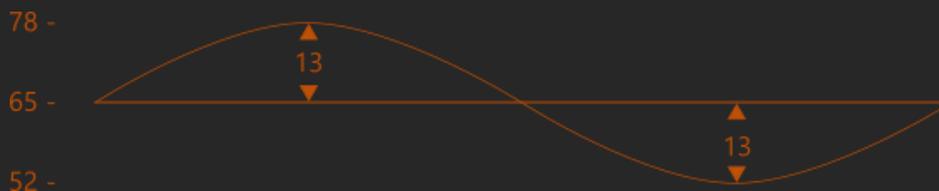


Fig. 5

3. The 3rd thing we must know about a wave is its phase.

In Figure 6, four waves are shown. They all have the same amplitude, but they are phased differently.

For the purposes of discussing this aspect of waves, let us adopt the terms shown in Figure 7.

We can now say that, in Figure 6, wave *a* is phased so that the ascending node comes at the beginning of the period, as drawn, the descending node comes in the middle, the peak comes one-quarter of the way along.

In wave 6b all this is exactly reversed; the peak comes three-quarters of the way along.

In 6c the peak falls in the middle and the trough falls, as it were, at the edges.

In 6d the peak falls between a quarter and half way along the wave.

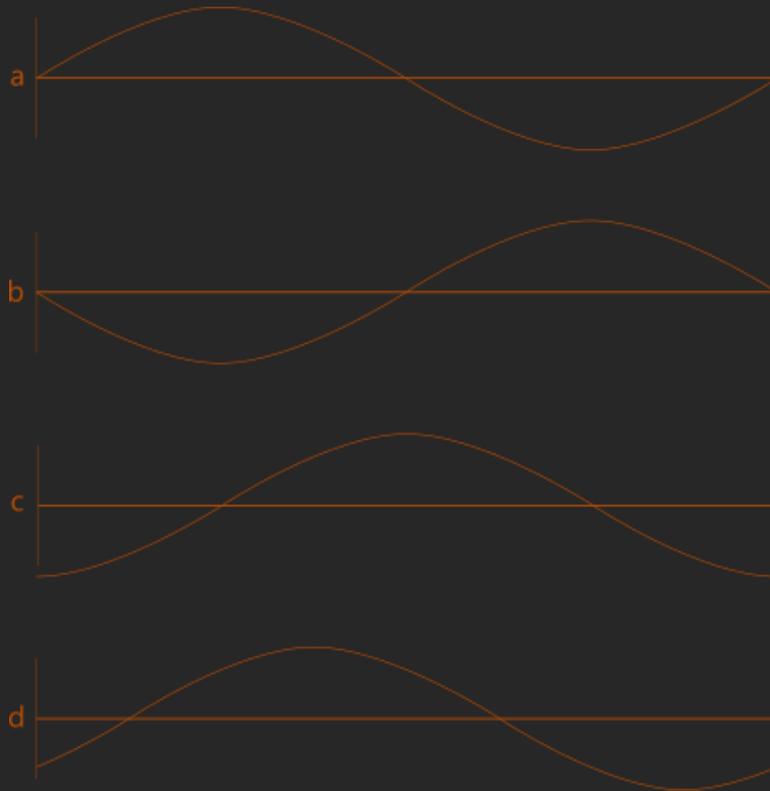


Fig. 6

This is a rather cumbersome way of expressing the phase and we shall need a simpler and more precise way of expressing this matter. This is done as follows:

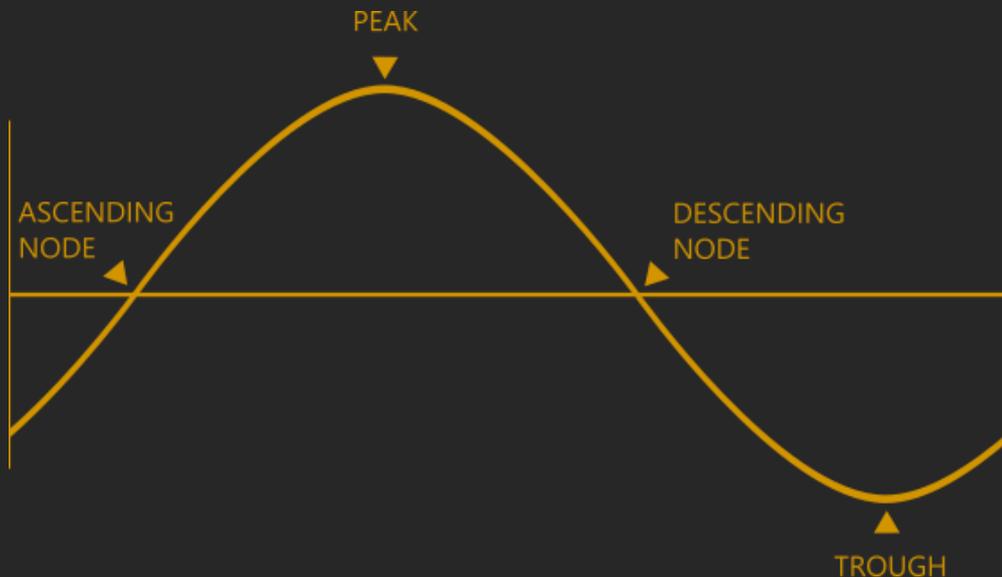


Fig. 7

Every wave is, in a sense, a cycle or circle, so we can treat every wave as if it were passing through 360° . This simply means, in effect, that we treat the length of each wave *whatever its actual length may be in other respects* as being 360° in extent. Thus although the 3rd harmonic of the circle is 120° in length, we treat it, for purposes of expressing the phase, as being one complete cycle or circle of 360° .

We can now re-draw Fig. 6 with this scale marked along the bottom (Fig. 8).

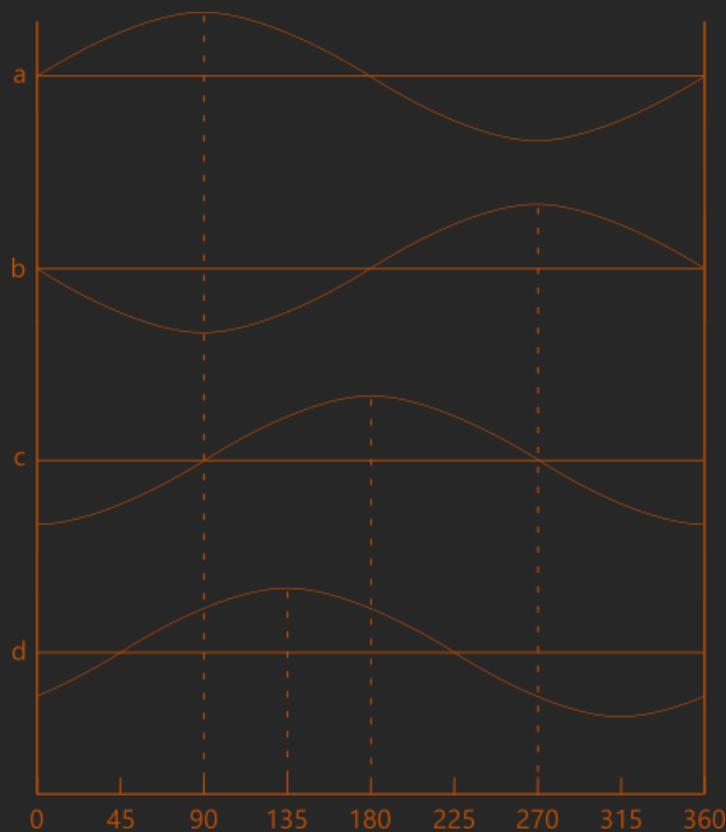


Fig. 8

To describe the phase of the wave now becomes easy because we have a scale of reference. We give the *phase angle* of the wave as being the distance in degrees at which the *peak* of the wave falls along our scale. Thus wave *a* has a phase angle of 90° and *d* (which we could only express rather vaguely before) has a phase angle of 135° .

This is the way the phase of a wave is expressed throughout this book, and this is the second place where I have departed from accepted usage. In mathematical parlance the phase angle is a measurement related to the ascending node. For this reason some students prefer to use the term "peak phase" or "peak direction" when referring to the point where the peak comes.

Of course, waves are continuous, following one after another, so if one has a series of waves, one must have some definite starting point for one's phase measurement. There is no problem here. For waves along the ecliptic (i.e. in the Zodiac) we shall make the tropical point 0° Aries our starting point. For waves in the diurnal circle (houses) we shall use the Ascendant, and when considering the harmonic distribution of one planet in relation to another (aspects) the slower moving planet will be our starting point.

The reader now knows nearly all he needs to know about waves. It would be a good idea for anyone who, at this point, is not sure about any of the 3 factors we have described, to go over this chapter, or its relevant parts, again.

To recapitulate, there are 3 things to be understood. The first is the *length* of the wave and this is determined by the number of the harmonic; the higher the number of the harmonic, the shorter the wave (Fig. 2). We would normally express the length of the wave in degrees - or degrees and minutes if necessary. Thus the 3rd harmonic is 120° in length. But we may note that in giving the number of the harmonic we automatically imply the length of the wave. Thus we know when the 8th harmonic is referred to that the circle has been divided by 8, giving a wave of 45° .

The second is the *amplitude* or the amount by which the wave rises and falls above and below the mean. In any particular case this is expressed as a percentage of the mean.

The 3rd is the *phase* which tells where the peak of the wave comes along its length. This is expressed as a phase angle from 0° to 360°, treating *all waves* as being *for this purpose* 360° in length.

In addition to the foregoing we have also introduced a number of other terms: harmonic and fundamental, ascending and descending node, peak and trough.

NOTES

1. This does not prejudice the Tropical-Sidereal issue. It is just that some definite and agreed starting point must be adopted. Later, after the student has mastered the basic concepts and principles, he may wish to explore the Tropical-Sidereal issue more fully. Aspects of this issue are discussed in Chapter 19.

3. MORE ABOUT WAVES

Chapter 2 has provided us with the basic concepts which we shall need in this book and the terms for dealing with them. But in order that the reader may understand easily some of the issues we shall be looking at in forthcoming chapters, it will be as well to take a little longer with our preliminaries and to explore one or two other matters which are really developments of what has been set out in the last chapter.

In Fig. 9 we have seven series of waves. They all fall between the uprights X and Y, that is to say they all occupy the same space and differ only in the number of waves in each series. Line 'A' represents the 1st or fundamental harmonic of the period XY; 'B' represents the 2nd harmonic, 'C' the 3rd, 'D' the 4th, 'E' the 12th, 'F' the 15th and 'G' the 17th. Notice that in every line there is a *whole number* of completed waves. They all start at the ascending node and finish at the ascending node.

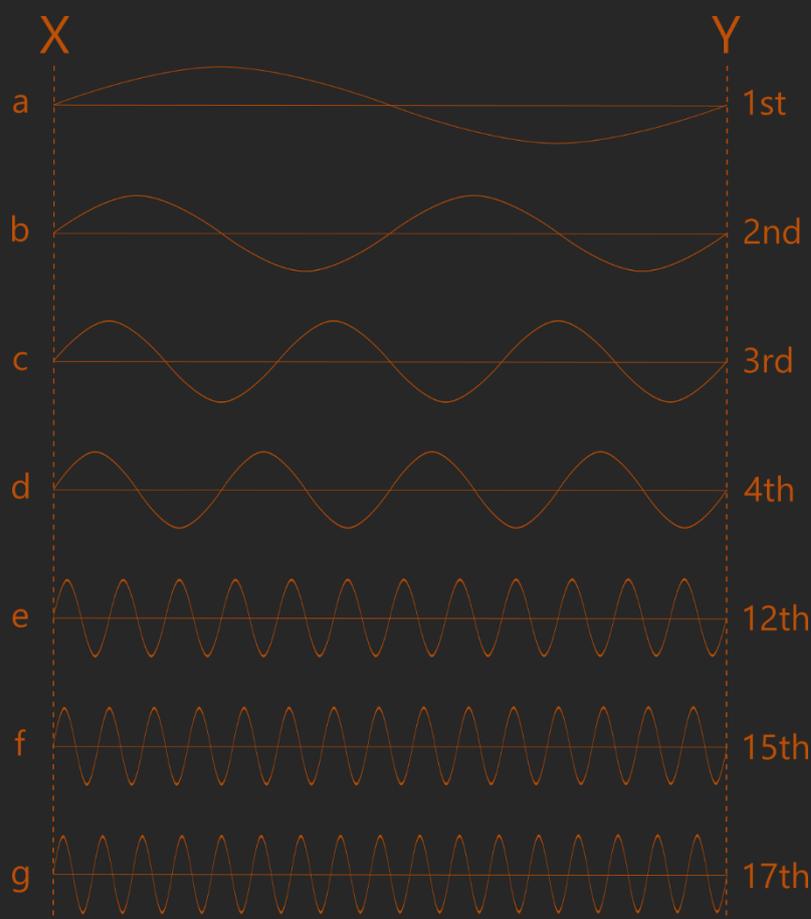


Fig. 9

This being so we can say that the wave length in lines B, C, D, E, F and G are all *sub-harmonics* of the fundamental A, because they all fit exactly with no part of a wave left over, into the wavelength of A.

We can also see that the wave length in line D is a sub-harmonic of the wave in line B. This is because there are 4 waves in line D and 2 in line B; thus, since 2 will divide into 4, exactly 2 waves are completed in line D for every 1 in line B. But notice that the wave length in line C is *not* a sub-harmonic of B because 2 will not divide exactly into 3. For the same reason D is not a sub-harmonic of C, because 3 will not divide into 4.

In the case of line E however, the wave is a sub-harmonic of B, C *and* D, because 2, 3 and 4 will all divide into 12. Thus, if we look carefully we shall see that exactly 6 waves of line E are completed whilst 1 wave of line B is being completed, 4 waves of E in one of line C, and 3 waves of E in 1 of line D. This of course reflects the fact that 2, 3 and 4 are all factors of 12.

At this point it may be as well to acknowledge that whereas most students will find a thing of this sort perfectly simple, there are others who, whilst fully capable of seeing that they get the correct change when they buy a box of matches, are yet inclined to make heavy weather of matters such as this, even though they are just as simple.

To them I say: Do not be put off; you are probably one of those who can see a principle as soon as it is applied in a practical context but have difficulty with theoretical explanations. Try once more to grasp the principle involved and then pass on. Make full use of the diagram (Fig. 9).

Now a question: Of what harmonics, B, C or D, is the wave in line F (which has 15 waves) a sub-harmonic? Yes, it is a sub-harmonic of the wave in line C (because 3 will divide into 15) but not of B or D, because 2 and 4 will not divide into 15 exactly. In other words, while 5 of the small waves in line F are completed exactly in the space of 1 wave of line C, the wave-lengths of B and D do not measure out an exact number of waves in line F. Another question: Of which harmonics, A, B, C, D, E and F, is the wave of line G a sub-harmonic? Yes, it is a sub-harmonic of the fundamental of A only, because 17 is a prime number and has no factors except 1.

For the last stage of the preliminaries, there is one more point which should be made clear. It is a question of how waves *combine*. Again and again in this book we shall find that we are not dealing merely with a single wave form but with a complex or combination of wave forms. That is to say that we shall have to combine, or study the combination of, a given harmonic with some of its sub-harmonics.

To start with a simple example, consider Fig. 10a which shows 2 waves, a fundamental and its 2nd harmonic. These 2 waves may be taken to represent the action of two separate forces. How shall we represent the result if both forces are operating *together*? Of course, a mathematician would or could deal with the problem mathematically, but for our purposes there is no need for this. We are simply going to draw the 2nd harmonic superimposed on the fundamental.

Having drawn our waves (Fig. 10a) we first note the *amplitude* of the 2nd harmonic, or the amount by which it rises above or falls below the horizontal line. We can then mark in this amount on the fundamental. We shall do well, too, to mark in nodes as in Fig. 10b. We can now draw in the new, combined, formation (Fig. 10c). It is as easy as that; and however many sub-harmonics to the fundamental we may have to draw in, the process is the same.

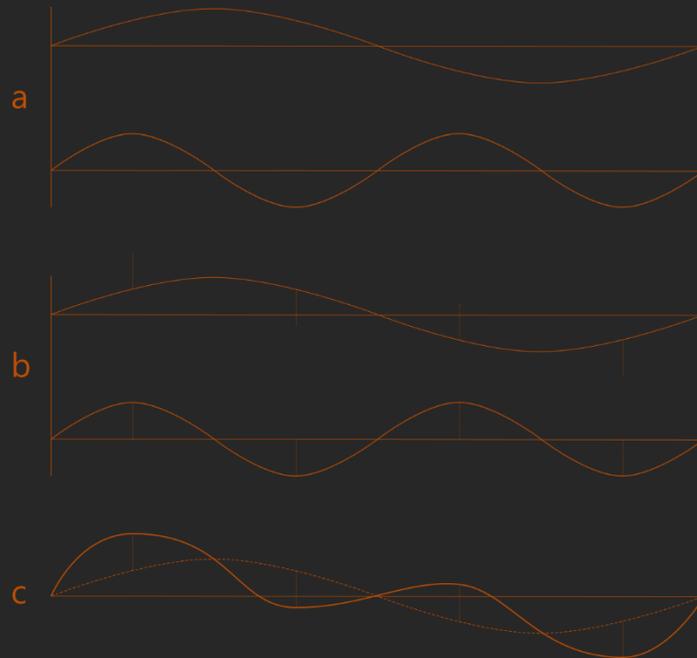


Fig. 10

Thus if we wish to combine 3 harmonics, as shown in Fig.11, we can do so in the manner shown.

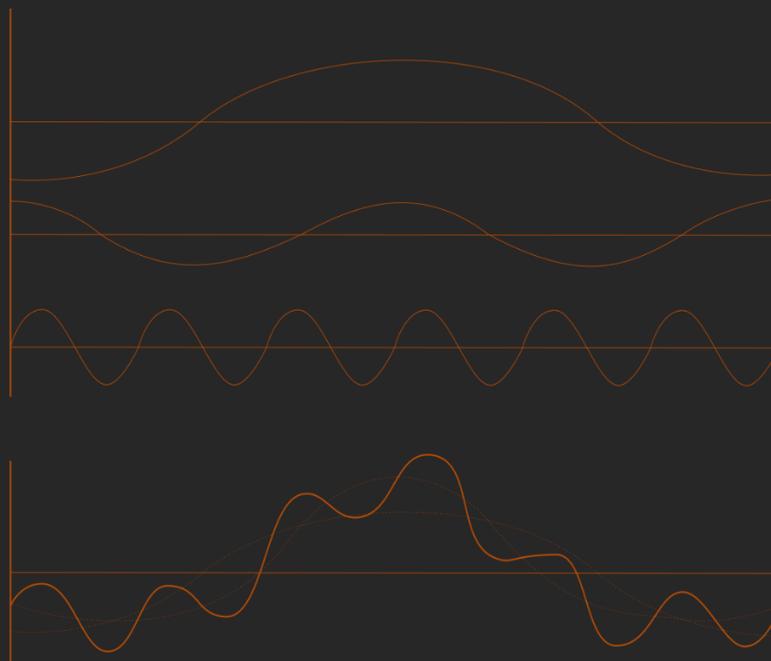


Fig. 11

It may be worth mentioning that the characteristic timbre of different musical instruments arises from the way in which the sub-harmonics of their notes combine. The same note played on different instruments makes a different sound because each type of instrument has its own unique construction and this allows certain of the sub-harmonics to sound and others not. One instrument may produce a sound wave very much like the one at the bottom of Fig. 11, another will produce something quite different.

We mention this not only for its interest, and because it may help to give an added insight into this problem, but also because the analogies between astrology and music are many. The concept of the 'harmony of the spheres' is no chance metaphor.

4. DOWN TO WORK

In most textbooks of astrology one is presented with a ready-made picture: a body of knowledge and a set of rules derived from traditional sources. In these cases the author does not expect to have to justify his statements; if he says that 2 planets are 'in aspect' when they are so many degrees apart and that the list of aspects is thus and thus, the reader must take him at his word. It is, for the most part, a case of learning a received tradition.

In this book we shall not go right back to 'square one' because it will be assumed that the student has a minimum familiarity with the elementary knowledge and terms of orthodox astrology. Nevertheless this textbook differs from most others in that we shall, step by step, examine evidence designed to show the true nature of the underlying laws and principles. Thus we shall actually be building up a picture of *demonstrable veracity* as we go along. This is necessary because many of the traditional concepts are demonstrably false, at least to the extent that they are extreme over-simplifications.

Again, the body of evidence of which we shall make use has been accumulated in the course of researches carried out over the past 20 years. We shall not observe any chronological order in the way we present that evidence. Our job in this book is to unfold a *coherent picture* and in doing this we shall make use of whatever items in this body of evidence are appropriate to our purpose at each step. At an early stage (Chapter 5) we shall offer the student a simple conceptual framework for thinking about harmonics in relation to astrology, but it will help us if we first examine some examples.

When I first began to realise the harmonic basis of astrological factors in the mid 1950's, the examples I had found were of harmonics which divided the circle by quite high numbers; but to begin our study now we need simple example of major harmonic patterns, that is to say, those based on divisions of the circle by low numbers. For this the work of Michel and Françoise Gauquelin will serve us well.

For the benefit of these not familiar with the work of Michel Gauquelin and his wife, it should be said in passing that Gauquelin is a French statistician and psychologist who, with some background knowledge of astrology, set out in about 1950 to see what justification he could find, as a statistician, for some of the traditional teachings of astrology. His work has grown steadily in scope over the past 20 years and is now, in terms of sheer magnitude, the greatest single contribution to the modern re-examination of astrological ideas.

Besides a number of general works on the subject for the lay reader³ he has published all his huge collection of data and details of his main experiments in some 16 volumes⁴.

³ For example, see his *The Cosmic Clocks, From Astrology to a Modern Science*, London: Peter Owen, 1969; *Astrology and Science*, London: Peter Davies, 1970; and *Cosmic Influence on Human Behavior*, London: Garnstone Press, 1974. The American publisher of these 3 works are, respectively, Chicago: Henry Regnery, 1967; New York: Mayflower Paperbacks, 1972; New York: Stein and Day, 1973.

⁴ Gauquelin's data and results have been published in 16 volumes, *vis.*, Gauquelin, Michel and Françoise: *Birth and Planetary Data Gathered Since 1949*, Paris: Laboratoire D'Etude des Relations entre Rhythms Cosmiques et Psychophysiologiques.

- a. Series A, Vol. 1 Sports Champions (1970)
- b. Series A, Vol. 2 Men of Science (1970)
- c. Series A, Vol. 3 Military Men (1970)
- d. Series A, Vol. 4 Painters & Musicians (1970)
- e. Series A, Vol. 5 Actors & Politicians (1970)
- f. Series A, Vol. 6 Writers & Journalists (1971)
- g. Series B, Vol. 1 Heredity Experiment (1970)
- h. Series B, Vol. 2 Heredity Experiment (1970)
- i. Series B, Vol. 3 Heredity Experiment (1970)

He has often criticised astrologers for an unscientific attitude and an easy acceptance of fallacious beliefs. He has been criticised in turn for evidently adopting a somewhat materialistic standpoint alien to the true nature and philosophy of astrology. There is no doubt some truth on both sides, but it is perhaps best to remember that no one could have achieved what he has done without a great desire to uncover the truth and a heroic determination to persevere in the search despite bigoted criticism from the ranks of orthodox science and a marked reluctance among many astrologers to acknowledge the full value of his work.

His approach has been strictly empirical. No doubt some of his criticism has been directed at what was obviously spurious in present-day astrology and was designed to publicly affirm his rejection of this. As time has gone by, he has apparently moved steadily towards a more sympathetic rapport with other researchers in astrology and is finding more common ground with them. But above all whatever one may think of his astrological viewpoint, one must acknowledge with gratitude the Herculean labours he has performed in freely providing fellow researchers everywhere with a huge reservoir of valuable data for furthering the common enterprise.

At an early stage in his work Gauquelin came across the work of an astrologer called Leon Lassons who had made studies of the distribution of the various planets in the diurnal circle (i.e., their daily rising, culmination and setting) in the horoscopes of different professional groups. Lassons' thesis was that the planets traditionally associated with different activities such as Mars for athletes or soldiers, Jupiter for actors, etc., tended to occupy certain parts of the diurnal circle (the houses) much more often than other parts.

Gauquelin made a collection of the nativities of members of different professional groups from the standard works of reference and discovered Lassons' thesis to be substantiated. He then proceeded greatly to enlarge his collections and to verify the findings on a scale which left no room for doubt.

The problem of dividing the diurnal circle for purposes of statistical study in such a way that there would be no built-in bias in the distribution pattern is quite a complicated one. Those desiring to satisfy themselves on this score must be referred to Gauquelin's own work⁵. Suffice it to say that his work has been thoroughly scrutinised by sceptical specialists and no flaw has ever been found in his methods in this respect.

It must be remembered that in continental countries whence Gauquelin's birth data were drawn, birth times are recorded and the time of each separate birth was ascertained from the records of the registrars of births. Thus Gauquelin was able to calculate the position in its diurnal circle of each planet.

For the purposes of noting the positions of the planets and analysing their distribution in the diurnal circle Gauquelin divided this circle first into 12 sectors, later into 18, and later still into 36. The admitted element of approximation in most birth records does not warrant a division of the

j. Series B, Vol. 4 Heredity Experiments (1970)

k. Series B, Vol. 5 Heredity Experiments (1971)

l. Series B, Vol. 6 Heredity Experiments (1971)

m. Series C, Vol. 1 Profession – Heredity (results of Series A & B) (1970)

n. Series C, Vol. 2 The Mars Temperament & Sports Champions (1973)

o. Series C, Vol. 3 The Saturn Temperament & Men of Science (1974)

p. Series C, Vol. 4 The Jupiter Temperament & Actors (1974)

No self-respecting university library should be without these works. (Laboratoire editions show French and English text on facing pages.)

⁵ Full details of his method of dividing the diurnal circle are well summarized by Gauquelin in Series C, Vol. 1, cited in Note 2 4 above.

diurnal circle into smaller sectors than this⁶. Fig. 12 shows each of Gauquelin's three ways of dividing the circle, how the sectors fall and how they are numbered in his work.

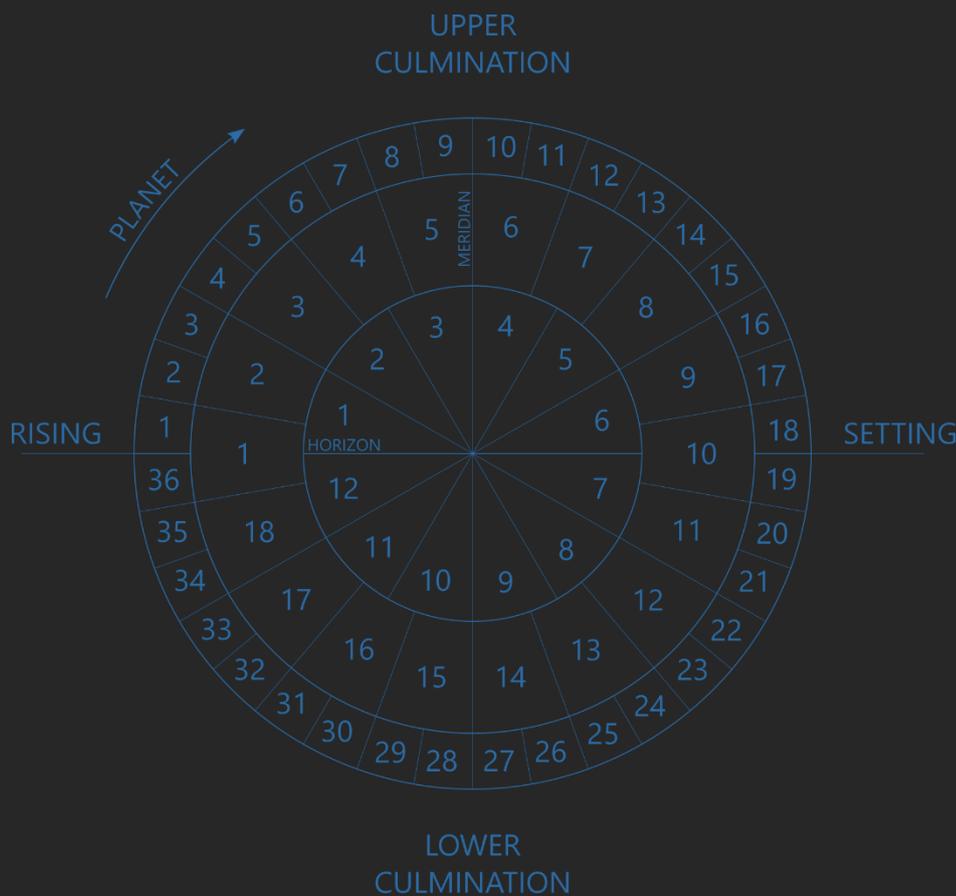


Fig. 12

We can now look at a typical example of one of Gauquelin's distribution patterns. Fig. 13a shows the distribution of Saturn in the nativities of 3647 physicians and scientists. In other words the names, dates and localities of birth of 3647 scientists and physicians have been culled from works of reference, their times of birth obtained from the birth registers and the positions of the planets tabulated for these times. The total number of times which Saturn fell in each of the 18 sectors of the circle (see Fig. 12) were then counted and the frequency plotted around the circle of what astrologers would usually call the 'houses' of the chart, except that, here, 18 sectors are used, not 12.

If we look at Fig. 13a we can see that there are 4 bulges in the distribution pattern, representing the parts of the diurnal circle which Saturn tended to occupy in the maps of these scientists and physicians. One is at, and just above, the Ascendant, one is just after the Midheaven, one is after the planet has set, and one just after its lower culmination. It is true that the bulges are not equal in size and, of the peaks to which they rise, 2 (those near the Ascendant and Midheaven) are higher than the other 2 (those near setting and lower culmination). We shall consider the reason for this shortly but let us concede at present that this distribution pattern is largely, and quite clearly, dominated by a 4th harmonic figure, as shown in the little figure 13b. Of course, the 18 totals of Gauquelin's distribution have been joined up by straight lines (in Fig. 13a), but if we can picture them joined up by a curving line we should see something like the fourfold wave of 13b.

⁶ Gauquelin, Françoise, in "Terrestrial Modulations of the Daily Cycle of Birth", *Journal of Interdisciplinary Cycle Research*, II (1971), pp. 211-217, examines the whole question of the accuracy of registered birthtimes in the countries from which Gauquelin draws his data.

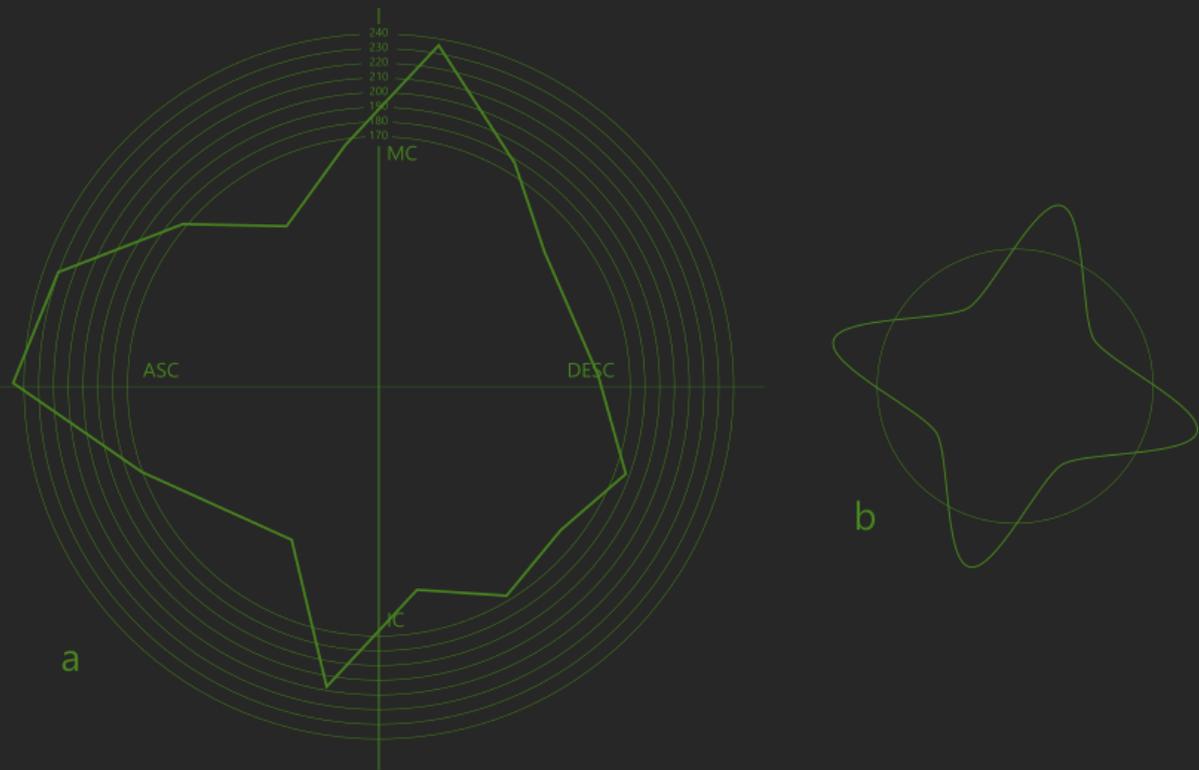


Fig. 13

This tendency of the planet or planets appropriate to a particular profession to show a 4th harmonic distribution is a frequent feature of Gauquelin's results. It is such a common feature, in fact, that at an early stage in his work, Gauquelin was able to put together most of the distribution patterns in his collections and show that even when many different results were lumped together, this 4th harmonic pattern held good. Fig. 14a shows this particular result: the top line includes 11,000 positions of Moon, Mars, Jupiter and Saturn as distributed in professional groups collected in France and the bottom line shows 19,000 positions of the same planets in the precisely corresponding professional groups as collected in Germany, Belgium, Holland and Italy⁷.

In Fig. 14a the result is given as a straightforward horizontal graph instead of round the circle as in Fig. 13. The message is the same in either case, but the student must get used to looking at both kinds of diagrams. We can also see in Fig. 14 that the 4 waves of the 4th harmonic, with their peaks just after the points of rising and setting, upper and lower culminations, are superimposed upon a long 1st harmonic (Fig. 14b). This raises the first 2 peaks above the second 2.

In order to 'keep our eye in', so to speak, with the things we learned in the introductory chapters, let us find out a little more about that diagram of the distribution of Saturn in the nativities of scientists and physicians. (Fig. 13).

At this stage the student will have to take it on trust that it is possible by mathematical means to break down any distribution pattern into its component harmonic elements. This is called harmonic analysis or, after the mathematician who devised the method, Fourier analysis. It simply involves extracting from a distribution pattern such as we are dealing with in Fig. 13 each harmonic or wave form which is present and calculating its amplitude (how strong it is) and its phase (where it falls).

⁷ Gauquelin, Michel, *Les Hommes et les Astres*, Paris: Denoel [?], 1960, p. 193.

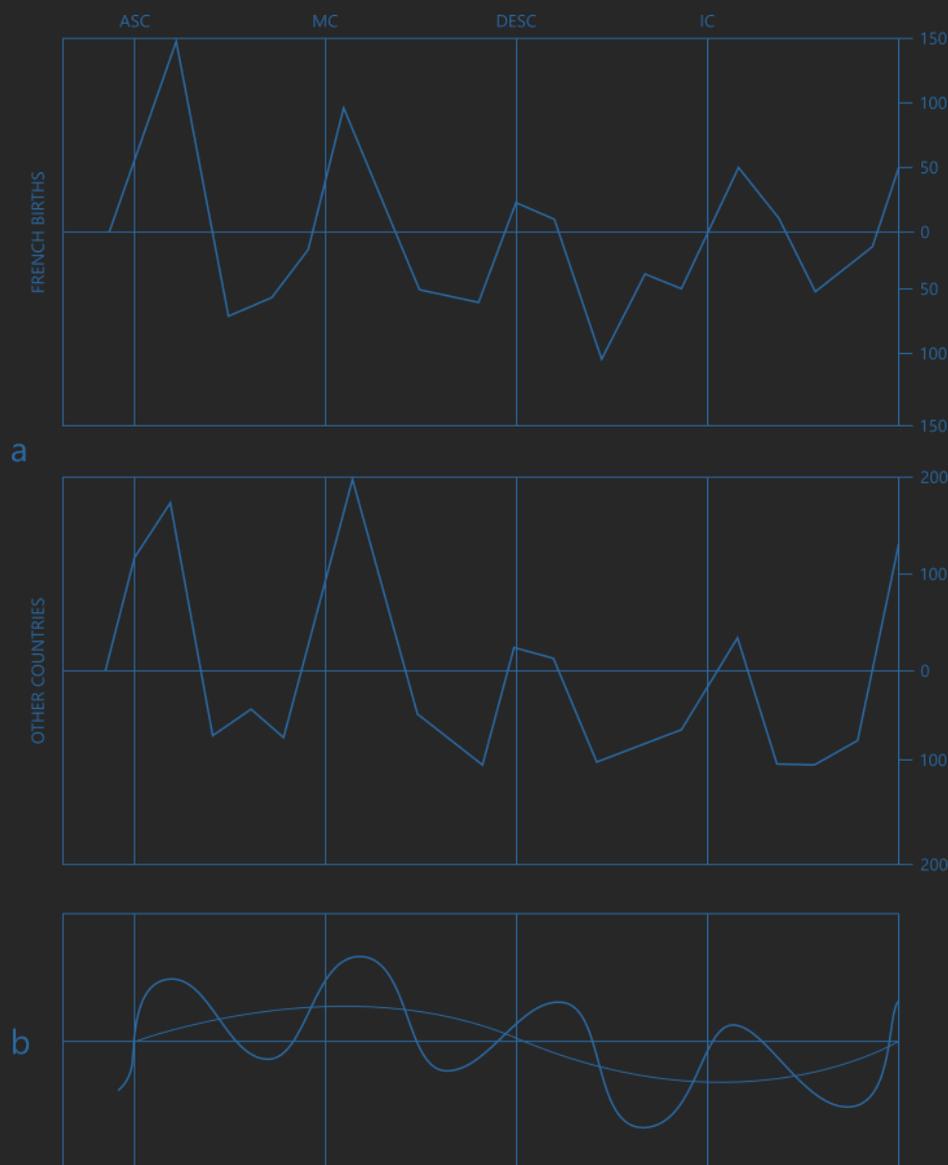


Fig. 14

The Astrological Association's Research Section has carried out harmonic analyses of all Gauquelin's results⁸ (we shall have fuller examples of these later). We can therefore say exactly where the 4th harmonic falls in Fig. 13 and how strong it is. As a matter of fact the Astrological Association, in carrying out these analyses, kept the scientists (1095 in number) and the physicians (2552) separate⁹; however we can arrive at a very close estimate of the amplitude and phase of the 2 sets put together. The details are as follows:

SATURN 4th HARMONIC

	Amplitude	Phase Angle
Physicians	9.3 %	49°
Scientists	15.9 %	47°

It will be seen that the phase angles are very close: 49° and 47°, so in combining the 2 sets we can safely say that the combined phase angle will be 48°. In forming an estimate of the combined amplitude we must remember that there are more or less twice as many physicians as scientists, so

⁸ These harmonic analyses are held by the Astrological Association's Research Section. They are, however, as yet unpublished.

⁹ One should indeed separate these, for research scientists and physicians are two different creatures however much they may have in common. It should perhaps be mentioned that these analyses were based on a further breakdown of the totals into 36 sectors.

the amplitude when the 2 sets are put together will be nearer 9.3 % than 15.9 %. Let us call it 12 % for the sake of a round figure.

Let us then refresh our memory. What do we mean when we say that in Fig. 13 the amplitude of the 4th harmonic is 12 % and the phase is 48°? We are dealing with 3647 Saturn positions and these are distributed through 18 sectors of the circle. The average for each sector will be 3647 divided by 18 or 202.6; this is the number of Saturn positions we should expect to find in each of the 18 sectors if they were evenly spread around the diurnal circle. But we know that the 4th harmonic has an amplitude of 12 %. That is to say that there is a fourfold rhythm in operation which alternately *lifts* the distribution *above* the mean by 12 % and then depresses it by 12 %. 12 % of 202.6 is 24.3, $(202.6 \times 12) \div 100$. Thus this force, whatever it is, is such that it would, by itself, lift the distribution at the top of the wave to 202.6 plus 24.3 (or about 227 cases) and at the bottom of the wave would produce a distribution of 202.6 *minus* 24.3 (or about 178 cases). This is shown in Fig. 15.

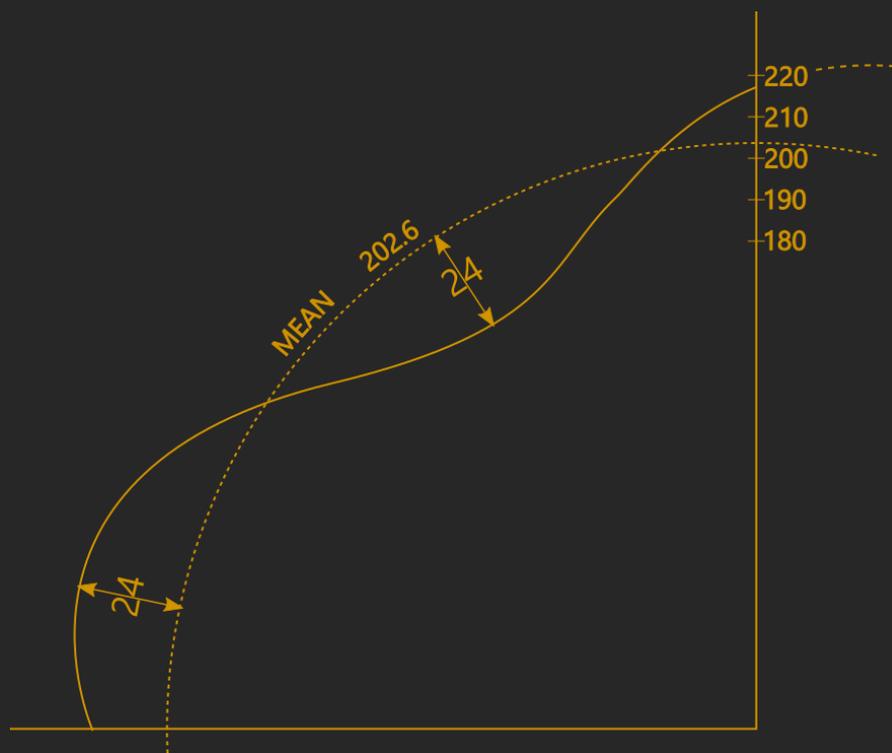


Fig. 15

What do we mean when we say the phase angle is 48°?

Remember that we are dealing with the 4th harmonic and therefore the wave is 90° of the whole circle in length. Remember, too, that we measure the phase angle from the Ascendant¹⁰ and that we treat every wave *for the purposes of the phase angle* as if it were a cycle of 360°. Therefore we can measure out a quarter of the circle (90°) from the Ascendant and mark off our scale of 360°. We can now see exactly where the peak of the wave comes - at 48° along the scale or about 12° of the *whole* circle above the Ascendant ($48^\circ \div 4$). This is shown in Fig. 16.

The student will have understood by now that we are always dealing with an *absolutely regular wave form*, the peaks in this case exactly 90° apart, the troughs 90° apart, and the rise and fall of the wave absolutely regular: 12 % peaks above the mean in the astrologers 12th house, 12 % in the 9th, 6th and 3rd houses, and 12 % troughs below the mean fall midway between these points.

¹⁰ Actually, the measurement is made from the planet's own point of rising.

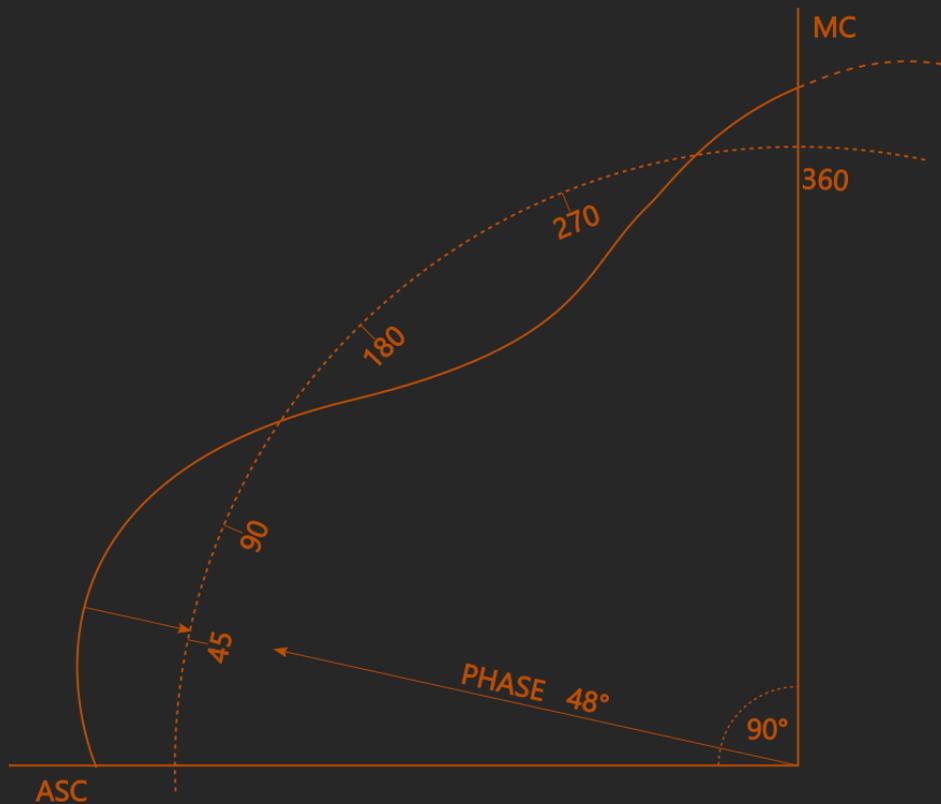


Fig. 16

But, the student will ask, if the wave is absolutely regular why does Fig. 13 show a much higher score for Saturn positions just above the Ascendant in comparison with the 3rd or 6th house peaks (Gauquelin's sectors 16 and 11)? The answer, quite simply, is that we are not dealing with a 4th harmonic only.

In the particular case we have chosen for our example, Saturn in the nativities of scientists and physicians, the harmonic analysis has been taken from the 1st to the 18th harmonic¹¹. We have already indicated that, of these, the 4th is easily the strongest. The second strongest, and probably the only other one which could qualify as significant¹² in the scientists and physicians *combined*, is the 3rd harmonic. Here are the details:

SATURN 3rd HARMONIC

	Amplitude	Phase Angle
Physicians	7.7 %	1°
Scientists	6.5 %	354°

Thus we can say that in the 2 sets put together the combined amplitude will be very roughly 7 % and the phase, since there are more than twice as many physicians as scientists, about 359°.

Remember that we are now dealing with the 3rd harmonic, so to show the phase angle we shall have to stretch our 360° scale along the first 120° starting from the Ascendant, and along this scale our 3rd harmonic wave will peak almost at the end of this as shown in Fig. 17. Similarly, with an amplitude of 7 % and a mean distribution of about 200 (actually 202.6), the harmonic by itself will alternately raise and depress the total by about 14, or 7 % of 200.

¹¹ This analysis was based on 36 totals, not 18.

¹² The question of significance will be dealt with in due course (see Appendix II).

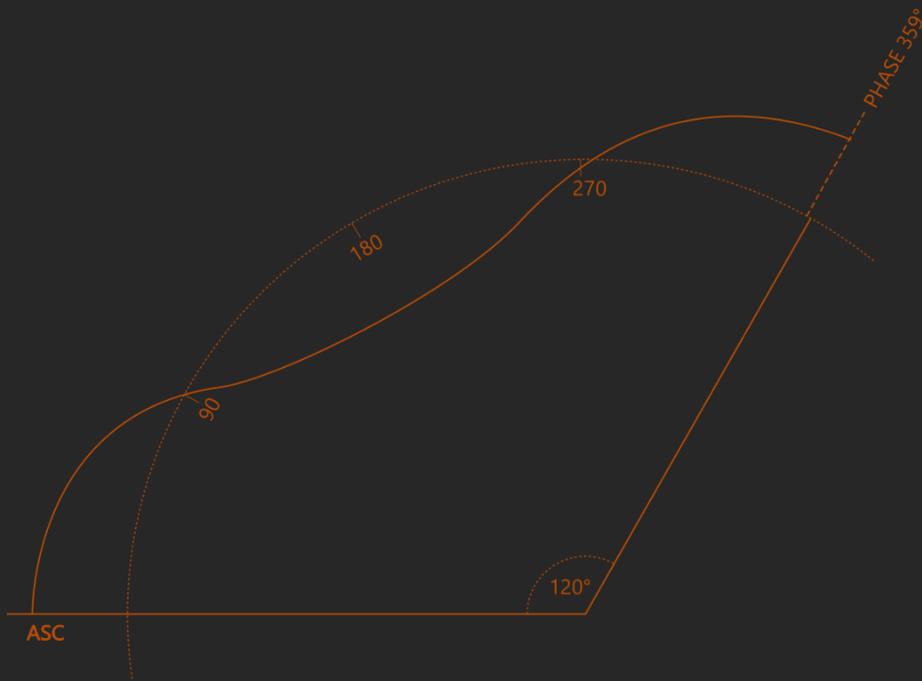


Fig. 17

In order to see the combined effects of these 2 harmonics, the 4th and 3rd, when they are operating together, we can draw in the 3rd harmonic and then superimpose the 4th - just as we did at the end of the last chapter. This has been done in Fig. 18. The drawing is only an approximate one but a comparison of the heavy line in this diagram with the Saturn distribution shown in Fig. 13a will show basically why the peaks at the Ascendant and after the MC are more pronounced than the other 2. At the Ascendant the 2 harmonics lie very close to each other and in effect 'build upon' each other; at the MC they are a little less close and at the other 2 points the harmonics are working against each other.

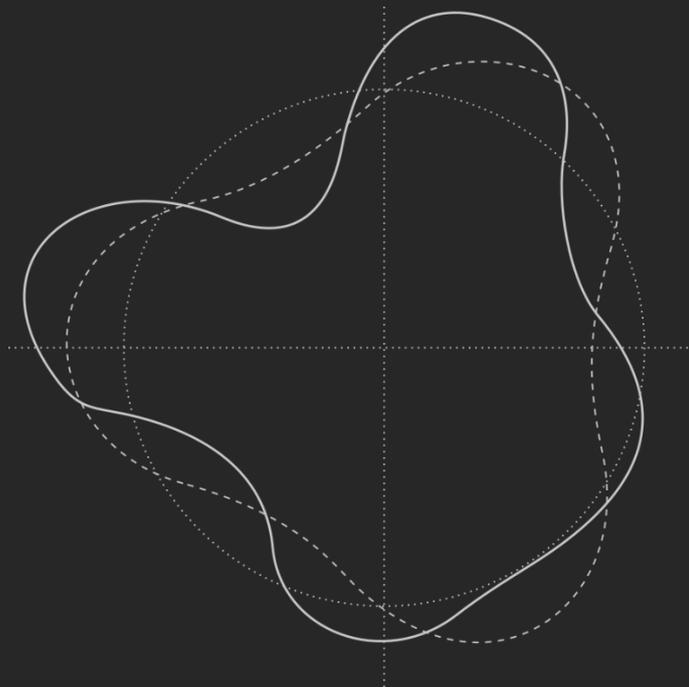


Fig. 18

Although we are actually dealing with 2 regular forces represented by wave forms, the way in which they combine is such as to produce an irregular result. We shall see in this book that all

astrological forces are built up along these lines. From this it follows that the simple division of the mundane circle into 12 sectors or houses does not lend itself to a clear representation of what happens.

5. A CONCEPTUAL FRAMEWORK FOR THE SYMBOLISM OF HARMONICS

Having examined an actual example of harmonics in astrology, what we now need is some guidance as to how we are to relate astrological symbolism to harmonics. We are used, in astrology, to taking as the fundamental symbolic elements, the *signs* of the Zodiac, the *houses* of the horoscope and *aspects* between planetary and other points in the chart. These all rest upon the *symbolism of relationship*¹³. That is to say they are concerned with symbolic relationships within a circle of possible relationships. In the first case the circle is the ecliptic (more or less), in the second it is the circle of diurnal motion and in the 3rd it is basically the circle of the synodic periods of the planets (i.e., their motion from conjunction to conjunction).

Now we have already seen in our first example that a division of the diurnal circle into 12 sectors of 30° - the houses - is a totally inadequate tool for describing the significant positions of a planet (in this case Saturn) when its position in the diurnal circle is dominated by a 4th harmonic (which must have 4 positive and 4 negative phases each 45° in length) and still less so when this is mixed with other harmonics. A 12-fold division is simply not adapted to the clear identification of such significant positions in the circle; the limits of the conventional houses do not correspond to the realities of the situation. And this will be true of all harmonics save only the possible exception of the 6th harmonic, which would have 6 positive and 6 negative phases of 30°. Even these phases would not coincide with the conventional houses unless the node of the wave fell exactly at the Ascendant. Furthermore, the operative force is one which fluctuates gradually round the circle rather than one which has distinct boundaries or cusps.

The same situation applies, as we shall show, to forces in the zodiacal circle and in the aspect circle. The conventional divisions of the ecliptic and the conventional aspects are only a partial formulation of a much wider and more flexible idea.

What then is the new picture that we are looking at? So far as the relationship of the different factors of astrology is concerned we are always dealing with a *circle* of potential relationships; the symbolic significance of the relationship is based on the number by which the circle must be divided to yield that relationship. Thus when we speak of Sun trine Mars, for example, we ascribe a certain significance to the idea of a trine and this is based on the division of the circle by the number 3. We consider this to be qualitatively different from the division of the circle by the number 4 or any other number.

These differences between numbers are inherent in the ideas of the numbers themselves because each number suggests or implies a different structure of relationships.

When we depart from the idea of unity (one) which must include within itself all the potentialities of number, and move to the idea of two, we may view this number as representing the idea of polarity, or of opposition, or of complementariness, or of positive and negative, or of subject and object, or of that which acts and that which is acted upon, or in countless other ways, but all these different ways imply the idea of duality and are derived from it.

But when we proceed again to the idea of threeness we must leave this set of ideas behind because we are now involved with a triangular relationship in which we can now no longer think simply of subject and object, positive and negative, etc. A 3rd factor has been introduced and this implies a new order of relationships which has a different set of applications and a different symbolism.

¹³ Of course, there is the symbolism of the heavenly bodies themselves but this is of a different order.

Now in astrology, when the symbolism of, say, the number 2 is involved, IT IS AS IF 3 positive points were established at equal distances round the circle (Fig. 19a) and these positive points imply the presence of 3 negative points midway between them (Fig. 19b). This again implies gradual fluctuation between positive and negative poles as we move round the circle (19c).

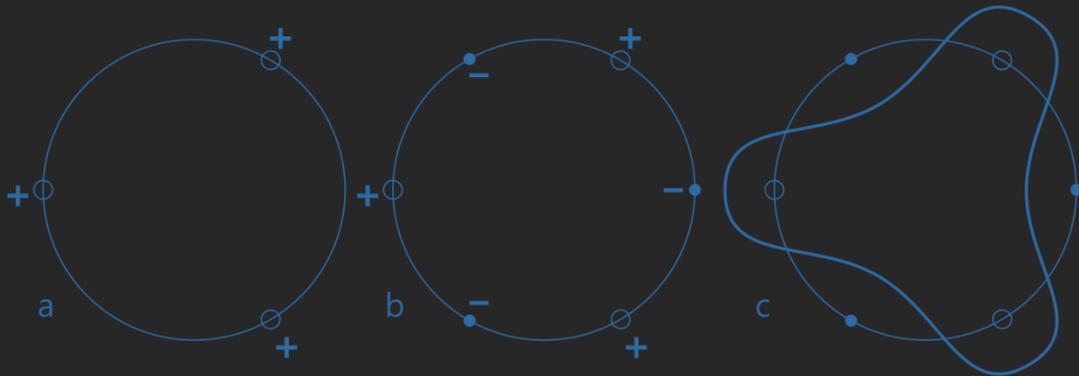


Fig. 19

Where the symbolism of the number 4 is involved it is as if 4 positive and 4 negative points were established at equal distances round the circle with a fourfold fluctuation between them, *and so with every other number*.

It is upon this principle that all astrological relationships in the circle of the horoscope are based. We can demonstrate that this is so and study examples of different *numerical potencies* at work in astrology quite easily and as follows:

Man must have known something of magnetism from remote times and he must have speculated about its nature and tried to frame some idea of magnetic forces. But one day someone of an experimental turn of mind must have had the idea of spreading, say, a sheet of paper over a magnet and sprinkling iron filings over it. Then tapping the paper he would find that the iron filings formed a distinctive pattern and he would realise that this was an image of the magnetic field. This would be a revelation; for the first time he would be able to think more clearly about lines of magnetic force. One iron filing would have told him nothing and 20 might have misled him, but a large number would reveal the true picture.

Similarly experiments have been formed by scattering sand on discs which were allowed to vibrate in response to different sounds. Here the sand was found to form patterns. Again it was because of the many grains of sand, free to respond to the forces at work, that the pattern became visible.

In astrology the same thing occurs when large numbers of a particular type or class of horoscope are collected and the positions studied *en masse*. The individual positions act as do iron filings in relation to the field of the magnet and their distribution reveals an ascertainable picture of the astrological forces at work.

The salient difference between the true picture, thus revealed, and the conventional one is twofold: First the traditional emphasis on the number 12 (12 signs of the Zodiac, 12 houses of the horoscope, 12 main aspect points¹⁴) is shown to be one of extreme poverty. Once the harmonic principle is grasped it can be seen that *all* numbers play their part in the symbolism of astrological relationships, including not only such numbers as 5, 7 and 9 and their multiples (which do sometimes appear in astrological tradition, as in the case of the ninefold or navamsa division in Indian astrology, the 27 lunar mansions or asterisms, etc.) but also all the numbers beyond 12. The prime numbers of course have a special place in the scheme of things.

¹⁴ Although in the case of conventional aspects the semi-squares and sesqui-quadrates must be added.

It is not too much to say that traditional astrology is based upon restricted analogies, rather like a botanical science in which the leaves and petals of plants could be only threefold, fourfold or twelvefold, but never fivefold, sevenfold, ninefold, elevenfold, or multiplex in their formation. In this sense alone the doctrine of harmonics in astrology opens a window onto a new and richer world of symbolism and one which is adapted to an integral study of man in all his complexity.

The second major difference between conventional teachings and the new understanding is that the significant 'units' in traditional astrology, so far as the circles of the signs and houses are concerned, are considered to be *sectors* of the circle, whereas the truly relevant factors are seen to be points (not sectors) of maximum and minimum intensity of significance (as in Fig. 19c). Thus the first 30 degrees of the ecliptic from the spring equinoctial point are considered to be a uniform whole – Aries – and in the diurnal circle the first sector above the Ascendant is considered to be a uniform whole – the 12th house. The reality is that the significance of these sectors is not uniform but one that ebbs and flows in intensity.

The half-realisation that this is so is reflected in the uncertainty which astrologers feel about whether a planet just above the Ascendant (or similarly placed near another house cusp) is to be treated as a 1st or a 12th house factor. It is also reflected in theories which are sometimes entertained about house cusps as centres of houses. But these issues can now be more fully clarified.

The important message of this chapter, however, is that the truly significant factors in the relationships of the horoscope are the numbers upon which the harmonic divisions are based. We have seen that Gauquelin's studies of the distribution of planets in the diurnal circle in the nativities of leading members of different professions very often tend to reveal a dominant 4th harmonic.

Gauquelin is a statistician and is understandably more interested in demonstrating the strict scientific validity of his case for *some* sort of connection between planetary positions and human life than in trying to clarify astrological principles. Because of this he has been content to demonstrate the high statistical significance of certain sectors of the circle, notably the abnormal strength of the sectors which occur after a planet's rising and upper culmination, rather than try to get at the deeper principles underlying his results. For this reason he has not tended to think in terms of harmonics and has not realised, though we may be sure that he will, that the significant elements in his results are really the individual harmonics.

But as astrologers we must penetrate below the surface and try to see the significance of his results. Thus we must ask *why* it is that the 4th harmonic is so much a feature of the nativities of those who have achieved the higher reaches of their professions.

The symbolism of the different numbers will become clearer as fuller studies of harmonics in astrology are made. Nevertheless it seems safe and adequate at this stage to say that the number 4 is evidently connected with the idea of *difficulty-effort-achievement* and that it is because this element is a common feature of Gauquelin's nativities of successful men that this harmonic so often appears in his results. It is doubtful if the phrase 'difficulty-effort-achievement' can be taken to represent the *root* idea of the number 4. A more philosophical treatment of the subject might take us to something behind this phrase, but it seems sufficiently close to the root idea for our present purpose. Thus, to make the matter clear, it is suggested that the 4th harmonic distribution pattern, as in Fig. 13, represents the striving-to-manifest which characteristics these nativities, especially in relation to the particular planet which might be said to go with the particular profession in question.

But it is noteworthy that it is not by any means always the 4th harmonic which is strongest and we might consider another example. Why, for example, in the nativities of 2088 sports champions is the distribution of Mars (which is the strongest planet in this group) dominated by the 3rd harmonic (albeit with the 4th a close second)? Fig. 20a shows the actual distribution pattern in this case and we can see quite clearly that the 3rd harmonic, as indicated in Fig. 20b, is the strongest factor.

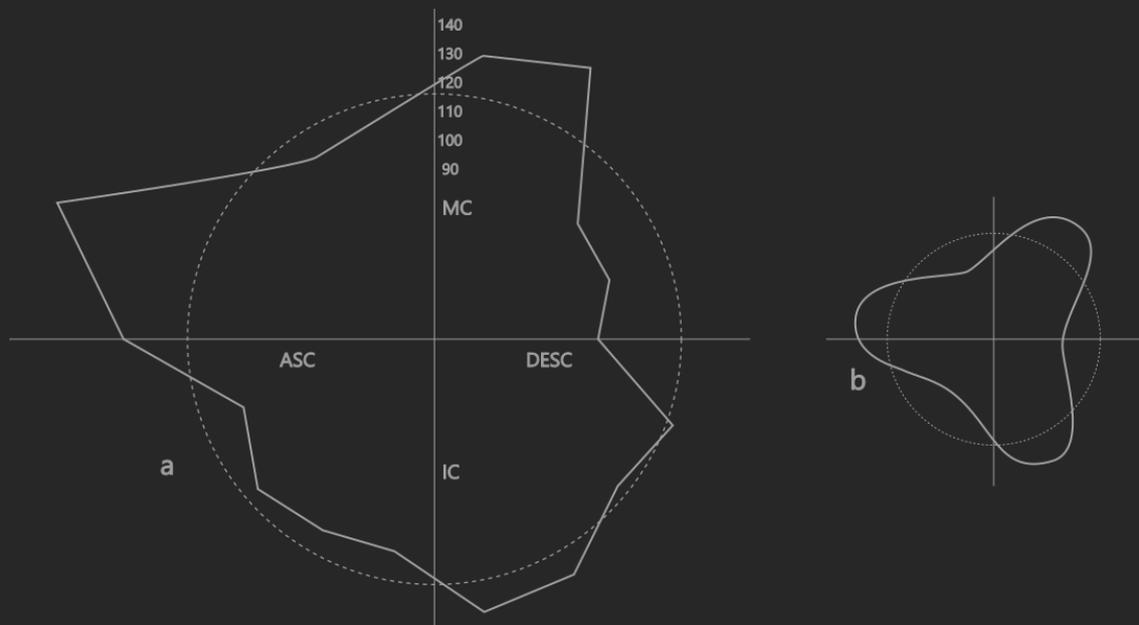


Fig. 20

What perhaps distinguishes the sports champions from Gauquelin's other groups is that whereas all the other categories are strictly professional groups, that is to say they relate to some kind of *work*, this group alone - as the word 'sport' implies - introduces the idea of *play*. In other words we may suppose the sports champion to be motivated by sheer enjoyment, zest and enthusiasm to a much greater extent than say, the soldier or physician. That is not say that other professions do not enjoy their work or that sportsmen are not capable of determination and hard work, but the element of sheer pleasure in the exercise of his strength and power (Mars) must be very strong in the sports champion. This would lead us to suppose that the number 3 is more distinctively connected with, among other things, the idea of *enjoyment*. In contrast, the motives of effort and duty are uppermost in the symbolism of the number 4.

We shall find in this book that the study of harmonics in astrology requires us to clarify our insights into number symbolism to a much greater extent than heretofore, because the number of each harmonic represents a particular quality or range of qualities and their related effects. At the same time we shall also find that our study of number symbolism is rendered both easier and *surer* by virtue of the fact that we can constantly relate out hypothesizing to actual examples of different numerical potencies at work in the harmonics we examine.

6. HARMONICS IN THE DIURNAL CIRCLE

One of the criticisms which has been levelled at the studies of large collections of astrological data such as we have been drawing upon is that they do not produce results which are applicable to individual nativities and that they therefore have no practical utility. We shall see in due course that this is *very* far from the truth and that even at this early stage some very striking additions to our directly interpretative understanding of the horoscope are emerging. Nevertheless before we can appreciate and explore some of the practical applications and implications it will be necessary for us to spend several more chapters simply looking at different examples of harmonics in astrology so as to become thoroughly used to the idea and to see their operation in different contexts.

First, then, let us have a closer look at harmonics in the diurnal circle, that is in the apparent daily revolutions of the planets about the earth. And, in order to get to grips with the subject, let us try

our hand at a simple but effective kind of harmonic analysis. There is nothing which teaches one better and more quickly about a subject than practical work on its problems.

Among his collections of different professional groups Gauquelin has given us the positions of the planets at birth for 3046 successful military men¹⁵. Not surprisingly the distribution of Mars in these nativities provided us with an interesting study, so let us take this as our example. We want to be able to carry our investigation as far as we reasonably can, so the more sector-totals we use for our diurnal distribution the better. The largest number of divisions into which Gauquelin divides his circle is 36 (see Fig. 12) so let us have the total number of Mars positions in each of these 36 sectors for our 3046. In order to have it clearly in mind what these totals represent we will give them in circular form on a diagram of their daily rising, culminating and setting.

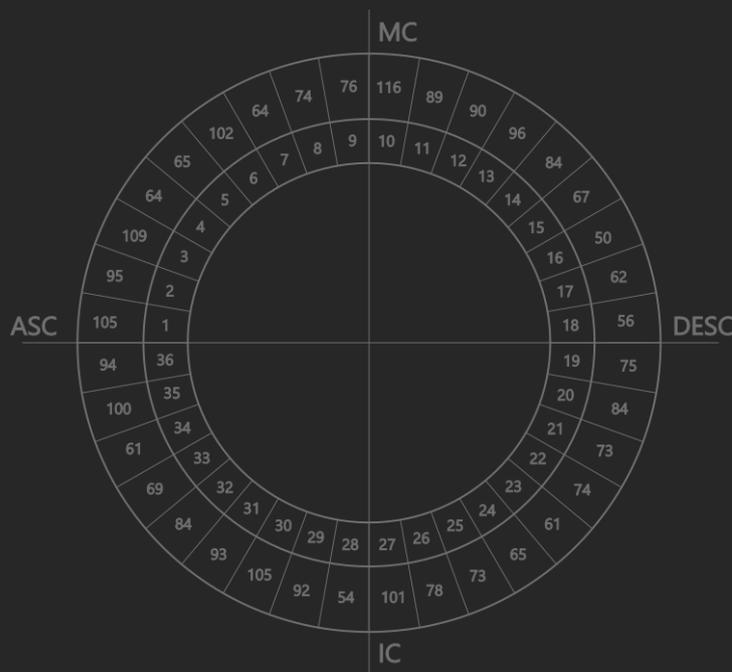


Fig. 21

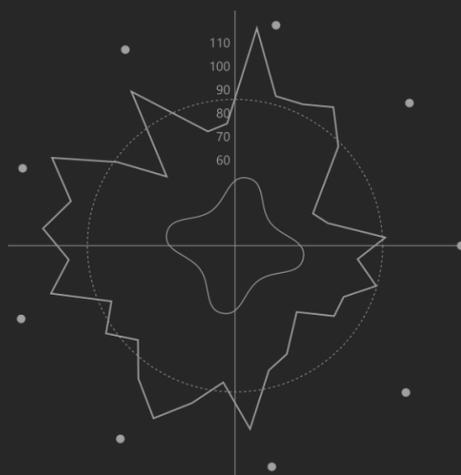


Fig. 22

Fig. 21 then gives the number of times which Mars appeared in each of the sectors and Fig. 22 shows the distribution drawn out as a circular graph. Ignore for the time being the little crosses which have been marked around the outside of the distribution - we shall come to these presently - and look, instead, at the little 4th harmonic wave placed in the centre of Fig. 22. We can see that

¹⁵ See Chapter 4, Note 2, where full reference to Series C, Vol. 1 is given. This volume gives full details.

there is a fairly clear 4th harmonic in this distribution pattern phased as indicated by the little figure in the middle.

We can see that the peaks after Mars has risen and after its upper culmination are stronger than those after its setting and lower culmination, just as with Saturn in the scientists (see Fig. 13a). We know this must be because the 4th harmonic is combined in some way with other harmonics. How can we take out the 4th harmonic from the pattern, disentangling it, so to speak, from the other harmonics present, so that we can have a look at it in isolation and see just how strong it is (its amplitude) and just where it falls (its phase)? There is a very simple technique for doing this which we shall use from time to time in this book. It requires the use of only simple arithmetic and graph paper.

We know that every harmonic is perfectly regular and that if there is a 4th harmonic present, it will repeat exactly at 90° intervals around that circle with a regular rise and fall. From this it follows that we can take our totals in regular sequence for each of the 4 90° sectors and set them down under each other so that the peaks and troughs of the 4th harmonic will exactly coincide in each 90° run of totals. If there are other harmonics which do not repeat regularly within the quarter-circle, these will be cancelled out (we shall see why this is so presently).

Starting from the Ascendant and going around in a clockwise direction, the 9 totals from each of the 4 sectors are as follows:

Table 1

Sectors	1-9	105	95	109	84	65	102	84	74	76
Sectors	10-18	116	89	90	96	84	67	59	62	86
Sectors	19-27	75	84	73	74	61	65	73	78	101
Sectors	28-36	81	92	105	93	81	89	81	103	94
		377	360	377	347	291	323	297	317	357

Before we draw our graph from these final totals let us pause and ask ourselves what it will show us, what it *can* show us and what it *cannot*. We know that every harmonic is absolutely regular; if there is a 4th harmonic with a peak just after the Ascendant in sector 1, there will also be peaks in sectors 10, 19 and 28. There will also be troughs halfway between these points because the pattern will repeat at regular intervals. But if there were to be any of the sub-harmonics of the 4th, namely the 8th (2 waves exactly repeating in each quarter circle), the 12th (3 waves exactly repeating), or the 16th (4 waves), then they also will be seen if they are strong enough to be of any account.

First of all let us simply mark our 9 points on the graph without attempting to join them up (Fig. 23). We can mark our degrees from 0 to 90 along the bottom and we will draw in the line representing mean distribution which will be $3046 \div 9 = 338$. It will help the student to use squared graph paper.

A little experience is needed before one can deal confidently with such graphs as this but we can see straight away that there *is* a high-scoring area near the beginning of the series and a low-scoring area just over halfway through it. We can assume therefore that there *is* a 4th harmonic and that the peak probably comes somewhere between the 2 highest scores (i.e. between 10° and 20° along the horizontal scale) and similarly that the trough (which *must* be 45° away from the peak) comes somewhere between the 2 lowest points. We also know that if there are other harmonics present they will fluctuate about this line.

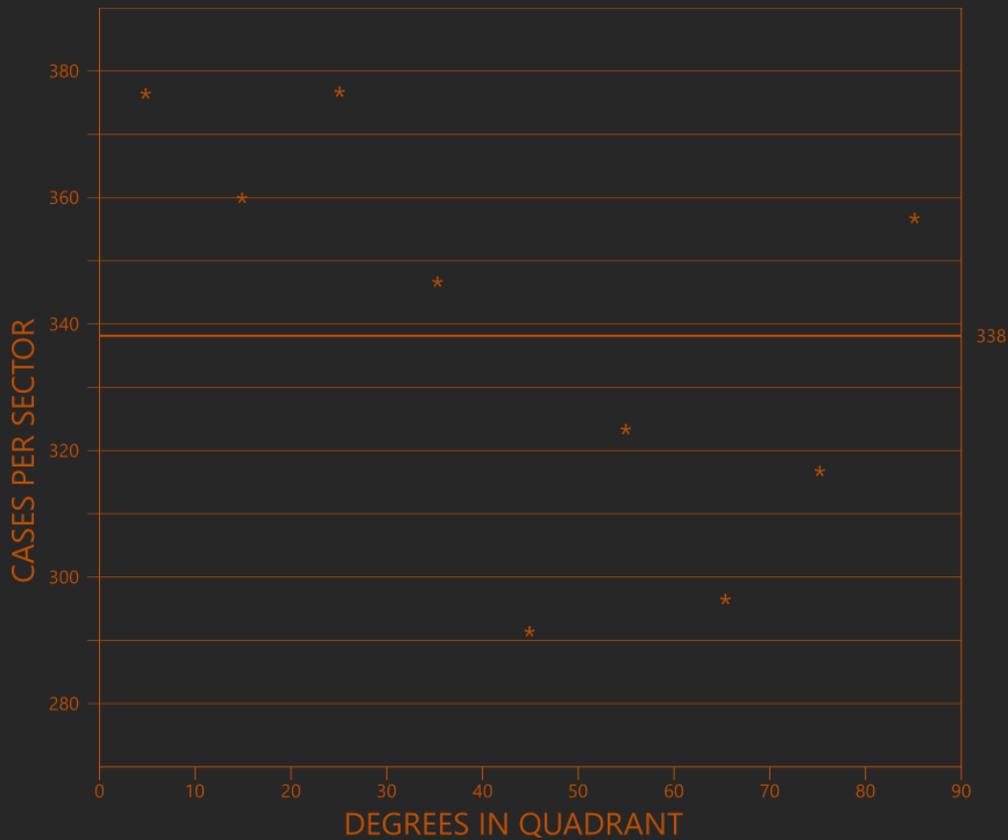


Fig. 23

Let us then draw in our 4th harmonic, trying to adjust it so that it moves smoothly and evenly through the other points, with peak and trough spaced equal distances apart (see Fig 24). It may help us to extend our graph a little to the right using a dotted line so as to see just what is happening as the wave begins to repeat. Remember to get the peaks and troughs of the wave neither too rounded (they are not semi-circles) nor too pointed. (As if to drive home the lesson, our artist has, for once, got the wave too pointed. Nobody is perfect.)



Fig. 24

Having drawn our 4th harmonic we can now see that there is a fluctuation about our main line and we can see almost at a glance what it is. There are 3 quite regular waves superimposed upon

our fundamental 4th. These therefore reveal the presence of the 12th harmonic (3 waves in each quarter circle).

If we mark our phase-angle scale along the bottom of the graph from 0° to 360° we can now see that the phase of the 4th harmonic is somewhere *about* 50°. If we wish to estimate the amplitude of this wave we can see how much the wave rises above and falls below the mean and do a little sum. It rises to roughly 378 and falls to about 298, that is to say a rise and fall of 40 above and below the mean of 338. So, if the amplitude is 40 on a mean of 338, what will it be on a hundred, so as to give us our amplitude in terms of percentage? It will be $(40 \div 338) \times 100$. This is a simple long division sum and gives an answer of 11.8. The student will soon find that he can usually estimate such things fairly accurately, remembering always that the rise and fall must be the same.

Actually, the amplitude and phase given in the mathematically exact harmonic analysis by computer¹⁶ is:

MARS 4th HARMONIC

	Amplitude	Phase Angle
Military Men	11.5	52°

We can see from this that our estimate of the amplitude and phase is very close. My experience is that these graphs of harmonics will usually give a very close approximation of the true figures.

Turning our attention to the fluctuations about the 4th harmonic in Fig. 24 we are not left with much doubt that it is simply a 12th harmonic which is shown. The rise and fall above and below our dominant 4th are fairly, though not perfectly, regular and they are quite equally spaced.

We must not fall into the trap of thinking that the phase angle scale for the 4th harmonic will do for the 12th. If we wish to get a better idea of the phase and amplitude of this wave, we can do it quite easily from the 9 totals given in Table 1. We know that the 12th harmonic is 30° in length and that it will repeat regularly 3 times each 90°. Therefore we can set out our 9 totals from Table 1 in runs of 3, thus:

Table 2 (from Table 1)

377	360	377	347	291	323	297	317	357
347	291	323	←					
297	317	357				←		
1021	968	1057						

We can now attempt a graph of these 3 totals. After a little experimenting with a pencil to get our wave in the right place with an equal rise and fall, we shall be able to draw out our 12th harmonic. We can make our phase angle scale along the bottom and as we have now divided our 3046 soldiers into 3 totals, the mean will be $3046 \div 3 = 1015$ (See Fig. 25).

Examining our graph we can see that our phase angle must be about 330° to 340°. Since the rise and fall of the wave is about 50, or just over, on a mean distribution of about 1000 (actually 1015), we know that the amplitude will be about 5% - $(50 \div 1000) \times 100$. Referring to the exact harmonic analysis by computer we find:

¹⁶ It would be nice if one could report that the computer really did give a strictly truthful 'result', but as a matter of fact the computer also has certain limitations. These are explained in Appendix II.

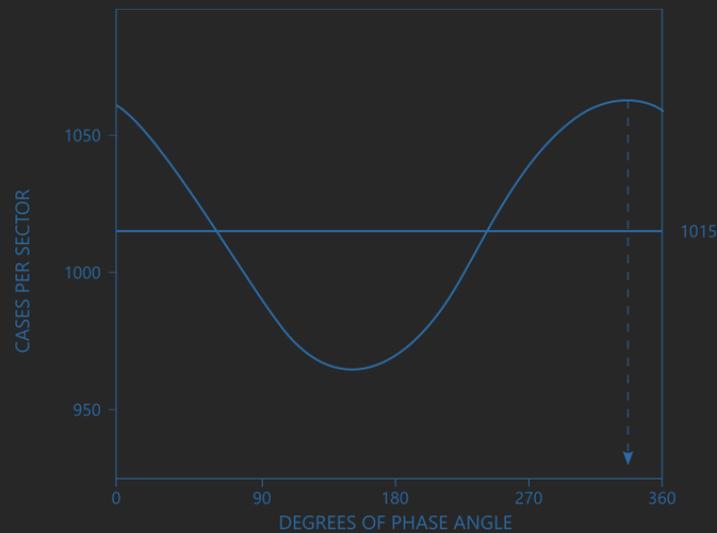


Fig. 25

MARS MILITARY MEN

	Amplitude	Phase
8 th Harmonic	0.2	202
12 th Harmonic	5.1	336
16 th Harmonic	2.8	142

We can see from this that our estimate of the amplitude (5 %) and the phase (330 to 340) are almost exactly correct for the 12th harmonic and that we were also correct in deducing that the 12th was the only other harmonic of any note, the 8th and 16th having very small amplitudes.

Actually there *is* another harmonic which is worth noting in our Mars distribution pattern. Our reconnaissance of the 4th harmonic and its sub-harmonics has revealed the presence of the 12th, and shown us that the 8th and 16th are not strong. In just the same way, if we made a systematic reconnaissance of the 3rd and its sub-harmonics we should be able to see whether the 3rd (120°), 6th (60°), 9th (40°), and 15th (24°) - all multiples of 3 - played any significant part in our original Mars distribution. We should also come across our friend the 12th again, because the 30° wave will also fit into the 3rd exactly. Of these it is the 9th which is, as it happens, the second strongest of all the Mars harmonics in the soldiers' nativities. Just to give ourselves another chance to become familiar with this simple kind of harmonic analysis which we have been learning, let us look at this 9th harmonic.

The 9th part of a circle is 40°, so our 9th harmonic will be a wave of 40° in length. As it happens our circle has been divided into 36 sectors of 10° each, so that by taking our totals in runs of 4 we shall be able to isolate the 9th harmonic. This we will proceed to do.

Going back to our original totals given in Fig. 21 and proceeding as before from the Ascendant clockwise we have:

Table 3

Sectors 1-4	105	95	109	84
Sectors 5-8	65	102	84	74
Sectors 9-12	76	116	89	90
Sectors 13-16	96	84	67	59
Sectors 17-20	62	86	75	84
Sectors 21-24	73	74	61	65
Sectors 25-28	73	78	101	81
Sectors 29-32	92	105	93	81
Sectors 33-36	89	81	103	94
	731	821	782	712

Using these 4 totals we can draw our graph, Fig. 26, and from this we can see that our phase angle will be about 150° to 160° . To estimate the amplitude, we see that the mean distribution is 761 ($3046 \div 4$). The top of the wave rises to just above 820 and falls to about 700, a rise and fall above and below the mean of about 60 cases. Thus our amplitude will be $(60 \div 761) \times 100 = 7.9\%$.

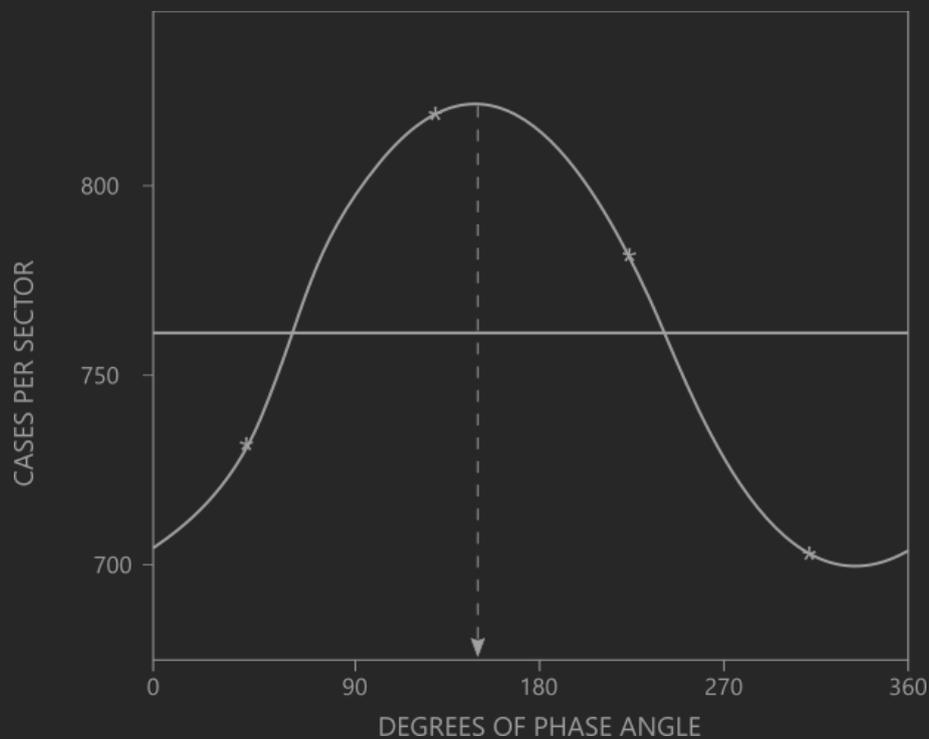


Fig. 26

The analysis by computer for this harmonic gives:

MARS MILITARY MEN

	Amplitude	Phase
9 th harmonic	7.9	155

Our estimates were again very close. We can also see that our 9th is evidently not distorted significantly by an 18th which is the only other harmonic which could show in our graph. For the sake of interest the places where the peaks of the 9th harmonic fall have been marked with little crosses in Fig. 22 and we can see that it forms a significant element in distribution.

A little practice in drawing out these harmonic graphs will soon show the student that once the knack of drawing a smooth, even sine wave has been gained, he can obtain quite good results from this simple method of harmonic analysis. A fuller example is given in Appendix I.

Where a distribution of totals gives a baffling wave shape he can assume that he is dealing with a complex of waves which may take a little time and care to sort out. These may indeed prove too

difficult for the beginner. Again we must recognise that there are some harmonics which are difficult to get at by this graphic method. The 13th or 17th, for example, could not be detected, unless the student was very experienced in looking at the basic distribution, except by more elaborate mathematical means. We are also restricted by the number of original totals and the intervals at which they are given.

Before ending this chapter we have one very important lesson to learn. Why was it that when we put our totals down in runs of 9 totals in order to see our 4th harmonic and its sub-harmonics more clearly, it had the effect of *cutting out* all other harmonics except the 4th and its family of sub-harmonics? Why, for example, did the 9th (which, as we have seen, was quite a strong one) not appear in this result to confuse the issue? Look at Fig. 27a. Here we can see the 9 waves of the 9th harmonic. If we divide the circle into 4 quarters there will be 2 ¼ waves in each quarter. If we put these 4 divisions on top of each other (Fig. 27b) the waves *will not coincide* and will have the effect of *exactly cancelling each other out*, every high score in one sector being exactly cancelled out by a low score in another sector.

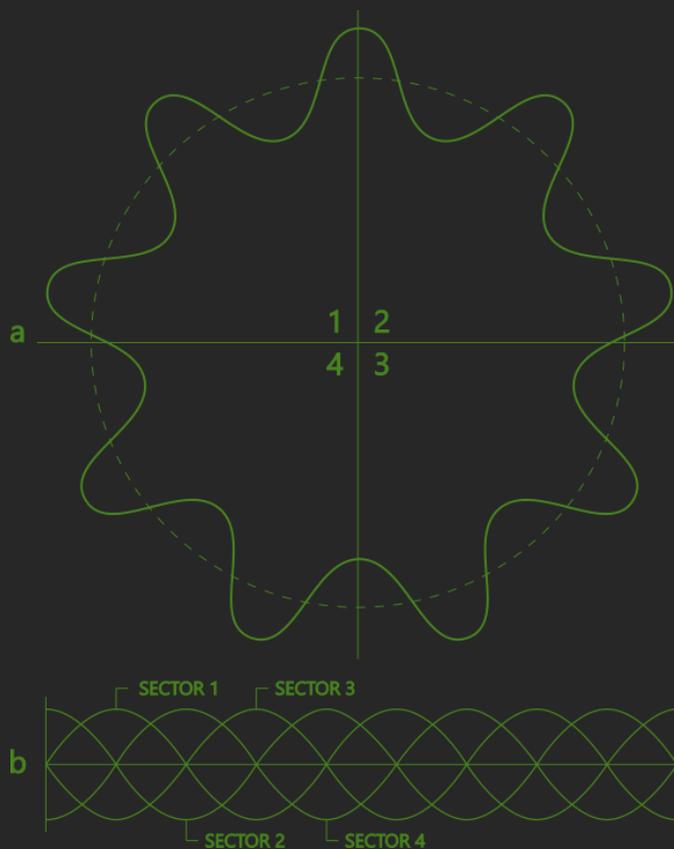


Fig. 27

Therefore we can remember that if we divide any circle into a number of sectors of equal length (say 4 sectors of 90° or 9 of 40°) and set down our totals for each sector in order (as we did in Tables 1, 2 and 3 above) then this will have the effect of revealing more clearly the harmonics which will fit into that sector-length, because it also has the effect of eliminating, in the result, all harmonics of the whole circle which will not fit into that sector-length. This provides us with a useful tool which we can use when necessary to show more clearly the presence of a particular harmonic.

7. HARMONICS IN THE ECLIPTIC CIRCLE (I)

In Chapter 5 we suggested that the traditional division of the ecliptic into 12 zodiacal signs, although based on the idea of harmonic intervals expressing a twelvefold order of relationships, was nevertheless a very limited application of the harmonic concept. In point of fact the division of the

ecliptic by every number has its astrological significance. The number 12 derives some pre-eminence from the fact that it is the lowest common multiple of 2, 3, 4 and 6 and so embraces the symbolism of these important numbers.

The usual conception of the Zodiac is of 12 'boxes', placed end to end round the circle of the ecliptic. When a planet is passing through one of the boxes its 'influence' is considered to be uniformly colored by that sign throughout its transit. When it moves out of the sign, it is immediately in the next one and takes on a new coloring which it keeps until it again moves into another sign. This view has a certain practical value but it is not really in conformity with the astrological truth. If it were, we should be able to examine the distribution pattern of large numbers of solar, lunar or planetary positions and see the sudden change of emphasis when the boundary between 2 signs was reached. *But very many such studies have been made and there is never any evidence of such a sudden change in emphasis¹⁷ at the sign boundary.*

Consider for example the study of the dates of birth of 7302 doctors of medicine by the late Rupert Gleadow and Brig. R. Firebrace¹⁸. From this huge collection of birth dates we can consider the distribution of the Sun round the circle of the Zodiac. This gives us a solar distribution total for each one of the 360° degrees of the circle, representing, approximately¹⁹, the number of doctors born on each day of the year. Fig. 28 shows this distribution. For the purpose of this graph a 6° moving total has been used in order to smooth the line slightly without, however, removing local zodiac fluctuations.

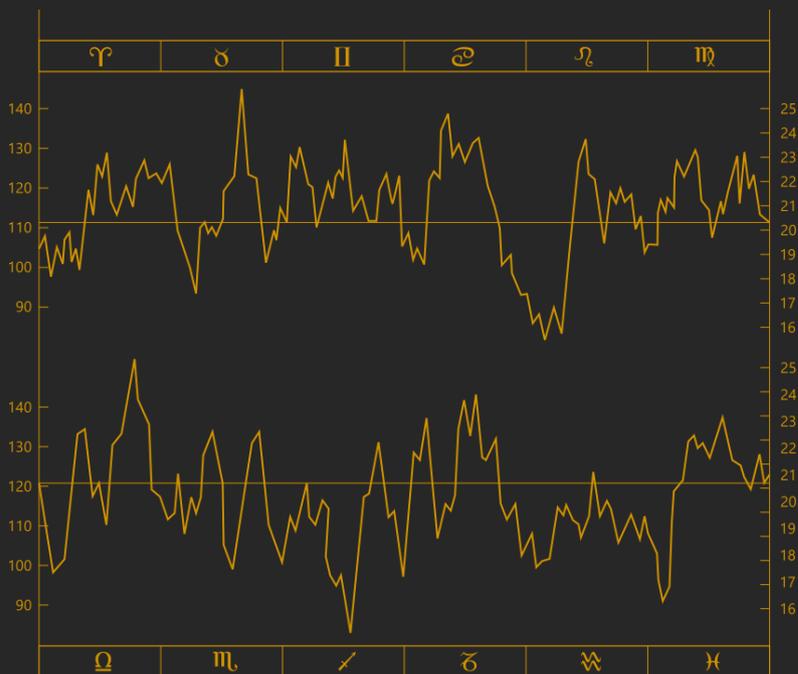


Fig. 28

The term 'moving total' is one which may not be familiar to every student and an explanation is called for. The idea is quite simple: if we gave the 'raw' total of Sun positions for each degree, the line showing the distribution would have many minor oscillations from degree to degree. Because of this it would be rather difficult to see the general trend of the distribution. We therefore move along the totals for each degree adding them up in runs of 6 degrees.

¹⁷ On theoretical grounds one can see that there would be certain rare cases when a combination of harmonics would produce such a change at the end of a sign.

¹⁸ See Firebrace, Brig. R.C., "Astrological Statistics", *Astrological Journal* (Astrological Association, London), XI (1969), no. 4.

¹⁹ Approximately, that is, because the difference between 360 degrees and 365 day in a year.

For example here are the total Sun positions for the last 3 degrees of Pisces and the first 13 degrees of Aries from the sample of 7302 doctors. From these we can give a moving total for each set of 6 degrees from 0° to 10° Aries, moving along the line of totals, dropping successively those to the left and talking in totals to the right. In other words, each of the moving totals is the sum of 3 preceding and 3 following degree totals. The moving totals are given underneath the degree totals.

	Pisces			Aries												
Degree	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13
Deg. Totals	21	16	22	25	14	17	20	21	16	17	25	12	25	21	8	21
Moving Totals				115	114	119	113	103	116	111	116	119	111	113		

[Editor’s note: original scan of this table is small and blurred, so no guarantee is given for correctness of above table.]

The lower line of figures provides us with the first 10 totals shown on our distribution graph (Fig. 28); this is a 6 degree moving *total*. If we want to change it to a 6 degree moving *average* we should divide each of the derived totals by 6, but we can achieve the same effect exactly by marking a new scale down the right-hand side of the graph in which the left-hand scale has been divided by 6.

We have now scattered our iron filings, so to speak, over the zodiacal influences at work (for the Sun) in the nativity of the typical doctor. As we look at our graph, we can indeed see a clear tendency to high-scoring and low-scoring areas in different parts of the zodiacal circle, even after a 6° moving total has smoothed the line. These do not, however, show any obvious tendency to conform with the boundaries of the signs. In fact high-scoring and low-scoring areas run across the sign boundaries just as if the boundaries were not there!

In order to see more clearly that what we are really dealing with are harmonic fluctuations, let us simplify our graph. Fig. 29 shows the same distribution pattern by plotting *1 total for every 5 degrees* round the circle (we are no longer using a moving total). Thus the first point in the graph represents the number of doctors born with the Sun between 0° and 4° 59' of Aries, the second the total of those born between 5° and 9° 59', and so on. It is basically the same diagram as Fig. 28 but simplified in order that we can make a comparison with the twelvefold zig-zag placed above the distribution line. If we compare the distribution carefully with the zig-zag we can see that the two have a general correspondence. The distribution *tends* to be lower near the beginning of the signs than it is later in the signs showing that the 12th harmonic is one of the important elements in the distribution of the Sun in the nativities of our doctors.

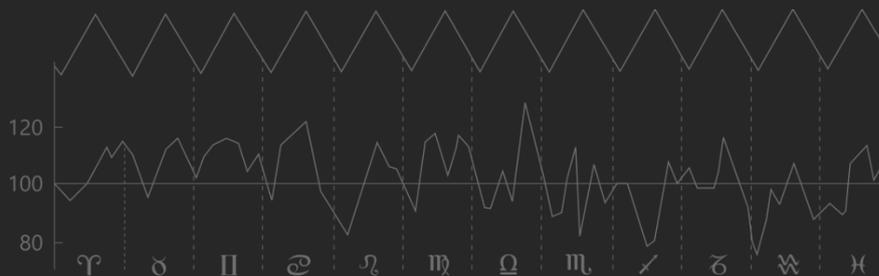


Fig. 29

If we make use again of the technique demonstrated in the last chapter we can isolate (more or less) this 12th harmonic. Remember that we are dealing with an absolutely regular wave form; therefore if we have a twelvefold wave as in Fig. 29 we can divide the distribution into any number of sectors, *provided* that each contains the same whole number of waves. By collecting the sectors together, we shall tend to obtain a clearer picture of the harmonics which fit into the length of the sector. Thus in Fig. 30, if we cut the 12 waves into 3 sectors, each of 4 waves and collect the 3 sectors

together by adding up the totals for the corresponding points in each series, the waves will exactly coincide and we shall expect to see a clear fourfold wave in our result.

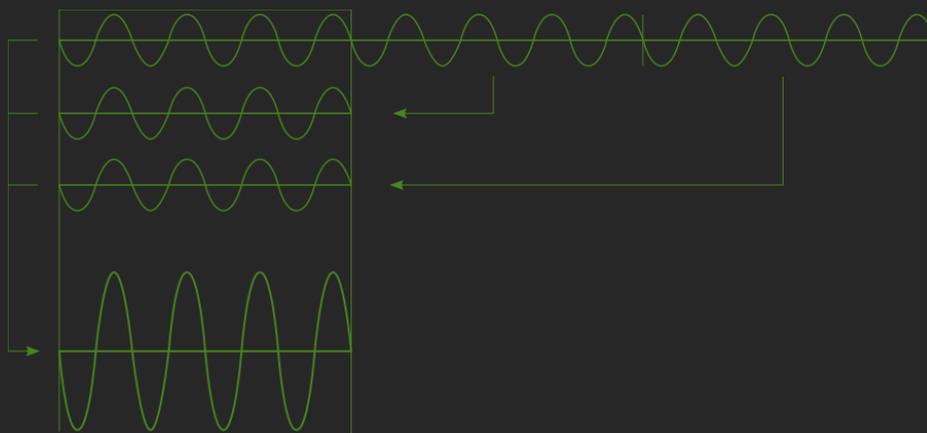


Fig. 30

In Fig. 29 we have a total for each block of 5° around the Zodiac. If we divide the Zodiac into 3 sectors, Aries to Cancer inclusive, Leo to Scorpio, Sagittarius to Pisces, and set down the totals for each 5° block underneath each other, just as we did in the last chapter, we shall obtain 24 totals, 6 for each of the quadruplicities, fire, earth, air and water. From these totals we can draw another graph (Fig. 31). We can now clearly see the 4 waves in each 3rd part of the Zodiac showing beyond doubt the regular rhythm of the 12th harmonic in the complete circle.

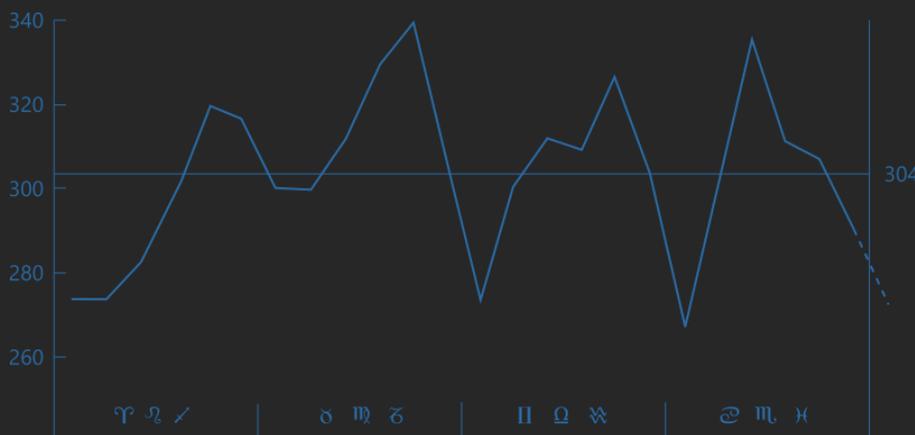


Fig. 31

This shows again the value of this technique for exposing particular harmonics in a complex of harmonics. As it is so important let us state the general principle of the method again: **By dividing any circle of distribution totals into sectors of equal length and collecting those sectors together, the effect is to remove all trace of those harmonics of the full circle which are not harmonics of that sector length. One is left only with those harmonics which do fit exactly into that sector length.**

Let us have another example from the Sun positions of the doctors and in doing so confirm, at the same time, another point we have been making. For our 7302 doctors we have a separate total for the number of times the Sun occupies each degree of the Zodiac. if we divide our zodiacal circle into 6 sectors of 60° each we shall have 6 runs of 60 totals. Each sector will include 1 positive and 1 negative sign exactly. Let us collect these 6 sectors together by adding up the totals for the 1st degree of all the sectors (i.e., the 1st degree of Aries, Gemini, Leo, Libra, Sagittarius, Aquarius), then the totals for the 2nd degree in each of these signs, then the 3rd and so on right to the last degrees of Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces. We shall finish with 60 totals, 1 for each degree of the positive signs put together and 1 for each degree of the negative signs put together.

This gives us in effect the typical distribution pattern for the 6th part of the circle. Now we know that the harmonics which will precipitate into this distribution will be those, *and those only*, which will fit exactly into a 6th of a circle. If in the doctor's solar distribution there is a 6th harmonic (60° in length) it will fit exactly once into our pattern and appear as 1 long wave. If there is a 12th harmonic (and we already know that there is) it will appear as 2 waves of 30° each. If there is an 18th harmonic (20°) that, too, will fit exactly into our 60° sector and will show as 3 waves. The 24th harmonic will show as 4 waves of 15° and so on. Fig. 32 shows the result of this exercise giving the 60° distribution pattern.

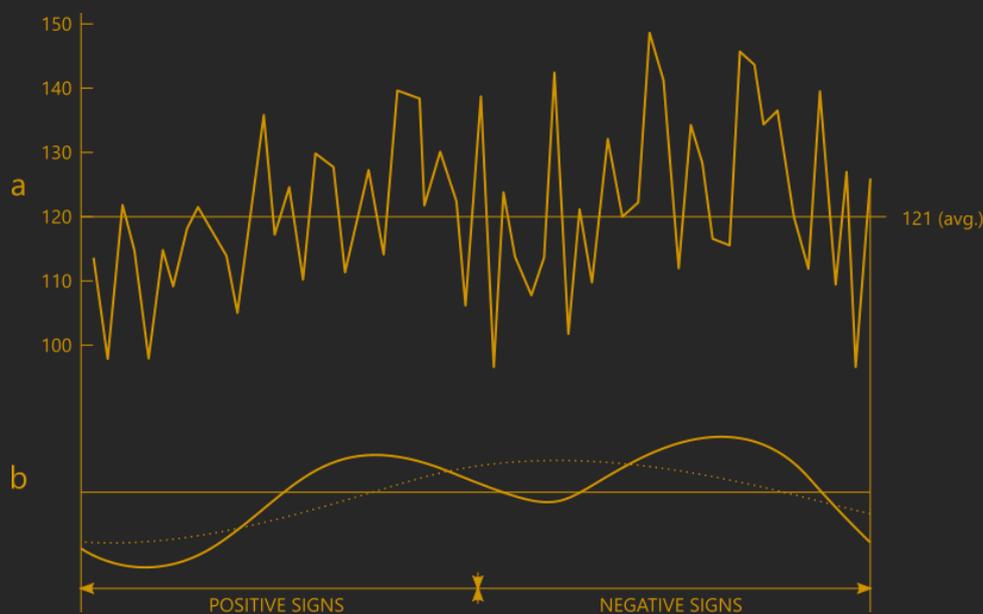


Fig. 32

There are only 2 points at present to which we need to draw attention in this graph. The first is that we can clearly see the 6th harmonic (of 60°) and the 12th (of 30°). These have been drawn out underneath in Fig. 32. The 12th is easily the strongest of all the solar harmonics in the nativities of our doctors and the 6th is also a strong one. These 2 together form the 'framework', so to speak, of the whole pattern and carry all the shorter sub-harmonics 'on their back' as it were. (The presence of the 6th is shown in Fig. 31 because the 2nd and 4th waves are higher than the 1st and 3rd).

The second thing to which attention is especially drawn is that there really is, as we have said, no sudden jump to higher or lower totals at the boundary between the positive and negative signs. One can now actually see that there is only the steady and gradual sweep of the wave from a high point to a low point between the points of maximum and minimum intensity in each harmonic. Of course the shorter sub-harmonics are superimposed upon them²⁰.

One should perhaps point out, at this stage, the mistaken nature of so much of the kind of astrological research which is based on the counting of positions in the signs of the Zodiac. Countless conclusions have been drawn, including much of the evidence for the value of the Sidereal Zodiac, on the quite erroneous basis of the 'box-type' Zodiac, that is, sectors of the ecliptic with distinct boundaries.

The problem of the truth about the rival Zodiacs remains, scientifically, an open question. However, it cannot be solved without an appreciation of the harmonic character of the forces at work in the circle of the ecliptic. This is a subject to which we shall return in a later chapter.

Michel Gauquelin himself, who has done so much to elucidate the characteristics of the diurnal or mundane circle, says he can make no sense of planetary distributions in the circle of the Zodiac

²⁰ For a fuller study of this subject, see Addey, John, "Seven-thousand doctors", *Astrological Journal* (Astrological Association, London), XI (1969), no. 4.

or in the aspect circle. This is quite simply because so far he has not fully grasped the harmonic nature of all such astrological factors. He has so far persisted, in consequence, in continuing to count distributions in the conventional signs of the Zodiac instead of breaking the ecliptic into smaller units and examining the results in terms of harmonics.

In the case of 7302 doctors referred to above, by far the strongest single element in the solar distribution is the 12th harmonic. This is a wave of 30° in length with a high point and a low point in each 30° sector of the circle. It does not matter where these 12 waves are divided into 12 compartments. there will *always* be a high and a low in each 'box'. If, then, one counts the total number of Sun-positions in each 30° sector, one will always be adding the positive and negative halves of the wave together and these will always cancel each other out. Thus the single most significant element will have been completely thrown away. This is the reason, in principle, why good astrological statistics have in the past proved so difficult to produce.

It is true that even after this important 12th harmonic has been removed in this case (or in others) there will still be high and low-scoring parts of the ecliptic circle, but they will be the result of other harmonics, say, the 3rd or 4th or 5th. These have nothing to do with a Zodiac of 12 signs as such. The problem of the Zodiac must be seen in the context of the basic fact that we are always dealing with *points*, and not sectors, spaced round the circle. The nearest one can get, in terms of harmonics, to the traditional idea of 12 equal and significant sectors of the ecliptic, is the case of the 6th harmonic (Fig. 33).



Fig. 33

The 6th harmonic produces 12 equal sectors alternating between positive and negative. I have always held that the most likely situation (in terms of psychological factors at least) in which one would be likely to find a collection of nativities showing a pure 6th harmonic distribution would be in the case of a study of psychological types. One would focus upon the distinction between positive and outgoing, and negative and inward-turning types.

Jeff Mayo, formerly principal of the Faculty of Astrological Studies, has recently undertaken a most thorough and searching experiment along these lines. It is designed to correlate the classical introvert and extrovert types of modern psychology with horoscopic factors. At the time of writing no results of this work have actually been published. However, when Mayo gave a talk on the results of his 2 large-scale experiments to date, he said that both had shown a perfectly consistent correlation between the 6 positive signs and the extrovert type and the 6 negative signs and the introverts. The extroverts showed a solar distribution as in Fig. 33 and the introverts showed the inverse pattern. His results evidently greatly impressed London University's Department of Psychology.

Individual scientists have recently begun to interest themselves in zodiacal distribution patterns. These sometimes produce results which seem to the scientific world mildly astonishing, even when examined on this rather rudimentary basis of the 12 conventional signs. The leading British scientific journal, *Nature*, recently published (April 26, 1974, pp. 788) a study of the dates of birth of molecular biologists and taxonomists, made by Donald A. Windsor of Norwich, New York. It showed the relative frequency of the Sun's placement in the 12 signs for these scientists. Such highly specialised groups always show very specific harmonic combinations. These are not really revealed by reducing the distribution to 12 totals, which can only show harmonics up to the 6th. Needless to say, there was no indication in this instance of the basis upon which the results could be explained. This could have been done using harmonics.

8. HARMONIC IN THE ECLIPTIC CIRCLE (II)

So far, in discussing harmonics in both the diurnal and ecliptic circles, we have confined ourselves very largely to what might be called the major harmonics, that is to those with harmonic numbers up to 102. But exactly the same principles apply to the higher numbers as well as to those lower numbers, such as 7 and 9, which are less used in conventional astrology.

If we look at Fig. 32a we can see that superimposed upon the combined 6th and 12th harmonics (as shown in 32b) there are many quite vigorous oscillations from degree to degree. These might be thought to be merely random fluctuations about the mean, but although this random factor must enter into it, yet it can be shown that those oscillations are partly at least the result of identifiable and significant high-numbered harmonics²¹.

As it happens this solar distribution for doctors does not provide us with a simple, clear and easily-manageable example of the high-numbered harmonics. To examine such an example it will be best to take another instance, this time from the nativities of children who suffered from paralytic poliomyelitis. The Sun position of 1023 such children were tabulated through the 360 degrees of the Zodiac. The sector-length we need to take from this example, for our present purpose, is the 24th part of the circle - the sector of 15°. So in this case we have divided our 360 degree-totals for the Sun's position into 24 runs of 15 totals.

By dividing these 24 sets of 15° into 2 groups of 12 sets and collecting these together we can compare 2 typical 15° distribution patterns. Fig. 34 shows the way in which the circle has been divided and the 2 sets of sectors. The 12 sectors marked *a* have been collected together and the distribution in these compared with the 12 sectors marked *b*. Fig. 35 shows the 2 distributions.

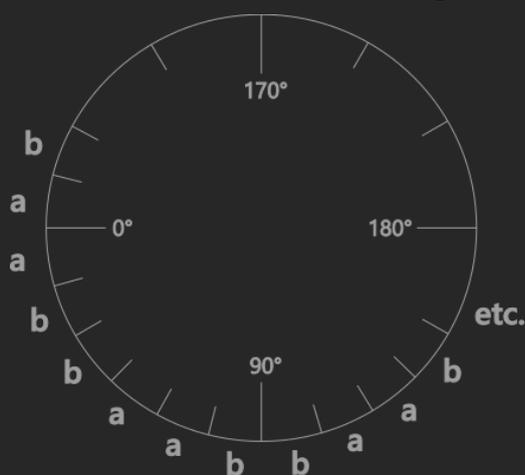


Fig. 34

Here we can see a good example of the shorter harmonics at work. No doubt is left in our minds from a comparison of the 2 distributions shown in Fig. 35 that they are telling the same story and that both are reflecting the same combination of harmonics.

²¹ See Chapter 15 on degree area influences.

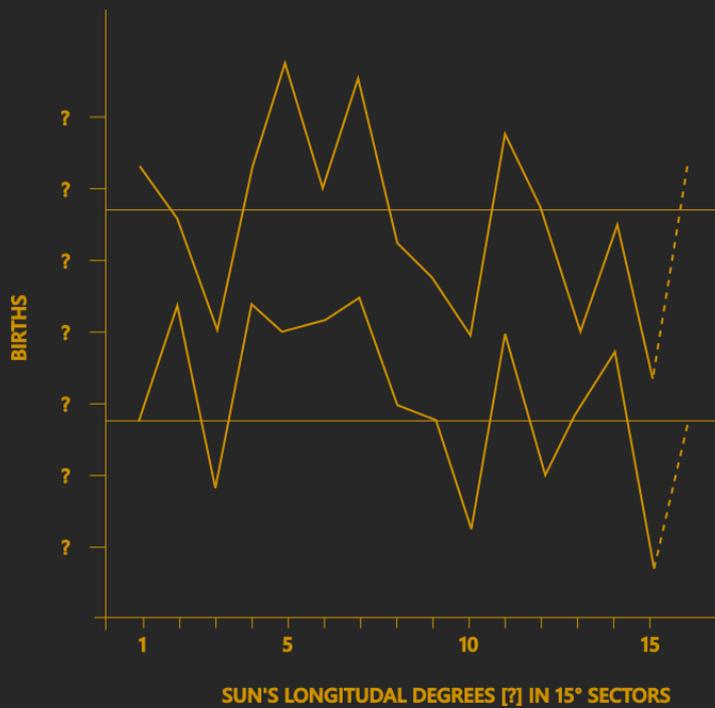


Fig. 35



Fig. 36

There are 3 harmonics which outstandingly determine this distribution. They are the 24th harmonic of the complete circle (a wave of 15° in length, the first or fundamental in Fig. 35), the second sub-harmonic of this series (the 48th of the circle), 2 waves of 7 1/2°; and the 5th sub-harmonic of this series (5 waves of 3° each) representing the 120th of the whole circle. We have drawn these out in full (Fig. 36) so that the student can see exactly how the distribution pattern of Fig. 35 is produced. A comparison of the combined wave form at the bottom of Fig. 36 with the actual distribution shown in Fig. 35 will show the student what is meant. A detailed study of this aspect of

the polio-prone naticities has been published separately²². The student is referred to this for fuller details.

Thus far we have considered harmonics in the circle of the ecliptic which have some sort of relationship to the usual twelvefold division of the circle; the 6th harmonic, the 12th, the 24th, the 48th, and so on. But as we said earlier, one of the lessons of the harmonic approach to astrology is that this range of numbers can be seen to be only a part of the picture. Consider, for example, the Sun positions on the dates of birth of 1974 British clergymen²³. When this solar distribution was analysed from the 1st to the 180th harmonic, the 3 most outstandingly strong harmonics were the 7th, the 49th (7²) and 98th (7² x 2); these were the only harmonics with an amplitude of more than 10 %.

The association of the number 7 with sacred and religious matters is proverbial; even so it is impressive to find its appearance with such strength in the naticities of those who exercise the priestly function in society. We shall have more to say about the significance of the 7th harmonic later but in the meantime it is instructive on several counts to see this solar distribution in the naticities of clergymen in graphic form. For one thing, a control set of birthdates was made having an equal number of samples and the same general parameters as in the case of the clergy. For another, the exercise illustrates a number of technical points.

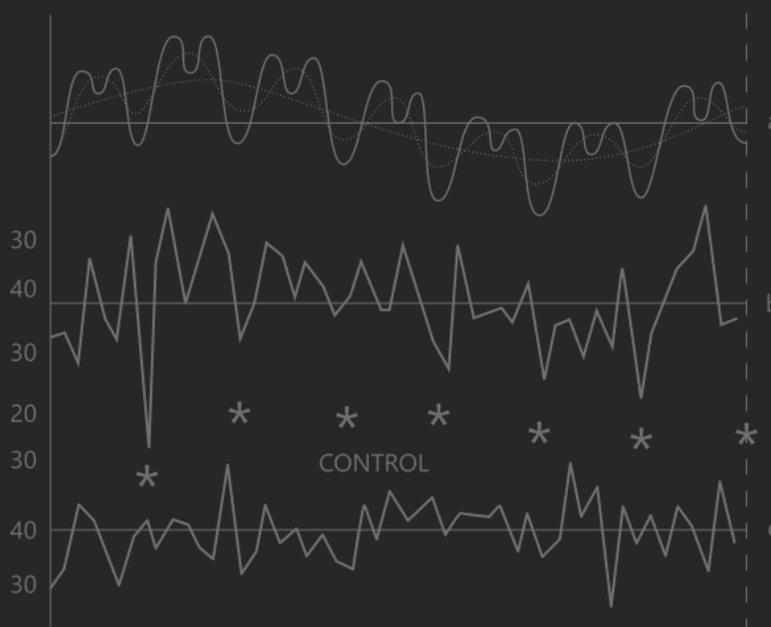


Fig. 37

Fig. 7 shows the actual degree by degree distribution of the Sun in naticities of 1974 clergymen in each 7th part of the ecliptic or zodiacal circle, the 7 sectors having been collected up in the way with which we are now familiar. Fig. 37a shows the combination of the fundamental 7th (dotted line), the 49th (7 waves superimposed upon the one basic 7th) and the 98th (2 waves to each one of the 49th series). Fig.37c shows the distribution in the control group.

Looking at Fig. 37 we can see, first, that the actual solar distribution for the clergy (Fig. 37b) has a clear, regular and vigorous rhythm with wide divergences from the mean, whereas in the control the divergences are weak and irregular. Secondly, we can see that the 49th and 98th coincide on the *downbeat* to give 7 low scores marked with crosses. Thirdly, we can see that the crests of the 49th tend to be cleft because of the 2 peaks of the 98th superimposed upon them.

²² Addey, John, *The Discrimination of Birthtypes in Relation to Disease*, Green Bay, WI.: Cambridge Circle, 1974

²³ The degree by degree distribution is held by the Astrological Association Research Section. The original study was made by Firebrace, Brig. R. C. and A. J. Kelly, in "Statistical Research Project", *Astrological Journal* (Astrological Association, London), II (1960), no. 3, though this is now difficult to obtain.

There are several technical points of interest. First, the 7th part of a circle is approximately 51° 26'. How then, since there are not a whole number of degrees in each sector, did we manage to obtain our distribution graph when we have totals for whole degrees only? In a situation of this kind, if we want to draw the result in graph form, we must do the best we can. In fact, the degree totals were set down in 7 runs of 51°, 52°, 51°, 52°, 51°, 52°, and 51°, the final score in the lines with 52 totals being dropped. If one thinks about this ploy one can see that the result will be quite adequate to the purpose. No line of totals will be more than ½° out of phase with the first line of totals. Since even the shortest wave (the 98th) will be about 3 ¾° in length this element of approximation still allows the effect of the shortest wave to show in the result.

Secondly, it will be noticed that whereas there is usually an interval of 7 degrees between the strong downbeats marked with crosses, there are 2 places where there is an interval of 8 degrees. This, of course, is because 7 does not divide exactly 7 times into 51, but has a remainder of 2.

Finally, it will be noticed that the strong downbeat and double-crest effect is well shown at some points in the graph but much less so at others. This again is partly because the regular, ideal seven-fold pattern shown in Fig. 37a is not regularly picked up by the 51 totals in Fig. 37b. This sort of situation is not uncommon and arises where the 'readings' taken at regular intervals fall irregularly in relation to the waves of the ideal pattern.

For example, in Fig. 38 the 5 waves are perfectly regular and the 9 points at which readings are taken are equally spaced, yet, because they fall irregularly in relation to the waves, the 9 points taken do not accurately reflect the regular wave pattern. This is a snare which the research student should look out for in drawing conclusions from drawn graphs of distribution patterns.

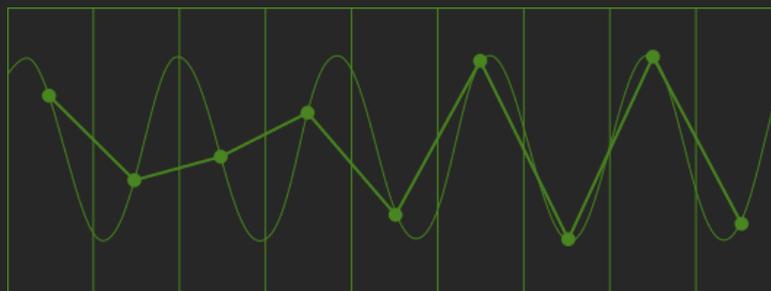


Fig. 38

The collection of birthdates of British clergy was an attempt to repeat an investigation into the birthdates of 2492 American clergy by the late Don Bradley of the United States²⁴. The Sun positions of these American clergy did not show so great an emphasis on the 7th and its sub-harmonics²⁵ although there *were* striking similarities. The strongest single harmonic here was the 125th (5³). As this was also one of the very strong harmonics in the British clergy, with a phase angle very close to that of the American clergy, the 125th was the strongest in the combined total of 4466 clergymen of both countries.

In the nativities of 7302 physicians already referred to the 25th (5²) was one of the strongest of the solar distributions, although not as strong as the 12th. In the birthdates of 2875 artists (culled by Charles Harvey from *Whos' Who in Art* and held by the Astrological Association) it was the 5th which was the 3rd strongest of the 1st 100 harmonics.

The number 5 certainly has much to do with Man himself and with human divisions and categories. It is therefore not surprising that the 5th harmonic and its sub-harmonics should appear

²⁴ Bradley, Donald, A., *Profession and Birthdate*, Los Angeles, CA.: Llewellyn Publication, 1960.

²⁵ This is possibly because clergy in the U.S. do not show so great a homogeneity of religious allegiance as British clergy who are mostly Church of England.

in collections of nativities of those who follow the different branches of human occupations which must, in the nature of things, correspond to different aspects of man's nature and constitution.

One of the important things noticed in this chapter is that certain kinds of collections of birth data tend to exhibit the presence of what we might call "families" of harmonics. In the polio nativities the solar harmonics were dominated by the 12th series, that is the 24th, 36th, 48th and others; in the clergy it was the 7th and its sub-harmonics; in others the 5th and its sub-harmonics. This is a widespread phenomenon in the field of cycle research and it is one which is abundantly confirmed by the very extensive evidence accumulated by the Foundation for the Study of Cycles, Pittsburgh, Pennsylvania, which we shall refer to later²⁶.

To sum up, we have tried to show in this and the preceding chapter that the traditional concept of the Zodiac as 12 equal sectors of the ecliptic is one limited application of the idea of harmonic intervals in this circle. The true picture is one in which the symbolism of *all* numbers can and should be brought into play, not in terms of sectors but in terms of an ebb and flow between equally spaced points around the circle, as shown in Fig. 19.

9. HARMONICS IN THE ASPECT CIRCLE

No part of this work is likely to present greater difficulties, either for the reader or the author, than this chapter which deals with the question of harmonics in the aspect circle. There are a number of reasons for this, and the reasons which must make it difficult for the student of traditional astrological teachings are not the same ones which will make it difficult for the writer who is up against a different set of problems - problems, incidentally, which are made worse by a lack of information.

From the standpoint of the reader who has been educated in terms of the prevailing concepts, the great difficulty is likely to be that of replacing his current ideas about what aspects are like, as described in the textbooks, with what they are like in reality. According to the textbooks, aspects are things which pop up here and there in the aspect circle; traditionally there are 12 main points at 30° intervals in the circle which are said to be 'in aspect'. An additional 4 at 90° intervals start from the semi-square of 45°. These 16 aspects, together with any others the astrologer may fancy, are envisaged as being angular relationships in the circle at which 2 planets are brought into a significant relationship. A certain highly variable, not to say, indeterminate, 'orb' is allowed on either side of the exact aspect-point. When 2 planets move out of orbs of an aspect, the relationship between them is deemed to pass into some sort of limbo.

The picture in the astrologer's mind is something like Fig. 39 which shows 'bleeps' in the circle corresponding to the standard aspect points. The sort of strength and orb associated with each is roughly indicated. This picture is a mass of anomalies and uncertainties. It is out merely that a wholly unreasonable choice has been made in favour of certain numbers for dividing the circle (12 and 8), or that what constitutes an 'orb' has never been intelligibly defined and cannot, as things stand, be so defined, except on an arbitrary basis. Rather, it is the notion that 2 planets can somehow cease to have a significant relationship which puts the finishing touch of absurdity to the whole scheme.

²⁶ See Chapter 21.



Fig. 40

But the reader will say, surely such a state of affairs necessarily implies that the square aspect - which it is alleged results from the operation of the 4th harmonic - must always have an orb of some 22 ½° (see Figure 40a). This is totally contrary to our experience.

Quite true, the 4th harmonic, *by itself* in terms of aspects does have an orb of 22 ½°, that and no other. The explanation of this apparent contradiction to our accepted experience is that major harmonics hardly ever operate in isolation and are in practice nearly always accompanied by a number, and often a considerable number, of their sub-harmonics.

For example, if, to the 4th, we add only its first 2 sub-harmonics (that is the 8th and 12th), and assuming they are all positively phased in relation to the points 'X' in Figure 41, we can see that the strength of the square aspect is already enhanced and the orb narrowed (and is narrowed still further if more harmonics are added). Yet each harmonic remains consistently in operation round the whole aspect circle, and if there are parts of the circle where the combination of harmonics throws up peaks of more intense force and others where the operative forces seem to die away, this is only because at some points the harmonics are all acting in unison and at others they are counteracting each other.

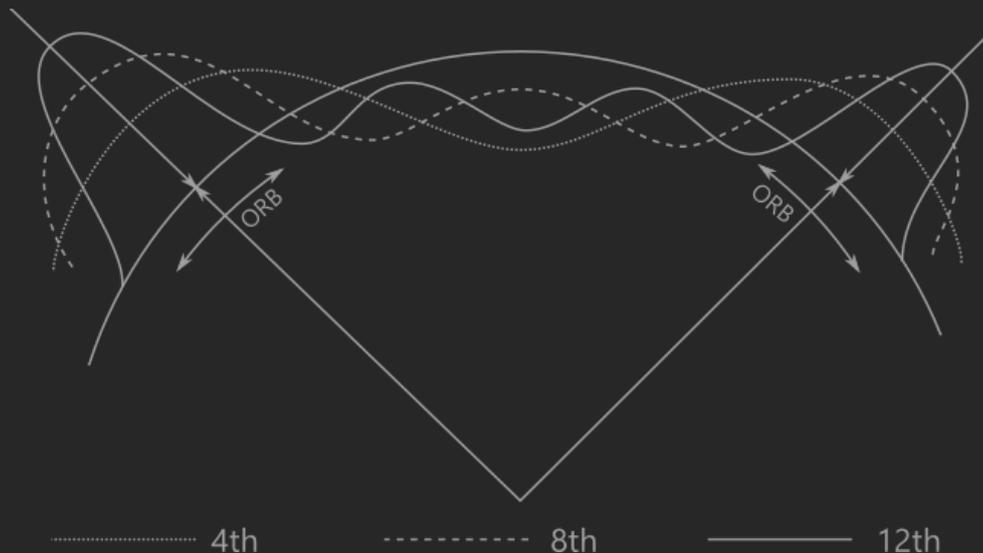


Fig. 41

This, quite simply, is the sole reason why the so-called major aspects (the conjunction most of all, then the opposition the trine and square) *are* thought of as 'major', namely because, being primary divisions of the circle, they contain the most sub-harmonics and because they are the most likely places in the circle for these sub-harmonics to coincide and reinforce each other.

We can now consider what orbs really are and how they are to be defined. The fact is that it is difficult in practice to avoid adopting a double standard, that is, a theoretically accurate definition and working definition for practical purposes in interpreting the chart. Strictly speaking there can be no one 'blanket' definition of an orb except, simply, that for any harmonic the orb of positive or negative 'influence' will be one quarter of the harmonic length (See Fig. 41). One cannot really go further than this because for each combination of harmonics the orb will be different. Even this simple definition assumes that we are dealing with harmonics which are phased either at 0° (positive 'influence') or 180° (negative 'influence'), as in Fig. 42, but this does not always seem to be the case. On the contrary, it would seem that sometimes the nodes of the wave fall at the aspect point so that the applying or separating aspect represents the maximum positive or negative value. See Fig. 43.



Fig. 42

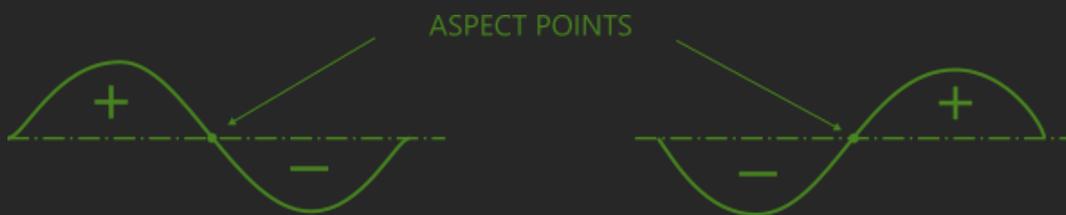


Fig. 43

It is recognised that such a way of looking at orbs, although it may be useful to remember, is not very satisfactory for the person who sits down to interpret the chart. On a practical level an element of arbitrariness must be brought in to provide some working rule and the best one can do in such circumstances is to make sure that the rule is as much in conformity as possible with the harmonic nature of aspects. Therefore in Chapter 14 I have attempted to formulate a working principle which covers the problem of orbs for all aspects, and the reader is referred to this for a viewpoint which he will probably find more enlightening in a practical way.

So much for a brief introduction to the theory of harmonics as applied to aspects. When we come to the question of demonstrating these principles from actual studies which have been made, we are faced with one very big difficulty which has so far restricted all but the most preliminary investigations. The difficulty we refer to, of course, is that of the apparent irregularities of the planetary motions. Their periods of retrogradation by themselves produce very strong harmonics indeed if they are studied in relation to aspect patterns in the same way that we have examined the solar distribution patterns in the ecliptic. This fact is still often overlooked by those who make statistical studies of aspects.

To take a simple example, let us look at the case of the aspects between the Sun and Mars. Reference to the ephemeris will soon show that the conjunction between Sun and Mars is a far more frequent aspect than the opposition. Every 2 years, more or less, Sun and Mars are within 5° of an opposition for roughly 8 days; every 2 years they are within 5° of a conjunction for, on average, about 38 days. Thus the conjunctions are over 4 ½ times more common than the oppositions. The reason is easy to see.

The situation is shown in Fig. 44. When the Earth and Mars are in line on the *same side* of the Sun, there results an apparent opposition. The Earth, because it is close to Mars and moves faster

than that planet, passes Mars quickly and Mars appears to go retrograde. Thus the period for which they are close to a straight line relationship with the Sun is very brief. When Earth and Mars are on opposite sides of the Sun, they are far distant from each other and move round the Sun in the same direction like 2 wrestlers looking for an opening. Consequently, *this* relationship is longer lasting.

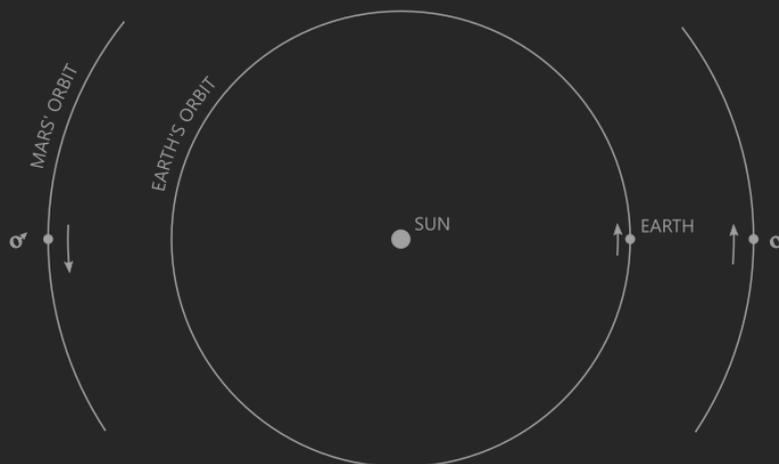


Fig. 44

Thus if a large number of random angular relationships between Sun and Mars were plotted over a period of time, there would be far more conjunctions than oppositions and one would see a 1st harmonic in the aspect circle of over 60% amplitude. This means that the frequency of the conjunction is 60 % greater than the average frequency of all angular relationships taken together; the frequency of the opposition is 60 % less. This 1st harmonic effect is much smaller in the geocentric relationship of Sun and Jupiter and smaller still in the relation of Sun and Saturn. Even so the Sun-Saturn aspect cycle will show a 1st harmonic roughly in the order of 10 % amplitude.

In the case of the solar aspects to the inferior planets Mercury and Venus there is no longer a full circle of relationships but a sort of pendulum effect. Mercury and Venus appear, viewed from the earth, first on one side of the Sun, then on the other. In these 2 cases the conjunctions are brief in comparison to the duration of their positions when near their maximum elongations from the Sun. Thus a distribution pattern in relation to the Sun is formed as in Fig. 45.



Fig. 45

If this seems a little complicated when planets are considered in aspect to the Sun, whose apparent motion is nearly regular, it will easily be seen that when the various planets with their different speeds and stations are considered in relation *to each other*, all sorts of harmonic patterns are set up between them especially when the birth data to which they relate is drawn from a relatively short period of time, say 2 or 3 decades.

No adequate study has been made of the harmonic patterns produced by the relationships of the various planets; the job is essentially one for the computer. Until we have programmed a computer to give us the harmonics for the inter-relationships of planets for particular periods, we shall not be able to make much progress in this field. It is easy to see that one cannot claim significance for the occurrence of over 4 times as many Sun-conjunct-Mars aspects as Sun-

opposition-Mars in a particular sample of births (astronomical factors alone would produce such a discrepancy in any random sample spread over a couple of decades), but it is not so easy to know exactly what harmonic patterns should be allowed for in other cases. Perhaps the best we can do is to confine ourselves to aspects between one of the planets and the Sun (which at least cuts out the retrograde factor in 1 of the 2 bodies) and to pay special attention to the short wave harmonics since these are unlikely to be produced by the orbital motions involved.

Consider therefore the aspects of the Sun to Saturn in the nativities of 972 nonagenarians, being all those men and women in the 4 volumes of the publication *Who Was Who* (1889-1950) whose dates of birth and death were given²⁸. All achieved their 90th year and rated an entry in *Who's Who* during their lifetime, so that their lives had been crowned by personal achievement and exceptional length of days. Surely among such people we should find the Sun vigorously aspected. In particular, since everyone knows from Gustav Holst's Planets Suite that Saturn is "the bringer of old age", the aspects between Sun and Saturn ought to provide us with an interesting result.

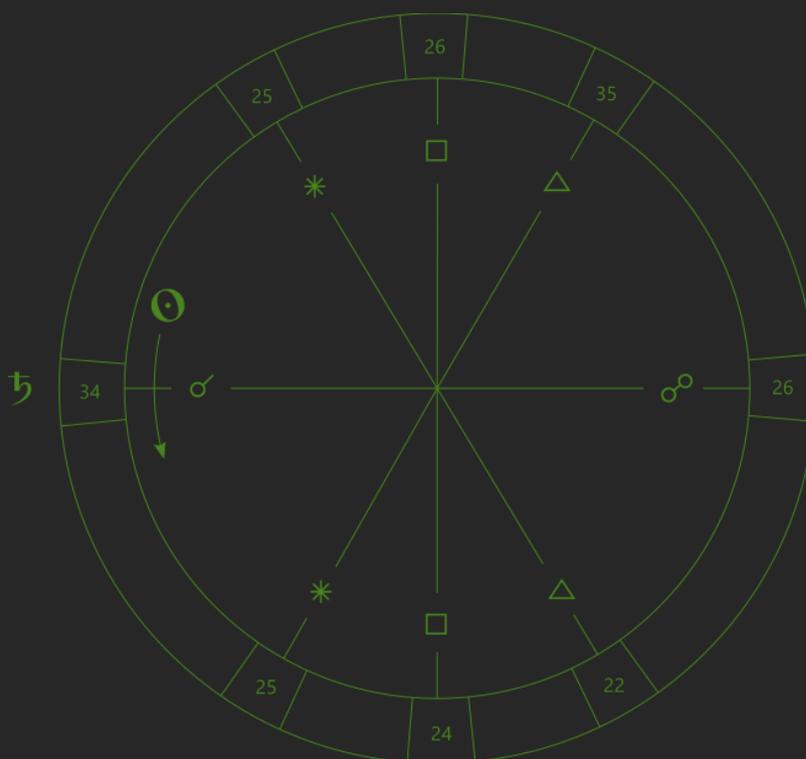


Fig. 46

Now, in conventional terms, if there are 972 positions of the Sun in relation to Saturn, and if we take the number of cases we have of Sun within 5° of the principle aspect points - conjunctions, oppositions, trines, squares and sextiles - we would have a total of 8 10° areas in the 360° circle. We should expect to find $972 \times 10 \div 360 = 27$ cases in each 10° area in a random distribution. Fig. 46 shows in diagrammatic form the totals for each of these aspect areas.

The sextiles yield a total of 50 aspects, the squares 50, the trines 57 and the conjunctions and oppositions 60. The expected total, by contrast, would be 54 or 2×27 . Thus we have an observed total of 217 aspects against an expected total of $27 \times 8 = 216$. None of the aspects shows a significantly high score, especially in regard to the slight astronomical bias in favour of the conjunction in relation to the opposition. Narrowing the orb to less than 5° makes no improvement to the level of significance. An examination in the same terms of the solar aspects to Mars, Jupiter, Uranus, Neptune and Pluto yields a very similar result - nothing of the least significance.

²⁸ See Addey, John, "The Search for the Scientific Starting Point", *Astrology*, XXXII (1958) nos. 2 & 3, Reprinted in *The Harmonic Anthology*, Green Bay, WI.: Cambridge Circle, 1976.

It was this observation which led me in 1958 to write the following: 'So for these men who had reached the top of their various professions of fields of activity, whose lives had been crowned by success and recognition *and* by exceptional length of days, their natal Suns (representing the 'life force') showed no more than a chance tendency to gather vigour and enterprise from Mars, or buoyancy and zest from Jupiter, or diligence from Saturn, or originality from Uranus, or insight and imagination from Neptune, or intensity and penetration from Pluto! The maps of so many assorted jellyfish would evidently have done just as well²⁹.

This is the kind of disappointment or indeed, shock, which the student who conscientiously investigates the traditional concepts of astrology is liable to receive, although not all investigations of conventional teachings are quite so disastrous. Even the resourceful Michel Gauquelin has declared, after making studies of traditional aspects, that he can find no scientific foothold in the astrological doctrine of aspects. Certainly a sceptic who set out to show that astrology was bunk and who obtained such a result after so much labour, would rub his hands, publish his findings with joy and say 'I told you so'. The usual answer from astrologers is to blame statistics and say that their science is not accessible to such methods.

For those who love truth this will not do. What we have is an example of the cardinal error of all research, the error of deciding beforehand what the truth of the matter is, and then setting out to prove that one is right.

The best approach to all research is to ask an open-ended question. In this case, the question is: 'Are there such things as aspects and if so, what are they like?' Or, if one is satisfied on that score, one should ask in this particular case: 'What is the characteristic relationship of Sun and Saturn in the nativities of nonagenarians?' In either case, one leaves it to the results to give their reply.

In response to such a question one naturally begins by listing the angular relationships of Sun to Saturn in *each and every chart, whatever* that relationship may be (they are all nonagenarians!), arranging them in a 360° grid (see Appendix I). This basic flexible arrangement is used for examining the distribution in terms of different harmonics.

Ideally one arranges for a complete harmonic analysis by computer, but, because of the uncertainties described above concerning orbital irregularities, no aspect distributions have been analysed in this way. Therefore, one must adopt some simple tactics to see what can be found. The following is an example of such methods:

First, since we suspect that major harmonic patterns may be set up by the geocentric relationship of Sun and Saturn we will ignore the largest harmonics and start with, say, the 60° sector. Remember that sectors now are sectors of the aspect circle. The first sector will be the distribution of Sun in relation to Saturn when it is separating from that planet by 0° to 60°, the second sector from 60° to 120° and so on round the circle. For this preliminary skirmish we can conveniently take our totals for the distribution of Sun in relation to Saturn in blocks of 5°, giving us 12 totals for each 60° of the aspect circle. We then collect our 6 sets of 12 totals together into one run of 60°. Here are the actual totals with the resultant graph shown in Figure 47. The first total (90) is the number of times the Sun was in the first 5° after the conjunction and all 60° aspects. The second total is the number of times the Sun falls between the 6th and 10th degrees beyond these aspects; the 3rd total refers to the 11th – 15th degrees, etc.

²⁹ See reference in Note 2 above. These results have been worked over by 2 other people to ensure accuracy.

90 83 103 78 72 69 84 64 98 69 85 77

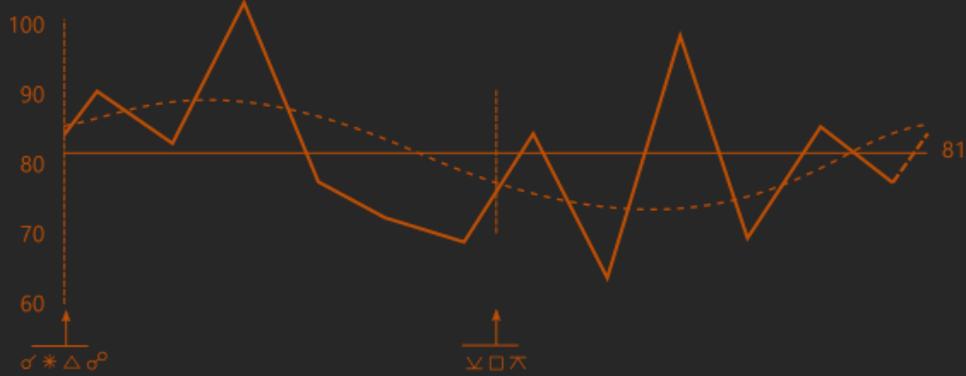


Fig. 47

Looking then at Fig. 47 we can see (1) that there is evidently a 60° wave, with an amplitude in the order of 10 % which we have inserted in what appears to be roughly the right place; (2) that in religiously counting up the positions which fall within 5° of the main aspect points we were in fact missing all the fun since those are the very places where the distribution is near to the mean, and (3) that if we compare the first 30° with the second 30° there is evidently a repeating pattern with a very high score at the third 5° total in each half of the distribution.

With this in mind let us go a step further and put the 2 halves of Fig. 47 together so as to get a clearer view of the distribution in each 30° . Fig. 48a shows the result and 48b shows that this pattern is very largely the result of a combination of the 2nd and 3rd sub-harmonics of the 30° period, that is the combination of a 15° and a 10° wave with amplitudes of roughly 7 % and 10 %. These are the 24th and 36th harmonics of the aspect circle. Now we are certainly justified in thinking that there are forces at work in this distribution which are due to something more than chance. The 3rd total, 201, against a mean of 162, is very high indeed. The conclusion we might draw from this is that the distribution is the result of unsuspected astronomical factors due to the geocentric relation of Sun to Saturn. However, if it depicts a significant astrological relationship, then we need a new view of 'aspects' which speaks a language *based on harmonics*.

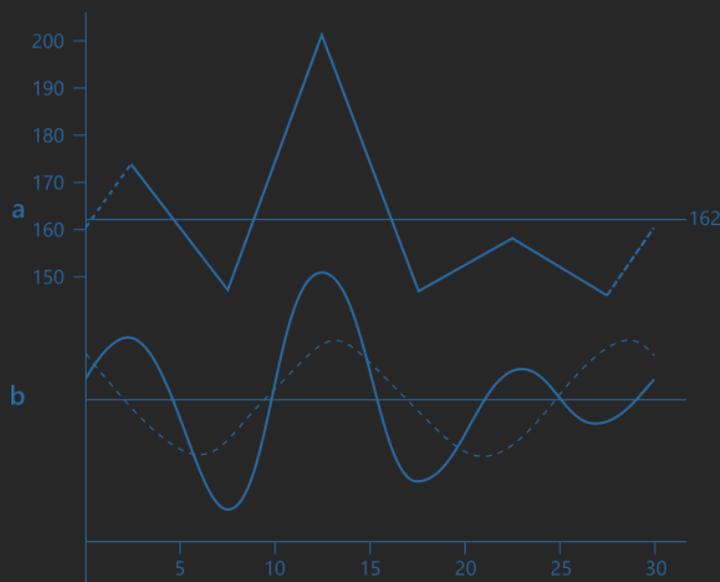


Fig. 48

We said earlier that we could only feel reasonably sure of having eliminated astronomical factors when we had found a very short harmonic. Let us then get out our magnifying glass, as it were, and

ask what happens to, say, the quite strong 10° wave when we look at the actual single degree totals in each 10° sector round the aspect circle. This will tell us the story about short harmonics. For this we must go back to our 360-degree totals and add them up in 36 runs of 10 separate degree totals. This sequence of 10 totals, which represents the relationship of Sun to Saturn in each 10° of the aspect circle, is as follows. The first total represents the number of times the Sun was within $\frac{1}{2}^\circ$ on either side of an exact conjunction or in each 10^{th} degree measured from that point:

89 107 107 101 119 99 95 109 82 64

If we draw these totals in graph form (Fig. 49) we can see our 10° wave - the 36^{th} harmonic of the aspect circle - but there are also quite clearly 3 shorter waves superimposed upon it. We can now see that the 10° wave is probably nearer 12 % than 10 % as we estimated before, and although it is rather difficult to judge the precise amplitude of our 3^{rd} sub-harmonic, that also appears to be approaching 12 %. This is a very interesting finding! This short wave is, of course, 3×36 or the 108^{th} harmonic, 3 waves in each 10° , in other words, the Indian navamsa measure of $3 \frac{1}{3}^\circ$.

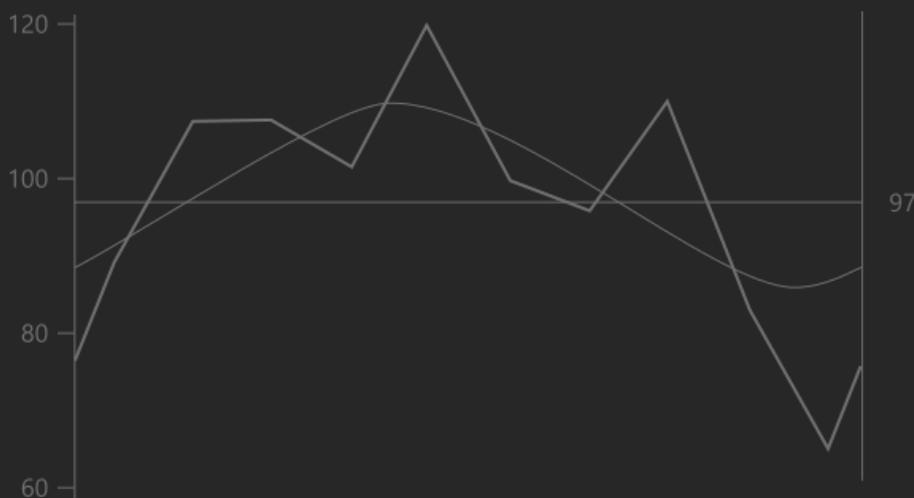


Fig. 49

What our subjects are distinctively supposed to have in common is longevity, but as a matter of fact it is rather more precise than this. All of them entered their 90^{th} year but because the death rate is very steep at this age the overwhelming majority of them died in the next 3 or 4 years. We can say that we have here a large group of people whose life cycle was just about the same.

The number 9 (the Navamsa measure being $\frac{1}{9^{\text{th}}}$ part of a sign) is distinctively connected with the *completion of a cycle*. It may well be that in setting out to find the Sun-Saturn relationship in long-lived subjects we have ended by finding one of the pointers to the length of life - an item of astrological lore lost to the West but probably better preserved in India - namely the Sun's position in the aspect navamsa cycle of $3 \frac{1}{3}^\circ$.³⁰

It is perhaps difficult for the student of orthodox astrological teachings to accept the idea that the conception of aspects at 30° or even 15° intervals may be really rather crude and primitive. But the truth must be that all divisions of the circle have their significance and always *the significance is to be found in the symbolism of the number by which the circle is divided*.

³⁰ Referring to the full harmonic analysis of the Sun's distribution in the ecliptic in these 972 nonagenarians it is interesting to note that, of the 180 harmonics, the 9^{th} is the 2^{nd} strongest. There are many fascinating insights into number symbolism to be had from these analyses. In this case there appear to be 2 especially important harmonic series: the 9^{th} and the 17^{th} . The strongest amplitude of any harmonic is the 170^{th} (10×17) at 16.2 %. The 2^{nd} strongest is the 9^{th} , 13.8 %. The 3^{rd} strongest are the 153^{rd} (9×17) at 13.5 % and the 171^{st} (9×19) at 13.5 %. The 18^{th} (2×9) is 13.1 %. The symbolism of prime numbers such as 17 is of profound interest.

That learned and perceptive astrologer, Cyril Fagan, once spoke of these Indian techniques based upon small-increment divisions as “aspectarian verniers”³¹ for measuring “micro-aspects”. This is only one of the many ways in which the new approach to astrology in terms of harmonics promises a reunion of the Eastern and Western traditions in astrology and indeed, seems likely to illuminate Indian astrology for Indians as much as Western astrology for Westerners.

Let us return to our example and to the 108th (navamsa) harmonic relationship of Sun and Saturn in our nonagenarians. Have we really satisfied ourselves that this quite vigorous harmonic is not a freak result of the Sun’s relationship to the stations of Saturn repeated over a long period? After reflecting upon the apparent Sun-Saturn cycle, we might be almost certain that this could not possibly be the explanation. But, if it were not for one thing a lingering doubt might remain. Fortunately, there is evidence which settles the matter.

The startling fact is that in our 972 nonagenarians exactly the same feature appears in the aspects of the Sun to Mars, Jupiter and Uranus. The other planets have not been investigated. Fig. 50 shows this sequence of 10 aspect-totals for the solar aspects to the 4 planets, Uranus, Saturn, Jupiter and Mars. At the bottom of the diagram the result for all 4 sets of aspects are combined - a total of 3.888 aspect positions.

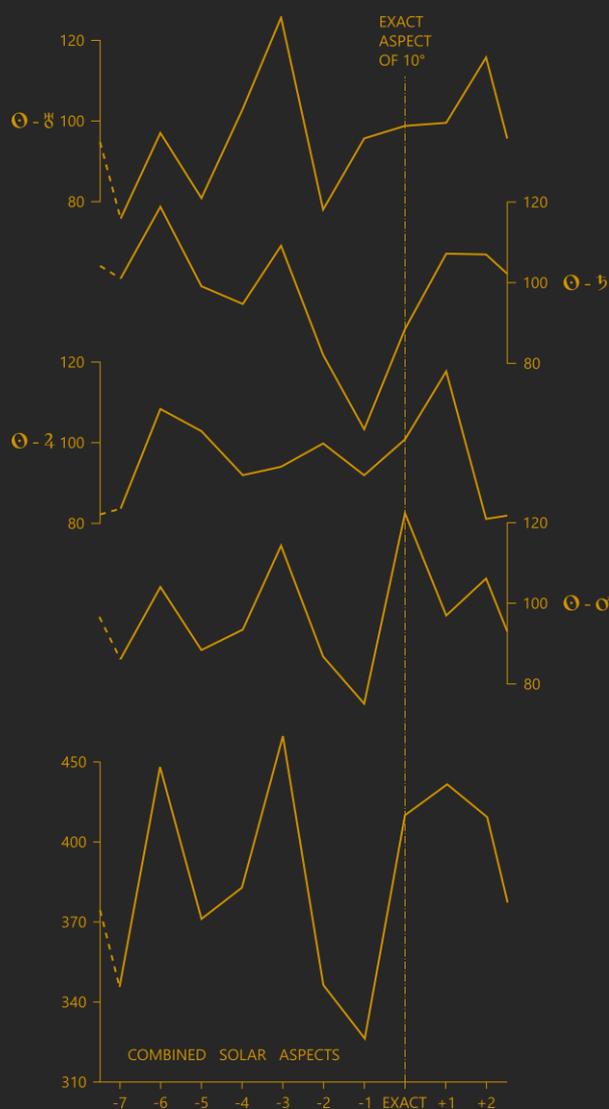


Fig. 50

In this figure we have rearranged the sequence of totals so that the first point in the graph is the Sun’s application by 7 degrees to the exact conjunction (or one of the 35 other points at 10° intervals round the aspect circle). The exact aspect point is indicated. The phasing of the 108th harmonic is

³¹ A vernier is an adaptation used by surveyors for making fine measurements of angles.

very slightly different from one planet to another and other harmonics may possibly be present in some cases. Nevertheless the similarity is such as to give a perfectly clear and convincing result in the combined totals as shown in the final graph.

Although one can conceive of such a feature as this 108th harmonic appearing by virtue of astronomical factors in the relationship of the Sun to one of the planets, it certainly could not appear in all of them from this cause, for their motions are quite different. We can therefore say with confidence that we have revealed a significant astrological feature. Moreover, this feature has a very sound if unexpected symbolic aptness.

The main purpose of this chapter has been to show that the same principles apply to the aspect circle as to the circle of the houses and of the Zodiac and that (apart from a need to assimilate the idea of harmonics itself), what is especially required in astrology is the development of a full range of number symbolism.

10. RECAPITULATION

The reader who has reached this point in the book will probably be longing for some relief from the positions taken up by astrological "iron filings" and our attempts to see behind these patterns the principles which govern significant astrological relationships in the horoscope. He deserves such a respite. In Part Two of the book we shall leave the drudgery behind for a while and try to demonstrate some of the implications, in terms of practical horoscopy, of the principles so far adduced. But before doing this it is right that we should look back briefly at what has been learned so far and try to see where it has been leading us.

Astrology is full of circles and circular motions. 3 of these are usually given precedence: first, there is the circle of the Zodiac, that is, the circle of the ecliptic in which the positions of the planets in their orbits are determined. Secondly there is the circle of the houses, that is, the diurnal circle of the planets as they rise, culminate and set each day. Thirdly there is the circle of aspects as a planet moves from its conjunction with another body round to the opposition and back again to the conjunction.

In each of these circles *the astrologer studies the relationship of one factor to another and places an interpretation upon that relationship*. Without these relationships and the significance he attaches to them, the astrologer could not even begin to interpret a horoscope. It is true that each of the planets has its own symbolism and significance regardless of its relationships in the chart, but each planet is in every horoscope. What distinguishes each particular horoscope is the relationship of one factor to another in these circles of reference.

In the first case he attaches a meaning to the planet's position in the ecliptic. He says it is in such-and-such a sign, for example, and in so doing he is saying in effect that it has *a certain relationship* to the point 0° Aries. In the second, he attaches a certain meaning to the house position of the planet, and in this he is *relating* this to the Ascendant or some other point in the diurnal circle. In the third case he ascribes a certain meaning to the angular *relationship* of one planet to another. Thus everything in astrology depends upon how we view these relationships and the precise basis of the symbolism which we use to interpret their meaning in terms of qualities.

All these relationships fall within *a circle of possible relationships*. Therefore the thing which the astrologer needs to understand above everything else is the symbolism of the circle and its divisions. The circle is the most comprehensive of symbols. In itself it represents the idea of a whole, and in its largest significance the idea of infinity and eternity.

Everything in the realms of manifestation owes its existence to the dynamic power of Ideas. Ideas in their highest aspect are spiritual wholes or unities. Such wholes, existing above time and space, are yet the formal causes of everything in manifestation.

What is unitive above is multiplex below. Thus Ideas express themselves objectively through parts, the parts representing in their inter-relationships the outworking of the subjective potentialities of the whole from which they are derived, each fulfilling or expressing a function or aspect of the parent unity. The Idea, *as* a unity, manifests as the entire circle of the ordered relationships of the parts. In the realms of time it manifests as the whole cycle of the stages of unfoldment of the Idea by which the inherent potentialities are actualised in the order of succession.

In the horoscope this scheme of relationships of the one to the many, of the whole to the parts, and of the parts or aspects of the whole to each other is expressed through the symbolism of the circle and relationships within the circle. This scheme functions on many different levels.

To see how the symbolism of the circle is adapted to the interpretation of different elements in life we must recognise that all living things and their existences are organised as hierarchies. Every unity, when it proceeds into manifestation, unfolds an orderly succession of subordinate principles whereby it expresses its innate characteristics. First come the most basic and fundamental movements towards life and then, as these are developed and differentiated, a wider and wider range of powers and principles emerge.

The human soul, which is the unity behind the individual life, has three basic faculties: the will by which it addresses itself to the good, the "heart" or desire nature by which it addresses itself to the beautiful, and the mind or intelligence whereby it addresses itself to the true. We see these from babyhood, for the newborn infant first *asserts* its existence, *desires* food and warmth and *discriminates*, through its senses and instincts, what it wants from what it does not want.

In time each of these faculties expands and diversifies. The primary self-assertion of the will develops into a wider range of impulsive, elective and purposive functions, each with its own subordinate aspects. The basic desire nature responds to an ever increasing range of attractions, aesthetic susceptibilities and aspirations of a more and more spiritual nature. So too with the intelligence; from elementary forms of sense contact and instinct it moves to more and more deliberative kinds of knowledge and finally to reason and true intuition.

In all this we see the picture of a unity-in-diversity, a whole which manifests its life through a hierarchy of powers and principles in which the lesser, more particular and specialised is subordinated to the greater, more universal and general. We see the same thing in the human body where different kinds of cells are subordinate to different kinds of tissues, tissues to organs, organs to physiological systems and these to the life and economy of the whole body. We see it again in society where the individual is part of the family, the family of the civic, the civic of the national and the national of the global unit. At each level all sorts of other groups and sub-groups operate, consciously or unconsciously, in different fields, and all are interwoven in the complex life of mankind.

Between each of these hierarchical structures there is an intimate parallelism. The human body and human society are constituted as they are because man himself is constituted as he is. Under each head there are corresponding elements at every level. Furthermore, both man and the cosmos are made "in the image of God", that is to say they embody the same powers and principles, the one microcosmically and the other macrocosmically. Thus there are correspondences between man and nature at every level.

The ideal way of expressing these correspondences is by the symbolism of number, for every unity unfolds into multiplicity through identical stages, each in terms of its own nature. Every monad proceeds to a duad, thence to a triad, a tetrad, and so on. It is above all, as Pythagoras and others taught, to the first 10 numbers that we must look for the basic key to this kind of symbolism. After these 10 principles all further proliferation is a repetition in the sense of new combinations, upon other levels and in different contexts, of those original principles. But in all these different contexts and upon all levels the underlying reality of *the whole and the parts* remains. For this reason the

symbolism of *the circle and its sub-divisions* is adapted to all possible circumstances and to every conceivable requirement of astrology as "the algebra of life".

In practical horoscopy this symbolism of the circle and its sub-divisions manifests in the way we have tried to show in Part One of this book. Every circle in astrology represents a particular whole or unity. The primary divisions of each circle into 3 or 2 or 5 etc., yields a number of equally spaced points round the circle as in Fig. 19. This represents the division of the original whole or unity into its appropriate parts or subordinate qualities. The points themselves represent the points of maximum expression of the particular subordinate qualities. The sections of the circle between the points represent the range of possible relationships of a planet to these subordinate principles, whether positive or negative, showing how the planet passes through a whole sub-circle of relationships within the main circle. For these reasons, Fig. 19 is one of the most important diagrams in the whole book, as it provides the key to almost everything we have been trying to say.

This gives us the idea of circles within circles. As each circle and sub-circle is divided and sub-divided into ever smaller units, we gradually move symbolically down the scale of a hierarchy of principles from the more universal to the more particular. Every student of astrology with any feeling for the subject already understands this truth in general terms. It is the basis of many familiar astrological concepts, such as the Zodiac itself. The principle is emphasised here because it is important that the student, knowing the principle, should be as clear as possible in his mind as to how the principle is expressed in terms of the symbolism of the circle.

Thus we have tried to show in Part One of this book how astrological positions, when studied in great number, reveal the idea of a fluctuation between positive and negative phases of divisions of any circle of relationships. It is a fundamental principle that the number by which the circle is divided holds the key to the interpretation of the relationship involved,

PART TWO

PRACTICAL APPLICATIONS

11. THE NAVAMSA CHART

If one asks a Hindu astrologer to interpret one's horoscope he will almost always begin by calculating at least 2 charts and probably more. First he will have the radical, Rasi, or sign chart giving the natal positions as ordinarily understood; but in addition he will calculate the Navamsa or '9th division' chart (pronounced Na-VAM-Sha). This chart is one of 16 sub-charts, the Shodasavargas or 16 divisions, which he can call upon. Strictly speaking there are 15 sub-charts for the natal chart is counted as the first of the 16. Each of these has a special application to the life of the native³².

The way in which the Navamsa or 9th division chart is calculated is very simple. Each sign of the Zodiac is divided into 9 equal sectors of 3° 20' each. The first sector, extending from 0° to 3° 20' Aries, is then allocated to Aries; the second, from 3° 20' to 6° 40' Aries is allocated to Taurus; the third, 6° 40' to 10° is given to Gemini, and so on round the circle. By the time one has reached the end of the sign Aries one has got 9 small Navamsa divisions allocated from Aries to Sagittarius inclusive. The first 3° 20' of Taurus then goes to Capricorn, the second to Aquarius and the third, taking us to 10° Taurus, goes to Pisces. Thus the first 40° of the Zodiac have been made into a new little Zodiac of 12 miniature signs.

One then starts again with Aries at 10° Taurus and continues round the circle, each 40° yielding another set of 12 signs. Thus, since 40° is 1/9th part of 360°, one ends by having 9 little Zodiacs extending in due order through the original 12 signs. In other words, by dividing each sign into 9 equal divisions and then making these into groups of 12 signs one is in fact dividing the whole circle into 9 Zodiacs. (See Fig. 51.)

So we are back with our idea of circles within circles. Fuller details of methods of calculating the various harmonic charts are given in the next chapter, but we can use Fig. 51 to show quite simply how the positions in the radical chart are recalculated so as to give their positions in the Navamsa chart.

Let us suppose that the natal Sun is in 11° 06' of Aries. We can see from Fig. 51 that this will fall in a Cancer division of the Navamsa circle for this extends from 10° to 13° 20' Aries. How far into that little Cancer sign has the Sun moved? The division starts at 10° Aries and the natal Sun is at 11° 06' Aries, so it has travelled 1° 06' into the mini-sign. But the new Zodiac has been created by collapsing the original Zodiac into 9 smaller Zodiacs, so in order to find the new position of the Sun we must multiply 1° 06' by 9. Thus $9 \times 1^\circ 06'$ gives us 9° 54' Cancer as the position of the Sun in the Navamsa chart.

Suppose the radical Moon was in 7° 50' Taurus. Reference to Fig. 51 shows that this falls in a Pisces sub-division in the Navamsa circle. How far has it moved into Pisces? The sub-division starts at 6° 40' Taurus so, at 7° 50' the Moon has moved 1° 10' into that sub-division. Thus $9 \times 1^\circ 10' = 10^\circ 30'$ Pisces, which will be the Moon's Navamsa position. Therefore the Sun at 9° 54' Cancer will be in trine to the Moon in 10° 30' Pisces.

If the radical Jupiter was at 17° 48' of Gemini it would have moved 1° 08' into a Pisces sub-division, or more precisely $9 \times 1^\circ 08' = 10^\circ 12'$ of Pisces. Thus in the Navamsa chart we have Moon conjunct Jupiter. This is another way of saying that they are just about 40° apart, from 7° 50' Taurus to 17° 48' Gemini, in the radix.

³² See Harvey, Charles, "Harmonics and Hindu Astrology", *Astrological Journal* (Astrological Association, London), XII (1970), no. 2. Shortly to be included in *The Harmonic Anthology*, Green Bay, WI.: Cambridge Circle, 1976.

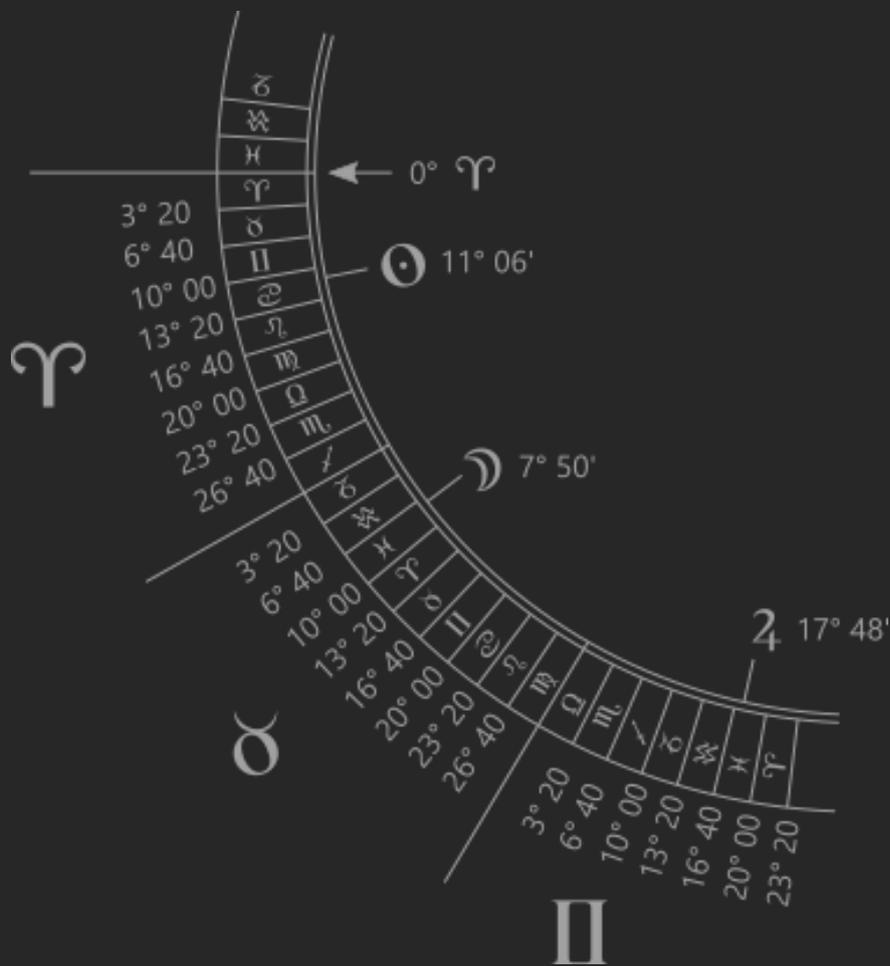


Fig. 51

We can now see that this old tradition in Hindu astrology of creating sub-cycle charts is really a practical application of the idea of harmonics. Each division of the circle into a subordinate number of cycles or circles has its own significance derived from the symbolism of the number by which the division is made. By dividing up the original circle of the Zodiac into a number of lesser circles one is, in effect, considering the distribution of the natal positions within the sub-circle of a particular harmonic.

It is true perhaps that the Indian astrologer may think of this technique as one in which each *sign* is divided by a particular number, in this case 9. But in point of fact, what he has done first and foremost is to divide the *whole circle* by 9 and then divide each of those 9 divisions into a little Zodiac of 12 signs. It may be that this secondary division into 12 signs has a symbolic validity, for the number 12 relates to the mundane order of things; thus the subordinate division by 12 has the effect, so to speak, of "earthing" his original division of the circle by 9, for the purposes of interpretation.

From another point of view it is arguable that the purpose of the secondary division into mini-signs is primarily as a system of nomenclature whereby one identifies points in the sub-cycles which would not otherwise have a name. In Fig. 52 we have divided our circle into 9 parts and the encircling wave-form shows the resultant cycles of the 9th harmonic. Let us suppose that in a particular horoscope there are planets X, Y and Z. They look as though they fall at about the same point in the 9th harmonic wave so that they would be conjunct in the Navamsa chart, but how can we make an *accurate* comparison of their positions? Only by having some system of measuring exactly where they fall in each sector. The traditional Indian practice is to divide each of the 9 sectors into 12 signs so that we can recalculate the positions of X, Y and Z in a familiar system of coordinates - namely, the Zodiac - and so identify their positions exactly.

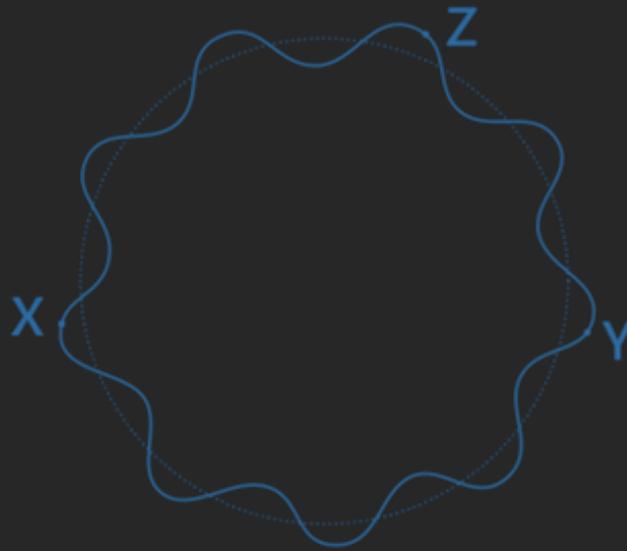


Fig. 52

We have said that each of these 'harmonic charts' as we might call them, has its own symbolism as applied to the life of the native, based upon the number by which the whole circle is divided - that is the number of sub-cycles within the complete circle. Indian astrology has its own traditions regarding the appropriate significance and symbolic application for each of its Shodasavarga charts. For example it is said that one of the primary meanings of the Navamsa chart is that it *describes the marriage partner*. This is an interesting allocation and deserves some comment.

Most of the basic Shodasavarga divisions are related to departments of life with which one might expect them to be connected on the basis of zodiacal symbolism. Thus the Hora or 2nd harmonic chart is said to signify wealth and possessions, the 3rd (or Drekkana) brothers and sisters, the 4th (or Chaturthamsa) home and property, the 6th health and so on. But it is the 7th (or Saptamsa) chart which is said to indicate children and the 9th or Navamsa which is said to show the marriage partner. Let us, then consider the symbolism of the number 9.

The reason why Pythagoras and other philosophers of antiquity attached so much importance to the first 9 numbers derives from the teaching that everything unfolds from its innermost idea, which is pure potentiality, to its outermost expression, which is its manifest, actualized perfection, through 9 stages³³. This complete actualized perfection in which all the parts are finally brought into harmony is called the entelechy of a thing. Of 'entelechy' my dictionary says: "In Aristotelian and Scholastic philosophy a term used to signify the perfect form attained by anything by reason of which it actually exists and realizes its true function; the actual as opposed to its potential cause."

In Greek mythology the idea of the "entelechy" may be considered as represented by Apollo. His emblem is the lyre because he brings all things into perfect harmony. He is likewise said to be the God of Medicine because the purpose of the medicinal arts is to heal, to make whole and to bring the parts into harmony. Like his twin sister, Artemis, he was also handy with a bow and arrow and was sometimes the bringer of death, signifying the end or completion. Closely associated with Apollo and celebrated with him at Delphi were the Nine Muses of whom he represents the unifying principle. Apollo and the idea of entelechy, the realization of fullness of form, are thus represented by the number 10. The Nine Muses represent the 9 forms of inspiration corresponding to the 9 stages of unfoldment by which the Soul is brought to perfection. The correspondence with the 9 choirs of angels in Christian thought, associated with the stages of the Soul's ascent leading to the mystical marriage with its Ideal, needs no emphasis.

³³ See Addley, John, *Astrology Reborn*, Note 2, Chapter 1, above.

There are many other parallel examples of this nine-fold order in the myths, legends and religious doctrines of the world. The point to notice here is the close association of the number 9 with, among other things, the *Ideal* to be realized and with *Completion*. The number 9, though not identical with the idea of entelechy, yet represents the gateway to that fulfilment.

Thus we see some indication of why the number 9, and so the Navamsa chart, should be connected with the marriage partner. Every man and woman, searching consciously or unconsciously for his or her Ideal in the larger sense, also tends to choose a marriage partner who, in some way, represents this ideal. The student can experiment on his own chart and that of his married acquaintances to see how well this Navamsa chart describes the marriage partner. Elsewhere the author uses the charts of Elizabeth Barrett Browning and Robert Browning as an illustration. My own experience with the Navamsa chart in this context is that the correspondence between the Navamsa and the marriage partner and his or her chart is often very well shown. At other times it is not very obvious and one has to consider in what way the Navamsa is descriptive of the marriage partner or, in some other way, of his or her 'ideal'.

A phase that is sometimes used of the Navamsa chart is that it stands in relation to the radical map "as the fruit to the tree". The aptness of this phrase in relation to the symbolism of the number 9 as described earlier in the chapter is obvious. The bringing forth of the appropriate fruit represents the culmination and expression of the life of the tree.

Thus, where one can give an astrological identity to some aspect of the life work of an individual (for example, where one has the horoscope of a firm or an organization of some sort which is the expression of a man's ideals or life's purpose), that chart will often be found to correspond to his Navamsa chart.

There are some men who, because of their single-minded labors for some great purpose or ideal, are later described as "the father" of this or that. Thus, Atatürk is said to be the father of modern Turkey, James Watt is described as the father of the steam engine and so on. Such cases should always provide good examples of the relationship between a man's Navamsa and the horoscope of whatever embodies the ideal he worked for or the objective served. Here, for example (Fig. 53), are some of the positions in the Navamsa chart of Enrico Fermi together with the positions at the time of the atomic blast over Hiroshima. Fermi was in charge of the project which led to the first release of atomic energy in December 1942 and so directly to the manufacture of the atomic bomb³⁴.

The Navamsa charts are nearly always of great interest in relation to a man's life's work even when they are not superficially just what one might expect, and they certainly respond to transits though I have not tested them for directions. For example, Fig. 54 shows Winston Churchill's radical³⁵ and Navamsa charts. The Navamsa is not at first sight an obvious expression of war leadership but closer inspection shows many apt features. Apart from the 10th house Pluto and the opposition of Navamsa Mars to radical Moon, the rising Venus in Libra (which falls on the radical Mars/Jupiter midpoint) is not inappropriate. The reason why the Venus/Libra element is so often strong in the charts of men of war is because war is in the nature of an attempt to make an '*adjustment*' in the interests of *justice*. This is a Libran function, the familiar juxtaposition of the sword and the scales.

³⁴ In the first edition of this book, Fig. 53 showed the navamsa positions of Lenin in relation to the U.S.S.R. chart. Serious doubts about the reliability of those data necessitated a new illustration. The navamsa chart of Enrico Fermi (b. 29 Sept. 1901, 19:00 hours, Rome; see Gauquelin collection of birth data) was examined in relation to the Hiroshima explosion (6 Aug. 1945, 8:15 am) and this yielded a fair illustration of the principle involved.

³⁵ He was born, according to a letter written by his father on the same day, at 1:30 am on 30 Nov. 1874, at Blenheim, Oxfordshire. I have adopted a time about 2 minutes before this and the Ascendant is calculated for local time.

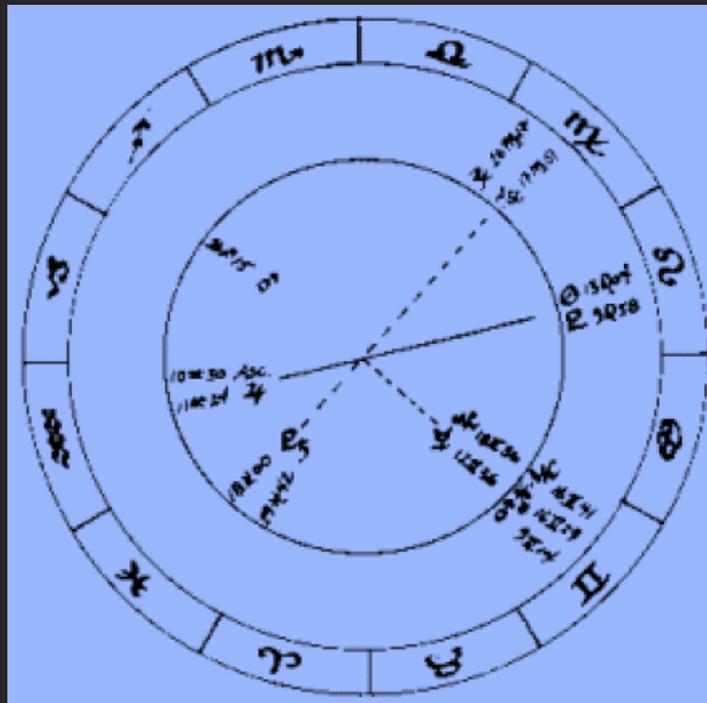


Fig. 53

Enrico Fermi, "Father" of atomic energy: Navamsa positions (inner circle) with positions for the Hiroshima atomic blast (outer circle). Fermi's radical Pluto 18.40 Gemini, Uranus 13.29 Sagittarius (See Note 4 34).

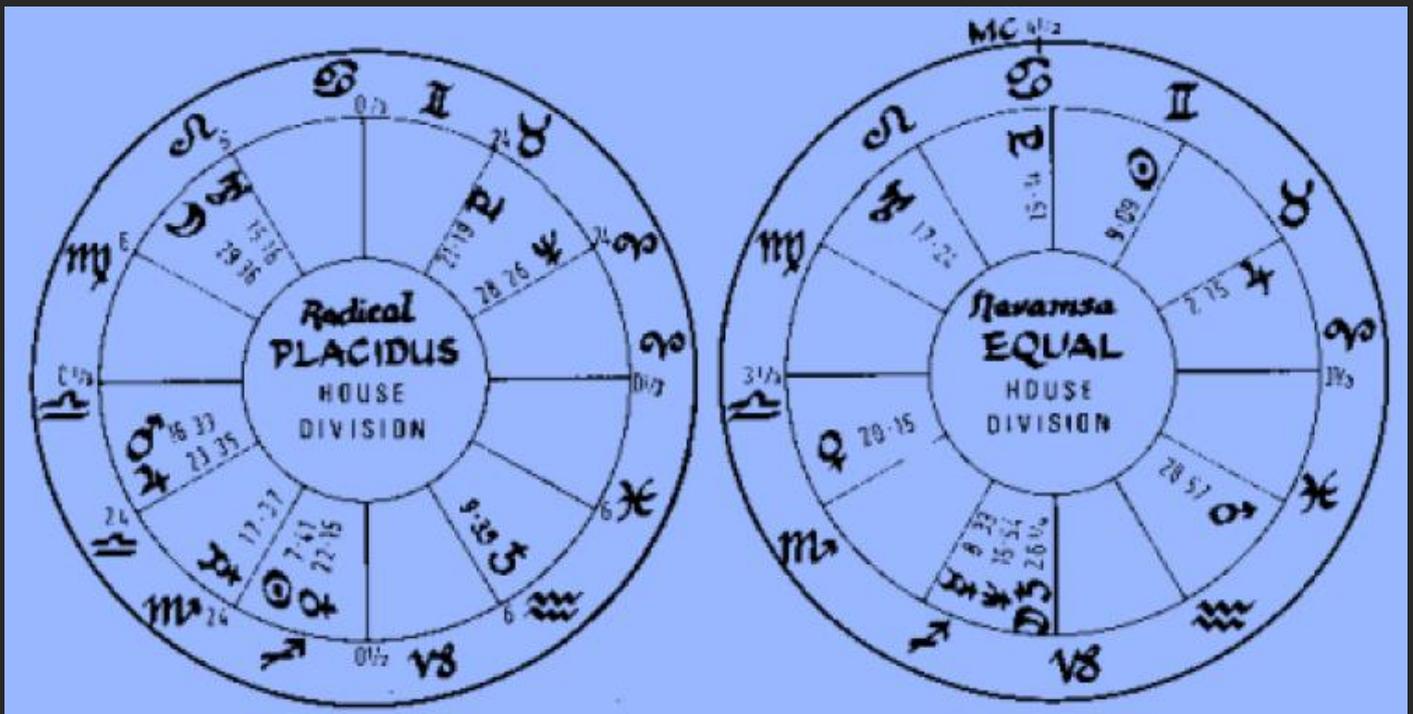


Fig. 54

Winston Churchill, radix on the left, Navamsa chart on the right.

The most interesting feature of the chart is the strength of the 3rd house. This is thoroughly apt (notice again the conjunction of Navamsa Mercury with the radical Sun) for in many respects it was Churchill's mastery of the written and spoken word which enabled him to exercise so great a sway in his time. In his literary output his *History of the English Speaking Peoples* is an obviously appropriate "fruit" of this chart. But it was his oratory which made so great an impact. Perhaps no one who did not live through the experience can realize or imagine how great a force Churchill's wartime speeches were. Looking back one suddenly realizes that one has not really heard very much

oratory from the politicians since, only a rather uninspiring drone. The 9th harmonic conjunction of Moon and Saturn in the 3rd is characteristic of this gift for articulate expression.

On 10 May, 1940 when Churchill took over the national leadership, the Moon and Mars were opposite this conjunction at 26° Gemini. His first act was to sit down and write the famous speech which he delivered to Parliament with Mars still at 27° Gemini, promising only “blood, toil, tears and sweat”. “You may ask: What is our policy? It is to wage war!” It was a speech which riveted the nation’s resolve. It was of this time, too, that he said he felt as if he were ‘walking with destiny’, a nice glimpse of Saturn in the 3rd in Sagittarius. The transits on 7 May, 1945 when Germany signed the surrender showed Mars at 3 ½° Aries (Cusp 7). In July when Churchill was defeated in the general election, Neptune transited the Navamsa Ascendant.

Contacts between positions in these sub-charts and radical positions always strengthen their importance. Thus, with Navamsa Mars in *Aquarius* opposite radical Moon, one recalls that Churchill’s mother died following an amputation after she had broken her *shin*. Why should this show in the Navamsa? Possibly because it was, for Churchill, an important experience of death.

In this chapter we have done no more than provide an introduction to the idea of the harmonic chart and its significance, using the 9th harmonic as our example. In Indian astrology there are elaborate rules for the interpretation of these charts. No doubt a close study of the Hindu doctrines with their sometimes complicated rulership systems will help us to understand more fully how to interpret and generally get more out of these charts. A great deal can also be learned by students from their own studies provided that the principle behind each chart is understood. Thus our purpose at present is to give the basic instruction as to their calculation and the general symbolic content underlying each. In this way astrologers can make their own observations and experiments and so help to fill out our knowledge of the use and applications of the harmonic chart.

12. THE FIFTH HARMONIC CHART

We have seen in the preceding chapter the general idea of calculating the harmonic chart and have gained some insight into the symbolism of the 9th harmonic. In this chapter, proceeding somewhat arbitrarily, we shall do the same for the 5th harmonic. In the case of the Navamsa chart we divided the circle into 9 smaller Zodiacs. In the case of the 5th harmonic we are envisaging the circle of the natal chart as divided into 5 smaller Zodiacs, each of 72° and each comprising 12 signs each 6° in extent³⁶. In Indian astrology this is known as the Panchamsa chart.

First of all let us deal with the question of how to calculate from the radical chart the positions in the 5th harmonic map. *The principle is the same for all harmonic charts*. There are 3 chief ways of dealing with the calculation:

1. The easiest way is to obtain *The User's Manual of the Astrologer's Guide to the Harmonics*³⁷, where tables of conversion are given for each harmonic up to the 13th together with the method of using them.

2. Alternatively, one can take a large chart form with the circle marked in degrees and make a conversion tool for oneself. Simply divide up the circle into 5 Zodiacs, each of 72° as illustrated in Fig. 55, and then divide each Zodiac into 12 signs of 6°. Mark the point where each sign begins and ends. One can then see where a planet in the original circle of the signs falls in one of the 5th harmonic Zodiacs. One must then ask how many degrees and minutes it has moved into its new 5th harmonic sign and multiply this by 5. Thus in the diagram the Sun is shown at 20° 23' Taurus; it has

³⁶ These 6° divisions were formerly known in the west as ‘faces’.

³⁷ *The Catalog User Manual and Harmonic Index* is the companion volume to the *Catalog of Harmonics* in Williamsen, James S. and Ruth E., *Astrologer's Guide to Harmonics*, Green Bay, Wi.: Cambridge Circle, 1975.

thus moved 2° 23' into the 5th harmonic Sagittarius, which begins at 18° Taurus. 2° 23' x 5 = 11° 55' Sagittarius, and this is the new position.

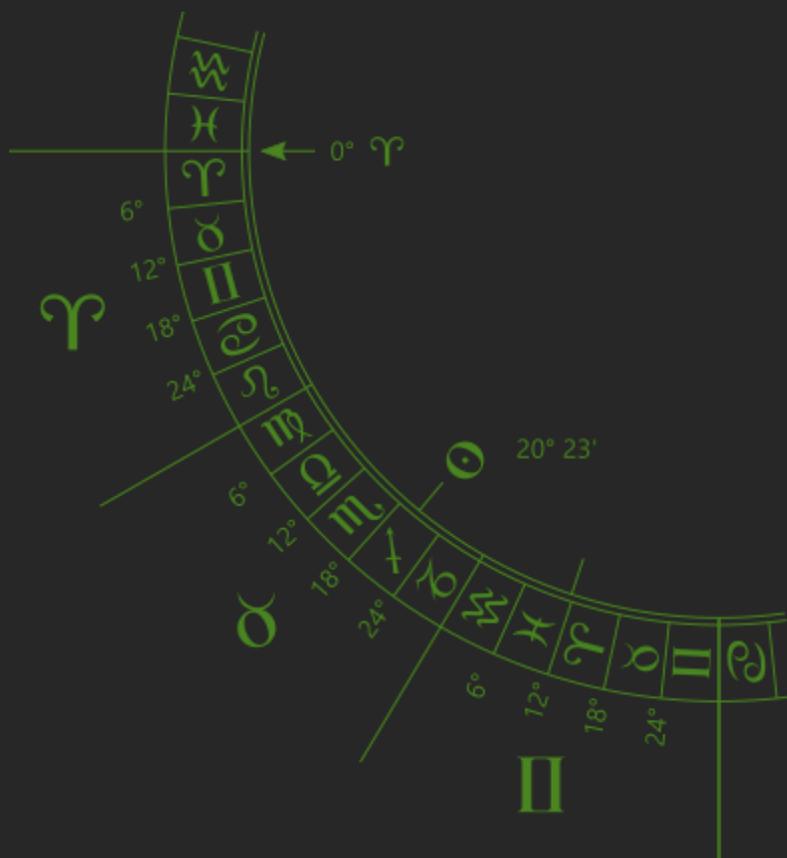


Fig. 55

3. The third method lends itself, with one small adaptation, to use with an electronic calculator. It consists in multiplying the absolute longitude (i.e. from 0° Aries) of the radical position by the number of the harmonic desired (in this case, the 5th). The nearest multiple of 360 is then subtracted from the answer. The remainder gives the new harmonic position in absolute longitude.

This may sound a little complicated but it is quite simple in practice. Let us suppose that we wish to translate a radical Moon position of say, 23° 33' Scorpio into the 5th harmonic:

Radical Moon	23° 33' Scorpio = Long.	233° 33'
	Multiply by 5	x 5 _____
		1167° 45'
	Subtract 3 x 360 (Table Two)	1080 _____
		Remainder 87° 45'

87° 45' = 27° 45' Gemini = 5th harmonic Moon

Those who have an electronic calculator will need to express the radical positions in degrees and *decimals* of a degree. For this, remember that 6' = 0.1°, so the multiples of 6' will be easy to see: 12' = 0.2°, 18' = 0.3°, 24' = 0.4° and so on. For minutes less than 6, the following little table can soon be memorized (Table One). Table Two gives some multiples of 360³⁸.

<i>Table One</i>	<i>Table Two</i>		
6' = .1°	1. 360	7. 2520	15. 5400

³⁸ Tables for converting minutes and seconds into decimal parts of degrees and vice-versa are contained in the *Catalog User Manual of the Astrologer's Guide to the Harmonics*, see Note 2 [37] above.

5' = .0833	2. 720	8. 2880	18. 6480
4' = .0667	3. 1080	9. 3240	20. 7200
3' = .05	4.1440	10. 3600	25. 9000
2' = .0333	5.1800	11. 3960	30. 10800
1' = .0167	6. 2160	12. 4320	

To take one more example: the Sun in Fig. 55 is in 20° 23' Taurus, thus:

Radical Sun 20° 23' Taurus = 50° 23' Longitude

18' = .3

5' = .0833 (Table One)

23' = .3833

So: 50.3833

x 5

251.9165 251 = 11° Sagittarius

.9 = 54' (9 x 6')

.0165 = 1' (Table One)

.9165 = 55'

Therefore, the new position = 11° 55' Sagittarius.

When all the radical positions including the Ascendant and M.C. have been recalculated in the 5th harmonic, these positions are all put together in one map. Exactly how one then arranges this map is a matter of personal preference to the individual astrologer. Probably most students will place the new 'Ascendant' (or 1st house cusp, since it no longer represents an actual Ascendant) on the left of the chart as usual, and then use equal house divisions for entering other positions in the circle. The M.C. can, of course, fall *anywhere* in the circle. It no longer represents an actual Midheaven but is a symbolic point equivalent to the M.C. in significance. If the radical Ascendant and M.C. are 72° or 144° apart, they will, of course, be conjunct in the new chart. So much for the actual calculation of the 5th harmonic chart. Now to its significance.

Strictly speaking, in order to understand the symbolism of number, one needs to start at the beginning and to unfold, step by step, the succeeding principles as they emerge from unity into multiplicity. To trace this unfoldment at all adequately really requires a separate work, therefore in these pages we must be content to deal in a limited way with the symbolism of a few numbers in more or less piecemeal fashion. The symbolism of every number may be derived from an examination of its composition, that is to say what its parts are and how the number is produced from them. The smaller the number, the simpler its composition and the more universal its significance.

The number 5 is the sum of 2 plus 3 and of 1 plus 4³⁹. This gives us the clue to two of its primary meanings. In the first place the Pythagoreans said that 5 was the number of marriage because it represented the union of the first female number, 2, and the first male number, 3. (The number one was regarded as the unity prior to all division into male and female.) Secondly, as 1 plus 4, 5 may be taken to represent man as the artist-soul at work amid the four elements of nature. Sometimes it is said that 5 is the number of man himself and this is true because he is indeed the lord of the realms of manifestation. But this is not the whole truth for man, made in the Divine Image, contains all numbers within himself and, in his many aspects and attributes, exemplifies them all.

Since the number 5 remains the same number no matter how we view its composition, it follows that the two interpretations given above must amount to one and the same thing. Although

³⁹ For a further study of symbolism of the number 5 see Addey, John, "Fivefold divisions and sub-divisions in Astrology", *Astrological Journal* (Astrological Association, London), XII (1970), no. 2. Also included in *The Harmonic Anthology*, Green Bay, Wi.: Cambridge Circle, 1976.

theoretical discussion may seem rather tedious, it is worth exploring this matter carefully because a clear understanding of what is involved will help us to see just what the 5th harmonic chart really signifies and what it does not.

The number 2 represents the *idea of matter*, not objective concrete matter (which belongs to 4), but metaphysical matter, the idea of matter as the potentiality of manifestation. And the number 3 represents *form* itself, the idea which 'in-forms' the matter of a thing and acts as its formal principle or cause. Now if we consider what man as the artist at work in the world does, he does just this: *he puts together form and matter*. This is the characteristic activity of the artist. Every artist (of every kind of human art - that of the sculptor, the town planner, the cook, the politician, the doctor) envisages an idea or formal principle and, wishing to express it, asks himself how he can make it a manifest reality. In order to do this, he must first discover in his mind what material he needs and so put together, subjectively, the form and the idea of the matter. Notice that this process is accomplished by mind, for it is mind which can subjectively take into itself the idea or formal principle and the idea of the matter and so unite them. Hence, note a relationship between 5 and *mind*.

Since it has a bearing on what we shall later have to say about other numbers, it is worth digressing slightly to point out that when the artist has done this, he has not yet produced the finished work of art. He knows what he wants to express and he knows what materials he needs in order to do it, but he has not yet done it. To do this he must actively put together the form (3) with the *objective* matter (4). This constitutes the act of creation proper ($7 = 3 + 4$). 5 is the number of the artist himself and 6, which I call the number of *rhythmic activity*, represents the work involved in applying the appropriate ways and means to the practice of the art. 7 also represents the influx of inspiration whereby the purely human labor is crowned and made fruitful by a higher sanction. "6 days shalt thou labor ..." but "... remember the Sabbath day, to keep it holy".

To revert again to the number 5, we can say that it represents the union of male and female and in this sense marriage as such, and the putting together of form and matter and in this sense art. But the *practice* of art, as we have indicated, belongs to the number 6. The number 5 and the 5th harmonic chart will tell us *what kind* of art and what kind of marriage. It describes how a person brings together, subjectively, form and matter, male and female. His marriage is thus an expression of a larger process with wider implications in his life: how he brings together and reconciles the masculine and feminine (heaven and earth) in himself.

The question of exactly how, in terms of astrological symbolism, the 5th harmonic chart shows one's *relationship to the order of art* is a matter which lies open for investigation. All these ideas are subject to further research, for we are still at the beginning of our study of harmonic charts. One way, however, is evidently through the involvement of the principal factors such as Sun, Moon, Ascendant and M.C. (especially perhaps Sun and M.C.) with the planets which are characteristically associated with different forms and fields of activity. In addition to this, the subsidiary movements, functions and alignments within a particular field of activity will be shown by common degree areas being tenanted in the 5th harmonic charts of those who contribute to that activity. For example, it would be presumably true to say that Saturn and Uranus are the planets which 'rule' astrology as such (although there are different 'schools' and different kinds of approach to the subject which no doubt involve the sub-influences of other planets). Thus we should expect Saturn and Uranus to be strongly linked to the principal factors in the charts of astrologers.

Consider then the charts of some leading figures in British astrology. The late Brigadier Firebrace was the first President of the Astrological Association, the author was his successor and Charles Harvey the 3rd President. Ronald Davison has been President of the Astrological Lodge of London since 1951 and the great Charles Carter, his predecessor, was President from 1922 to 1951. On the left below are given some of their radical positions, using only Sun, Moon, Ascendant, M.C., Saturn and Uranus. On the right these positions are transposed to the 5th harmonic:

<i>Brigadier Firebrace</i>	RADICAL	5 TH HARMONIC
1. Sun	24.07 Leo	0.35 Aries
2. Moon	6.14 Taurus	1.10 Libra
3. Saturn	23.50 Leo	29.10 Pisces
4. Uranus	19.02 Libra	5.10 Capricorn
5. Asc.	12.12 Capricorn	1.00 Pisces

The Author

6. Sun	23.51 Gemini	29.15 Taurus
7. Moon	5.49 Gemini	29.05 Aquarius
8. Saturn	6.08 Virgo	0.40 Gemini
9. Uranus	5.40 Pisces	28.20 Scorpio
10. Asc.	6.00 Leo	0.00 Capricorn
11. M.C.	11.58 Aries	29.50 Taurus

Charles Harvey

12. Sun	0.44 Cancer	3.40 Cancer
13. Moon	0.01 Aquarius	0.05 Gemini
14. Uranus	24.14 Taurus	1.10 Capricorn
15. M.C.	6.26 Taurus	2.10 Libra

Ronald Davison

16. Sun	19.17 Capricorn	6.25 Aries
17. Moon	25.52 Gemini	9.20 Gemini
18. Saturn	12.10 Gemini	0.50 Aries
19. Uranus	6.32 Aquarius	2.40 Cancer
20. Asc.	0.29 Aquarius	2.25 Gemini

Charles Carter

21. Moon	7.24 Taurus	7.00 Libra
22. Saturn	17.18 Cancer	26.30 Virgo
23. Uranus	12.24 Libra	2.00 Sagittarius
24. Asc.	17.00 Libra	25.00 Sagittarius

To these we ought to add at least one representative of astrology in the United States. Since Mr. Dane Rudhyar is one of the best known American astrologers, here are his positions:

25. Sun	2.08 Aries	10.40 Aries
26. Moon	24.38 Aquarius	3.10 Libra
27. Saturn	6.11 Scorpio	0.55 Aries
28. Uranus	18.36 Scorpio	7.55 Gemini
29. Asc.	13.30 Sagittarius	7.30 Libra
30. M.C.	12.00 Libra	0.00 Sagittarius

If we now collect up these 5th harmonic positions, numbered from 1 to 30, and put them onto one circle of 360° (Fig. 56) we can see that they all fall near 0° of the cardinal or mutable signs, *mostly* within very narrow orbs. About 2/3 of them fall within 2 ½° even after transposition to the 5th harmonic which means that the *radical* orb to the sensitive points in the Zodiac is only 2°. One cannot deny that this is impressive. Of course we have restricted ourselves to certain positions only, but almost all of the above have other positions near the appropriate points. For example, Brig. Firebrace, being a soldier and a diplomat and therefore skilled in the arts of war and peace, has 5th Mars at 1.15 Capricorn and Venus at 29.45 Leo, closely involved with his Sun, Moon and Ascendant.

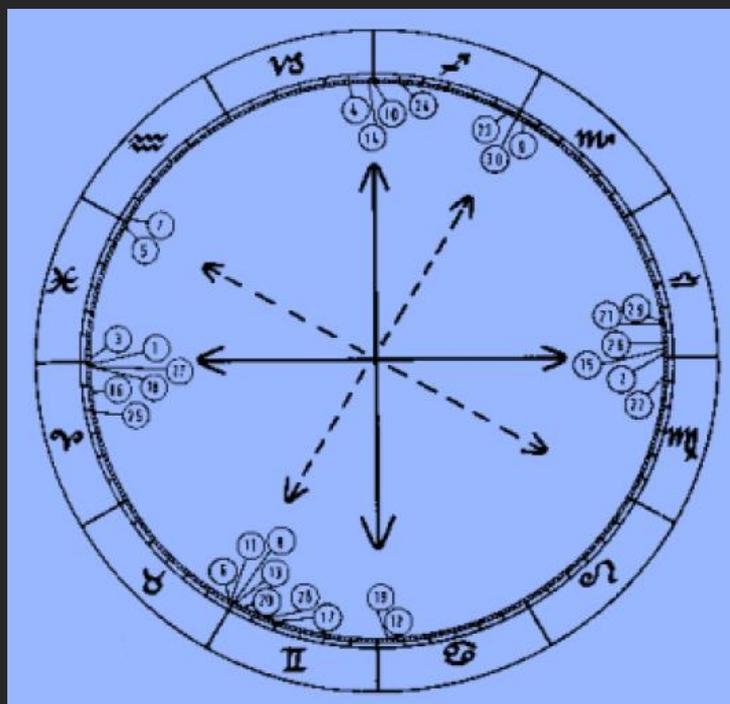


Fig. 56

It is true that we have not listed 6 out of a possible 36 positions in our tally, but we catch 2 more (Carter's Sun and Harvey's Saturn) if we include 0° of the fixed signs. Of the remaining 4 positions, 2 (the M.C.'s of Carter and Firebrace) fall in the 5th chart at 20° of Libra and Aries, respectively. These degrees are probably significant since there are 2 ordinary degree areas usually associated with astrology (28° Leo/ Aquarius and 22° Cancer/Capricorn) which, when transposed to the 5th harmonic, both turn into 20° Aries/Libra.

A great deal has been written about degree areas including those related to astrology but no one, to my knowledge, has ever pointed out this very strong tendency for astrologers to have planets very close to 0°, 6°, 12°, 18° and 24° of the signs. When transposed to the 5th harmonic these points all come to 0° of the signs. A glance through the above radical positions will make this clear.

Incidentally it will be seen that in all the above cases there are close squares and T-squares involved in the 5th harmonic positions given. This indicates that the relationship of those concerned

with astrology was one involving hard work, duties and responsibilities. Possibly those who have facility in astrology but whose relationship to it is more one simply of enjoyment will have the same degree areas and the same contacts with Saturn and Uranus, but with trines and sextiles predominating.

I must not leave the impression, in showing this strength of certain degree areas in the charts of astrologers, that the degree areas are more important than the planets involved. I believe it is the 5th harmonic involvement of Saturn and/or Uranus which is so often the mark of the astrologer possibly because such contacts have the effect of *deepening the mind*. If we switch to other professions or activities we shall find the Sun, etc. involved with the planets appropriate thereto.

To give a completely different example, consider Lester Piggott⁴⁰, the English jockey, six-time winner of the Derby and one of the great performers of our day. He has a quintile of Jupiter-Neptune (for horses) and a quintile of Mars-Mercury (for strength and dexterity). These are linked to each other by semi-quintiles and to the Sun by the 18° aspect, giving the familiar T-cross in the 5th harmonic chart: Sun square Jupiter-Neptune and Mars-Mercury. Here we have an entirely different but thoroughly appropriate group of planets to show the type of activity involved. In this way we see how the 5th harmonic chart reveals the special art or activity to which a person is drawn or adapted. It shows his *position*, as we have said, in the *order of art*.

There are some radical charts which are very strongly dominated by the quintile series of aspects; the charts of Mozart and Hitler are often mentioned in this connection. These produce 5th harmonic charts which are characterized by very pronounced complexes of conjunctions and oppositions. What are we to say of them? Perhaps the most important thing we should notice is that both destiny and inclination seem to combine to make such men *immensely single-minded in one field of activity*. In these cases the 5th series dominates everything else and the whole chart is mobilized in one direction, leading to power and wholehearted activity in the chosen field. This would be true of Hitler and Mozart. Apart from that, of course, the planets involved show the character and perhaps something of the flavor of their work. Thus Mozart has (5th) Ascendant with Sun, Mercury and Mars, Venus with Moon, and Jupiter with Uranus - very buoyant and sparkling. Hitler has a rather messy 5th harmonic conjunction of Ascendant with Saturn, Neptune, Moon, Jupiter and Pluto - a somewhat obsessive combination.

Just as the 5th harmonic chart describes the nature and purpose of the art practiced, so in relation to marriage a similar description is given, including any unusual circumstances surrounding the wedding itself. The marriage partner as such is not described although there is often a strong link with the partner's chart. As an example one might take that of King Edward VIII who renounced his throne in 1936 in order to marry Mrs. Wallace Simpson. His radical positions are given as follows: Sun 2° 22' Cancer, Moon 3° 57' Pisces, Mercury 28° 36' Cancer, Venus 23° 18' Taurus, Mars 0° 25' Aries, Jupiter 18° 23' Gemini, Saturn 18° 25' Libra (Sta Dir.), Uranus 11° 33' Scorpio, Neptune 14° 00' Gemini, Pluto 10° 43' Gemini, Ascendant 3° Aquarius, M.C. 4° Sagittarius.

Fig. 57 shows the 5th harmonic chart set up by equal house from the new Ascendant. This could scarcely be more telling. The Sun is square Neptune showing renunciation and withdrawal; Mars square Saturn forms an exact T-cross with the sensitive radical Sun in Cancer. The array of 4 malefics, which would be described as 'elevated' in a radical chart, do not help. Venus (trine Uranus) is in the 7th house, however, showing the personal happiness which came to him through his marriage but note that Venus in Sagittarius (foreign countries) is ruler of the 12th house (of exile) and likewise Jupiter, lord of the 7th, is near cusp 12. After his marriage, he was, of course, more or less obliged to live abroad for the rest of his life. This one might say is how marriage affected him personally. If the chart is set up by equal house from the new M.C., showing more particularly how the marriage affected his position in the world, Pluto now falls near cusp 5 (which represents, like Leo, the idea of

⁴⁰ Born 5 Nov. 1935. I have no time but believe it is on record.

kingship) and Mars and Neptune are also in the 5th house, being square the Sun, now lord of M.C. Altogether a very apt chart.

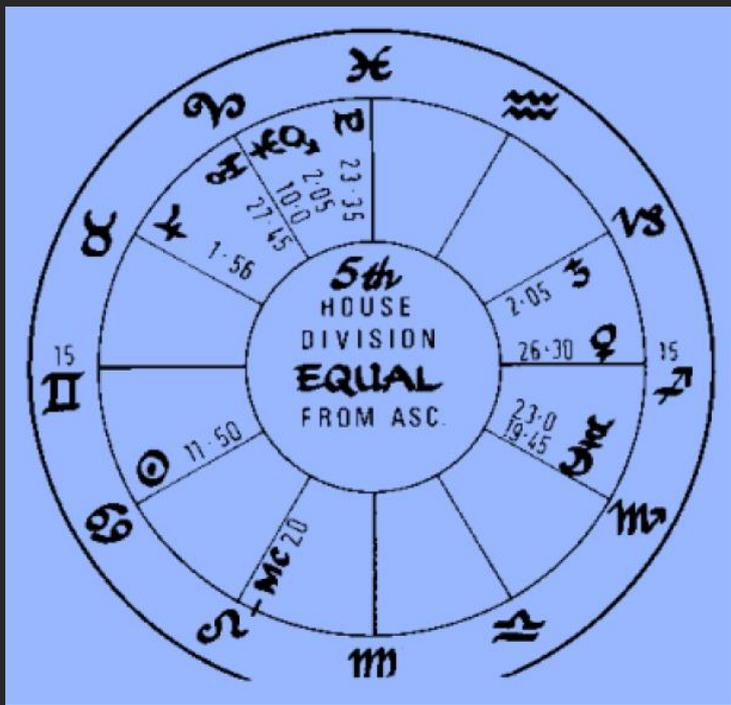


Fig. 57

5th harmonic chart of King Edward VIII.

So far in this chapter I have managed to avoid using the word 'creativity' in relation to the symbolism of the 5th harmonic, but not without a struggle. In every aspect of number symbolism one finds oneself called upon to make fine distinctions. Two things are often so closely associated that one may easily fail to distinguish between them and so let them pass as one and the same thing. We are up against such a difficulty here.

Earlier in the chapter, we said that 7 was the number which represented the idea of creation. Yet we have repeatedly said that 5 is the number of man the artist and that his characteristic function lies in putting together form and matter. Is this not creativity? In a sense it is and I think it is legitimate to regard 5 as in some senses the number of creativity. Yet it would seem that the better keyword for the number 5, in this context, is 'power', including the power to create, or as we shall see later, to destroy. (The question of whether 5 or 7 should be regarded as the number of creativity amounts to this: do we say that a man is *creative* if he has lots of good ideas as to how things should be done or made (2 + 3), or do we reserve this adjective for the man who not only has the good idea but actually puts it into practice (3 + 4) and so produces something?)

An analogy may be drawn from marriage and sexual union. An important symbolic element in the marriage ceremony is the placing of a ring on the finger and the consummation of the marriage likewise involves the idea of penetration. In sexual union the numbers 5, 6 and 7 are all involved in the 'act of creation': the coming together of male and female and the act of penetration (5), the rhythms of sexual union (6, the number of rhythmic activity) and the orgasm of creation (7) which requires a more distinct element of, in this case erotic, inspiration.

On this basis 5 may be said to represent the urge to power which is the prelude of creation. This desire to dominate some kind of material applies to all forms of artistic activity but the use of the words 'potent' and 'impotent' in a sexual context usually refers to this aspect of sexual union and reinforces what we have been saying. This undoubted connection of the number 5 with the idea of power brings us to another aspect of the 5th harmonic chart, and that is its relevance in assessing sexual proclivities and aberrations. We shall refer to this again in Chapter 14 where we consider what

new light harmonics shed upon the meaning of aspects, but it hardly needs pointing out that the urge to power will be involved in sadomasochistic tendencies and the like. That power which is potentially creative can also be used destructively.

Power as such is good, and likewise the urge to obtain power, for nothing can be accomplished without it and every man rightly exercises power in some sphere. To ask what kind of power one exercises is simply another way of asking what kind of art or arts one practices and how they are performed. Nevertheless it seems to be true that those who rise to power in the world in the conventional sense tend to have strong appropriate positions in the 5th harmonic chart. At the time of writing Gerald Ford recently took office as President of the United States. His accession to this high office was unusual in that he was the first and only President not to have been voted into office either as President or Vice-President. Thus fortune, as it were, dropped the Presidency into his lap and the element of popularity also evidently played a part. It is not surprising, therefore, to find that his 5th harmonic chart shows a close conjunction of Jupiter and Venus (radical aspect 144° 02') in very close trine to Uranus conjunct Pluto (radical aspect 143° 54'). Both conjunctions form a grand trine with the 5th harmonic Ascendant and a sextile to the M.C. (see Fig. 58)⁴¹.

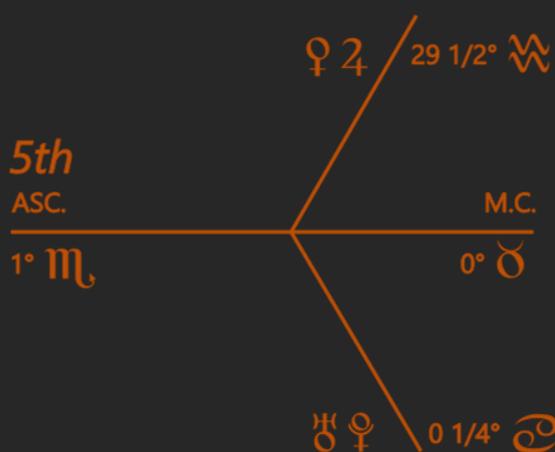


Fig. 58

To sum up we have suggested that the 5th harmonic chart shows the union of form and matter and of male and female. It is therefore relevant to the nature and purpose of one's marriage, often linking up with the actual marriage horoscope and indicating any special circumstances connected with the marriage ceremony or unusual events of the wedding day. Secondly, we have suggested that as the sum of 1 and 4 the 5th represents man's exercise of rulership or power over matter and the manifested world. It is an indication of whatever element of lordship he may exercise in life and it especially shows what art or activity he commands. This aspect of the number 5, incidentally, has an obvious connection with the 5th house and has, in general, a solar connotation which can often be traced in mythology and traditional rites and customs among mankind. Often one's special art or activity relates to one's vocation or occupation, but where this is performed merely to secure a livelihood and does not represent any creative impulse, the 5th harmonic chart refers more obviously to one's hobby. For example, in the case of President Ford the grand trine at about 0° of the water signs links up with his enjoyment of swimming. There are, of course, other aspects of the number 5 which are related to the foregoing but which we have not specifically dealt with. Others we have only touched upon, such as its relationship to mind and *mental characteristics*⁴².

⁴¹ A letter from the White House to Ann Davis of Cherry Hill, N.J., states that Gerald Ford (then Leslie Lynch King) was born at 12:43 am on 14 July, 1913, Omaha, Nebraska. I have adopted a birth time just after 12:41. The full radical positions are given in Note 6, Chapter 16.

⁴² For further interesting observations on the number 5 and its symbolism see Jones, Daphne, "A Pythagorean Approach to Astrology", *Astrological Journal* (Astrological Association, London), XV (1973), no. 4.

13. OTHER HARMONIC CHARTS

The student who has grasped the principle of the harmonic chart will by now have realized that there lies concealed within the natal map an endless series of sub-charts each with its own range of symbolic content and application. Just as we have in the last two chapters divided the original circle of the Zodiac into 9 parts in the one case and 5 in the other, so it can be divided by any other number or combination of numbers and the resultant chart interpreted in the light of the symbolism of the numbers involved. The full exploration of these sub-charts is a task which lies in the future. Our main purpose in this book is to indicate the general principle, showing how to deal with the calculations and providing a few pointers to the symbolism involved.

The general principle itself is not at all new for not only is it embodied in the Shodasavargas of Hindu astrology, but also the recent introduction in the West of the so-called 90° dial and the 45° dial, popularized by the Ebertin school of astrology, is simply an application of this principle. In other words the 90° dial (in which the planetary positions in each 90° are put into one circle) has the effect of showing relationships in the 4th harmonic and the 45° dial, similarly, in the 8th harmonic. I believe that these 2 dials have proved so popular and useful because the numbers 4 and 8 have a special reference to outward events and conditions. Or if preferred, they refer to the stimulus which circumstances provide to the actualizing of inner potentialities as a result of the challenge of events.

In this sense the number 4 is connected with the 'material cause', to use a term from classical philosophy. In terms of the life process this means that when two factors are in a square relationship or are brought into a square relationship by some directional movement, they show the appearance of 'external' conditions in the life which provide the possibility of realizing inner potentialities and making them manifest. It is only by the practice of the different virtues that one achieves self-mastery, but one cannot realize the virtues of courage or patience or temperance or anything else in a vacuum, but only in circumstances which truly require us to be courageous, patient, etc., hence the importance of the number 4 in introducing us to hard conditions which alone enable us to actualize certain qualities.

This element belongs not only to the square aspect, as such, but appears wherever there is a division of the circle by a number which has 4 as one of its factors. Thus a square aspect in a 90° dial or 4th harmonic chart is a '16th' aspect, or a square of the square, in the radical chart. The number 12 has both 3 and 4 as factors and therefore the 30° aspect has in it something of the difficult nature of the number 4 and something of the enjoyable nature of the number 3. Similarly, the manifested or mundane world in which we live, of which the number 12 is symbolic, is both a hard school in which we have to learn to unfold our potentialities and yet, at the same time, a magnificent game which is a source of enjoyment.

The reason why the number 4, as represented by the square aspect for example, seems to us a difficult or unpleasant feature of life is not so much because it involves an effort of will, for all *positive* actions are good and enjoyable in themselves. Rather it is because of the *element of uncertainty* which it brings with it. *It challenges us to do something which we do not know whether we can do or not* - until we have done it! Then if we have met the challenge successfully, we are just as pleased in retrospect with our squares as we are with our trines! Perhaps more so, for there seems to be something of solid value about the results.

The number 3 and so the 3rd harmonic chart represents form as opposed to matter and it is the formal principle of a thing which makes it what it is and imparts to it its special qualities. Without going into the esoteric complexities of the inner constitution of Man, we can say in very general terms that every individual man has a formative principle which is the source of his own unique existence and characteristics. A great deal could be written about this subject but we will content ourselves here with noticing that all defects of health which are not inherited necessarily arise from

defects in this formative principle. For this reason the 3rd harmonic chart has much to say about the *health*, although, because we tend to think of health in bodily terms we usually look to the number 6 for such information. Notice that the number 2 gives us the *objective* expression of a thing, thus 2 times 3 or 6 tells us about the health as expressed objectively in the life of the body. This is something with which we are already familiar through the significance of the 6th house and the 6th sign.

The number 7 and the 7th harmonic chart are interesting, if only because 7 has been somewhat neglected in conventional astrology. This is not altogether surprising for it is a difficult number to pin down. It is an awkward number to deal with in terms of divisions of the circle and also somewhat elusive to interpret. We have already suggested that it has some connection with sacred matters, with one's creations and creativity and with inspiration and one's receptivity thereto. To this we may also add that it is evidently connected with the unitive and mystical aspect of things and with wholeness and the idea of fulfillment and completion, although not in the same sense as applies to the numbers 9 or 10.

Inspiration is, by definition, something which is breathed into the life from without (or from 'above' if one prefers that term), thus apparently giving to the limited human powers and faculties an added dimension. In this sense, inspiration as such lies outside the horoscope. Yet we shall probably be on the right track if we think of the number 7 as representing the kind and degree of one's receptivity to inspiration. The direction in which it is sought and our capacity to focus it in our work and even to impart it to others may also be represented by 7 and indicated in the 7th harmonic chart.

The horoscope of Winston Churchill, for example, in Chapter 11, shows the Sun in close septile aspect to Mars. The septile aspect, $1/7^{\text{th}}$ of the circle, is $51^{\circ} 25.7'$ approximately, and Churchill's Sun-Mars is $51^{\circ} 08'$. If we regard major aspects as those which divide the circle by the numbers from 1 to 10 (or 12), then this is easily the strongest of Churchill's solar aspects. We can see that this accords well with his life for it was the condition of war which inspired Churchill and brought out his special genius, and although his wartime leadership has been criticized on some scores, no one seems to question that he was able to impart a dynamic inspiration to the nation and to the allied cause. (A close septile in the natal map gives a conjunction, of course, in the 7th harmonic chart).

The fact that aspects in the septile and semi-septile series are difficult to spot unless one is looking for them has meant that they have seldom received the attention they deserve, yet the charts of creative people very often seem devoid of anything really noteworthy unless the 5th and 7th series of aspects are observed. The Astrological Association's collection of 18 maps of artists, with biographical notes, in their *Brief Biographies*⁴³ series provides some interesting studies. We shall have more to say of these in the next chapter when considering what new light harmonics throw on the whole subject of aspects.

The best way of being sure that one *does* see all these interesting aspect complexes in the maps of creative artists or anyone else is of course to set up the 5th and 7th harmonic charts. When this is done one not only sees the 5th and 7th series of aspects and their subdivisions in regard to the natal charts, but one also often finds that the charts of artists in a particular tradition – such as, say, impressionist painters – are linked by common degree areas and the aspects of particular planets. This occurs in just the same way as we have shown in relation to the positions of astrologers in the 5th harmonic chart (see Chapter 12).

David Hamblin, a member of the Astrological Association, has suggested, for example, that composers in the romantic tradition tend to have distinct groupings in the 7th harmonic chart which resolve into conjunctions in the vicinity of 0° Cancer in the 28th harmonic. He points out that the first 3 composers in the collection of *Brief Biographies* referred to above, Beethoven, Berlioz and Debussy,

⁴³ Russell, Lesley, *Brief Biographies for Astrological Study* (I. Arts), London: Astrological Association, 1973. This work contains portraits (by Adrian Turgel), drawn charts and potted biographies of artists, composers, poets and writers.

all show complexes in the neighborhood of 20° - 25° of the cardinal signs in the 7th harmonic chart, as shown in Fig. 59. These yield conjunctions near 0° Cancer in the 28th, or the 4th of the 7th. It is not suggested that these positions show musical ability, as such, but rather that they indicate a certain sympathy in the content of the music of these composers, that they belong to a certain epoch and that their art is rooted, proximately or remotely, in the romantic revival. Of the other 3 composers given in this collection, Delius, Ravel and Schumann, Schumann has Mercury, Uranus and Neptune, Ravel has Uranus and Neptune, and Delius has the Moon in these areas.

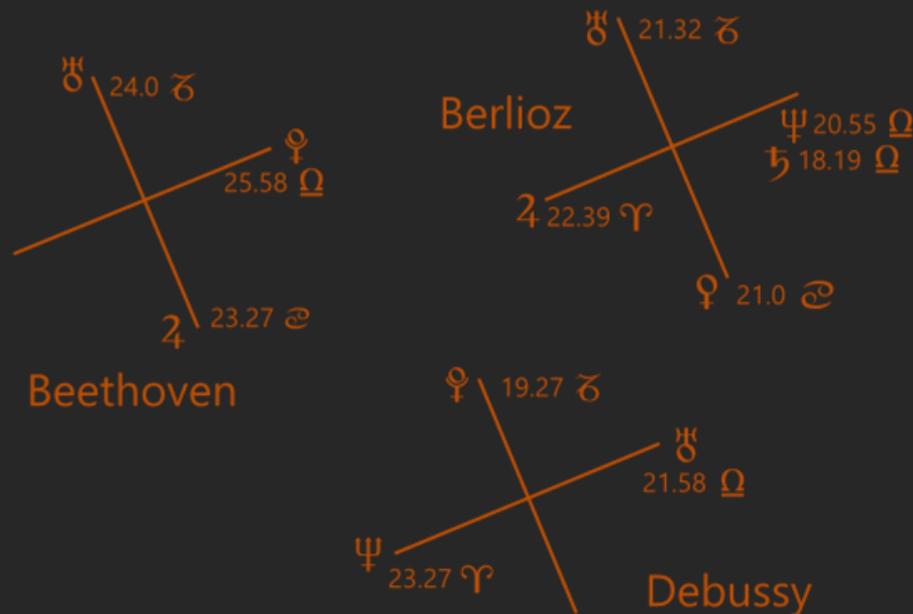


Fig. 59

There are two things of particular interest here. First and foremost, note that it is part of the philosophy of the doctrine of harmonics in astrology that one should ask: *Into what harmonic must the chart be reduced to bring all the planets concerned into a conjunction?* Thus all the squares in the 7th harmonic shown in Fig. 59 are brought together in the 28th harmonic (4 times 7). This suggests the recurring manifestation (4) of a certain type of creative work (7) or musical form.

The second thing to note in this case is that it is the major and outer planets which are so much involved, especially Uranus and Neptune. This suggests, what every astrologer knows intuitively, that there are what might be called 'historical' rhythms underlying the births of the great exponents of particular art forms. Since all temporal rhythms follow the same principle whether long or short, the use of the word 'historical' here is purely relative, indicating longer time intervals due to the slower movement of the distant planets. This link between an artist's creations and the 7th harmonic chart agrees, incidentally, with the Indian tradition which relates the Saptamsa (or 7th chart) to one's *children*. This is a topic we have not touched upon but the student can verify for himself by comparing the 7th harmonic chart of parents and offspring.

To refer to a different aspect of this matter I believe that the contacts in the 7th harmonic chart provide some indication of the conditions required to stimulate creative work and also of the character of the creative labor itself. One might take the case of Sun conjunction or opposition Saturn in the 7th harmonic. There is evidently a paradox here which often appears where Saturn is involved in the radix with the self-expressive powers. Saturn is the planet which distinctively gives actual *form* and in relation to the expressive powers (for example where Saturn occupies the 3rd house) one can almost always see one of two things happening: either Saturn seems to impose an obstacle, making self-expression difficult in some way, and so producing taciturnity (or even a stammer or some other impediment to communication such as deafness), or else it enables the

native to give form and definition to his thoughts with *exceptional ease and fluency*, producing the chatterbox or gift-of-the-gab type.

So in relation to the act of creation, the Sun with Saturn in the 7th chart either makes creation a real labor or bestows exceptional ease or fluency. In the case of Beethoven (7th Sun opposite Saturn in Scorpio) the extreme turmoil of his creative labors is well known. Cezanne (7th Sun conjunct Saturn) also labored over his painting; he abandoned one portrait after over a hundred sittings. In contrast, Schubert (7th Sun opposition Saturn) possessed a degree of fluency in composition which was quite exceptional; his ideas readily clothed themselves in musical form. Here we see the two sides of Saturn's characteristic action.

In relation to the kind of stimulus or the circumstances needed to induce inspired action of some kind one might consider the chart of Jim Clark, the world champion racing driver (see Fig. 61, Chapter 14). Here we see Jupiter to Venus $51\ 1/2^\circ$, giving a conjunction in the 7th harmonic. This might seem a curious contact but when we find exactly the same aspect, Jupiter-Venus $51\ 1/2^\circ$, in another world champion racing driver, Jackie Stewart, we are driven to ask what sort of element in the personal make-up this contact indicates. One of the important things about Venus-Jupiter contacts is that they give a strong emotional charge which tends to seek thrills and excitement. Can we therefore say that, whatever the connotation of other Venus-Jupiter contacts, in the septile range they can give inspired judgments in conditions of speed and excitement? Jupiter and Venus are both planets of judgment, the one through the judicial sign, Sagittarius, the other from the sign of the balance. Think of the many sports in which this could be an advantage.

We can see from this that aspects in the septile series are connected, to use a modern phrase, with what "turns one on" or with the conditions in which one becomes receptive to some form of inspiration. This, as we have said earlier, links the 7th harmonic with sexual activity, for one of the strongest forms of inspiration in everyday life is the erotic inspiration. This provides a horoscopic key to certain factors in the psychology of sex.

According to his biographers, for example, Ruskin was one who suffered from sexual impotence. Here we have Mars-Saturn $51\ 1/2^\circ$ so that Saturn would be conjunct Mars in the 7th chart. It is a well known aspect of sexual psychology that some people find it difficult to respond sexually unless they can, at least in some degree, act out the appearance of dominating or being dominated and even of inflicting or receiving pain or the semblance thereof. Perhaps such an element would be needed in the case of Ruskin's Mars septile Saturn, but in his case the standards of his day, together with the refinement of his own nature or other elements in the chart, would perhaps make this difficult or impossible. This aspect of the 7th harmonic chart is mentioned for its relevance to a wide range of phenomena in this field⁴⁴.

Finally, we suggested that the 7th harmonic was connected with the mystical or unitive aspect of things. For example, a Sun-Jupiter septile often tends to give an interest in mystical philosophy. Mercury-Saturn might give an interest in the mystical or symbolic aspect of numbers. In fact whenever a person seems to be impelled by what is called the "mystique" of a particular subject, I believe one can look for appropriate contacts in the 7th chart.

It is precisely this ability to sense the mysterious "whole" behind the parts of a subject which above all imparts inspiration; indeed, from one point of view, inspiration is no more than the capacity to embrace intellectually the formative idea or principle behind a thing and so to participate in the dynamic energy which that idea imparts. This operates in every field. "Courage," said Clemenceau, "c'est des idées." Shades of Churchill's Sun-Mars septile.

It is this connection between the number 7 and the "whole" which links it also with the idea of completion and especially with recurring cycles of completion in time. There are many fascinating

⁴⁴ Since writing this chapter a student has lent me a collection of charts showing sexual imbalance and in every case the 5th or 7th harmonic chart, and usually both, had strong relevant features.

examples of this tendency for temporal processes to culminate in cycles of 7 days, 7 years, etc., or their multiples, but this belongs to another subject.

To sum up, we have tried to show in this chapter that the technique of reducing the natal chart to the different harmonics within the chart is a valuable adjunct to practical horoscopy. Each number has its own symbolism and therefore each harmonic chart has a particular sphere of application. This is a field of study which, like many others opened up by harmonics, lies wide open for investigation. The great problem, as we have often said, is the need for a much more sound and comprehensive understanding of number symbolism than is usually provided by the general run of books on numerology.

An understanding of the symbolism of particular numbers can always be had from studying their composition. This makes prime numbers very important for all numbers can be decomposed into prime factors. We already have some grasp of the significance of the lower prime numbers but how is one to arrive at the symbolism of such numbers as 17, 19, 23, 29, 31 and so on?

First, of course, one can always consider how a number is arrived at by addition. We have already given the examples of 5 and 7 as the sums of 2 and 3 and 3 and 4, respectively. But to help those who may be interested in exploring this field further, the following working principle suggests itself to the writer.

Numbers follow one upon another in orderly sequence. Each one embraces all that has gone before it and adds one more. Every prime number, with the exception of the numbers 1, 2 and 3 which stand apart, is equivalent to a non-prime plus 1. In this sense each number gives an element of unity to what has gone immediately before. Thus, if we regard the number 4 as representing the 4 elements of the natural world, we can consider man as the 5th element in the universe who gives rulership and a certain crowning unity to it. We illustrated the same principle in relation to a non-prime when considering Apollo and the Nine Muses. The number 10 follows upon and represents the unifying principle of the 9 which preceded it.

In Note 4 following Chapter 9 we pointed out that the 17th harmonic and its multiples were dominant elements of the harmonics shown in the solar distribution of nonagenarians. The strongest harmonic was the 170th (10×17) and the 3rd strongest the 153rd (9×17). Now the subjects of these natiivities all had a very similar life span. We have already noticed the connection between the numbers 9 and 10 and the completion of a cycle of unfoldment. Is it a coincidence that the number 17 stands in the same relationship to the number 16 (4^2) as 10 does to 9 (3^2)? In other words if 10 represents the completion of the out-working of the formal principle symbolized by 3 through all its terms (3^2), then 17 would represent the unifying principle of the outworking of the number 4 (4^2), the principle of manifestation.

This will no doubt strike some readers as being somewhat speculative. It is given nonetheless as a suggestion which appears to be sound in principle to help those who may be interested in the symbolism of prime numbers. The suggestion is that we can deduce something of the idea behind each prime number by considering the number it follows and then asking what the structure of *that* number is, through its factorization. The succeeding prime number is regarded as having certain rulership over the whole sequence of preceding numbers.

This chapter has been concerned with techniques of constructing and interpreting harmonic charts. Through these and similar methods we have found a growing range of derivative charts each based upon the radix but having its own specific content and application.

14. NEW LIGHT ON ASPECTS

The student will not have failed to observe that in the course of the previous chapters on the various harmonic charts there was an increasing tendency to short-cut the actual calculation of the

harmonic chart by simply pointing to a particular type of aspect in the radix. Thus if 2 planets are 72° or 144° apart in the natal map we know that they will be in conjunction in the 5th harmonic; if they are 36° or 108° apart we know that they will be opposition in the 5th. If the planets are $51\frac{1}{2}^\circ$, 103° or 154° apart we know that they will be in conjunction in the 7th, and so on. Thus, in a sense, all that we have said about the meaning of these harmonic charts we have at the same time been saying about the meaning of aspects.

This is all part of the unifying effect of the harmonic concept in viewing the component parts of the language of astrology. The more the student assimilates the idea of harmonics in astrology the more clearly he will see that all the factors he uses, whether divisions of the ecliptic circle, divisions of the diurnal circle or divisions of the aspect circle, are based upon exactly the same principles and, what is more, that what applies to one must and will apply equally to the others.

If the student agrees that there are "degree areas" which have a special connotation in the zodiacal circle he will begin to realize that there are degree areas in the aspect circle whereby certain unusual angular relationships between planets have a certain specific association quite apart from the conventional aspect points. He will understand, too, that by the same token there will be degree areas in the diurnal circle. If he acknowledges that divisions of the aspect circle by the numbers 3, 4, 6, 8, etc., are related to effects based on the symbolism of those numbers, he will begin to consider what effects might be related to aspect divisions of the circle which conventional astrological teaching ignores. He will ask, furthermore, if such unusual divisions will not apply also to points in the zodiacal and the diurnal circles.

Having noticed, say, that Churchill has the Sun $1/7^{\text{th}}$ part of the circle away from Mars and that this has a certain appropriateness based on the symbolism of the number 7, he may ask himself if there is not some significance in the fact that Churchill also had Pluto at $21^\circ 20'$ of Taurus, almost exactly $1/7^{\text{th}}$ of the ecliptic circle from 0° Aries. Having noticed that the number 5 is connected with power and authority he may wonder if President Ford's radical Saturn at 13° Gemini, almost a 5^{th} of the zodiacal circle from 0° Aries, is not a pointer to the position of authority to which he was raised, especially when it is noticed that the harmonic chart for his 60th year (see Fig. 73) shows Saturn once more in this identical position with an exact trine from the Sun.

In these and many other ways the doctrine of harmonics has the effect of unifying and enlarging our understanding through the analogies it reveals between the different facets of astrological symbolism. Of course these analogies are already recognized by the thoughtful astrologer, but a fuller exploration of the harmonic idea has the effect of bringing them into sharper focus.

Our purpose in this chapter is to pursue a little further the idea of divisions of the circle in terms of aspects. In doing this we shall not repeat all that was said about the symbolism of those numbers already discussed in the preceding 3 chapters, but those who are interested in gaining a deeper understanding of such aspects as the quintile, septile and novile can re-read at their leisure what has been said about the 5th, 7th and 9th harmonic charts fully assured that these accounts will illuminate the nature of the corresponding aspects.

We mentioned that the number 5 was symbolic of the power both to create and to destroy (mentioning the charts of Mozart and Hitler as examples of each kind of action), so there is no need to labor the fact that the quintile, biquintile semiquintile and sesquiquintile aspects are frequently important features of the charts of those who enjoy the feeling of power in some form or other (such as racing drivers, dictators, etc.) or seek power (such as revolutionaries) or exercise power or leadership (such as statesmen or others in authority) or lust after and abuse power (such as gangsters and some other sorts of criminals).

The Swiss astrologer, Dr. Hans-Jorg Walter, has made a number of excellent studies of the quintile aspect. For example in the Ebertin *Kosmobiological Yearbook 1974* he examines a considerable number of charts which are heavily loaded with quintiles including those of the French revolutionaries Robespierre and Danton, statesmen and politicians such as Poincare, the racing

driver Jackie Stewart, the Italian soldier-poet-patriot Gabriele D'Annunzio, the gangster Caryl Chessman, the murder victim Michael John Gregston and others. Elsewhere Walter gives the charts of Italian racing driver Alberto Ascari and John George Haig, a famous 'lust-murderer', to use the graphic German term. In the latter case not only was the natal chart strongly characterized by quintiles but also the charts for the times of his crimes and eventually for his execution, carried out on the same day as the executions of a group of Nazi war criminals. This certainly exemplifies the destructive side of the quintile series. Happily the constructive use of power is more common than its abuse and as well as the more ordinate of the examples given above there are plenty of examples of the quintile series to be found among creative artists, writers and scientists, for example Einstein.

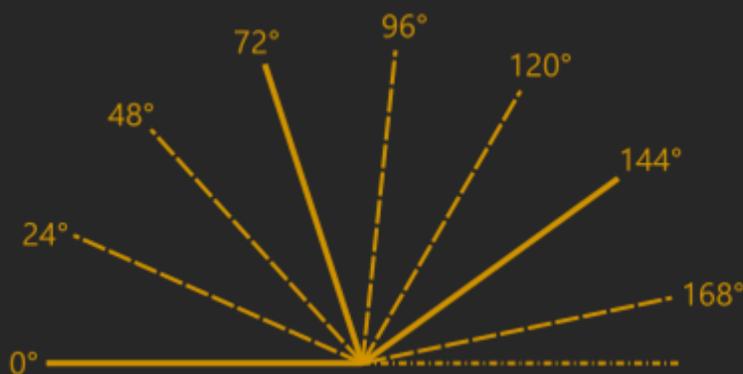


Fig. 60

One very important derivative of the quintile series which is almost entirely ignored, as a rule, is the 3rd subharmonic of the quintile, which gives us the aspect of 24° and its multiples. This is the 15th harmonic, the 3rd of the 5th or the 5th of the 3rd. Fig. 60 shows the aspect angles involved. It will be seen that this series includes the angles of 72, 120, 144 with which we are familiar but also the angles 24°, 48°, 96° and 168° which are not customarily used or understood. However these are certainly important and can now be given a quite definite meaning in the horoscope.

These aspects are indicative of the *enjoyment of and facility in some form of activity* as shown by the planets involved. In other words they show us what kind of power or what art or activities (5) a person delights (3) in exercising. One can think of them as trines in the 5th harmonic map and interpret them in the light of what was said about that chart. This must be seen in a wide context, for example a 24° aspect between Moon and Venus might indicate someone who enjoys cultivating the social graces, the art of the hostess, the art of forming sympathetic and agreeable relationships, understanding people and generally making the wheels of life turn smoothly. This is a most important art.

Looking through the 18 nativities of artists, poets, musicians, etc. in the collection of *Brief Biographies* (I. The Arts) published by the Astrological Association⁴⁵ we find many examples of these aspects. One of the commonest is between Venus and Jupiter which in its highest form represents the excitement of or the response to intellectual beauty as expressed in artistic activity.

Here we have:

Beethoven	Venus-Jupiter	23° 16'
Delius	Venus-Jupiter	168° 33'
Schumann	Venus/Mercury/Des.-Jupiter	48° 58'
Blake	Venus-Jupiter	47° 58'
Van Gogh	Venus-Moon/Jupiter	95° 33'
Baudelaire	Venus/Jupiter-Uranus/Neptune	95° 12'
James Joyce	Sun/Venus-Jupiter/Neptune	95° 21'

⁴⁵ Russell, Lesley, *Brief Biographies for Astrological Study* (I Arts), London: Astrological Association, 1973.

Besides these we have Shelley (Venus-Jupiter $72^{\circ} 16'$, mediated by a 24° aspect to Mercury) and others where there are Venus-Jupiter oppositions and squares in the 15th harmonic chart or where the 2 planets are related in this aspect series through the mediation of another planet - in fact very few of the 18 cases do not have some contact of this class.

To take quite a different kind of 'art form', Fig. 61 shows the chart of Jim Clark, the former world champion racing driver (born 4 March 1936, 3:25 pm, Wester Kilmany, Scotland). Here we have an interesting chain of 24° aspects linking MC/Uranus-Mars-Sun-Mercury/Descendant which gives, again, a good indication through the planets involved of the sort of activity in which he found enjoyment and facility.

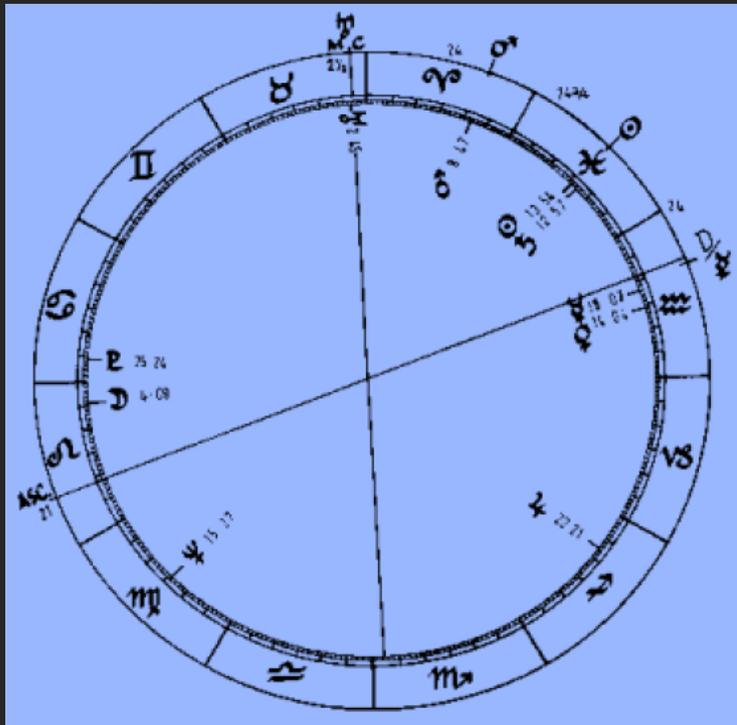


Fig. 61

Horoscope of Jim Clark, former world champion racing driver, born 4 March 1936, 3:25 pm, Wester Kilmany, Scotland (birth certificate)

It does not matter whether a person finds his enjoyment in travelling to distant places (Neil Armstrong, Moon-Jupiter $167^{\circ} 13'$, Mars-Jupiter $23^{\circ} 47'$) or being an evangelist (Billy Graham, Jupiter-Neptune $23^{\circ} 31'$) or thinking (Bertrand Russell Sun-Mercury $24^{\circ} 38'$, Mercury-Mars $24^{\circ} 21'$, MC-Jupiter $24^{\circ} 11'$) or fighting and planning military strategy (Churchill Moon-Mars $46^{\circ} 57'$, Mars-Neptune $168^{\circ} 07'$) or astrology (Dane Rudhyar, Asc.-Uranus $23^{\circ} 54'$, MC-Saturn $24^{\circ} 11'$), or simply reorganizing everything (Einstein, MC-Uranus $168^{\circ} 27'$). These aspects seldom fail to give some pointer to the sort of activity enjoyed and they are well worth keeping an eye on.

Many students are misled by the term 'minor' aspect into thinking that such aspects as this one are of small importance in chart interpretation. I believe this to be quite mistaken; one can reliably give them full weight in the interpretative field *provided that the orbs one allows are reduced in proportion to the size of the angle*. On these terms such aspects are *just as rare* and just as significant as the so-called 'major' aspects.

At this point it is worth stopping to answer a question which by now must be running through the mind of the reader. What 'orbs' *should* one allow for this kind of aspect – and for that matter, all other aspects? This question is worth careful discussion. In Chapter 9 we have shown that in actuality the orb will be a variable quantity according to what harmonics are involved in any particular case, but for practical purposes we need to find a working rule which will serve as a guide in the ordinary course of chart interpretation. If we combine practical experience with the picture we now have of

how these things work, I suggest that we can arrive at a good working principle which covers all cases, even though it necessarily has an element of arbitrariness which cannot be entirely disposed of except in the terms indicated in Chapter 9.

We know that in every harmonic, whether it be the 4th harmonic of 90° or the 120th of 3°, one is really dealing with one complete cycle. We can envisage the situation as shown in Fig. 62a. In each harmonic any 2 factors pass into and out of relationship with each other on the pattern of a wave form. In 62a, planet Y is moving towards planet X. Throughout the harmonic it has some *sort* of relationship to X, positive or negative, but it is only at the top of the wave where the wave flattens off that it briefly reaches and holds its maximum intensity and becomes a clearly distinguishable combination to be reckoned with. Expressed in circular form the situation is as shown in 62b.

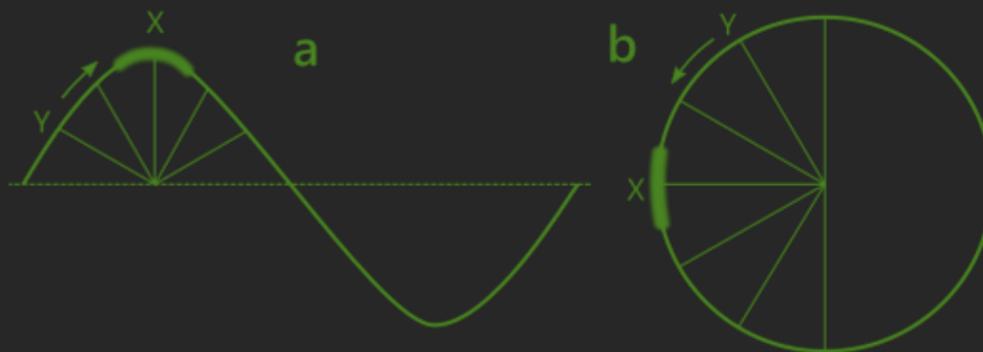


Fig. 62

In other words, if we suppose that no aspects were allowed except the conjunction, what orb should we allow in the full circle of 360°? Let us suppose that we decided upon 12°, *remembering that at this stage we do not recognize any other aspect*. It would then follow that in the 2nd harmonic (i.e., the opposition), when our wave is only 180° in length, our orb would be only 6°, that is our original orb of 12° divided by 2. In the 3rd harmonic, the trine, the orb would then be 4° (12 ÷ 3), 3° for the square (12 ÷ 4), about 2 ½° for the quintile, 1° for the semi-sextile and quincunx and 48' for the 24° aspect.

Perhaps the consensus of opinion would be that 4° was too small an orb for the trine and that 5° would be nearer the mark. Then we must enlarge our original orb for the full circle to 15°; this will give us 7 ½° for the opposition, 5° for the trine, nearly 4° for the square, 3° for the quintile, nearly 2° for the semi-square and 1° for the 24° aspect series or 15th part of the circle.

The virtue of stating the problem and its solution in these terms is that it brings home to us, unequivocally, the simple proposition that *the orb must diminish in direct proportion to the number of the harmonic*, that is the number by which we have divided the circle to get our aspect. If one considers that 3° is too much for the quintile and 1° too much for the 24° aspect, then it must follow that 5° is too much for the trine. One cannot have it both ways, and so one must arrive at a compromise which one can assent to as applicable to all divisions. If this general principle is accepted, the problem resolves itself into a simple question of what basic orb one is prepared to allow in the full circle. Tested against experience, as one goes down the scale through the smaller and smaller aspects, the 12° to 15° I have suggested above seem about right.

It is always rather difficult to get people to change their minds about something which has been instilled into them by a hundred textbooks. However, the above presents a clear and consistent basis for the determination of orbs in practice and, *with the proviso mentioned below*, can be taken I believe as a sensible guide. An opposition with an orb of 8° or 9° really is a very weak one and so is a trine of 6° or 7°; such things may be legitimately regarded as background influences but they are not aspects to which one can sensibly give much weight in interpretative practice. It is better to stick to the smaller orbs.

Let us then, for interest's sake, list again the orbs which would be permissible for the different aspects on the basis of orbs of 12° and of 15° in the full circle, i.e. for the conjunction:

Angle	Aspect	Division By	Orb (1)	Orb (2)
0°	Conjunction	1	12°	15°
180°	Opposition	2	6°	7° 30'
120°	Trine	3	4°	5°
90°	Square	4	3°	3°45'
72°	Quintile	5	2° 24'	3°
60°	Sextile	6	2°	2° 30'
51 ½°	Septile	7	1° 43'	2° 08'
45°	Semi-Square	8	1° 30'	1° 53'
40°	Novile	9	1° 20'	1° 40'
36°	Decile	10	1° 12'	1° 30'
30°	Semi-Sextile	12	1°	1° 15'
24°	Quin-Decile	15	0° 48'	1°
18°	Vigintile	20	0° 36'	0° 45'

Needless to say any multiple of one of these aspects which does not coincide with a more primary aspect counts as having the same orb as its basic division. The orb of the Quincunx, for example, is regarded as the same as that of the Semi-Sextile of which it is the 5th multiple.

To make a list of this kind has its advantages and disadvantages. One great advantage is that it enables one to check one's accepted notions of orbs for *consistency*. It is inconsistent to want to have an 8° orb for a square and then refuse to allow, say, a 3° orb for the 36° or the 108° aspects. If the latter is too wide (as I believe is the case) then so is the former. Undoubtedly what most students will quarrel with in our list is the very wide orb which is allowed for the conjunction. This is certainly something to give one pause for thought if not misgivings, but it is worthwhile to try to look at such things with new eyes occasionally. The reasonably acceptable consistency in the rest of the list suggests that we should try to see what it is that is special about the conjunction and how this wide orb should be viewed. We must remember, first, that the conjunction *is* the most powerful and universal of aspects, forming as it does a part of *every* aspect series and thus having a proportionately wider connotation. Secondly, as explained in Chapter 9, the force of the major aspects can be viewed as deriving from the fact that they represent the points where many harmonics are in practice liable to coincide and, so to speak, reinforce each other. In this sense the conjunction which is *the* 1st harmonic aspect is unique in having a very wide orb *beyond* that allowed to its nearest neighbor, the opposition or 2nd harmonic. In other words, in allowing 12° for the conjunction we must notice that only the first 6° is supported by even one more harmonic, so that after the first 6° the influence is relatively weak and general in character. Perhaps these observations will placate some of the criticism which this feature of our list of orbs is likely to arouse.

The disadvantage of such a list is that it may cause one to become inflexible. We spoke, earlier, about a 'proviso' in applying this principle to determine what orbs should be allowed. The proviso is this. Every map is different and every aspect is a case on its own. It is not that an aspect suddenly ends when it reaches the limits of the orbs such as we have listed, but that *as a rule* aspects with wider orbs will sink into the background and become rather faint voices, so to speak, in the chorus of the horoscope. But we must recognize that some aspects are stronger (and some weaker) by virtue of their position in the horoscope. Some, though wide, will agree with other factors in the horoscope and so increase the existing tendencies, while others will be quite at variance with more important factors and so will be entirely overshadowed. The good astrologer already knows this.

More important still perhaps is the fact that some horoscopes actually seem to be very short of aspects, and this is not necessarily an enfeebling condition. It does mean, however, that the few aspects that *are* there become the channels of the whole life force and even those which are wide by ordinary standards become important. Such charts are often easier to interpret because of the concentration into a few well-defined lines of development.

Consider for example the horoscope of the poet Shelley⁴⁶ shown in Fig. 63. One seldom sees a chart with so few aspects. There are trines and an opposition to Pluto but the really important aspects are the immensely powerful quintiles between Sun-conjunct-Venus and Mars-conjunct-Jupiter which gave him his tremendous mental power and turbulent poetic fervor, making him something of a 'rebel angel' - and the highly inspirational septile of Mercury-Neptune. To these we must certainly add the wide 24° and 48° involvement of Mercury with the quintile group, for even though the orb is wider than we have listed as appropriate to this aspect, in a map of this sort it clearly plays a key role in providing an outlet for the energy of this quintile. The same can be said in more general terms of the wide bi-quintile aspects and quincunxes to the Moon in Pisces.

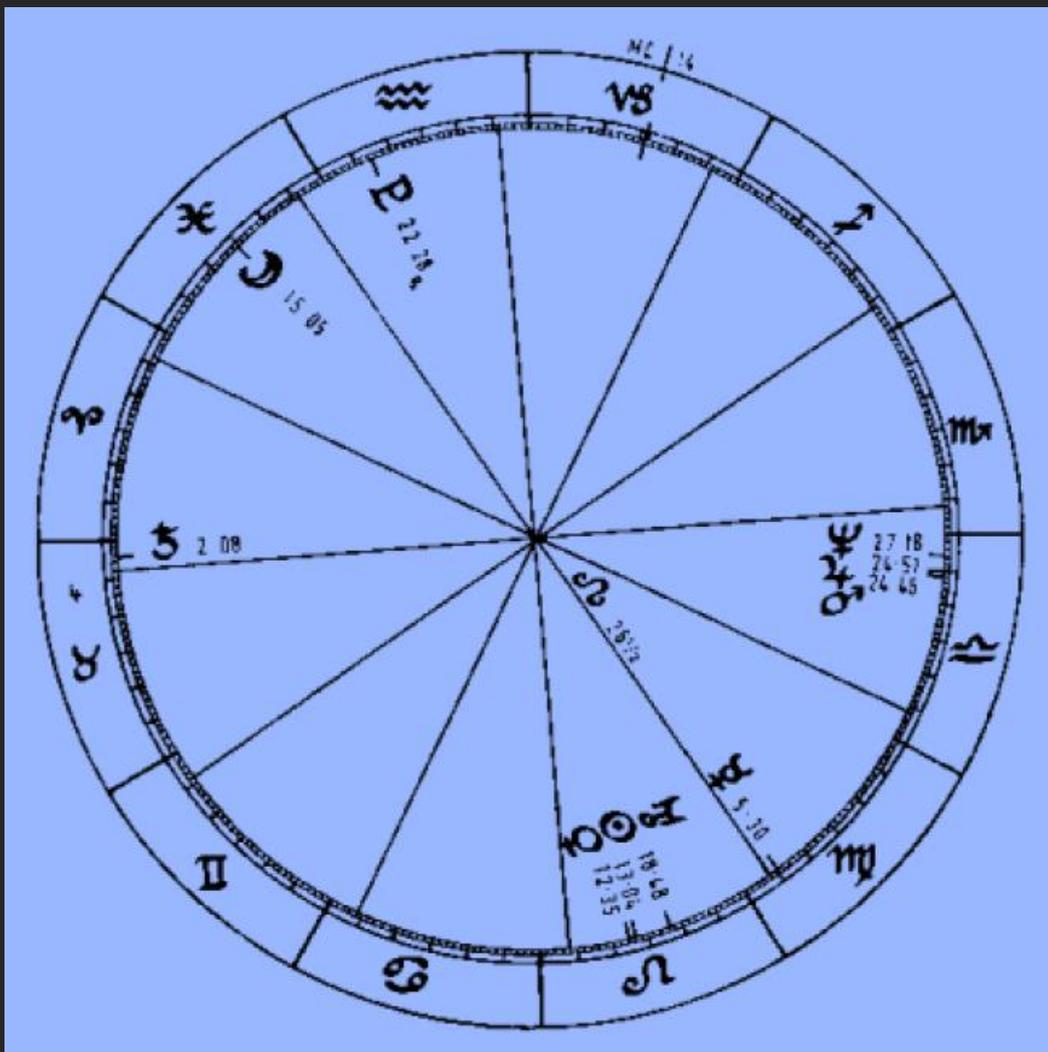


Fig. 63

Horoscope of P. B. Shelley for the recorded birthtime, 10 pm, 4 Aug. 1792, Horsham, Sussex. (the true Ascendant was probably at the end of Aries).

Another advantage of having a definite principle upon which to judge orbs is that it enables one to move with confidence into the sphere of micro-aspects which result from the division of the circle by numbers above, say, 20. One such aspect which must be important is the 27th part of the circle (3

⁴⁶ This chart is for the recorded time of 10:00 am on 4 Aug. 1792, Horsham, Sussex, but I assume that the correct Ascendant falls at the end of Aries, and that birth occurred 15 or 20 minutes earlier.

x 3 x 3), although we have no clear views as to the interpretation of this at present. This is an angle of $13\frac{1}{3}^\circ$ and its multiples. One would hesitate to apply this aspect because it occurs 26 times, in addition to the conjunction, in the circle. But, provided one applies the rule given above concerning orbs, its occurrence will be neither more nor less common in a horoscope than any other aspect. In this case the orb will be about $12^\circ \div 27 = 27'$ or $15^\circ \div 27 = 33'$ - say half a degree. As with all other aspects, its action will be most pronounced where the orb is smaller.

Another issue which is likely to become a focus of interest in the light of the idea of harmonics is the symbolism of aspects based upon prime number divisions of the circle, such as 11, 13, 17 and so on. These will call for a greater measure of research into number symbolism than seems to have been carried out in a truly philosophical manner in modern times, although there may well be valuable studies of which the writer has no knowledge.

In relation to these numbers one is often dependent upon suggestive glimpses of earlier ideas. For example the old philosophers said that 11 was a number of 'excess' because it went beyond the perfection of the number 10. I cannot say what value there is in this idea although a student has drawn my attention to 2 charts of alcoholics where the Moon-Neptune angle fell in the 11th series of aspects (multiples of $32^\circ 44''$ approximately).

The number 13 is also interesting. It represents *the one in the midst of the 12* and so suggests the idea of spiritual (?) lordship. Keith Critchlow in his valuable study of *Order in Space*⁴⁷ points out that 12 spheres of equal size will exactly fit round a central sphere of the same size so that all are exactly touching their neighbors. The aspects in the 13th series are as follows:

27° 42' 55° 23' 83° 05' 110° 46' 138° 28' 166° 09' (orb about 1°)

Searching for representations of the number 13 in art, literature, etc., one thinks of the Last Supper. This used to be a favorite theme of artists, and perhaps still is, for Annigoni is currently engaged on a mural of this scene. Leonardo da Vinci's painting is usually given pre-eminence because he evidently gave more thought to the whole subject. Interestingly, Leonardo has a '13th' aspect between Saturn and Venus ($138^\circ 21'$ - orb 7'). The aspects of Saturn and Venus are always important in the maps of artists because they relate to the effort to give shape and form to the beautiful. Considering that I have only a small handful of charts in which to look for examples there seem to be a lot of 13ths about between these 2 planets: Blake $27^\circ 32'$ (orb 10'), Mozart $27^\circ 30'$ (orb 12'), Rupert Brook $55^\circ 52'$ (orb 29'), Zola $82^\circ 00'$ (orb $1^\circ 05'$). Could this be connected with the element of asymmetry in art? The number 13, after all, cannot be divided by 2 and is a prime.

Closely associated with the Last Supper is the idea of *betrayal*. Edward Elgar⁴⁸ treats this theme in his oratorio *The Apostles*⁴⁹. He has Saturn-Neptune $110^\circ 35'$ (orb 7') and Thomas Hardy⁵⁰, whose stories constantly show a preoccupation with betrayal, also has Saturn-Neptune $55^\circ 52'$ (orb 29'). Emily Bronte, another doom merchant, has Saturn-Neptune $83^\circ 33'$ (orb 28'). Van Gogh had the Sun on the mid-point of Neptune and Uranus about $27\frac{1}{2}^\circ$ from each; one thinks of his religious mania. Perhaps it is a pity to emphasize a rather negative factor such as the idea of betrayal when there are no doubt important virtues associated with this series of aspects too. The apparent association is mentioned as a basis for further investigation by others.

It is worth pointing out in passing that nowadays, when many people are in a position to have charts calculated by computer, it is a good idea to choose a program which simply lists the angles

⁴⁷ Keith Critchlow, *Order in Space*, London: Thames & Hudson, 1969.

⁴⁸ Born 2 June 1857.

⁴⁹ Elgar was once asked how he produced the terrifying sound in *The Apostles* where Judas goes out to hang himself. Elgar replied that he simply visualized Judas in the extremity of his remorse and *heard it* on the muted horn - a good example of how the dynamic power of ideas, when contemplated, inspires its own appropriate expression through the artist.

⁵⁰ Born 2 June 1840.

between each pair of planets as shown below. This is no trouble for the computer and it enables one to glance through the angles in search of aspects in a particular series such as the one we have been speaking of, or others which are difficult to spot such as the septiles. Computer programs which list the conventional aspects are not nearly so useful. (I know that many people like to draw lines on the horoscope to indicate squares, trines, etc., but I have always had reservations about this practice for the same reason. In drawing attention *to* certain aspects it may also draw the attention *away* from others which are often most important, especially the quintile and septile series.)

CASE: EINSTEIN

RADICAL ASPECT - ANGLES														
	MOON	MERC	VENUS	MARS	JUPT	SATUR	URAN	NEPT	PLUTO	NODE	ASC	M C	VERT	0° ARIES
SUN	98:59	9:38	23:29	56:35	26:02	10:42	157:48	44:22	61:08	52:01	107:58	10:39	115:42	6:30
MOON		108:37	122:28	42:24	72:57	109:41	103:13	143:21	160:07	46:58	153:03	88:20	16:43	105:29
MERC			13:51	66:13	35:40	1:04	148:10	34:44	51:30	61:39	98:20	20:17	125:20	3:08
VENUS				80:04	49:31	12:47	134:19	20:53	37:39	75:30	84:29	34:08	139:11	16:59
MARS					30:33	67:17	145:37	100:57	117:43	4:34	164:33	45:56	59:07	63:05
JUPT						36:44	176:10	70:24	87:10	25:59	134:00	15:23	89:40	32:32
SATUR							147:06	33:40	50:26	62:43	97:16	21:21	126:24	4:12
URAN								113:26	96:40	150:11	49:50	168:27	86:30	151:18
NEPT									16:46	96:23	63:36	55:01	160:04	37:52
PLUTO										113:09	46:50	71:47	176:50	54:38
NODE											159:59	41:22	63:41	58:31
ASC												118:37	136:20	101:28
M C													105:03	17:09
VERT														122:12

Note: This page is a typeset facsimile of a computer printout sheet.

We can if we wish move directly into the world of micro-harmonics proper. Strictly speaking, in terms of aspects the circle is infinitely divisible and we are limited only by the limits of observational accuracy. This is obviously something for the more advanced student to consider, but, when the German astrologer Theodore Landscheidt⁵¹ speaks of the 1024th harmonic (2¹⁰), we need not feel that we are being too outlandish in looking for such intervals as the 125th (5 x 5 x 5).

Elsewhere⁵² I have tried to show the nature of the link between this (the 125th) harmonic and the *senses*, among other things. If it is true that the 5th harmonic has a special connection with the mental or gnostic faculties - those by which we *know* - then one can see that the senses, which represent the outermost aspect of this system of faculties, might well be shown by a subordinate division in the 5th series. Thus for particular physical characteristics one may have to look someway down the harmonic hierarchy. Ronald F. Harvey, whose fascinating book *The Grammar of Astrology*⁵³ is teeming with fertile suggestions for the philosophically and scientific minded astrologer and who, as an osteopath by profession, has the knowledge and experience to judge of medical issues, has drawn my attention to numerous cases of high-numbered harmonics as they appear to relate to physiological questions.

⁵¹ Landscheidt's point is that whilst the Moon's motion is such that it forms several aspects every day, Jupiter, Saturn and the outer planets will only form frequent 'aspects' if one uses very small intervals, the 1024th being 21' approximately in length.

⁵² Addey, John, *Astrology Reborn*, Green Bay, Wi.: Cambridge Circle, 1975, p. 20f: also see reference in Chapter 12, Note 4.

⁵³ Harvey, Ronald F., *The Grammar of Astrology*, Green Bay, Wi.: Cambridge Circle, forthcoming.

To revert to the 125th harmonic, this gives an angle of 2° 52.8' - a micro-aspect, one might say. I have tested this in 10 cases of blindness⁵⁴ with allegedly accurate birthtimes by calculating the 125th harmonic chart⁵⁵ for each and looking for afflictions to Mercury, which must certainly have relevance to the sight. Only 1 out of the 10 cases⁵⁶ failed to yield close squares or oppositions from malefics in the circle of the 125th harmonic. Here are the results in the other 9 cases:

1. Mercury square Mars (orb 1')
square Neptune (orb 3')
2. Mercury square Saturn (orb 1')
3. Mercury square Saturn (orb less than 1')
4. Mercury opposition Neptune (orb less than 2')
sesquiquadrate Saturn (orb 1')
5. Mercury square Mars (orb 1')
opposition Saturn (orb less than 1')
6. Mercury square Mars (exact)
opposition Saturn (orb less than 2')
7. Mercury opposition Uranus (orb less than 2')
also in aspect to Mars square Saturn (orb less than 1')
8. Mercury square Neptune (orb 1')
semi-square Mars (orb 1')
9. Mercury semi-square Mars (orb almost exact)
opposition Saturn (orb 2')

It will be appreciated that with regard to these 'aspects' one is dealing with a complete circle of 2° 52.8' or 173' approximately, so that squares in this circle will represent an interval of about 43'. In other words an orb of 1' is equivalent to an orb of 2° in a full circle of 360°. The above test cannot be considered exhaustive but it is convincing as far as it goes. It suggests that in looking for pronounced physical defects one may have to examine high-numbered harmonic intervals.

One recognizes that some astrologers will view an aspect-angle of 2° 52.8', let alone a quarter of that, with a jaundiced eye. Presumably not many will find room for it in practice. However for those who are interested in researching specialized problems in astrology this topic of micro-aspects. deserves mention.

Before ending this chapter, reference should be made to the "Catalog of Harmonics" in the *Astrologer's Guide to Harmonics*⁵⁷ compiled by James and Betty Williamsen and published by the Cambridge Circle. Anyone who has read this chapter and considered the implications of aspects based upon divisions of the circle by all sorts of unusual numbers will rightly ask: How are we to deal with all the aspect-intervals thrown up by such divisions, and how are we to research unusual aspect

⁵⁴ Of these 10 cases the first was a blind piano tuner who came to the author's house and was able to give an exact birth time (4 Jan. 1906, 11:40 pm, London). The second is that of Helen Keller (born 27 June 1880 about 4:00 pm, Tuscomb, Alabama, U.S.A.). The remaining examples of blindness were a collection of cases of this affliction found in an old copy of the *British Journal of Astrology* (a publication long since defunct) which was available at the time. Unfortunately I no longer have the birth dates and times but the charts were calculated and discussed by E. H. Bailey, the editor, who was an astrologer of the old school and a stickler for accuracy, so I believe the positions can be regarded as reliable.

⁵⁵ It is really necessary to have for this the *User Manual* in the *Astrologer's Guide to the Harmonics*, see Chapter 12, Note 2 above.

⁵⁶ This was the chart of an Indian boy. I am a little sceptical about Indian birthtimes which seem often to depend more on "rectification" than accurate observation.

⁵⁷ Williamsen, James S. and Ruth E., *Astrologer's Guide to the Harmonics*, see Chapter 12, Note 2 above.

series when the labor of dividing the circle by all sorts of numbers and then finding the intervals at which such divisions repeat round the circle is so prohibitive a task?

For many years after I had realized the importance of harmonics and harmonic intervals in relation to a wide range of astrological problems, I had the hope that one day someone would use a computer to compile a complete catalogue of harmonic intervals of the circle and their multiples right down to, say, the 180th harmonic (2°). It was not until I met Dr. Williamsen, then a Fellow of Kings College, Cambridge, at the Astrological Association's annual conference at Cambridge in September 1971, however, that I found someone who would tackle this project. Early in 1972, with the help of John Barnden, he produced a complete list of all harmonics and their multiples. At about the same time Michael Heleus of Florida and Michael Munkasey of New York were also addressing themselves to the same problem, each adopting a very slightly different approach although basically the same. For the record I *believe* Michael Heleus was the first to produce such a catalogue but all 3 were produced independently within a time-span of 2 or 3 months. Michael Heleus has since performed some interesting experiments reducing the orbital intervals of planets, combined with harmonic relationships, to the musical scale⁵⁸. Michael Munkasey, too, has continued to pioneer this field.

Dr. Williamsen's catalogue has now been published in an adapted format designed to facilitate easy reference and research. It is worth reproducing a specimen page to show how it works (see below).

Every degree of the circle from 0° to 359° is given 1 complete page, as shown. Suppose 2 planets are approximately 100° apart. One can turn to the page giving the harmonic intervals which fall in this degree. In the first column are listed all those fractions of the circle which fall exactly at 100° (i.e. 5/18ths, 10/36ths, etc.). Next to these are listed for quick reference all those which fall *beyond* 100° but before 101°. Then, after the double line, the fractions between 100° and 101° as they occur are listed in due order. Thus 100° 07' 06" (or 100.1183°) is 47/169ths of the circle and so on.

HARMONICS		100° and		HARMONIC	100° and	HARMONICS		100° and		HARMONIC	100° and
EXACTLY	BEYOND	Min	Sec			DECIMAL	EXACTLY	BEYOND	Min		
100°0'0"	100°0'0"					100°0'0"	100°0'0"				
5/18	7/25	07	06	47/169	.1183	41/147	40	41	33/113	.6780	
10/36	12/43	07	57	42/151	.1325	42/150	41	57	40/143	.6993	
15/54	14/50	09	01	37/133	.1504	42/151	42	51	47/168	.7143	
20/72	17/61	10	26	32/115	.1739	43/154	48	00*	49/175	.8000	
25/90	19/68	12	22	27/97	.2062	44/157			42/150		
30/108	21/75	13	38	49/176	.2273	44/158			35/125		
35/126	22/79	15	11	44/158	.2532	45/161			28/100		
40/144	23/82			22/79		46/164			21/75		
45/162	24/86	17	09	39/140	.2857	46/165			14/50		
50/180	26/93	19	40	34/122	.3279	47/168			7/25		
	27/97			17/61		47/169	53	30	44/157	.8917	
	28/100	21	49	46/165	.3636	48/172	54	33	37/132	.9091	
	29/104	23	05	29/104	.3846	49/175	56	04	30/107	.9346	
	30/107	24	29	41/147	.4082	49/176	58	32	46/164	.9756	
	31/111	27	54	48/172	.4651	50/179			23/82		
	32/115			36/129							
	33/118			24/86							
	34/122			12/43							
	35/125	31	10	43/154	.5195						
	36/129	32	26	31/111	.5405						
	37/132	33	31	50/179	.5587						
	37/133	35	18	38/136	.5882						
	38/136			19/68							
	39/140	37	16	45/161	.6211						
	40/143	38	43	26/93	.6452						

Last Harmonic PREVIOUS PAGE AT 99°53'04" - First Harmonic NEXT PAGE AT 101°0'26"
 Harmonic Summary: 10 at 100°0'0" EXACTLY - 40 between 100°0'0" and 101°0'0" (27 Distinct min-sec Values)

⁵⁸ Heleus, Michael C., "Astrosonics", *Astrological Journal* (Astrological Association, London), XVII (1975), no. 2.

If one were researching the 25th harmonic and wanted to know if 2 planets 100° 30' apart were involved in this series, one could look in the 1st and 2nd columns where one would see at a glance that the interval of 7/25ths fell on this page of the "Catalog"; further inspection would show that it fell at 100° 48', which is well within the orb.

Of course this catalogue is intended partly as a tool for research; most of the fractions given are as yet quite unexplored and their meaning undefined. Nevertheless some interesting connections have been found between unusual harmonics and specific conditions and it is obviously desirable that all fractions should be fully listed. Altogether the "Catalog" lists over 16,000 harmonic intervals.

There is another point which should be mentioned. This catalogue lists all angles from 0° to 360° and not only 0° to 180°. For many purposes the latter would be adequate but in the long run Dr. Williamsen is justified in treating every angle as a fraction of the *whole* circle and not only of the half circle. Thus in the specimen list of Einstein's planetary angles given above, the angles are listed from 0° to 180° taking the smallest angle between each 2 planets. As long as one is interested only in the *denominator* of the fraction concerned, this is adequate. Thus if Saturn is at 0° Aries and the Sun at 10° Cancer their aspect angle will be 100°. They would also be 100° apart (measured by the smaller angle) if the Sun was at 20° Sagittarius, but strictly speaking, in the later case the Sun has travelled 260° round the circle from Saturn and not 100°. In the first case the Saturn-Sun angle is 5/18ths, in the second it is 13/18ths.

This raises an issue in relation to harmonics to which we have so far made no direct reference. If we divide the circle into 12 parts we say, speaking in terms of the houses, that the 1st 12th refers to the personal qualities and characteristics, the 2nd 12th to possessions, the 3rd to brothers and sisters, the 4th to the home, etc. So, too, with the successive steps of every number series, each represents a distinct aspect of that number-principle considered as a one-in-manyness. This is something which has not been explored to any great extent in terms of most numbers although we are familiar with the constituent elements of the Two Principle (as embodied in the idea of polarity), the Three Principle (as embodied in the cardinal-fixed-mutable concept), the Four Principle (as represented by the 4 elements) and the Twelve Principle. I have also written on the Five Principle and its constituent parts⁵⁹. But in the long run there is a need for more studies of this kind in relation to numbers.

The *User's Manual*⁶⁰ of the "Catalog", issued separately, provides a great deal more information for the research student. Included are the arc-lengths for every aspect separately, how the harmonic intervals are concentrated at different points in the circle, and so on.

In summary, a clear recognition of the relationship between the symbolism of number and divisions of the aspect-circle, combined with a definite norm for deciding upon orbs, enables one to move freely and think creatively about the whole field of aspect relationships. Major aspects are more important in the sense that they are more general and more comprehensive in their significance, but minor and unusual aspects can reliably be given full weight when the orbs are kept proportionately small and when their meaning has been defined and understood. The former reveal the character and balance of the horoscope in general terms. The latter can contribute most valuable insights into the precise direction and flavor of the chart. Such minor aspects will often supply the key to those things which make one person so different from another, his special aptitudes and not only in what he does but how he goes about it.

⁵⁹ Addey, John "Fivefold Divisions and sub-divisions in Astrology", see Chapter 12, Note 4 for full details.

⁶⁰ Williamsen, James S. and Ruth E., *User Manual of the Astrologer's Guide to the Harmonics*, see Chapter 12, Note 2 above.

15. HARMONICS AND DEGREE AREAS

The allocation of special meanings to certain degree areas in the Zodiac has a long history in astrology and is a familiar idea to all students⁶¹. The subject has been variously treated by writers in the past according to the thought of their day. In former times word-pictures were devised to catch, as it were, the symbolic content on different levels of a particular degree or degree area; in modern times empirical studies have been made of horoscopes with a view to discovering what common feature or attribute is associated with planets occupying a given degree area. These studies have ranged from the somewhat over-imaginative to the thoroughly perceptive and scientific.

Strictly speaking we ought to distinguish between the significance of degree areas and of the symbolism of the 360 degrees as such. The latter obviously derives from the number 360 in its outworking. It is with the former that we are chiefly concerned in this chapter. As a rule there has been no understanding of how these "degree area influences" arise, and writers have been content to point out that certain areas of the Zodiac are clearly associated with certain qualities whilst admitting that they do not know why this should be so.

In the light of what we have learned about harmonics we are in a position to explain the basis of at least those degree-area influences which repeat at certain regular intervals round the Zodiac, as for example degree areas which are in opposition or trine and which therefore could not be associated with certain fixed stars (even if fixed star influences were deemed valid). In a nutshell, *degree-area* influences always arise by virtue of the coincidence of certain harmonics. Thus, we say that people with a certain very specific aptitude or talent must, in order to possess that aptitude, have certain pre-requisite qualities; for example, a successful tennis player must have quick reactions, a muscular system which is not liable to sprains and strains, a good judgment of the position of objects moving in space, a competitive spirit, a delicate sense of touch and timing and so on. We can then say that the harmonics associated with these separate qualities will tend to combine in a certain way to produce degree-areas which are very characteristic of those in whom all these qualities are combined.

Some of these degree areas are undoubtedly based upon very complex harmonic combinations; however, we can illustrate the principle quite simply with, say, 3 harmonics which we must suppose are associated with 3 separate tendencies. Thus in Fig. 64 we have the 1st, 3rd and 8th harmonics of a given sector of the ecliptic. In the example of the successful tennis player given above, the 1st harmonic here might refer to the more general characteristic, a competitive spirit perhaps, the 3rd to the sense of touch and timing and the shortest wave to the most specific attribute, perhaps the ability to judge moving objects in space. We can easily see that there is one point in this combination of regular waves which gives a high 'plus' rating in relation to any aptitude which requires all 3 tendencies in combination. This quite simply is the basis of all degree area meanings. If the fundamental in Fig. 64 is 180 degrees in length then our degree area will occur twice in the Zodiac at opposite points, if 120 degrees there will be 3 sensitive areas in trine, and so on.

⁶¹ This chapter is based on Addey, John, "The Nature and Origin of Degree Influence", *Astrological Journal* (Astrological Association, London), XII (1970), no. 1; to be reprinted in *The Harmonic Anthology*, Green Bay, Wi.: Cambridge Circle, 1976.

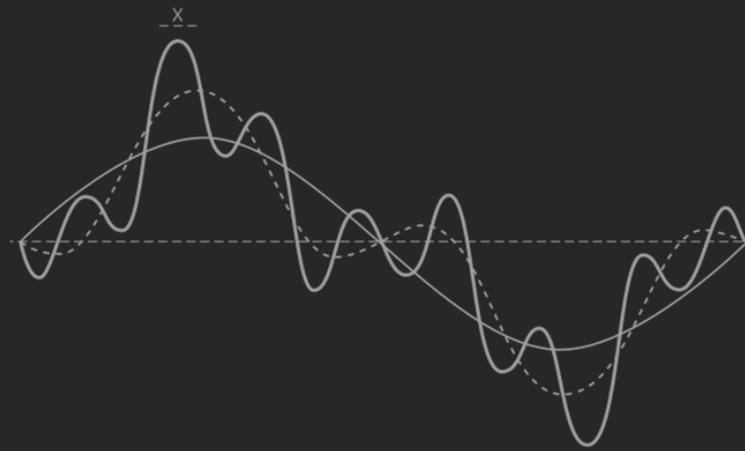


Fig. 64

We can study an actual example of a degree area influence at work in diagrams already used in Chapter 7. Fig. 28 shows the distribution of the Sun in the nativities of 7,302 doctors and we can see that certain very high peaks occur in the solar distribution, the highest actually falling in 22° Taurus.

We are inclined to think of special degree areas as falling, very often, at opposite points in the zodiacal circle (for example Carter, in his *Encyclopedia of Psychological Astrology*⁶² gives many such polarities, as: 3° Cancer-Capricorn = sight, 17° Aries-Libra = oratorical ability); but sometimes the sensitive areas are in square or in trine (e.g. Carter gives 5° of the fire signs = hair). *In the case of medical ability he mentions 22° of the negative signs.*

Now any factor which falls at 22° negative signs must recur at regular intervals of 60°. We can therefore look at our 60° distribution pattern (Fig. 32) extracted from the general solar distribution and see there that the peak distribution in each 60° does in fact fall between 19° and 23° of the negative signs. In Fig. 32 we can see that the basis of this high-scoring area is, in the first place, the coincidence of the 60° wave and the 30° wave, but on top of those, there must be other harmonics which refer to qualities or tendencies common to doctors and so we have our degree area for 'medical ability' at 22° of the negative signs.

There are of course 2 ways of arriving at our degree influence meanings. One is the empirical or inductive approach where actual horoscopes are examined either singly or in quantity (these 2 methods are complementary). The other is the deductive approach in which the meanings of particular harmonics are deduced from the 1st principles of number symbolism, that is from the ideas which lie behind numbers. As always in scientific inquiry, it is good to use both inductive and deductive methods in conjunction, each checking and reinforcing the other.

In the light of these general principles there are certain things we can say about degree areas which are not generally recognized.

1. For every positive degree area which promotes a certain attribute, there is usually another one - a negative degree area so to speak - which militates against that attribute. Thus in Fig. 64 as well as in the high peak about 1/4 of the way along the wave complex, there is a deep trough 3/4 of the way along. These negative degree areas are just as important as the positive ones although they have never, in my knowledge, been made a subject of study.

2. Sensitive zodiacal areas relative to a certain quality do not only occur infrequently in the Zodiac say at intervals of 180°, 120° or 90°. They may be much more frequent, although when this happens the 'area' involved at each point will be narrower. Thus in writing about the positions of astrologers (Chapter 12) we drew attention to the tendency of important positions in their maps to fall at 6° intervals from 0° Aries. If we ask where the Sun, Moon, Ascendant, MC, Uranus and Saturn of the 6

⁶² Carter, C.E.O., *The Encyclopedia of Psychological Astrology*, London: Theosophical Publishing House, 4th ed., 1954, pp. 197-199.

astrologers listed (in Chapter 12) are placed in each half-degree of the recurring 6° sectors of the Zodiac then Fig. 65 shows the answer.

Here we can see a clear 6° rhythm with peaks at 0°, 6°, 12°, 18° and 24° of the signs and a 'low' at 3°, 9°, 15°, 21° and 27°. Actually the highest half-degree total falls in the last quarter-degree before the 6° intervals and the following quarter-degree. This half-degree area (1/12th of the 6° span) yields 15 positions out of the total of 36.

Needless to say some of these 6° intervals are more important than others in this context, for the obvious reason that the 6° rhythm (the 60th harmonic) is involved with other harmonics. This can be inferred from the fact that some of the clusters shown in Fig. 56 are much stronger than others. Another example of this repetition of sensitive zodiacal points is to be seen in our reference to David Hamblin's work on musicians' charts in the 7th and 28th harmonics.



Fig. 65

3. It is to be noted that sometimes a strong positive degree area will at one point in the Zodiac be matched by a strongly negative area at the opposite point. This happens when the dominant harmonics are odd numbered, for such harmonics always produce a 'high' opposite to a 'low'. When even numbered harmonics are dominant there will be a 'high' opposite to a 'high' in the circle and a 'low' opposite a 'low'. When odd and even numbered harmonics are mixed, one will frequently see a 'high' opposite a 'low' with peaks on either side of it. This can be seen at the point opposite to the peaks at 22° Taurus and 12° Cancer, for example, in Fig. 28.

4. It is sometimes asked how wide a degree area is in the Zodiac and how rapidly the 'influence' falls away on either side. We can now see there is no one answer to this question for the possible combinations of harmonics which produce a degree area are many and various. Sometimes the area is quite wide, sometimes very narrow, sometimes the effect dies away gradually, sometimes rapidly. Everything depends upon what harmonics are involved and how they are related.

Finally in this chapter, there is one very important corollary concerning what has been said about degree areas in the zodiacal circle. Because exactly the *same principles apply to all circles in astrology the idea of 'degree areas' is just as valid in the aspect and diurnal circles as in the Zodiac.* This is a matter to which very little thought has been given; one never hears of degree areas in the mundane

circle apart from conventional house positions, and very seldom in the aspect circle apart from conventional aspects, although these are, strictly speaking, just like degree areas in that circle of reference.

An example of the former may be found in Gauquelin's sports champions. If we stick to house positions only, one merely notices in his Mars distribution for outstanding athletes that there is a high score in the 12th and 9th houses; however the truth of the matter is much more striking than this. The really high score is not just in the 12th and 9th houses but in the 3rd *decanate* above the Ascendant and the 3rd *decanate* past the MC. Fig. 66 shows in 10° sector totals the distribution of Mars in the 90° of oblique ascension from Ascendant to MC (top line) and again from MC to Descendant (bottom line). Here we see the extraordinary leap between 20° and 30° past the exact angle.

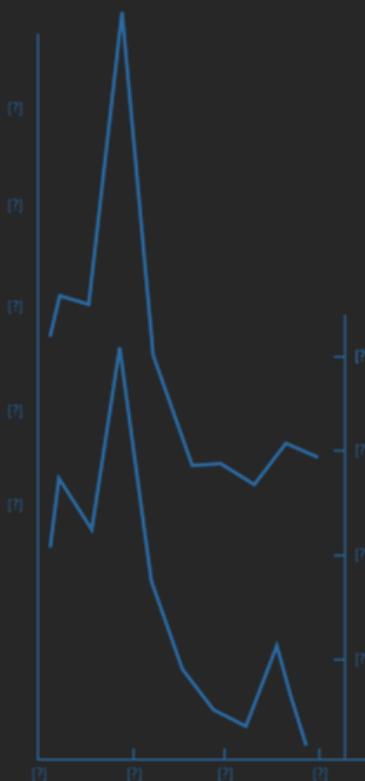


Fig. 66

The 2 90° sectors yield the following totals of Mars positions:

Degrees past the angle

0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
139	133	180	123	103	99	95	107	96

That this should show up so powerfully despite the admitted element of approximation in the birth time is extraordinary. This leads one to think that there may be a very narrow 'mundane' degree area here for Mars in relation to sporting prowess, perhaps about 23° to 26° after the angle. If, as we suggest in a later chapter, Gauquelin's birth times tend to be registered late, then this degree area may be nearer the angle, but in any case it is clearly not connected with the house cusp as such.

There is usually a strong symbolic connection between a feature such as this and the psychology of the case. In this instance the only way in which such a sudden high peak could be obtained is by the extreme concentration or coincidence of many harmonics at one point; in just the same way the really outstanding sports champion must have the capacity to concentrate all his energies (Mars) for an intense effort. Looking at Fig. 66 one is reminded of an electro-cardiogram where the different

rhythms of the heart coincide at intervals to give the sudden leap of the heart-beat. Perhaps the heart could be called the athlete of the body.

The point to notice especially here is that this feature appears as a degree area in the *diurnal circle*, not in the Zodiac, and that it does not fall at an angle or on a cusp any more than zodiacal degree areas fall exactly at the 4 cardinal points or even exactly at the beginnings or middles of signs. Degree areas can fall anywhere in the circle.

In precisely the same way the important angular relationships in the aspect circle are not only at the conventional aspect points at 30° intervals but may fall anywhere in the aspect circle. We can reasonably assume, however, that the conventional points have a priority of importance. If we look again at the diagram showing the Sun's relationship to Saturn among nonagenarians (Fig. 48) we can see that the significant relationships do not fall at the conventional aspect points but between 10° and 15° *past* the conventional aspect.

16. HARMONICS IN PROGRESSIONS, TRANSITS AND OTHER DIRECTION PROCEDURES

We have discussed some of the various applications of harmonics in the natal chart but so far no reference has been made to harmonics as they appear in relation to the unfoldment of the radix through progressions, transits and the like. It would be very surprising, however, if a principle which applied universally in the one case did not apply equally in the other.

First of all let us think about what happens as the events of life unfold. The course of life is not a chaos and although some events may appear to happen 'out of the blue' as it were, we are really always dealing with orderly sequences of experience. A man may have a period when he is feeling the pinch financially, this leads him to seek promotion or a better paid job and this again, if he is successful, brings new responsibility and readjustments. It also brings a new prosperity which may enable him, say, to put down the money on a house. On a different level a child may appear to have a rather sluggish period of poor health, this makes her vulnerable to infections at school, she catches measles, but after a quick recovery she suddenly blossoms out and is found to be bursting with life and energy. It does not always happen like that but this is not an uncommon experience; it is as if the fever had had a cathartic effect. Or again, the corresponding first stage of such an experience may be something in the nature of a nervous breakdown, when life seems to confront someone with an overwhelming dilemma which he does not know how to deal with. However, as Jung has shown, such situations are sometimes resolved almost imperceptibly. Some symbolic act or experience, which happens almost unobserved; releases the tension; suddenly the dilemma no longer looks like a dilemma and equilibrium is restored and confidence regained.

Now when these experiences are looked back upon, what is it that is actually remembered? In the last case it is the dreadful experience of a nervous breakdown which is recalled and if the native is an astrologer it is *that* "event" for which he will later look in his directions. The child's mother remembers the time when her daughter was so ill with measles and searches for suitable directions for *that*, forgetting the earlier period of poor health and perhaps not associating her daughter's renewed energies with the measles. The little girl looks back upon the time she took on a fresh lease on life and came top of her class. The man who suddenly steps up in the world may regard his promotion as the natural culmination of much effort (and long overdue anyway!) and chiefly remembers the day when he and his wife could at last have a house of their own.

This lengthy preamble is intended to show that the course of our lives is not so much a series of isolated events as a flowing sequence of unfoldment and that whereas one person will focus on one stage of the sequence, another will see a different stage as the important event.

Now in terms of progressions it would seem to be the case that as progressed aspects form we can often relate the sequence of events to the applying, exact and separating stages of an aspect. Thus in Fig. 67 if we think of planet A forming a progressed aspect with planet B, point x may represent stage one (the 'hard up' period of the man in our first example, the little girl's poor health, and the nervous breakdown), point y may indicate stage two (promotion, measles, the unnoticed resolution of conflict) and point z will show the consequent improvement (the new house, the fresh lease on life, confidence restored). The period from x to y and y to z may be a month or 6 months or 2 years.

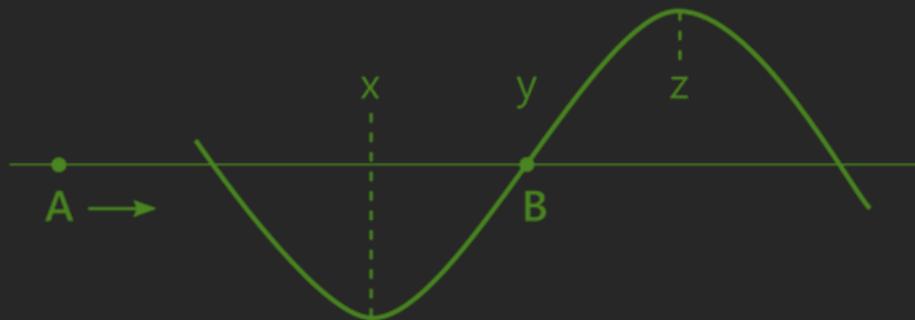


Fig. 67

In each case the process is the development of one principle or type of aspect through various stages; in the first case it is evidently a Saturn aspect which is at work; x = Saturn denied (penury), y = Saturn resurgent (promotion, responsibility), z = Saturn enjoyed (bricks and mortar). If Saturn is planet B in this example and the Moon is planet A, then in the case of the young lady with measles, planet B is probably Mars and planet A is perhaps the Sun, for hers is a more Mars type of experience: x = Mars denied (impurities clog the system and the fires of life burn poorly), y = Mars resurgent (cathartic fever), z = Mars released (the energies burn brightly again). And so on. Notice that in each case 'y' is, so to speak, a nodal event with a distinct 'before' and 'after' stage. The nodal event (promotion, measles) is often short and sharp in contrast to the before and after stage.

I do not of course suggest that the applying aspect is always a denial or repression of the planetary principle involved. Sometimes the excess comes first and the deficiency comes after the aspect; in fact all 4 possibilities shown in diagrams 42-43 can apply; it is a question of what stages of experience we are passing through.

This brings us to the point we have been leading up to. The different principles and forces at work in life are constantly moving between polarities or positive and negative, full and empty, tension and release. This is why I believe the notion of progressed aspects which suddenly pop up from time to time and then are done with is basically a false one. As a progressed planet A moves around the circle forming an everchanging relationship to planet B we are always dealing with a regular flux between positive and negative poles of experience. If the gentleman who was feeling the financial squeeze and looking for promotion thinks he is going to feel rich forever he has got another think coming; but he probably knows as well as we do that in a year or two's time he will be feeling poor again. If he is a student of Parkinson's Laws he will know that expenditure expands to meet income; if he is of a philosophical turn of mind he will know about Yin and Yang, and will realize with Lao Tse that:

'If there is contraction, then before there was expansion.
If there is weakness, then before there was strength.'

And so the rhythm of life moves on. In short we need to think less about exact aspect points and more about the ebb and flow of progressed motions, trying to determine the types of life rhythms

related to different planetary configurations in the progressed chart. It would seem to be the coincidence of these rhythms at certain intervals which brings the most significant situations and these do not always coincide with the conventional aspect points⁶³.

Enough theory; let us have some practice. What progressions, for example, should be look for at the time of marriage? The investigative astrologer is always on the lookout for suitable data and often he must take it where he can find it. *The Directory of the Turf* (1970 edition)⁶⁴ gives the dates of birth and marriage of the jockeys of the day and by extracting these in relation to all married flat-race jockeys⁶⁵ we have a collection of 116 cases where the actual dates of birth and marriage are given. From these we are able to calculate the progressions for the age of marriage in years and months, assuming birth to have taken place at noon - a small marginal approximation.

But what are we to look for? Of course the textbooks have a rather simple approach to such questions and may suggest something like Sun progressed in aspect to Venus. The positions of the progressed Sun in relation to Venus radical at marriage in these 116 cases are shown in Fig. 68. We can see that what is chiefly reflected is the general distribution relationship of Sun and Venus exactly as illustrated in Fig. 45. There is no suggestion that progressed Sun in conjunction with or in aspect to Venus coincides with marriage. We need to think a little more carefully.

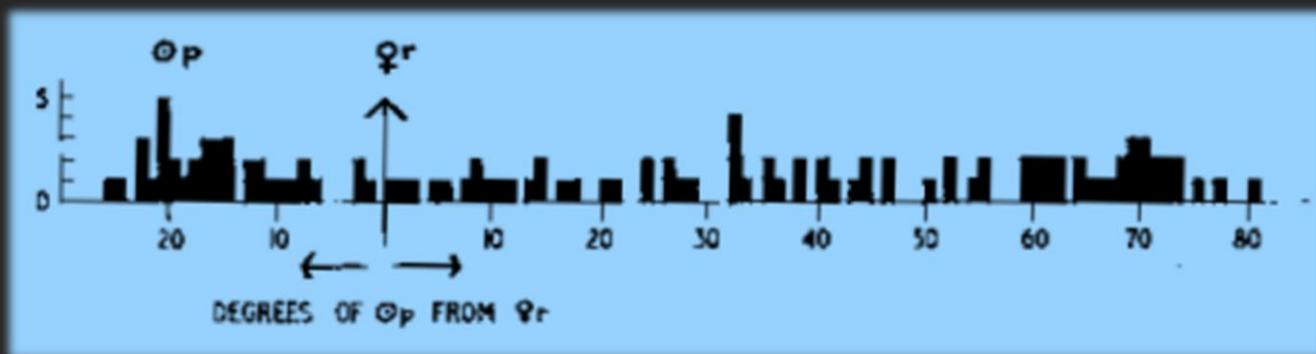


Fig. 68

The point about marriage perhaps is that it is a *permanent relationship*, a *definite* formal agreement *binding* upon both parties; it introduces an element of *stability* into their lives and confers a measure of *security* of relationship and affection. In the past at least the woman gained some financial security and the man financial *responsibility*. The relationship between Venus and money is well brought out in Carter's *Astrological Aspects*.⁶⁶

There is no need to go any further, all that we have said points to a Venus-Saturn relationship. The phenomenon of the young man or woman who has been rather wild but suddenly becomes more steady, serious and responsible at the time of marriage is a commonplace. Saturn is not exalted in Libra for nothing; this is the time when one's affections crystalize as it were, upon one person. Now if there is any sense to be made of the symbolism of planetary relationships then there *must* be a characteristic Venus-Saturn relationship of *some* kind involved here.

⁶³ Most students are familiar with biorhythms, the theory that there are 3 rhythms which start at birth, a 23 day rhythm referring to body states, a 28 day rhythm relating to feelings and a 33 day rhythm relating to mental states. Much has been made of this idea but although the general concept is fully in accord with what we have been saying, it will be obvious to students of astrology that life rhythms are of immense variety and that the 3 mentioned, if true, will surely be lost amid many others. In this sense one might regard biorhythms as something like Sun-sign astrology, not without a grain of truth but inadequate on their own,

⁶⁴ *Directory of the Turf*, London: Stud and Stable, Ltd., 1970, 4th ed.

⁶⁵ Flat race jockeys can be distinguished by their lighter riding weight, as given.

⁶⁶ Carter, C.E.O., *The Astrological Aspects*, London: L.N. Fowler & Co., Ltd., 1969, 9th ed. This book has always been recognised as one of the outstanding modern works on astrology.

But what kind of Venus-Saturn relationship and what kind of direction should we use? The usual day-for-a-year method of progressions is well attested and certainly justifies an examination but symbolic measures such as the One Degree (equals 1 year) may be better. We must not start with the preconceived idea of what this Venus-Saturn relationship will be; that way we shall be limited by what we think we know instead of discovering what we do not know. So our question must be: "What is the relationship of progressed Venus to Saturn at the time of marriage?"

After calculating the secondary progressions for marriage, we must tabulate the relationship in degrees from Saturn to Venus progressed (we measure from the slower planet to the faster). For this we again use the grid, illustrated and explained in Appendix I, upon which we record the angular distance from Saturn to Venus in every one of our 116 cases. In this way we shall get the best picture possible of the actual relationship of Venus to Saturn at marriage without any preconceived ideas about what we shall find.

Now because Venus may be anywhere in the whole aspect circle in relationship to Saturn, we shall naturally find these progressed positions of Venus scattered round the whole circle and this is in fact what we find. In the 30° after the conjunction there are 8 cases of progressed Venus, between 30° and 60° there are 8 again and so on round the circle. No sector has more than 12 cases and none less than 6. This sort of thin spread of cases does not lend itself well to a full harmonic analysis even if we were able to perform one, so we must resort to the sort of simple tactics which we have used before, that is collapsing the distribution of progressed Venus positions into one 30° sector by collecting the degree totals for all 12 sectors into one 30° run.

Here are the totals, by degree of separation from the 30° aspects:

deg. sep.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
total	4	0	6	3	10	5	4	5	2	3	4	3	3	2	1
deg. sep	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
total	2	4	5	2	2	5	7	6	4	8	3	1	2	3	7

To be clear what these figures mean: the 1st total (4) shows that there are 4 cases where Venus is exactly at one of the 12 aspects to Saturn at 30° intervals, i.e. within ½° on either side of the conjunction, semi-sextile, sextile, square, etc. The 2nd total (0) means that there are no cases of Venus separating by 1° from these aspect points. Then there are 6 cases of Venus separating by 2°, 3 cases separating by 3°, 10 separating by 4° and so on, while at the end of the line of figures we have 3 cases of Venus applying by 2° to an exact aspect and 7 cases applying by 1°.

In order to check our line of figures for a 1st harmonic (actually the 12th harmonic of the whole circle) we can ask if it is possible to divide them into 2 halves of 15° each so that one half is significantly higher than the other. A little addition shows us that the middle portion of the line of figures has lower scores on the whole than the two ends. If we start at the 7th total (4) then we have 15 consecutive totals which add up to 47, whereas the next 15 totals (starting at 7, the 21st degree of separation) add up to 69. This suggests the presence of a 1st harmonic with the peak near the exact aspect point. Continuing our investigation we can point to 2 harmonics which are even stronger. These are the 2nd and 5th of this series, the wave of 15° and that of 6°.

In order to demonstrate this, casting our minds back to what we learned in earlier chapters, we can put our totals down in runs of 15° and of 6°, thus:

4	0	6	3	10	5	4	5	2	3	4	3	3	2	1	2	4	5	2	2	5	7	6	4	8	3	1	2	3	7
2	4	5	2	2	5	7	6	4	8	3	1	2	3	7										4	0	6	3	10	5
6	4	11	5	12	10	11	11	6	11	7	4	5	5	8									4	5	2	3	4	3	
18	21	20	28	27	33	32	28	26	24	22	16	14	18	19	(3° Moving total)								3	2	1	2	4	5	
																							2	2	5	7	6	4	
																							21	12	15	17	27	24	

Taking the 15° run first, we have made a 3° moving total of this series, the results of which are shown in graph form in Fig. 69. Here we can see a vigorous 15° wave with a rise and fall of about 8 on a mean of 23; in other words the amplitude is $(8/23) \times 100$ or nearly 35 %. Fig. 70 shows the graph of the 6° wave from the totals above. Here we can see another good result with a rise and fall of about 6 1/2 on a mean of nearly 20, giving an amplitude of $(6 \frac{1}{2}/20) \times 100$ or nearly 33 %.

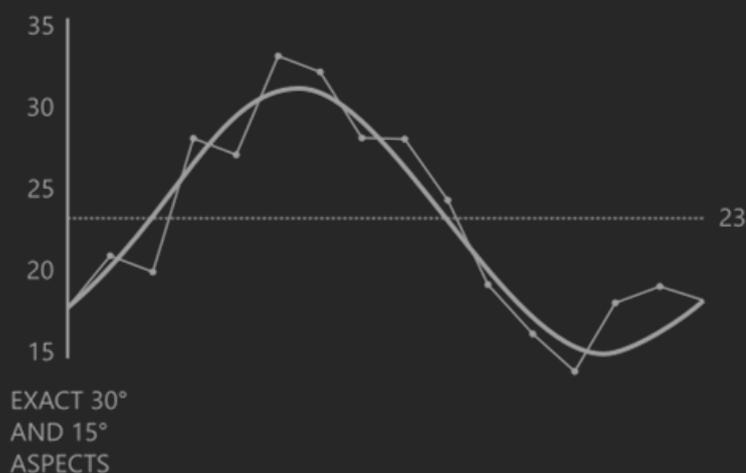


Fig. 69

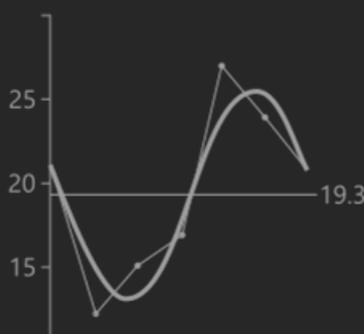


Fig. 70

Notice that in these 2 harmonics the peak and the trough are more or less equally spaced and the totals for the peaks are more than twice those of the troughs. This gives us a measure of confidence in the result. On the evidence of these totals, we therefore have 3 harmonics which when put together show a relationship of Venus to Saturn in each 30 degrees of the aspect circle at the time of marriage in this particular sample of cases. The 30° wave which we will very conservatively call 10 %, the 15° wave (35 %) and the 6° wave (33 %) are drawn together in Fig. 71, to show our combined characteristic distribution.

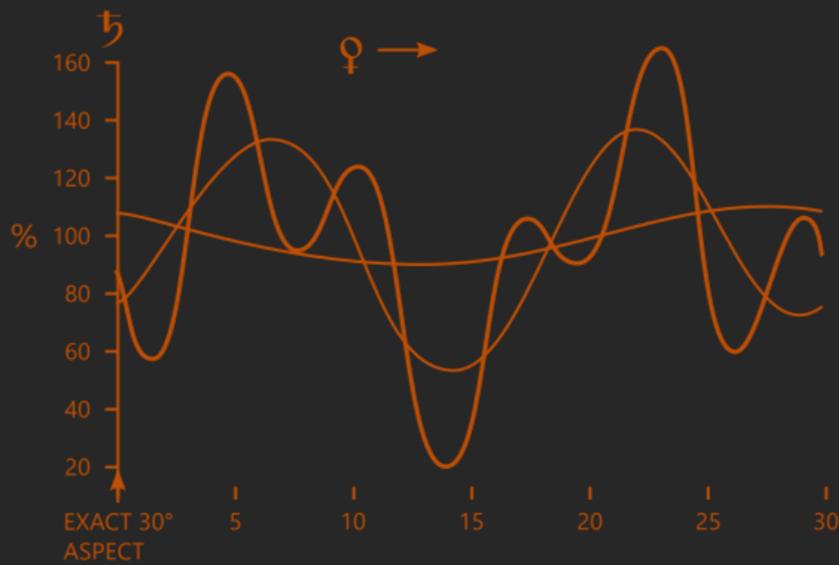


Fig. 71

It must be emphasized that this graph is simply a general description of this particular result and is neither more or less reliable than the sample we have taken. The sample is small and applies to men only and furthermore to a sample of men of a similar type, jockeys. Thus it is not claimed for one moment that this graph is universally applicable; what we have done is to demonstrate a method of procedure which if applied on a larger scale might well show us that there is a typical Saturn-Venus relationship at the time of marriage. Indeed as astrologers we must assume this to be the case. The relationship may be different for men and women, it may be different for different types of people, and it may vary from epoch to epoch, but these differences should be identifiable. In any case the principles involved in the relationship remain the same, only the circumstances of their applications differ. Of course, in starting with 30° sectors of the aspect circle we have already partly prejudged the issue; for a fuller investigation one would need to examine the distribution in other sectors.

What we have demonstrated is that, whatever people may believe about exact (textbook) aspects, these 116 cases taken from life tell a different story. There *are* points where the Venus-Saturn relationship is strongly associated with marriage, for example, when Venus is separating by about 4 ½° from, or applying by 7° to, a conventional Saturn aspect, and there are positions when it is not. But the relationship is more complex than is generally assumed⁶⁷.

Even if the result of this little investigation proves to be a misleading one, yet the method of approach to the problem is surely the right one. It is interesting to note in passing that if, instead of taking the secondary progressed Venus, we take Venus by 1 degree measure for these cases, the 6° wave holds good as shown in Fig. 70, with similar amplitude and phase, despite the considerable difference in motion between these 2 measures. Similarly the progressed Sun in relation to Venus (as given in Fig. 68) also shows a strong 6° rhythm. 6 degrees is 1/5 of a sign and we have already pointed out the association of the number 5 with marriage. One of the unsatisfactory things about the insistence upon the 30° aspects in relation to an event such as marriage is that the interval between such aspects is too large for an event which usually takes place during a relatively short age span; it is much more likely that a 6° rhythm for Venus progressed, something like a 5-year cycle, would suit the case better. In any case we must allow this brief coverage of progressed aspects to illustrate what we believe to be the principles involved.

⁶⁷ It so happens that the writer's son was recently married and after writing this paragraph I decided to look where his progressed Venus was at the time. It was exactly 4° past the conjunction with Saturn.

What of transits? Evidently the same principles apply. One illustration must serve to show what is involved. Some years ago Mr. W.H. Somerford of Urmston, Manchester submitted an entry for the Astrological Association's annual *Astrology Prize* which was never published but is of unusual interest. Mr. Somerford extracted from *Burke's Peerage, Baronetage and Knightage* (103rd edition, 1963) all cases of *only sons* where the date of death of the father and the date of birth of the only son, and therefore the age of inheritance, were given. This amounted to 205 cases. He provided in his study the natal, progressed and transiting positions of the Sun at the time of inheritance and the position of the lunation preceding the event. Lunations are simply double transits of Sun and Moon.

The death of a parent is an important psychological event for most people and this must be enhanced in the case of only sons, especially when the event marks the inheritance of lands, title and wealth with their accompanying responsibilities.

There is a tendency for astrologers to think of transits as operating within quite narrow orbs, and the transiting position of the Sun in relation to Sun radical would not, in any case, rank very high in the books of most students. But Somerford's 'iron filings' scattered over this particular astrological magnet show that the low-numbered harmonics, the long waves with wide orbs, are strongly operative in the case of transits, just as they are in other ways.

At the time of the father's death these transiting Sun positions showed a strong 4th harmonic relationship to the radical Sun, and this was even stronger in the case of lunations (the positions of which are of course closely related to the transiting Sun). Fig. 72 shows the distribution of the lunations which preceded the father's death, relative to the radical Sun, in each 90° sector. In other words we are asking where the monthly conjunction of Sun and Moon preceding the father's death fell in relationship to the radical Sun or to the points in square or opposition thereto.

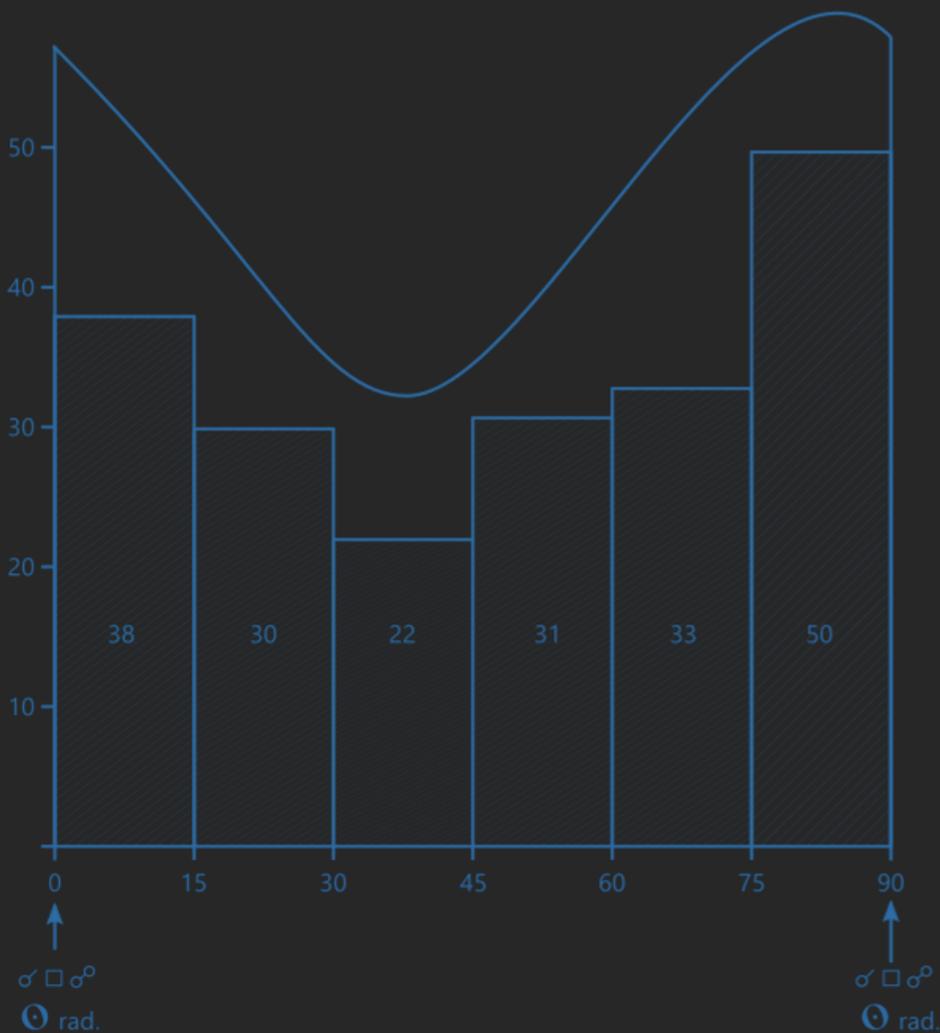


Fig. 72

This 4th harmonic shows an amplitude of about 38%! It is very much stronger than any of the other shorter harmonics involved in the position of transiting Sun. Somerford did not include any strictly planetary positions in his study but an examination of these shows good harmonics for transiting positions. This is a very interesting collection of data.

Before ending this chapter there are 2 additional points that should be made, the first one is important, the second somewhat speculative. First, it is worth spelling out what will be obvious to most students, namely that the idea of harmonics when applied to directional methods points very clearly to the importance of what are called 'symbolic measures'. Many of these have been suggested and indeed demonstrated to be valid by various authorities. The criticism which can be made of symbolics however is that most astrologers tend to apply *any* symbolic measure to *any* kind of event. But since there is an almost endless variety of symbolic measures to choose from, it follows that the astrologer will always be able to find *some* sort of aspect to go with any event he chooses. This is unsatisfactory.

Every division of the circle has a specific meaning derived from the number by which the division is made, and each symbolic measure, if it is to be used intelligently, should be applied in the field to which it belongs and no other (although there are of course some measures which are more general in their right application and others which are more particular). The study of number symbolism in relation to harmonics will, I believe, help to clarify the right use of symbolic measures and so greatly enhance predictive potential.

The second and somewhat speculative suggestion is this: we have shown in earlier chapters how to calculate a harmonic chart, and though we were chiefly concerned with the lower numbers, the principle applies to the harmonic chart for any number. Now there is a possibility that the harmonic charts in succession may apply to each year of life, i.e., the 2nd harmonic chart to the 2nd year of life, the 3rd to the 3rd year, the 40th to the 40th year and so on. The interesting thing about this suggestion is that it conforms to an acknowledged fact about the unfolding life process. The change from one harmonic chart to the next in the low numbers (that is in the early years of life) is considerable and similarly our development in 1 year of childhood experience is also considerable. Later in life we become progressively more settled in our ways and character and so the change from year to year, say from the 40th to the 41st harmonic chart, is relatively small yet perceptible. A little experiment with this technique has given mixed but promising results. Perhaps the problem lies in identifying more clearly just what we mean by 'unfolding' in this context.

To illustrate how this works: suppose the Ascendant is 20° from Jupiter. Then, since 20° is 1/18 part of a circle, the 18th harmonic chart will show Ascendant conjunct Jupiter. This will occur again in the 36th, the 54th and the 72nd harmonic charts and the theory is, of course, that these years of life will have the appropriate Jupiter conjunct Ascendant flavor. This tendency of similar events and circumstances to recur at ages which are multiples of the age at which they first occurred has often been noticed. This technique of using the successive harmonic charts not only gives a rationale to the idea but also shows how the particular configuration, such as Ascendant conjunct Jupiter in the example given, will fit into the *whole picture* of the rest of the chart for a given recurrence of the aspect. It is usually quite impossible to see this whole picture without using the harmonic chart.

This may prove to be a valuable addition to the predictive branch of astrology. The difficulty is that if we wish to check past years of our life the labor involved in calculating the charts for the appropriate years may be troublesome. However, a simple check on the ages on which major conjunctions will materialize can be made with the help of the "Catalog" in the *Astrologer's Guide to Harmonics*.

Let us suppose that the angle from Ascendant to Jupiter is a rather unpromising one, say $78^{\circ} 16'$, and we want to know at what age, if any, this will occur as a conjunction in a harmonic chart. We can look up $78^{\circ} 16'$ in the catalogue and there we find that it is just $5/23^{\text{rd}}$ s of the circle. Thus we know that Ascendant conjunct Jupiter would appear in the 23^{rd} harmonic chart and again in the 46^{th} . This may sound complicated but a little practice will, as always, show its potentialities. It is worth adding, however, that 2 planets will not always appear as a conjunction in any harmonic chart during one's lifetime. Their relationship must be such that it forms some whole fraction of the circle, the denominator of which is less than or equivalent to a normal life span.

My view is that though this general technique is almost certainly valid it must apply to some rather basic, stable process underlying the life, rather than transient events as such, though these may provide triggers for the deeper process. To give an example, Fig. 73 shows the 60^{th} harmonic chart of President Ford, based on a birth time shortly after 12:41 am on 14 July 1913. The radical positions are given below⁶⁸. Gerald Ford unexpectedly stepped up to the Vice-Presidency of the United States on 13 October 1973 (aged $60 \frac{1}{4}$) at a time when the Presidency was tottering. He became President in the following year. As will be seen, the 60^{th} chart is a striking one and has a number of extremely interesting features. (If a slightly later birth time is taken, Ascendant and MC will move forward sharply in the 60^{th} . By 12:42 am MC would be opposition Sun and Ascendant would be later in Aries. This shows the potential value in rectification of these charts.)

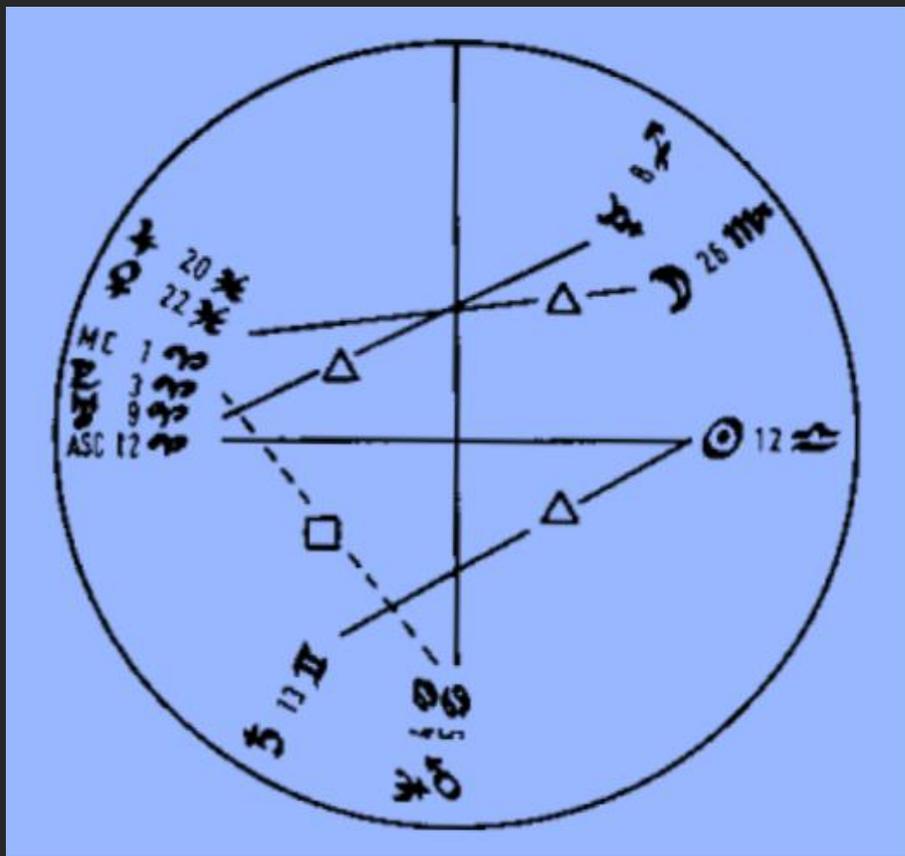


Fig. 73

Positions for the 60^{th} harmonic chart of President Gerald Ford. (Gerald Ford was 60 when he became vice-president of the U.S.A.)

To sum up, we have tried to show that the principle of harmonic fluctuations applies as much to progressed and transiting positions as to radical positions and that the prevailing concepts of

⁶⁸ Gerald Ford zodiacal positions: Ascendant $12^{\circ} 12'$ Taurus, MC $24^{\circ} 1'$ Capricorn, Sun $21^{\circ} 12'$ Cancer, Moon $3^{\circ} 56'$ Sagittarius, Mercury $16^{\circ} 8'$ Leo, Venus $5^{\circ} 52'$ Gemini, Mars $19^{\circ} 35'$ Taurus, Jupiter $11^{\circ} 50'$ Capricorn (Rx), Saturn $13^{\circ} 13'$ Gemini, Uranus $6^{\circ} 9'$ Aquarius (Rx), Neptune $25^{\circ} 34'$ Cancer, Pluto $0^{\circ} 3'$ Cancer.

astrology are, in this respect, ripe for review. It will be objected that if one takes away the preeminent importance of exact progressed aspects (and it is certainly not suggested that these are unimportant) then the whole business of prediction from the natal chart is put into the melting pot. To those who are satisfied with the reliability of present predictive methods this will seem like a good argument. But after many years as an astrologer I have yet to find a man whose chart was rectified to the same Ascendant by any 2 good astrologers, whilst I have known some who have had their charts 'rectified' to a different Ascendant by each of a dozen leading practitioners. The inadequacy of these methods speaks for itself.

PART THREE

PROBLEMS

17. SOME WAVE COMPLEXES

Astrology today has inherited a large body of doctrine from a bygone age. There is no doubt that in general terms the basis of thought upon which this traditional knowledge rests is a sound one, but it is equally certain that in many respects the application of the underlying principles has become confused. In the effort to make the science easily manageable (and this tends to happen in every field), rule-of-thumb methods are laid down, principles are over-simplified and modified, and textbooks which are primarily written to help the beginner to get his bearings become the standard yardsticks of astrological teaching.

The result of all this is that, with the passage of time, the really fundamental principles tend to be lost sight of and the codified system of rules becomes first the main focus of attention and then the subject of dispute. There is not a single department of practical horoscopy - the Zodiac, the houses, aspects, directional methods (to mention only the main topics) - which does not present a host of uncertainties. The fact that many students are scarcely aware that these uncertainties exist only makes things worse. And the trouble, first and last, is that fundamentals are ignored and the efforts of researchers which should go towards the needed clarification of basic principles are directed towards justifying the conventional code of rules.

In earlier chapters of this book we have tried to clarify some of the principles which should govern our understanding of astrological positions in the various circles of relationship with which the astrologer deals. There are however many basic issues which remain obscure, and although we cannot deal with all of these in a textbook which is intended only to be introductory, there are a number which can be mentioned. Some of these refer to the standard issues of dispute in astrology today, for example the problem of the Tropical and Sidereal Zodiacs, and some are more concerned with the pursuit of a clearer understanding of the workings of the principle of harmonics, for example what determines the phasing of the waves shown in our harmonic distributions. We certainly cannot produce all the answers but at least we can attempt to indicate the nature of some of the problems and set the ball rolling towards some of the answers, at any rate to the extent of considering what criteria, or what sorts of criteria, we should be looking for if we are to find solutions.

(It might be kind to indicate at this point that Chapters 17 and 18 contain a good deal of semi-technical material. I hope the reader will tackle them in the end but he may prefer to go on to the later chapters which are of more general interest and return to this part at a second reading).

As a first step towards discussing some of our problems, one of the things which will help us most is a brief consideration of some of the theoretical formations of certain wave complexes or combinations. This may seem a strange starting point for further inquiry but the relevance of the topic to some of our problems will become apparent and in any case the student should know something about this matter.

We have already noticed 1 type of wave complex which we may call the 'kick' effect, when a number of harmonics all come into phase at one point to produce a sudden leap like the heartbeat. The example given was that of the Mars distribution for athletes shown in Fig. 66. We suggested that this effect might occur in the charts of those who were required to make sudden spurts or concentrations of effort.

Another wave complex which will be encountered again and again by anyone who investigates planetary distributions in astrology is the 'beat' effect. When 2 adjacent harmonics, say the 5th and 6th, appear strongly in a distribution pattern, the result is that the 2 series of waves will alternately

coincide with, and then contradict, each other. Thus in Fig. 74 we can see that in the center of the diagram the 2 series of waves are moving in unison, whereas at the edges they are out of step. The result of this is to produce, when the 2 wave series are combined, a 'beat' effect with a strong oscillation in the center when the 2 are reinforcing each other and then a 'dying away' effect where the 2 are *working against* each other. This is the same phenomenon which one hears sometimes with a bell (such as Big Ben on the radio - the bell shape notoriously produces harmonics which are close together), where after the initial stroke of the bell, one can hear reverberations (BOOM ... BOOM ... boom ...) as the sound waves pass into and out of phase with each other.

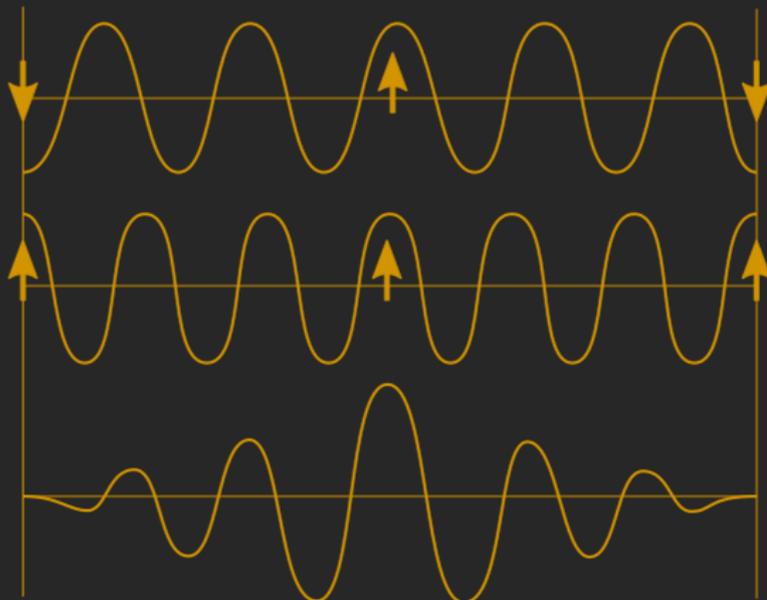


Fig. 74

Notice that if Fig. 74 represents the forces at work in the *whole circle* then there will be *one* place in the circle where the waves are in phase and *one* place (opposite) where they will cancel each other out. If the period represented is a half-circle (180°), so that the 2 harmonics are really the 10th and 12th of the full circle, there will be *two* opposite places in the circle where they are in phase and two, in square to these, where they are out of phase.

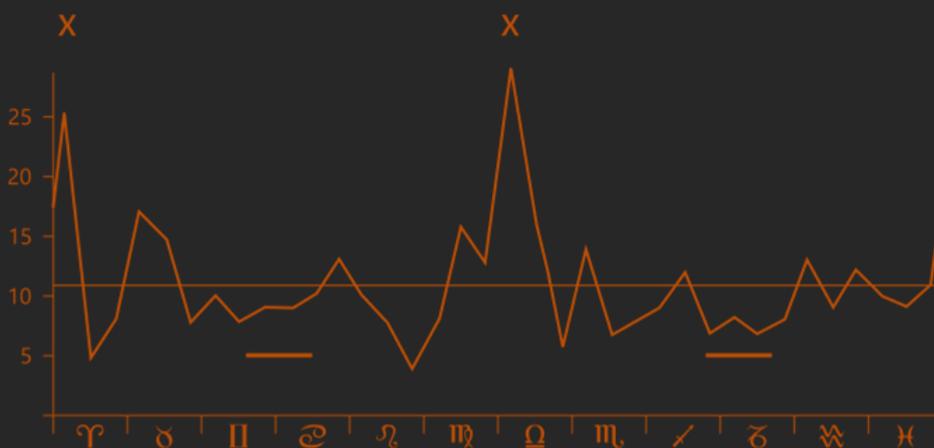


Fig. 75

Distribution of the Sun in the Zodiac by decanates in the charts of 391 delinquent children, showing the "beat" effect of adjacent harmonics in the half-circle.

This is an effect which one often meets, for example Fig. 75 shows the distribution of the Sun in the Zodiac by decanates in the nativities of 391 delinquent children who were brought before the

courts in Australia⁶⁹. Ivan Hyde, who published this data, could find no significant deviation of the solar distributions when he examined the totals for each *sign* of the Zodiac, naturally, since the high score in the first decanates of Aries and Libra were immediately cancelled out by low scores in the 2nd and 3rd decanates. It was not until he examined the solar distribution by smaller sectors that the 2 opposing peaks became apparent. This illustrates well the mistake which some investigators make, of assuming that the signs of the Zodiac are necessarily the significant divisions. Notice the high peaks at the beginning of each half of the Zodiac and the flattening off half way between.

In this example there are 2 opposite places in the circle where the 'beat' effect occurs, so that harmonics involved (adjacent in the half circle) must be 2 places apart in the whole circle. They may in fact be the 10th and 12th as in the previous example shown in Fig. 74. It must be pointed out however that this effect can also arise in a different way (see Fig. 38). Of course, one can get a clearer picture of what is happening by putting the totals for the 2 halves of the Zodiac together.

It may be a coincidence but I have noticed that just as there is something discordant about the note of a bell or 2 adjacent notes on the piano, so this effect seems to appear where there is an element of discord in the subject of the study - in this case delinquents. One is doubtful if this suggestion could be sustained, and yet it seems highly probable that there must be analogies between the characteristics of sound wave complexes and the psychological qualities which correspond to our planetary distribution patterns. Thus some instruments such as the clarinet produce a full, rounded note which is reflected in a rounded sound-wave complex, whereas others such as the 'shrill passionate voice of the violin' produce a rather spikey sound-wave.

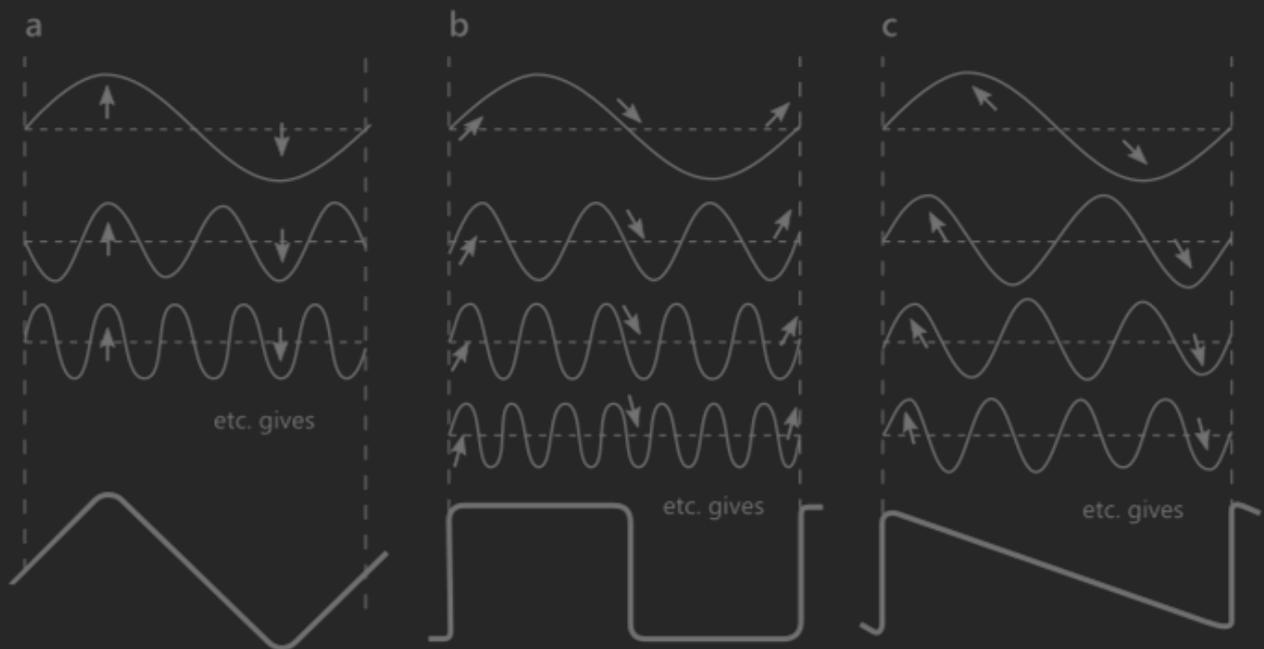


Fig. 76

This 'spikey' zig-zag effect occurs where the fundamental is accompanied by odd numbered sub-harmonics phased so that their peaks and troughs coincide with the original peak and trough of the fundamental. This tends to make the peaks and troughs into sharper and sharper points as more and more odd numbered harmonics are added (Fig. 76a). Where a fundamental and its odd numbered sub-harmonics coincide not at the peaks but at the descending and ascending nodes, one obtains a square, fortified or turreted effect (Fig. 76b). This suggests something stable, defensive or resistant. This effect, which incidentally represents the only situation where one could get a 'box' type Zodiac result with alternate signs high and low and clear sharp changes at the boundaries is one which I have never seen in practice though it exists in theory. Would a collection of 'defensive'

⁶⁹ See *Spica* (magazine of Sidereal Astrology), Jan. 1970 and April 1970.

types (policemen, *goalkeepers*) show this turreted fortification-type distribution pattern? An interesting type of wave complex of which one *can* produce examples is the saw-tooth effect. This occurs where a harmonic and all its sub-harmonics coincide at the ascending node (See Fig. 76c). Notice that if the descending rather than the ascending nodes coincide the saw-tooth will face in the opposite direction.

A good example of the saw-tooth in modified form is to be found in one of Gauquelin's experiments. This was one of the experiments he conducted to show the association between certain characteristic distributions of particular planets and specific psychological types. (Full details can be obtained from the appropriate text⁷⁰.) In relation to his collection of the nativities of successful scientists he inquired what psychological attributes were considered to be characteristic of the typical scientist. This he did, first by examining a number of studies of the scientific temperament made by psychologists, second by asking a section of the educated public to list the words they would use to describe the scientific type, and third by using a dictionary of synonyms to enlarge the derived lists of character traits. He then made use of a dictionary of antonyms to list the character traits which were *opposite* to those that allegedly describe the typical scientist. Thus he obtained 2 lists of descriptive words, one deemed to be characteristic of the typical scientific, one descriptive of the opposite, temperament.

He then went through the biographical notices which described individual scientists in his collection. Each time one of his character-trait words was used of one of the scientists, the position of each of the planets for that person counted once. Gauquelin thus obtained 2 sets of planetary positions for each planet, one which correlated with the words descriptive of the typical scientist, one set which correlated with the opposite characteristics.

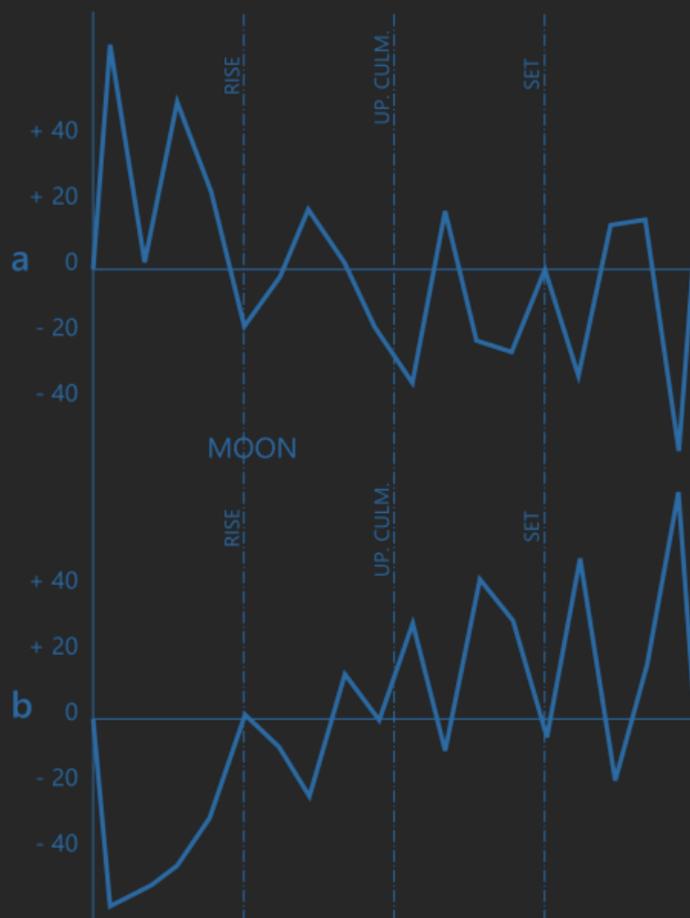


Fig. 77

⁷⁰ Gauquelin, Michel and Françoise, *Birth and Planetary Data Gathered Since 1949, Series C, Vol. 3, The Saturn Temperament & Men of Science*, see Chapter 4, Note 2 for full details.

As it happens Gauquelin was chiefly interested in the position of Saturn, but he provides the diurnal distribution in 18 sectors for other planets, too. Fig. 77a, then, gives the distribution of the Moon for the characteristics listed as those of the typical scientist; 77b gives the lunar distribution for the characteristics *opposite* to those of the typical scientist. Here we can see the basic ingredients of the saw-toothed effect, with a very steep rise (77a) between the extreme 'low' in the last 20° before the IC and the extreme 'high' in the 20° just after the IC. This must be produced, as in Fig. 76c, by the coincidence of the ascending nodes of a number of harmonics *at the IC*. The opposite result is yielded by the opposite character traits (77b) and this must be produced by the coincidence of descending nodes at the IC.

If we are to extend, somewhat shakily, our analogy between wave shapes and personality types we should have to say, perhaps, that the scientific mind should be incisive and that hence the saw-tooth has some aptness. However the scientist ought presumably to be using a scalpel rather than a saw so perhaps the analogy breaks down!

Notice that the peak positions for the Moon in relation to the scientific temperament is in the 3rd house, and this conforms to traditional ideas. Of greater interest, however, is the fact that the peak actually comes *just after the IC*, that is to say at the 'back' of the 3rd house, the region near the *cusp* having only an average score. This confirms what we have been saying throughout this book: so many of the arguments in present-day astrology (in this case, whether the strongest point of a house is in the center or near the cusp) are simply being carried on *in out-worn and irrelevant terms which do not speak the language of astrological reality and can never produce clear answers*.

Of course it is fully acknowledged that whoever wishes to practice astrology *must* adopt a code of manageable rules, and therefore the existing rule book must be used until a better one can be devised. This does not justify the objections, however, of those who say that investigations of astrological laws through the study of large collections of data are of no use because they are not immediately applicable to the individual chart. The object of such studies is to enable us to clarify astrological principles so that a manageable code of precepts *which is nearer to the truth* can be formulated for the guidance of those who interpret the birth chart.

We have already shown in earlier chapters that this new understanding of how astrology works, from the practical viewpoint, *is* emerging and is already providing new insights, for example into the interpretative value of aspects. But even where it is not yet possible to reduce the observed astrological effects to coherent laws, nevertheless the empirical study of the effects helps to give the astrologer a sense of *what kind* of laws he is dealing with and so inculcate a better feeling for the subject.

All the same, the inductive method based upon observation and experiment can never *by itself* lead to final solutions. There should always be an interplay between such methods and the deductive or philosophical approach, so that observed effects are related to first principles and such principles used again as guides to the understanding of the more phenomenal side of our science. In the last resort it is ideal philosophy and the vision of spiritual laws which will give a secure foundation to our knowledge of all the outworkings of astrological effects. The writings of the German mystic, Jacob Boehme, are said to have been a direct inspiration to scientists as diverse as Samuel Hahnemann in his formulation of the laws of Homoeopathy and Isaac Newton in his intuition of the law of gravity. It is only in the light of universal spiritual laws that the details of astrological science can be perfectly formulated. Although so much of this book has evidently been concerned with conclusions based upon observational methods, this is because present circumstances call for such an approach. Only in this way can the real nature of the effects which the astrologer studies be more distinctly seen and so more intelligently and securely related to their originating principles.

18. WHAT DETERMINES PHASE?

If we are to reduce our observations of wave distribution patterns to coherent and manageable laws we must try to draw some general conclusions about the principles by which astrological effects are related to planetary positions. Some of these are self-evident. The *amplitude* of the observed harmonics is, as we said at the outset, related to the *intensity* of the effects studied. Gauquelin has himself demonstrated this to be true. In studying the distribution of Mars in the nativities of sports champions he found certain parts of the diurnal circle which were more frequently occupied by Mars, and we have shown that this is because the distribution of Mars was dominated by certain harmonics. But when he took not merely *any* successful sportsmen *but only those of supreme achievement*, he found that the parts of the circle where the peak distribution occurred were *even more frequently* tenanted by Mars and, similarly, the places in the circle which were avoided by Mars in the generality of sportsmen were even more frequently avoided in the charts of the greatest sports champions.

This is simply another way of saying that the amplitude of the harmonics of Mars' distribution was more vigorous in the supreme athletes and this, again, is simply another way of saying that Mars was even more strongly attracted to certain points in the circle and away from other points. This is straight-forward enough and merely confirms the general principle of harmonic divisions of the circle.

But the great problem is: *What determines the phase?* How are we to decide at what points in the circle the maximum effect occurs in any particular case? Of course we can continue to collect large quantities of data and make our harmonic analyses of the planetary distributions, but we cannot do this forever and for every particular instance. The collections are laboriously made in order that by studying them we can arrive at *general principles* which will allow us to make astrological interpretations about planetary positions, even those which have never been examined in quantity. Ultimately we shall, without doubt, succeed in arriving at these principles; at present the question of phase remains unsettled however and some discussion of it is called for.

We are always dealing with the relationship between 2 points. In the diurnal circle we are considering the relationship of a planet to the horizon or to the meridian (in practice the Ascendant or MC). We ask: Where in relation to the Ascendant does the peak distribution of a planet occur in each harmonic? In the zodiacal circle we ask similarly: Where does the peak distribution occur in each harmonic in relation to 0° Aries - the point of intersection of the ecliptic and celestial equator? (The Siderealists consider that the correct point of reference is elsewhere, but we will consider this later.) In considering aspects in terms of harmonics we ask: Where does the peak distribution of one planet occur in relation to another planet? In the case of the diurnal and zodiacal circles we cannot be absolutely sure that we are correct in taking the Ascendant and 0° Aries as our measuring points, we only assume we are correct. In the case of one planet in relation to another no question arises about the positions of the 2 points involved (unless by any chance we should be using heliocentric co-ordinates).

In considering what determines the phasing of the peak distribution there are 2 likely hypotheses. The first may be thought of as attributing to the *aspected* point, whether the planet or some other point, a sort of *projective* power. Thus in Fig. 78, if we regard the circle as representing the 360° of *any* harmonic (not necessarily that of the 1st harmonic only), then if the phase is given as 240°, we are saying that the aspected point or planet symbolically projects as it were a maximum effect to a point 2/3 of the way around the circle, and that *that* is the point at which the moving planet, as it passes around the circle, will produce the strongest effect in relation to a particular quality.

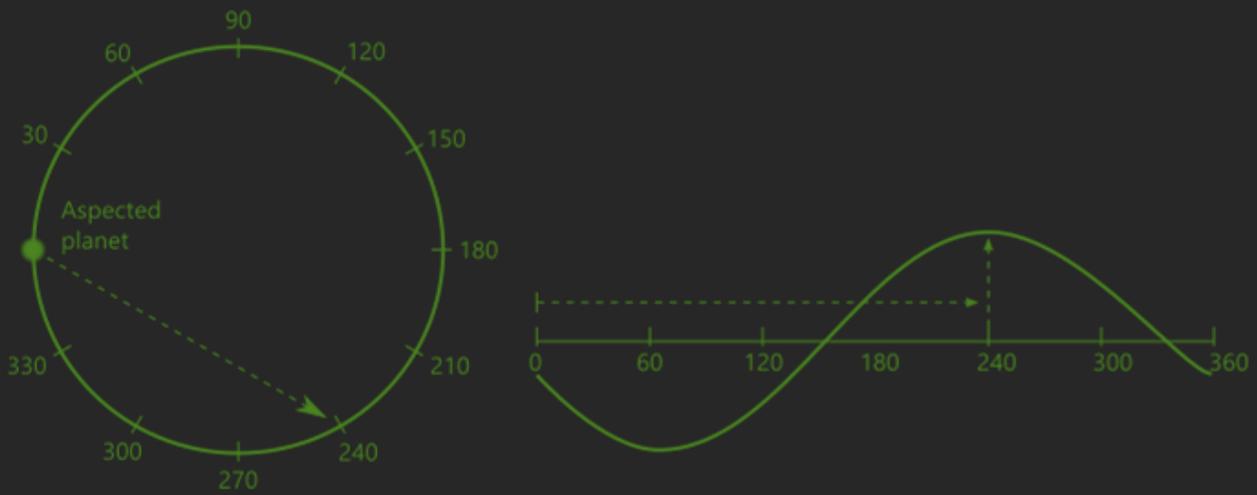


Fig. 78

The second hypothesis is, on the face of it, more in conformity with the philosophy of harmonics. It states that the *conjunction* of the moving planet with the aspected point is always what counts, and that it is always at the conjunction, say, of one planet to another, or a planet with the Ascendant, that the maximum effect, positive or negative, occurs. This is another way of saying that the phase angle of any harmonic in any significant relationship between 2 factors always tends to be 0° or 180°. Either planet A in conjunction with planet B (or with the Ascendant, etc.) is *positive* (0° phase) and *promotes* a certain quality, or else A with B is *negative* (180° phase) and *militates against* a certain quality (see Fig. 79). For example, Mars in conjunction with the Ascendant may promote the quality of aggressiveness: this would be associated with a Mars/Ascendant harmonic with a phase of 0°. But Mars conjunct Ascendant might militate against the quality of forbearance; thus the phase will be 180° in relation to that characteristic.

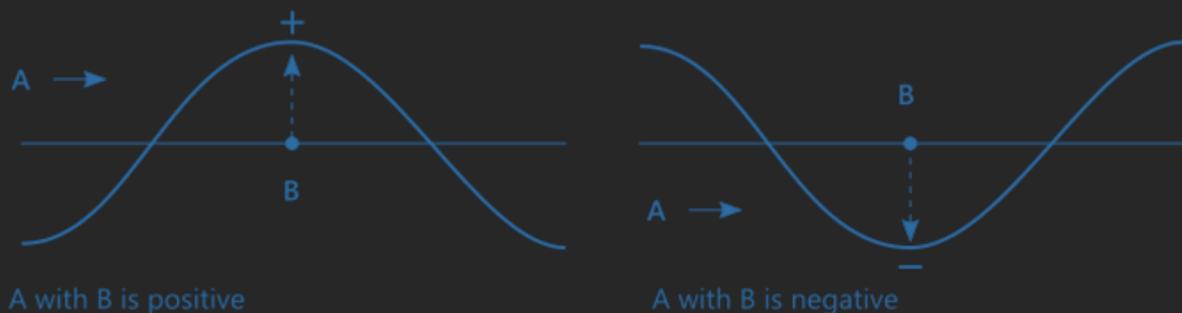


Fig. 79

There is something very attractive, from the philosophical viewpoint, about this hypothesis; it reduces things to a bare simplicity which is in conformity with many other scientific and philosophical ideas. It involves a simple contrast between positive and negative, being and non-being. The *I Ching* is built up on this contrast between polarities of Yin and Yang, and the 64 hexagrams simply represent the 2 alternatives raised to the power of 6⁷¹.

2 objections to this hypothesis immediately present themselves. First, even allowing for the undoubted fact that the phase angles observed in empirical studies can only be approximations, nevertheless we have evidently found cases where harmonics are phased at 90° or 270°, i.e., with the peak intensity before the exact aspect and the trough afterwards (or vice versa) with the exact conjunction representing the node. Secondly we have Gauquelin's results to consider where the characteristic peaks come after the Ascendant and MC, i.e. in the astrologers' 12th and 9th houses.

⁷¹ For discussion of this idea, see Graham, Charles M., *The Concept of Cycle in Contemporary Science, Astrology and I Ching*, Green Bay, Wi.: Cambridge Circle, 1976.

This again suggests that the Ascendant and MC play a nodal role, or at least that the peak does not coincide with the 'angle' of the chart.

In this connection we must remember that, with all odd-numbered harmonics, if the peak reaches the exact positive or negative phase at say, the Ascendant then the points in square (i.e. the MC and IC if we are prepared to speak in terms of mundane squares), will be occupied by a node. Similarly, in zodiacal terms, any odd-numbered harmonic which peaks at 0° Aries will have a node at 0° Cancer-Capricorn. But this would not account for Gauquelin's peaks in both the 12th and 9th houses. We are left to conclude either that our second hypothesis, where the conjunction of 2 factors always represents the positive or negative phase, cannot be sustained, or that Gauquelin's division of the mundane circle is in some way misconceived, incorporating as it does both MC and Ascendant in 1 circle of reference though they are seldom in exact longitudinal square. There are certain things about Gauquelin's results which make one believe that his use, in effect, of the circle of oblique ascension (where MC and Ascendant are 90° apart, i.e. in mundane square) must be tight, but there are other features of these results which raise misgivings about his divisions of the diurnal circle. This is something which has yet to be explored.

There is also the idea to be considered that the most significant astrological point in the East may not be the Ascendant but another point. We accept the significance of the point on the ecliptic which is cut by the meridian running North-South and passing through the Zenith of the observer and the North and South Poles. Why should we not look for equal importance to the points on the ecliptic cut by the Prime Vertical, the corresponding meridian which runs East-West through the observer's Zenith (and which therefore yields the ecliptic points which are due East and due West – the so-called Anti-Vertex and Vertex), or the ecliptic points cut by the East-West meridian which runs from the eastern and western points of the horizon but passes through the North and South Poles? These again are matters which have been partially explored in astrology but have not been related to diurnal harmonics.

Let us see what happens if we examine Gauquelin's results carefully in the light of our second hypothesis. *Is it or is it not true that the important harmonics yielded by Gauquelin's researches tend to be phased either at 0° or 180° relative to, say, the Ascendant?* In other words does the Ascendant mark *either the peak or the trough* in Gauquelin's outstanding harmonics.

We must remind the reader again (it has already been pointed out but perhaps not sufficiently emphasized) that "Ascendant" in this context means the planet's own point of rising. This often differs from the Ascendant as such, but throughout this chapter "Ascendant" means the planet's own point of rising.

That Gauquelin's results are highly significant, are becoming more significant as he proceeds and will one day be recognized as such by the scientific world, all this is beyond doubt. That they will eventually be seen to rest upon the general theory of harmonics is also, in our view, beyond doubt. So let us see what we can make of them in relation to our hypothesis about phasing. It is sometimes better to stick to a good hypothesis which does not quite appear to fit the observed facts than to abandon it in favor of 'facts' which may prove to be distorted by misconceived observational methods.

THE EXPERIMENT

1. *Material.* Our material consists of the Astrological Association's harmonic analysis of all Gauquelin's planetary distributions by 36 sections in the diurnal circle⁷², that is to say of Moon, Venus, Mars, Jupiter and Saturn positions for 2088 sports champions, 2552 physicians, 1095

⁷² See Chapter 4, Note 6.

scientists, 3046 military men, 1473 painters, 1409 actors and 1352 writers⁷³. The smaller collections of politicians and musicians are omitted for reasons stated below.

Each of these collections consists of 2 groups: 1) nativities collected in France and 2) nativities collected in other countries (Germany, Belgium, Holland and Italy). The object of our exercise is first to ask which of the harmonics revealed by the harmonic analysis of these planetary distributions are of outstanding significance, and then to see where their phase angles lie in relation to the (planet's) Ascendant.

2. *The Estimate of Significant Harmonics.* The science of calculating the significance of particular harmonics in analyses of this sort is a branch of mathematics which has received relatively little attention, although a number of writers have tackled the problem. I have provided an appendix dealing with some of the problems of harmonic analysis and for those interested, this chapter should be read in conjunction with that appendix.

First we must notice that the amplitudes given in harmonic analyses will vary with the size of the sample analyzed. The larger the number of cases in one's sample and the higher the sector totals the more stable and reliable will be the result and the less erratic will be the amplitudes yielded. The smaller the sample, the higher and more erratic will the amplitudes tend to be. It is for this reason that politicians and musicians are omitted from this test, in each case one of the 2 groups was too small a sample.

I do not know of any formula which gives the precise relationship between *sample size* and *expected mean amplitude*, although I am told that this is proportional to the square root of the sample size. However, it is possible to determine an approximate expected mean amplitude by taking such harmonic analyses as we have and calculating the mean amplitudes in those. Thus Fig. 80 shows the actual mean amplitude in 13 sets of harmonic analyses of various results. The small crosses represent mean amplitudes of Gauquelin's results, each one being the mean of 85 amplitudes. The 3 heavier crosses are from analyses of solar positions in the nativities of 710 judges of the high court, 1974 British clergy and 7302 doctors of medicine, each of these being the mean amplitude of 179 harmonics.

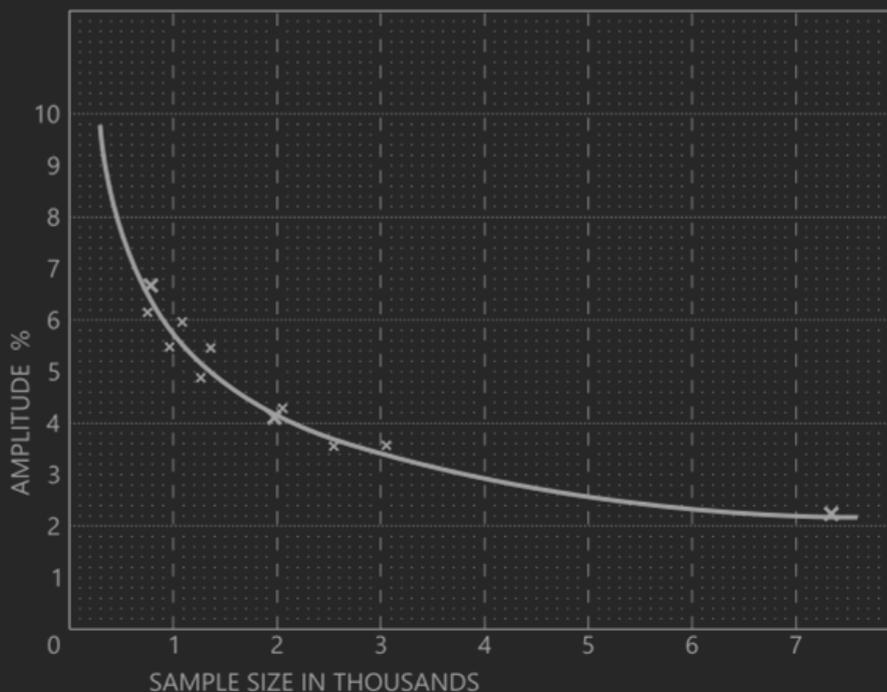


Fig. 80

⁷³ Gauquelin, Michel and Françoise, *Birth and Planetary Data Gathered Since 1949*, Series C, Vol. 1. See Chapter 4, Note 2 for full details.

Insofar as it must be assumed that some of the harmonics involved have significantly high amplitudes due to their astrological connotation, an empirically obtained graph such as this should yield a curve which gives somewhat too high a mean amplitude. However, because the significant harmonics may be relatively few among a large number of others the result may be taken as a fair practical guide. At any rate it will not be too low.

In order that the reader can see exactly what is involved, let us give the harmonic analysis of the distribution of Mars in Gauquelin's 3046 military men:

Mars — Military Men (3046}

Harmonic	French (1035)		Other Countries (2011)		Combined	
	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase
2	6.9	216	4.5	259	4.0	240
3	7.5	6	0.6	260	2.3	357
4	13.3	52	10.5	53	11.5	52
5	7.9	242	0.8	263	3.2	246
6	4.9	3	3.5	44	3.7	27
7	4.9	24	2.1	234	0.8	230
8	10.0	106	5.2	284	0.2	202
9	7.5	194	9.0	146	7.9	160
10	4.9	249	5.6	223	5.2	231
11	12.3	297	3.7	7	5.5	317
12	3.9	343	5.7	334	5.1	336
13	3.6	190	1.2	120	1.7	165
14	1.5	296	2.8	137	1.3	145
15	4.8	80	6.0	43	5.5	61
16	4.5	5	6.1	157	2.8	142
17	4.5	102	7.0	151	5.7	140
18	2.9	90	3.5	270	1.3	270

We have 3 sets, 'French', 'Other Countries' and 'Combined'. It has been customary to omit the 1st harmonic from these results because, in some, astronomical factors are liable to give an artificially high result. If we total the amplitudes for the other 17 harmonics for the combined sets and find the mean, the result is 4.0. Comparing this with our graph (Fig. 80) we find that the *expected* mean amplitude for a sample size of 3046 is almost 3.4. Thus our mean for this set is higher than expected; this is not surprising since we have chosen a factor (Mars - military men) which one would expect to contain some significantly strong harmonics.

Having now provided ourselves with some means of assessing what the *expected* mean amplitude will be for a given sample size, we can ask what criterion we must adopt for singling out those harmonics which are significant. In doing this we are obviously looking for those harmonics which are not only strong in terms of amplitude but also those that are *consistent in phasing* as between the nativities collected in France and those collected in other countries.

For example, in the table showing the harmonics for Mars in the maps of military men given above we can see not only that the 4th harmonic is very strong for both 'French' and 'Other Countries' but also the phase agreement is close as between the 2 sets. It is because the 2 sets have this close agreement in phasing that the 'Combined' amplitude is strong, for no matter how strong the amplitudes of the 2 sets are separately, if the phase agreement is wide then they would tend to cancel each other out.

After considering our position, the following admittedly arbitrary criteria have been adopted for the choice of harmonics to be considered as significant:

1. The observed amplitude must be 50 % above the expected mean for the sample size *for each set separately*.

2. The amplitude must be 100 % above that expected for the *combined* total of the 2 sets together.

3. The phase angle of the 2 sets must be within 30°.

Thus, to pursue our example of Mars - military men, the [branch?] set consists of 1035 cases and the expected amplitude for this size of sample (see graph) is 5.7; the amplitude obtained for the 4th harmonic, 13.3, is over 50 % above that expected. The Other Countries set consists of 2011 cases - expected amplitude 4.1; again the 4th harmonic (amplitude: 10.5) qualifies. For the Combined cases (3046) the expected amplitude is 3.4, so the observed amplitude (11.5) which must be double this, easily qualifies. Finally, the phase angles, 52° for the French and 53° for Other Countries, fall within 30° of each other. Thus, by the criteria we have adopted the 4th harmonic for Mars in military men qualifies as significant. As can be seen it is the only one in this set which does qualify.

Before setting out the list of harmonics found to be significant there is one other qualification we must make. As already mentioned, investigations of the reliability of harmonic analysis by researchers of the Astrological Association have shown that the standard methods of Fourier analysis only yield reasonably reliable results up to that harmonic which is 1/6th of the sector-totals used for the analysis (see appendix). Gauquelin gives 36 sector-totals so we can only depend upon the reasonably close accuracy of the amplitude and phase given for the harmonics up to and including the 6th. Since we omit the 1st harmonic for astronomical reasons we shall only have regard to the harmonics from the 2nd to the 6th, inclusive.

3. *Harmonics Found to Be Significant.* On the basis of the criteria given above the following is a list of harmonics found to be significant. Notice that against the combined phase angle there is a second figure given in brackets. This represents the phase angle measured from a different point and will be explained presently.

			FRENCH		OTHER COUNTRIES		COMBINED	
	Expected Amplitude	Harmonic	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase
<i>Military Men</i>								
1035 French	5.7							
2011 O.C.	4.1	Mars 4 th	13.3	52	10.5	53	11.5	52 (16)
3046 Comb.	3.4							
<i>Sports Champions</i>								
1094 French	5.6	Mars 3 rd	15.1	20	10.0	356	12.4	11 (344)
994 O.C.	5.8	Venus 5 th	8.8	183	10.2	162	9.3	172 (127)
2088 Comb.	4.1							
<i>Physicians</i>								
1321 French	5.0							
1231 O.C.	5.2	Saturn 4 th	8.9	35	10.3	52	9.3	49 (13)
2552 Comb.	3.7							
<i>Scientists</i>								
381 French	8.4							
714 O.C.	6.5	Jupiter 3 rd	13.4	221	12.9	195	12.8	205 (178)
1095 Comb.	5.6							

	Expected Amplitude	Harmonic	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase
<i>Painters</i>								
1133 French	5.4	Saturn 4 th	16.3	253	16.5	244	16.3	251 (215)
340 O.C.	8.7							
1473 Comb.	4.8							
<i>Actors</i>								
783 French	6.5	Jupiter 4 th	15.4	46	10.4	46	13.0	46 (10)
626 O.C.	7.0							
1409 Comb.	4.9							
<i>Writers</i>								
813 French	6.4	Saturn 4 th	11.7	200	11.7	229	11.3	211 (176)
539 O.C.	7.5							
1352 Comb.	5.0							

In this list we have 8 harmonics which are evidently significant. Without a doubt our qualifying mark for what constitutes significance is a very stiff one indeed, and it has certainly demanded the exclusion of a number of harmonics which one can feel confident are in fact significant. Some of these are listed below.

In order to give some substance to our qualifying standard it should be said that Colin Bishop of the Astrological Association generated 4 sets of 36 random totals on a strictly comparable basis to Gauquelin's results. Each of these was subjected to harmonic analysis exactly as in the table (Mars - military men) above. This gave 72 harmonic amplitudes and phase angles (18 harmonics x 4 sets) based on random data. As these results had no reference to observations in the diurnal circle it was legitimate to compare *each* harmonic amplitude and phase *with every other*, yielding 2556 pairs of harmonics for comparison $(72 \times 71) \div 2$. Although these harmonic analyses looked superficially very like Gauquelin's results, only 7 pairs of harmonics out of 2556 pairs reached our qualifying standard of significance, or *1 pair in 365*. From Gauquelin's results we have obtained 8 significant pairs out of 175, or *1 pair in 22*.

As the above 8 significant harmonics do not provide us with the abundance of evidence which we should like, it is worth listing the main harmonics which did not qualify but missed either because the amplitude for 1 of the 2 sets separately was not quite high enough, or because the phase agreement was not quite close enough. Here are the 'near misses', 11 in number, in which one can feel some confidence:

		French		O.C.		Combined	
Military Men	Jupiter 4 th	17.9	69	8.6	18	10.6	44 (8)
Sports Champions	Mars 4 th	17.4	58	9.3	115	12.1	76 (40)
Physicians	Mars 3 rd	6.9	16	9.5	8	8.1	11 (344)
	Mars 4 th	11.7	45	5.3	19	8.4	38 (2)
	Saturn 3 rd	9.3	3	6.0	358	7.7	1 (334)
Scientists	Venus 5 th	11.6	181	11.6	185	11.6	183 (137)
	Moon 3 rd	14.0	144	7.9	177	9.7	161 (134)
	Saturn 4 th	6.0	54	21.2	46	15.9	47 (11)
Writers	Moon 4 th	8.8	40	14.0	77	10.3	59 (23)
	Mars 6 th	9.8	71	10.6	95	9.9	81 (27)
	Venus 4 th	16.4	55	4.3	32	11.5	52 (16)

4. *Phasing of the Significant Harmonics.* We now come to consider where the phase angles of these outstandingly strong harmonics lie.

It occasionally happens in scientific work that some kind of mistake or accident leads to the discovery of something which might otherwise remain unnoticed and this is what happened in this case. Due to a misunderstanding of instructions the phase-angles were originally calculated so that they were measured from the *center* of Gauquelin's Sector One (i.e., the 1st 10° above the Ascendant) instead of from the Ascendant. In other words they were measured from a point 5° above the Ascendant.

When these were examined there was indeed a tendency for the phase-angles to fall into 2 groups, those phased roughly towards phase 0° and those phase roughly towards 180°, although they were rather to one side of these points. When the mistake in measuring was discovered and put right the phase-angles, instead of moving nearer to 0° or 180°, moved in the opposite direction. This led me to ask *from what point it was necessary to measure the phase-angles so that they were phased at 0° or 180°.*

A little experimenting revealed that the point needed was some distance above the Ascendant, say between 8° and 10°. Therefore, in the foregoing lists of outstanding harmonics I have listed, against the 'Combined' phase-angle, what the phase would be if measured from a point 9° above the Ascendant. Fig. 81 shows, on the left, how the phase angles fall when they are measured from the Ascendant, and on the right how they fall when measured from a point 9° above the Ascendant.

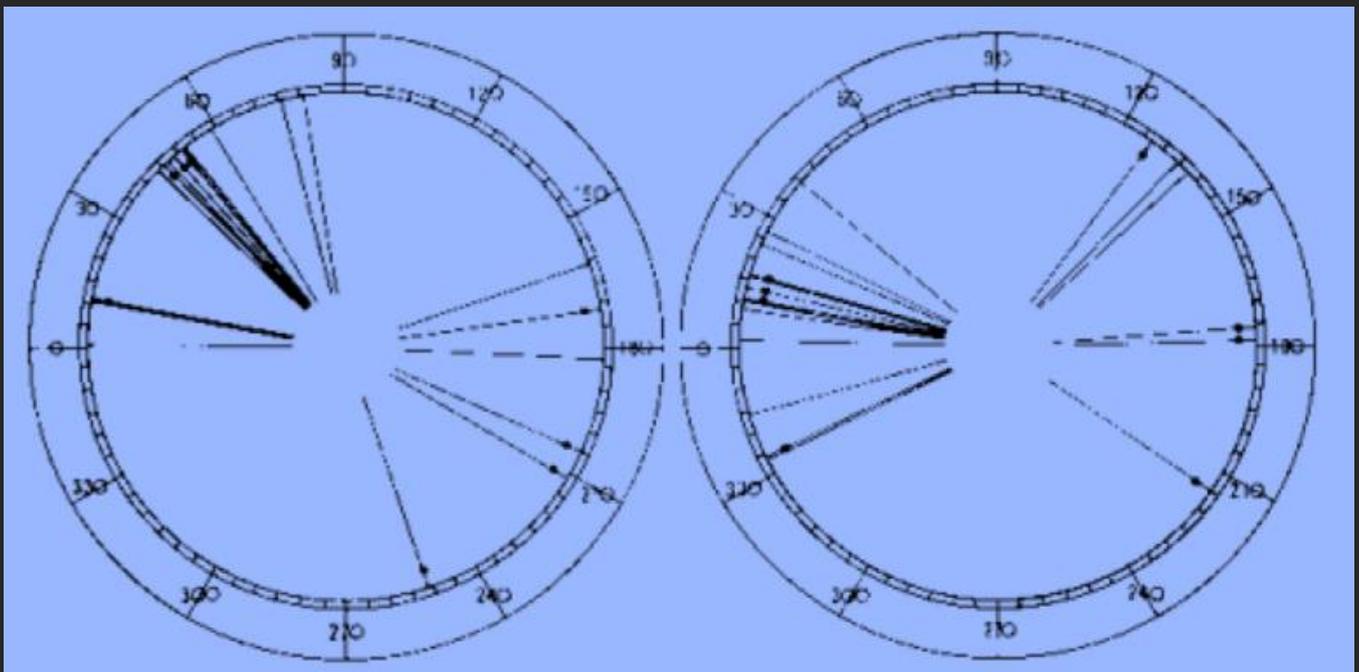


Fig. 81

Phase angles measured from the Ascendant (left) and from a point 9° above the Ascendant (right) showing the tendency for the strongest harmonics in Gauquelin's results to be phased at 0° or 180° in the latter case. (The 8 most significant harmonics are marked with a dot.)

First, let us be clear what this diagram shows. The lines on the left-hand circle do *not* show how far the planet was above the horizon, but how far along the particular harmonic it had travelled, treating the whole circle as the length of that harmonic. In other words the 360° of the circle represents the 360° of each and every harmonic.

For example the 4th harmonic of Jupiter in military men has a phase of 44° when measured from the Ascendant, but of 8° when measured from a point 9° above the Ascendant. (See Fig. 82.)

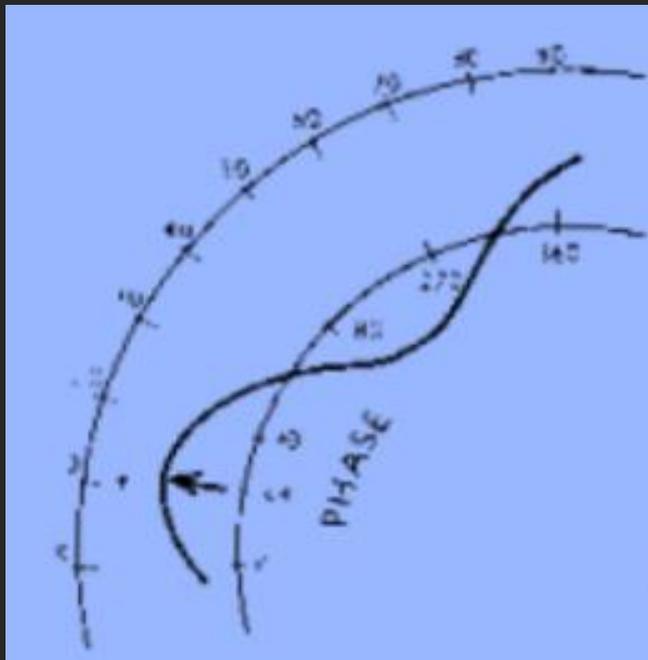


Fig. 82

Now in both parts of Fig. 81 we can see that the phase-angles for our significant harmonics spray out in *opposite directions*, but it is at a point approximately 9° above the Ascendant that they tend to be phased at 0° or 180°. What is the significance of this extraordinary finding? There seem to be 3 possible explanations:

1. Gauquelin's way of treating mundane positions in oblique ascension has produced some unexplained distortion in the result. On the face of it this does not seem likely but it remains a possibility.

2. The significant point we should be taking note of is not the Ascendant but some other point which lies near the Ascendant.

3. Perhaps the most likely explanation is the simplest one and it has the advantage of putting the blame for everything on a well-known scapegoat: father! In European countries the responsibility for registering the birth within so many days rests with the parents, thus it normally falls to the lot of the father. In other words the time of birth *as registered* tends to be significantly late! 9° is equivalent to about 36 minutes of time and this seems rather a lot but our point may be a little less than 9°, bringing the time lag nearer to half an hour.

It is certainly a common observation among astrologers that the reported time of birth tends if anything to be a little *after* the true time. We must remember that most of these births took place long before the days when fathers were allowed into the delivery room and so they were dependent upon a report which might reach them after some delay. Being male chauvinists they would naturally not appreciate the reason for any delay.

If we can judge strictly by our 19 strongest harmonics listed above we can also give the different groups of fathers a reliability rating. The fathers of future scientists performed best being about 10-15 minutes late. The fathers of future physicians came next, about 20 minutes late; sport champions 25 minutes; actors, military men and writers about $\frac{3}{4}$ of an hour, and the fathers of painters just over 1 hour. This may be a misleading assessment, based as it is on a few harmonics, but no one to our knowledge has made a scientific study of the degree of impairment to the faculties of men who have just heard that they have become fathers or of the mental process by which fathers decide on the time to be registered.

A very interesting and informative article by Françoise Gauquelin in the *Journal of Interdisciplinary Cycle Research*⁷⁴ presents a study made from her wide experience of the evidence as to the reliability of registered birth times. She implies that the professional classes tend to be more accurate with their information than the lower orders, that birth times registered in this century are considerably more accurate than in the last and becoming steadily more so, and that the Germans tend to be more accurate than the South Europeans⁷⁵. It would be interesting to know if the German nativities in Gauquelin's collections showed harmonics phased closer to the Ascendant than in France and Italy. The relatively good showing of sports champions may be due to the fact that they are the latest generation to appear in Gauquelin's results and therefore benefit from the improved accuracy of registration in the 20th century.

To sum up, Fig. 81, showing the phasing of Gauquelin's strongest planetary positions, leaves little doubt that the phase-angles tend to fall into 2 opposing groups. This lends some support to the idea that it is the *conjunction* of 2 factors, in this case the planet and its Ascendant, which marks, in any harmonic, the point of strongest 'influence', positive or negative. This tends to give phase-angles of 0° or 180°. If this is true and it is the Ascendant which is the significant point in this context, then Gauquelin's recorded birth times tend to be late by about half an hour and the much discussed strength of the 12th and 9th houses in Gauquelin's results becomes suspect. In any case the peak of this effect, as observed, does not lie in the middle of the 12th and 9th houses but between 7° and 11° past the angle. In order to see the sort of thing that happens when the phasing slips in this way one has only to look at Fig. 24 where the positive phase of the 4th and the negative phase of the 12th, which coincide, have got into the 12th house and raised the score there to a very considerable degree.

Finally, we must make it clear what is implicit when we speak of harmonics being positively and negatively phased. The 3rd harmonic of Jupiter for example is negatively phased at the Ascendant for scientists (Fig. 83a). Since Jupiter 3rd represents the idea of *exuberant enjoyment* this suggests that this characteristic is not commonly found in the temperament of the scientist; compare, for example, the annual dinner of a rugby football club, a Jupiter 3rd event, with the annual dinner of a scientific society, a more staid occasion. But the 3rd harmonic of Mars is positively phased at the Ascendant for sportsmen (Fig. 83b) and this suggests that the enjoyment of competition and the exercise of strength *is* a characteristic of these people.

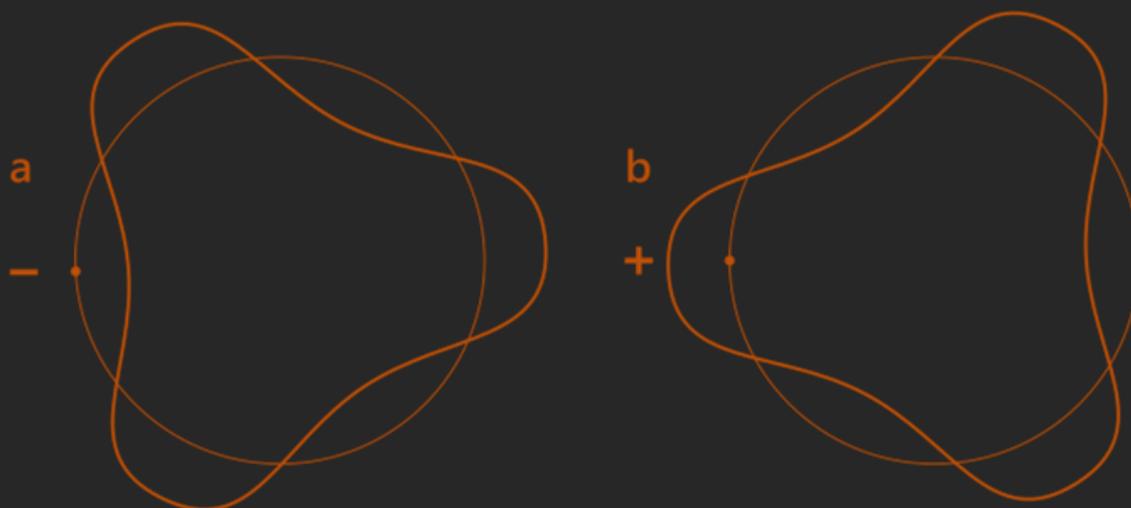


Fig. 83

⁷⁴ Gauquelin, Françoise, "Terrestrial Modulations of the Daily Cycle of Birth", see Chapter 4, Note 4.

⁷⁵ A quick check on 500 cases from each country shows over 80 % of French births to be registered on the hour but less than 50 % of German births. Over ¼ of German births are registered at quarter to or quarter past the hour, suggesting a real attempt at accuracy.

In brief, then, there is evidence that the conjunction of 2 factors tends to produce the strongest effect, positive or negative, in any harmonic relationship. We cannot regard this as conclusive however, and the possibility that there may be a symbolic basis for phasing at any point in the cycle of a harmonic remains. If this is so then we may evidently expect the 4 'cardinal' phase-angles, 0°, 90°, 180°, and 270°, to take some precedence in potency. One piece of evidence in particular must not be overlooked; this concerns the phasing of the lunar harmonics in Gauquelin's test on the scientific character-trait words, described in the last chapter (Fig. 77). This shows the coincidence of ascending and descending nodes *at the IC*, which alone leads us to include 90 and 270 as important symbolic phase-angles.

19. TROPICAL OR SIDEREAL?

One of the great controversies of the astrological scene in the past 50 years has been between the Tropicalists and Siderealists. The former contend that the Zodiac begins at the Vernal Point (the intersection of ecliptic and celestial equator) and moves with the precession of the equinoxes. As opposed to this, the Siderealists contend that Ptolemy (or someone) made a disastrous mistake in ever taking note, for astrological purposes, of precession and that the true Zodiac reposes in unchanging splendor in the circle of the constellations, providing the only true basis for astrological interpretation.

Cyril Fagan, undoubtedly a very knowledgeable and perceptive exponent of astrological lore, was the great champion of the Sidereal Zodiac. He sought to demonstrate that this was the Zodiac used in the astrologically enlightened periods of antiquity⁷⁶. Fagan was supported by Donald Bradley, the brilliant American researcher, who sought to justify the Sidereal Zodiac through statistical studies⁷⁷, the scholar Rupert Gleadow, who fought the battle on the interpretive front⁷⁸, Brig. R. C. Firebrace, who edited the Sidereal magazine *Spica* for many years, and others. Fagan, Bradley, Gleadow and Firebrace all died during 1973-74.

In the West the great majority of students use the Tropical Zodiac but in the East the Sidereal Zodiac is still the accepted yardstick. Those who have read this book so far may feel that too much has been expected of the signs of the Zodiac and that this 12-fold division has been given undue prominence in comparison to other divisions.

Perhaps the most telling indication that something, somewhere, is wrong, is the very fact that this controversy about the 'right' Zodiac can exist at all. I summed up the position in 1968 as follows, when reviewing Rupert Gleadow's book *Your Character in the Zodiac* in which he gives his interpretations, in terms of character, of the signs of the Sidereal Zodiac:

"The traditional tropical view of the signs is that each sign provides, in most respects, a striking and distinct contrast to those adjacent to it. In the interpretation under review, (i.e. Gleadow's) these distinctions may be muted but they are still there. Pisces still 'dislikes taking decisions', is 'kind and good natured', 'undisciplined', etc., whilst Aries is still 'often full of energy and decision', 'unaware of the feelings of others', 'straightforward and direct', and so on.

"Sagittarius still 'can't help enjoying life while Capricorn cannot help thinking it all very uncalled for'. Sagittarius still 'hopes for the best' while Capricorn still 'prepares for the worst'.

"Yet the 2 Zodiacs are now said to be out of step by more than $\frac{3}{4}$ of a sign, so that we have a situation in which 1 group of people are looking at a man and seeing someone who is prompt and decisive and another group who look at the same man and see an easy-going character much given

⁷⁶ See for example Fagan, Cyril, *Zodiacs Old and New*, London: Robert Anscombe and Co., Ltd., 1951, or Los Angeles: Llewelyn Publications, 1950.

⁷⁷ For example, Bradley, Donald A., *Profession and Birthdate*, see Chapter 8, Note 4.

⁷⁸ See Gleadow, Rupert, *Your Character in the Zodiac*, London: J.M. Dent & Sons, 1968.

to procrastination. It is just as if intelligent people were to sit round solemnly arguing whether a certain color were black or white.

"Now I have found it a good rule in life to assume that when an intelligent person (and I know such people on both sides of this controversy) has made a careful study of something, it is unwise lightly to set his opinions on that subject aside. And when a situation arises in which informed judgments inexplicitly arrive at exactly contrary conclusions about the same thing, I believe one can nearly always look for some kind of confusion in the point at issue⁷⁹."

In the light of the concept of harmonics one can see where some of this confusion arises. Part of it evidently comes simply from the over-emphasis of the 12-fold division and the neglect of other valid divisions which must be just as strong if in a sense less basic. But another distorting factor comes from that view of the ecliptic which sees it, astrologically, as 12 *box-type* sectors, each sign having a uniform quality from start to finish, instead of as a complex of wave forms.

It is this last error which undermines - indeed, invalidates - the work of Bradley and others who have followed in his footsteps, seeking to justify the Sidereal Zodiac on the basis of the greater statistical significance of solar emplacements in the Sidereal signs as opposed to the Tropical. The theoretical basis of such work by Bradley and others is as follows: the Zodiac is envisaged as 12 equal sectors of the ecliptic with distinct boundaries and a more or less uniform significance of each sign from the 1st degree to the last - like 12 boxes placed end to end. Thus, on the assumption that each sign will favor say, certain vocations, one has only to collect a large number of astrological positions for members of a certain profession and ask *whereabouts in the ecliptic one must make one's 12 equal divisions or boundaries so as to obtain the most significant divergence of sign-totals* and this will tell one where the boundaries lie and so where the Zodiac starts and ends.

On this assumption Bradley and others have made their collections of nativities of different groups of people, found the total of solar positions for each degree of the ecliptic, and then tried out *30 possible Zodiacs*, 1 starting from the vernal point 0° Aries, 1 from 1° Aries, 2° Aries, 3° Aries and so on up to 29° Aries, thus sliding the Zodiac along the ecliptic, as it were, to find at what point it produces the most significantly high and low scores for Sun-position totals.

As long as the Zodiac is viewed as 12 boxes this method should succeed. There will come a point in the process where the 12 divisions 'click into place', so to speak, with the true zodiacal divisions. But the zodiacal influences are not box-like divisions but are represented by the ebb and flow of harmonics in the ecliptic circle, and this requires a different approach.

One can illustrate the situation in various ways. For example we have seen in an earlier chapter that the strongest single solar harmonic in the Zodiac in the largest collection of nativities we have, that of 7302 physicians, collected and analyzed by Gleadow and Firebrace, is the 12th harmonic, the 30° wave (see Fig. 29).

Now if one goes along this Zodiac giving a total of Sun positions for each sign of the Zodiac one is *always exactly cancelling out* this harmonic by adding together, in each 30°, the positive and negative halves of the wave. And *it does not matter* whereabouts one makes one's divisions - one can have 30 possible Zodiacs or a 1000 - there will always be a positive and negative half of a wave in each 30°. So Bradley, by the methods he used and the model he formed for so many subsequent siderealist investigations, was throwing away the strongest element in this solar distribution, and a good many others besides.

But if this is so, how have the Siderealists been able to come up with what they call "consistently" good results in favor of the Sidereal Zodiac? The 1st answer is that such results do not *consistently* favor the Sidereal Zodiac; their results are mixed and only favor the Sidereal division on balance. But the real reason for this is deeper yet. Suppose we consider a zodiacal distribution where the 5th and

⁷⁹ See Addey, John, "Tropical vs. sidereal", *Astrological Journal* (Astrological Association, London), X (1968) no. 4. This is a book review of Gleadow's work cited in Note 3 above.

7th harmonics dominate, with the 5th harmonic having a phase of 180° at 0° Cancer (0° at 0° Capricorn) and the 7th having a phase of 180° at 0° Aries (0° at 0° Libra), both Tropical. Fig. 84 shows the result. The waves both have a primary phase in relation to the cardinal points of the *Tropical Zodiac*, yet this combination of odd-numbered harmonics produces a distribution with the highest and lowest scores in *Sidereal signs* as delineated by the Bradley-Fagan ayanamsa.

In Fig. 84 we have shown the 1st 6 signs only. The parts of the distribution which coincide with Sidereal Gemini and Leo are entirely below the mean and Sidereal Cancer entirely above. In the Tropical Zodiac these 'high' and 'lows' do not so exactly coincide with the sign boundaries. The graph will be inverted for the 2nd 6 signs so that the most outstanding results for the whole Zodiac will be 'high' in Sidereal Cancer, Sagittarius and Aquarius and 'lows' in Sidereal Gemini, Leo and Capricorn. *Not one of the Tropical signs will produce such "good" (i.e. significant) results. Yet the marking points for the harmonics involved are the cardinal points of the Tropical Zodiac, and this will happen again and again and indeed, I believe, tends to happen when odd-numbered harmonics are involved either by themselves or mixed with even-numbered harmonics.*

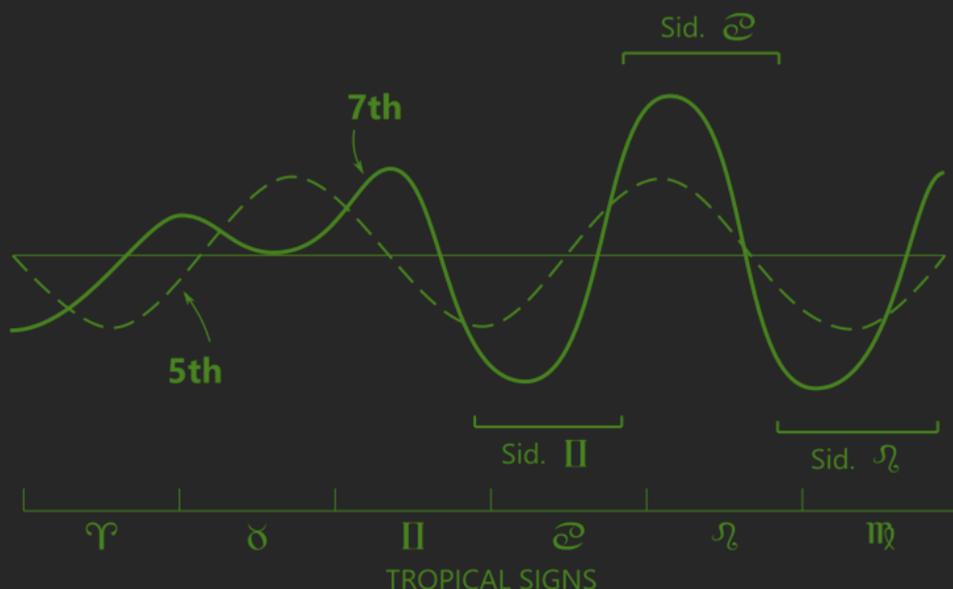


Fig. 84

Showing how harmonics with a primary phasing measured from 0° Aries (Tropical) will often produce the highest distribution scores in those parts of the ecliptic which correspond to the Sidereal signs.

This all comes about basically because the 'influences' of the ecliptic circle have been over-simplified into a 12-fold Zodiac with distinct boundaries instead of the all-various harmonics of the circle. Bradley should have guessed as much and perhaps, by the end, did. His work on meteorological studies, now accepted by the scientific world so far as the Moon and rainfall are concerned, are clearly based on the *harmonics* of cosmic periods - in this case the synodic lunar period.

Fig. 85 shows rainfall precipitation over 50 years in the United States as related to the synodic lunar period, as demonstrated by Bradley⁸⁰. One is left in no doubt of the dominance of the 2nd harmonic as a related factor. Bradley also did work showing the relationship of Venus and Jupiter to rainfall precipitation, no less convincing than that relating to the Moon. This, however, has not generally been accepted; a nice example of how scientists are conditioned by their metaphysical conceptions of what is possible! This work was based partly on the Capricorn Sidereal ingress

⁸⁰ See Bradley, Donald A. and M. A. Woodbury, article in *Science* (Journal of the American Association for the Advancement of Science), Vol. 137 (1962), pp. 748-749. Also see a similar article in *New Scientist*, no. 306 (27 Sept. 1962).

positions of Venus and Jupiter, but there are other possible 'marking points' in that vicinity which could provide a basis for his results.

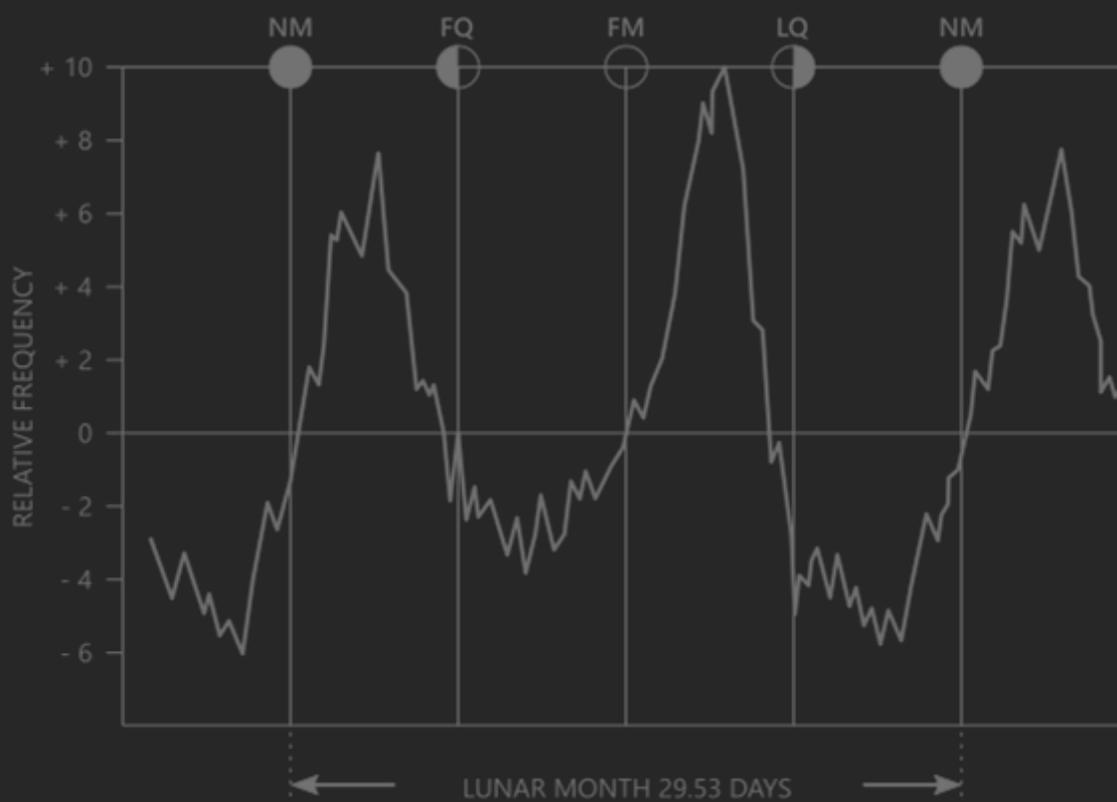


Fig. 85

Moon & rainfall

To come back to the question of the Zodiac, the important issue is not one of the Zodiac as such but of the significant focus or foci in the ecliptic from which effects, as represented by the harmonics in this circle, are generated. To put it simply, we are looking for a point or points in the circle of the ecliptic which have a substantial identity capable of producing effects. Fixed stars could possibly answer the requirement but in that case we would have many points, all producing effects. Unless we are prepared to contemplate such a medley of zodiacal influences all producing harmonics (which is not impossible), this is an answer which we must tentatively eliminate.

It is much more likely that such effects are generated from the point where 2 great circles intersect or from some kindred factor identifiable to astronomy. For such points there are several contenders. 1st we have the points of intersection of the ecliptic and celestial equator - the Tropical points 0° Aries and 0° Libra. This must be the most likely choice. A 2nd alternative is the Solar apex, the point in the constellations toward which the Sun and its system of planets is moving (and this is said to be at about 2° 6' Capricorn). A similar possibility is the Galactic Center, positioned evidently at about 26° 31' Sagittarius⁸¹, at present. A 3rd possibility is the intersection of ecliptic and galactic Equator.

All these could be significant measuring points in the ecliptic, all except the first are Sidereal and all, incidentally, are more likely candidates than the point 0° Aries of the Sidereal Zodiac postulated by the Bradley-Fagan ayanamsa. This point appears to have no astronomical identity at all, unless it is claimed to reside in one of the Fixed Stars, as used to be claimed for Spica until it was agreed that this star did not measure up to requirements.

But it is to the Tropical marking points, the equinoxes, that we come back as being the most likely generators of harmonics in the ecliptic, at least so far as the Sun is concerned. We can easily put this to the test for we have many collections of data which include solar distributions. The

⁸¹ See Landscheidt, *Cosmic Cybernetics - the Foundations of Modern Astrology*, Aalen, Wurt.: Ebertin-Verlag, 1973.

question therefore is, quite simply, do the solar harmonics in the collections of data gathered to date tend to have a primary phasing (i.e. 0°, 90°, 180°, 270°) at the equinoxial point 0° Aries?

The Astrological Association holds harmonic analyses of the solar distribution for the following collections of data: 7302 physicians, 2875 artists, 2492 American clergy, 1974 British clergy, 1024 cases of poliomyelitis, 977 nonagenarians and 710 judges of the High Court⁸². If then we take all of the first 60 solar harmonics in these collections which have an amplitude at least double that expected for the sample size (see graph, Fig. 80), we can see to what extent they *do* have a primary phasing in relation to the equinoxial and solstitial points (i.e. 0° Aries, Cancer, Libra and Capricorn in the Tropical Zodiac).

Here is the list of such harmonics with their phase-angles measured from 0° Aries:

<i>English Clergy</i>	<i>Nonagenarians</i>	<i>Physicians</i>
5 th ... 41	9 th ... 262	12 th ... 229
7 th ... 102	8 th ... 184	25 th ... 82
22 nd ... 275	51 st ... 178	31 st ... 178
26 th ... 199		57 th ... 112
49 th ... 182	<i>Artists</i>	
58 th ... 265	5 th ... 253	<i>Polio</i>
	47 th ... 309	24 th ... 100
<i>American Clergy</i> ⁸³		36 th ... 168
9 th ... 340		

We can show these phase-angles in diagrammatic form as in Fig. 86a. It can easily be seen that they do tend to have a primary phasing at 0° Aries although, interestingly, there are 2 or 3 good ones which have a phase mid-way between the cardinal points, i.e. at the 45° intervals. These include the powerful 12th among physicians which must be the best single result we have.

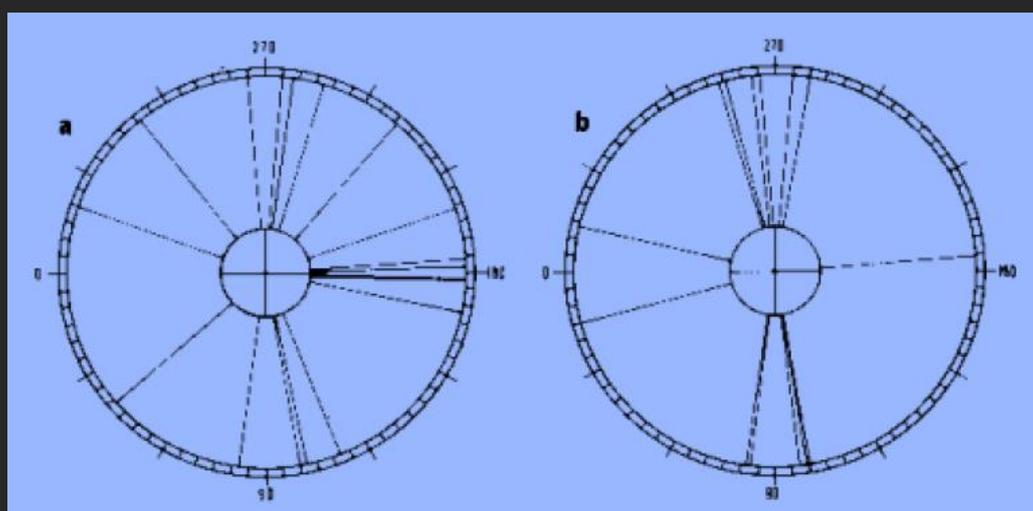


Fig. 86

Showing (left) phase angles of the stronger solar harmonics in the Astrological Association's collection of nativities and (right) the phase angles of the 5th harmonic series in the charts of 7302 physicians, both revealing a tendency to a primary phasing measured from 0° Aries, Tropical.

⁸² See Chapter 4, Note 6.

⁸³ That the British Clergy show so many more significant elements than the American is interesting. I attribute this to the fact that British clergy are much more homogeneous a religious group than their American counterparts.

It is not certain that by simply taking the strongest harmonics from these sets we are necessarily adopting the best policy. Striking evidence is to be had by taking some of the “families” of harmonics which, as we have said earlier, show up as being characteristic of these harmonic analyses of particular groups of nativities.

The collection of 7302 physicians is easily the largest collection we have, and with the added accuracy which such large totals give we can lean rather heavily on the harmonic analysis of these doctors’ Sun positions. This particular harmonic analysis is given from the 1st to the 90th harmonic as shown in the following table:

H: Harmonic			A: Amplitude			P: Phase		
H	A	P	H	A	P	H	A	P
1	5.2	86	31	4.5	178	61	1.8	124
2	2.2	66	32	0.9	285	62	3.7	251
3	2.5	171	33	2.1	102	63	2.5	194
4	2.5	17	34	4.2	4	64	2.6	217
5	2.8	15	35	3.1	265	65	3.5	99
6	4.0	239	36	2.0	108	66	3.0	156
7	0.7	336	37	2.3	332	67	1.2	338
8	2.7	139	38	1.8	223	68	1.4	295
9	1.8	235	39	2.8	249	69	3.4	354
10	4.3	274	40	1.4	284	70	4.6	46
11	1.7	110	41	3.1	186	71	1.9	289
12	6.2	229	42	3.3	340	72	1.1	317
130	1.1	262	43	2.8	318	73	3.6	340
14	1.9	82	44	0.2	235	74	3.0	327
15	1.2	100	45	0.6	184	75	1.2	39
16	2.2	356	46	2.2	107	76	2.1	91
17	2.2	162	47	1.1	184	77	3.9	66
18	1.0	133	48	1.2	266	78	2.1	337
19	0.6	158	49	1.4	55	79	2.2	115
20	2.3	277	50	1.5	347	80	1.3	287
21	2.8	349	51	1.9	317	81	1.0	235
22	1.2	340	52	1.2	207	82	1.5	249
23	1.9	1	53	0.9	288	83	4.0	64
24	2.4	240	54	2.1	163	84	2.3	7
25	4.7	82	55	1.3	311	85	3.3	211
26	3.6	284	56	1.8	190	86	3.1	175
27	2.2	201	57	5.8	112	87	2.6	34
28	0.5	125	58	2.5	88	88	4.5	342
29	3.0	34	59	1.5	273	89	3.7	264
30	1.5	83	60	1.6	97	90	1.4	260

One may draw attention to the phase-angles of the 5th harmonic and its sub-harmonics - i.e., all the multiples of 5. Omitting only 4 out of the 1st 18 of these sub-harmonics of the 5th we have:

Harmonic	Phase	Harmonic	Phase
5	15	40	284
10	274	45	184
15	100	50	347
20	277	60	97
25	82	65	99
30	83	80	287
35	265	90	260

These phase-angles have again been set out in diagram form (Fig. 86b) and there can be no doubt that it is the cardinal points of the *Tropical Zodiac* which are providing the marking points for our phasing.

Since it has a bearing on our last chapter in which we discussed the principles on which phasing is based, it must be said that in some of these families of harmonics the same 'bunching' of phase-angles is present but at other points besides the primary phase-angles. This is interesting and seems to send us back to the idea that every phase-angle can have its symbolic significance. *However, it should be noticed that this bunching would not take place unless the measuring points were tropical in origin*, for the variable position of the ayanamsa (representing the distance by which the 2 Zodiacs are out of phase) would be a variable fraction of the different harmonics. This would have the effect of dispersing the observed bunching of phase-angles. For example, the mean (Bradley-Fagan) ayanamsa of the physicians is about 23.07°, corresponding to the year 1879-80. This would tend to disperse the phase-angles not only from the primary phasing shown in Fig. 86a, *but from each other*, so that the bunch effect would no longer be present in Fig. 86b.

However, our study of these matters is still in its infancy and one is reluctant to be dogmatic in a field where we clearly have much more to discover. It certainly would not be surprising if some of the sidereal points we mentioned earlier, such as the galactic center or intersection of the ecliptic with the plane of the galaxy, were capable of producing harmonics. These may refer to such terrestrial phenomena as weather cycles whilst the tropical reference points provide the basis for the symbolism of nativities.

Perhaps the most fascinating lesson to be had from the study of the solar harmonics in the collections of data we have is the revelation of the remarkable mathematical structuring of the solar rhythms at work in the different groups of nativities.

I summed up the position in relation to these in *Astrology Reborn*⁸⁴:

"What it amounts to is this, that each one of these sets of birth data - doctors, artists, nonagenarians, etc., are, when analyzed in this way, just like different crystalline substances, each one characterized by a different numerical structure.

*"Over half a century ago, D'Arcy Thompson, in his memorable book *On Growth and Form*, commented on the reluctance of morphologists (in contrast to, say, astronomers or chemists) to raise their study to a science by the proper employment of mathematics. It was as if they saw in the teeming forms of nature, in the lineaments of the growing plant or the convolutions of the snail's shell, mysteries too deep and too varied to lie within the scope of clear numerical expression. Yet Thompson and others have since shown how mathematical laws are at work in all the forms of nature.*

"Now science must learn that the lineaments of human character and the convolutions of destiny too, fall, no less, within the scope of number; for if it is true that God made 'every plant of the field before it was in the earth, and every herb of the field before it grew', it is no less true that He measured the ways of man before he was in the womb, and made him an embodiment of ideal and divine numbers."

⁸⁴ Addey, John, *Astrology Reborn*. See Chapter 1, Note 2 for details.

20. ASTROLOGY, HARMONICS AND GENETICS

Of all the astrological problems which beckon to us from the future there is one which must excite the thoughtful astrologer more than any other. It is also the problem the solution of which may prove to be of greatest practical scientific value to mankind. This is the question of how astrology and genetics are to be related and, specifically perhaps, how the genetic code is expressed astrologically.

To put the matter in a nutshell, we know that there are laws of heredity by which natural characteristics are transmitted from generation to generation. We also know that the natural characteristics of each person are described by the horoscope calculated for his date, time and place of birth. It therefore follows - and we must be clear about this, it *does* inevitably follow - that the astrological code by which the horoscope is interpreted must be in agreement with the genetic code by which natural traits are transmitted from one generation to the next. The 2 things must be parallel expressions of the same theme.

Every astrologer who has investigated this matter in even a perfunctory manner suspects this to be true: every astrologer who has investigated it more carefully and who also understands the reasons behind the issue knows beyond any doubt that it is, and must be, true.

On the most basic scientific level Michel Gauquelin has demonstrated the existence of an astrological relationship between the nativities of parents and children in a massive scientific experiment involving the horoscopes (all calculated for the time of birth) of some 25,000 parents and children. All birth data has been published⁸⁵. The result of this experiment was to show that if one parent had a certain planet rising or culminating (sectors 36, 1, 2, 3 or 9, 10, 11, 12 in the division by 36 sectors - see Fig. 12) then there was a significant tendency for his or her children to have the same planet in one of these sectors. If both parents had the particular planetary position then the tendency for the child to have it too was approximately twice as strong. This is in conformity with genetic principles and the probability of Gauquelin's result occurring by chance was less than 1 in 500,000.

We may note in passing that this tendency was observed to be stronger for the planets nearer to the earth - Venus, Mars and Moon - than it was for Jupiter and Saturn. The tendency was not observed to a significant degree for Mercury or the outer planets. If the child was born on a day of high geomagnetic activity the effect was more pronounced with all bodies except the Moon.

We mention this work by Gauquelin because it does establish beyond any shadow of scientific doubt that an astrological relationship *does* exist between the nativities of parents and children. However, the relationship observed by Gauquelin is rather general in character and is quite inadequate on its own to meet the needs of providing a description of the genetic transmission in all its complexity.

The larger question remains to be answered. Having shown that an astrological relationship does exist, one must go on from there to determine, step by step, the whole range of principles upon which the genetic transmission is expressed in astrological terms. I believe that this is perhaps the greatest and most exciting enterprise which now lies within the compass of coordinated scientific and astrological endeavor.

Let us consider what are the impediments to this enterprise. There is 1 major obstacle and 2 minor ones. There is no question about what the greatest impediment is; it is DOUBT. A man who doubts the possibility of solving a problem, or even the rationality of the subject matter, is certain to fail. He must be wholly convinced of the reign of law throughout the universe, in small matters as

⁸⁵ Gauquelin, Michel and Françoise, *Birth and Planetary Data Gathered Since 1949*, Series B, Vols. 1-6 gives birth data of parents and children; Series C, Vol. 1 summarizes results. See Chapter 4, Note 2 for details. Gauquelin, Michel, *Cosmic Influences on Human Behavior* is also relevant; see Chapter 4, Note 1.

well as in great. Noticing a general similarity between the charts of parents and children he must grasp the fact that this similarity rests upon clear and definite principles that can be followed through to a more complete understanding. He must not think that because man has free will (as he undoubtedly has, *at all times*) the laws of nature cease to operate in their own proper field. If he does not proceed with conviction he will not address himself with determination to a problem of this kind or if he does he will abandon it as soon as the difficulties mount up.

Above all, we need to be confident in this matter that we are not on a wild goose chase. And we are not. We need to begin with a thorough-going conviction that we are embarking upon a study which will yield up its secrets if we approach it with intelligence and insight, with humility and patience. The student who attempts to contribute to the solution of this problem (and it is a problem fit for a prince of scientists) must first be well assured in his own mind of the intelligibility and accessibility of the solution. He must acquaint himself, as far as he can, with the known laws of evolution and heredity, whether Darwinian, Mendelian or biochemical, and he must be prepared to seek out the analogies between these laws and their astrological counterparts. If there are dominant and recessive traits in Mendelian genetics, then he should look for some corresponding principle in astrological terms, and so with every other aspect of genetic principles. It is true that there may yet be important potential elements of the astrological code which are still undiscovered, and there may be factors for which the correct way of handling the material is not well understood; indeed this is certain to be so and one can think of many such uncertainties. But the lack of these need not prevent a start being made in determining some general principles. Genetics was a very unsophisticated, even non-existent, science when Mendel made his careful observations of plant strains, and yet these were destined to yield one of the cornerstones of this study.

I spoke of 2 minor obstacles to this study. The first of these is the relative absence of recorded birth *times* and even birth *dates* before the mid-19th century. Parish registers, which are an important source of information, normally give the date of christening rather than the date of birth. I do not know the position in the United States; there may be some variation from state to state.

On this score we must do the best we can with the material available; scientific ingenuity can bridge many gaps and in any case it may be that there are enough families with recorded birth times over a good many generations to meet the needs of the situation. One need only comment in passing that *it is the duty of everyone who has the interest of astrology at heart to do all in his power, for the sake of future generations, to ensure that times of birth are accurately recorded (and preserved) in the society in which he lives.*

The other minor obstacle to the scientific investigation of the astrological genetic code is uncertainty about the relative significance of the times of *birth* and of *conception*. One would suppose, *prima facie*, that since the moment at which the genetic transmission actually takes place is the moment of conception, then this time, which cannot at present be pinpointed, must be of primary importance. This, strictly speaking, is not so much an impediment to the investigation of astrological genetics as one of the fundamental problems which such an investigation must tackle. It is sufficient to say that there is enough evidence to support the belief that the symbolism of the actual moment of birth is comprehensive in its own terms and that on this basis the time of conception may not be of such crucial importance as one would suppose. It is even more likely that with greater knowledge of what is involved, it may become possible to deduce the time of conception from the time of birth and other factors.

There is an astrological doctrine called the Trutine of Hermes, supposed to be of considerable antiquity, which is said to provide a rule whereby the time of conception can be so deduced. My view is that no *confidence* can be placed in this doctrine as it stands without further study, although, indeed, it may provide us with clues and in due course may prove to have truth in it.

One can view this problem philosophically in these terms: All terrestrial life is a precipitation and a manifestation of an inner order of ideas. Every individual is an idea, every family is an idea, every

nation, every race, every planetary family - all are the living embodiments and expressions of spiritual formative principles. This was the teaching, in a pure form, of the enlightened sages of antiquity. It is also a teaching which reappears with greater or less clarity' whenever men seek to contemplate philosophically the underlying truths of human life. Professor D. C. Darlington, one of the leading geneticists of our day, in his work *The Evolution of Man and Society*⁸⁶, sees the history of the genetic and evolutionary progress of mankind as the history of the unfoldment and transmission of ideas. To quote from *The Times* (of London) review of this book: "Ideas for him have always been, literally, embodied; ideas are people, ideas move as people move, settle as people settle, propagate as people propagate." Ideas, says Darlington, "have marched on foot, ridden on horseback and sailed on the sea" . . . and, he implies, have been transmitted genetically from generation to generation.

It is these ideas which are reflected in the astrological themes of men's origins. No science is adapted to see more clearly than astrology the unfoldment in time of these ideas insofar as they are genetically transmitted and woven anew in each generation into the life of society with all its activities, institutions and characteristics.

To return to the point at issue, the synthesis of genetic material which takes place at conception and is symbolized by that moment in time is obviously of radical importance as providing the material basis of the genetic transmission. Yet it may be that the formal cause or idea behind the incarnation may be just as distinctly reflected in the moment of *birth*, i.e., the first moment of life as an individual, which I take to be the first breath. I offer this thought without complete conviction as a possible justification for expecting that the nativity may prove an adequate reflection of the genetic relationship. This is a problem which we must take as we find it.

But why is it, one may ask, that the unravelling of this problem should suddenly present itself as a possibility? The principal reason, I believe, is the more distinct recognition of the harmonic basis of all relationships in the horoscope and the infinitely greater range of discriminatory symbolism which this opens up. As long as we were limited to signs of the Zodiac and conventional aspects and house divisions, no one could believe that the complex requirements of the genetic code could be adequately expressed in astrological terms. The new harmonic viewpoint, when seen for what it is, does hold out such a possibility.

In order to see how this process works, let us take an example, using a series of natal positions which are based on the quintile division and which might therefore have escaped notice if only conventional aspects had been regarded. It so happens that I have my father's birth time exactly⁸⁷, my own and those of my 3 children. My father was born with the Sun on the midpoint of Saturn and Uranus and roughly 72° from each, a 5th part of the circle. These positions I inherited with slight modification and in due course passed onto my children, again in modified form. Fig. 87 gives the positions for the 3 generations. (The aspects are to the nearest whole degree).

In order to appreciate the connecting links here one must remember the angles based on the 5th series: not only 72° and 144° but 36° and 108° (based on the half-quintile) and 18° and its multiples (54°, 90°, etc., based on the quarter-quintiles). There is also one aspect of 24° (a third of 72°), two of 45° (midway between 36° and 54° or 5/8^{ths} of a quintile) and one of 99° (midway between 90° and 108°, or 1 3/8^{ths} quintiles).

The point to notice in this example is that a very specific group of positions has been taken and all other factors rigidly excluded for the sake of keeping the example clear. We have applied, as it were, a magnifying glass to one particular planetary complex as it is manifested in 3 generations.

⁸⁶ Darlington, D.C., *The Evolution of Man and Society*, New York: Simon & Schuster, 1970.

⁸⁷ This was a stroke of luck. It became a legal requirement that the times of birth of twins should be registered in England and Wales in 1870. My father was a twin born on 3 Oct. 1870 and my grandfather registered their times of birth as 3:15 am and 4:05 am. (my father) 4:05 looks like an attempt at accuracy, and he had good reason to be on his toes for the event. His wife's mother had died in giving birth to twins on the same date, October 3rd, a generation earlier. Such 'coincidences' are not uncommon where family histories are remembered.

One could make the illustration more impressive in some ways by introducing more factors and so multiplying the 'coincidences', but then it would become too complicated to see the simple force of the family resemblance in the 3 generations. The resemblance between generations 1 and 2 is obvious enough, but the continuation of the theme in generation 3 is also clear when one looks at the positions carefully. The basis of the continuity is the 5th and its sub-harmonics.

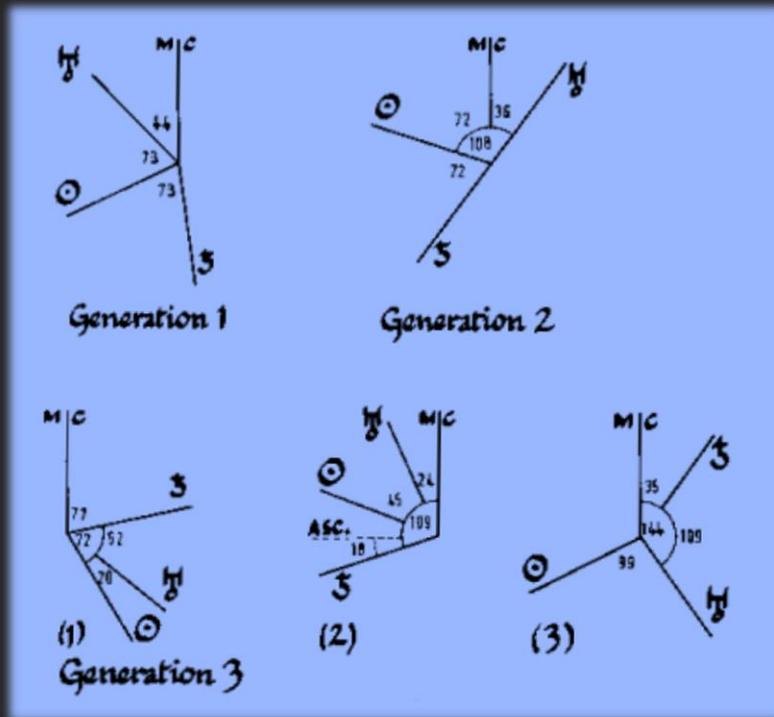


Fig. 87

If there is any doubt that this is a true pattern repeated in 3 generations, the doubt must be dispelled by an examination of the zodiacal degrees involved, for all these positions are linked to points of the same zodiacal pentagon as shown in Fig. 88. Still keeping strictly to the Sun, Saturn, Uranus and MC, we can list the positions shown in Fig. 87 as they fall on these zodiacal degrees. Interestingly, in doing this we can go back one more generation to my father's parents, whose Sun positions are also involved in the pentagonal framework.

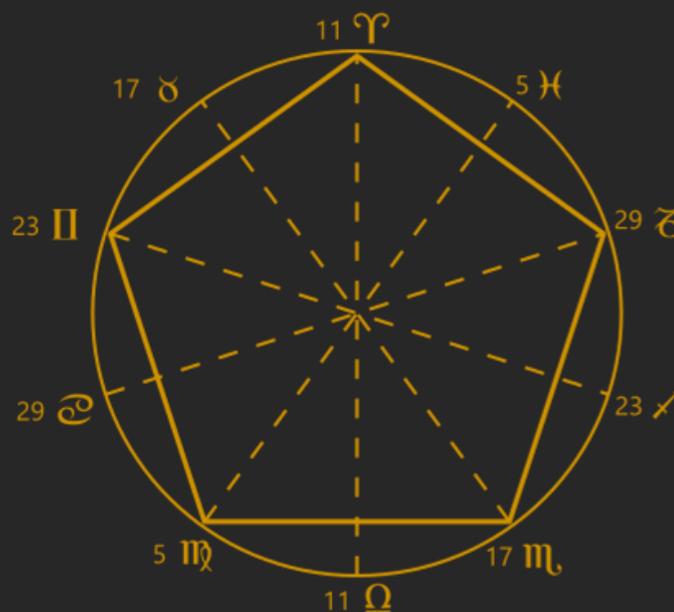


Fig. 88

Table 4

	11° ♀ - ♄	23° ♀ - ♃	5° ♀ - ♃	17° ♃ - ♄	29° ♄ - ♄
1 Grandfather					Sun 29 ¼° ♄
2 Grandmother		Sun 24 ¼° ♃			
3 Father	Sun 10° ♄	Saturn 23° ♃			Uranus 26 ¼° ♄
4 The Author	MC 12° ♀	Sun 23 ¼° ♀	Saturn 6° ♀ Uranus 5 ¾° ♃		
5 Daughter (1)		Uranus 25° ♀			
6 Son	Saturn 12 ½° ♄	MC 23 ¼° ♀	Sun 2° ♀		
7 Daughter (2)	Sun 11° ♀				

In Table 4 4 the primary involvement in the 10 points of Fig. 88 is shown by the fact that the Sun is involved in every case except one. The apparent exception (my elder daughter, No. 5 above) confirms the principle rather than negates it, for her Sun at 5° Gemini is thus 18° from the sensitive point 23° Gemini, ¼ of the 5th harmonic out of phase. My own Moon is at 5 ¾° Gemini, 18° 02' from my Sun at 23 ¾° Gemini, so the inherited relationship is obvious.

No one who examines these positions carefully can doubt that they are characterized by some kind of *order*. They are in no wise exceptional for all families show such family patterns in their horoscopes. But order by its very nature is distinguished by law; one cannot have order appearing and maintaining itself by chance. *It is to the discovery of these laws of genetic astrology that we suggest astrologers should now be addressing themselves.*

Before we leave the example just given there are 2 points which are worthy of comment. The 1st is that where some stable family pattern has been found such as our 5 or 10 pointed pattern shown in Fig. 88, one of the positions in the pattern may be neglected for a generation or 2, thus column 4 (17° Taurus-Scorpio) is empty in our list, and Column 5 (29° Cancer-Capricorn) is rather thinly occupied. When this happens, subsequent generations will revert to the neglected degree area and, so to speak, 'catch up', perhaps by marrying into these positions, and so restoring a neglected element in the 'balance' of the family idea. This law will often explain the appearance of an apparently 'new' element in family charts.

The 2nd point is that there is some indication that the 5 or 10 pointed grouping we have used as an example may have specific relevance in the tracing of a genetic line. There is an undeniable connection between the number 5 and the concept of the *splitting up* of a unity into parts, in this case through the operation of genetic forces. This is reflected perhaps in the 5/10-fold structure of the DNA molecule. It stems from the truth that in the descent or katabasis of an idea from potentiality into actuality through 9 steps or stages⁸⁸, the 5th stage is the middle point, the point

- 1 2 3
- 4 5 6
- 7 8 9

⁸⁸ See Chapter 11 on the navamsa symbolism.

where the unitive idea or whole is split up or differentiated into parts in order that it can manifest through 'body' which consists essentially of parts subordinated and superordinated to each other as an objective or phenomenal whole which mirrors the subjective and noumenal unity from which it springs.

This tendency for the 5th element in a series to be associated with fragmentation is often noticed, as in the 5th orbit from the Sun being occupied by the asteroids. On a quite different level, it is found in such myths as that of Dionysius-Zagreus being torn to pieces by the Titans, and other similar representations of the splitting up of the World Soul into partial (human) Souls. Thus a 5-fold/10-fold system is one which might be looked for in astrological family themes.

For how many generations do such family patterns maintain themselves? The evidence suggests that they do in fact survive for centuries, though I do not know of any full-scale studies in these terms. On my sitting-room wall hangs a sampler stitched by my great-grandmother, the mother of number 2 above and the lady referred to in footnote 3 of this chapter. The sampler indicates that she was born on 25 May 1819. This is the same birthdate as daughter No. 5, so her Sun was again at 4° Gemini, her Uranus being at 23° Sagittarius and so on.

To the uninitiated this will seem incomprehensible. Is there not a fresh infusion of new traits from other families as each new generation marries? How can family patterns maintain themselves in the face of such constant dilution? The explanation of this is simple, for the *attraction of like to like* is constantly at work, not only through the obvious channels but also through many unseen and cryptic ones, and it is far stronger than is commonly supposed in this context. Anyone who examines his family tree over a number of generations is likely to be impressed by this tendency for family likenesses to be maintained through marriage.

If the reader will forgive another example from the writer's own family, there is a very simple instance, this time from the distaff side, which makes the point. It concerns the stability of Moon positions among the womenfolk in the family. Fig. 89 shows the positions, including all the female birthdates I have in the direct line on this side of the family.

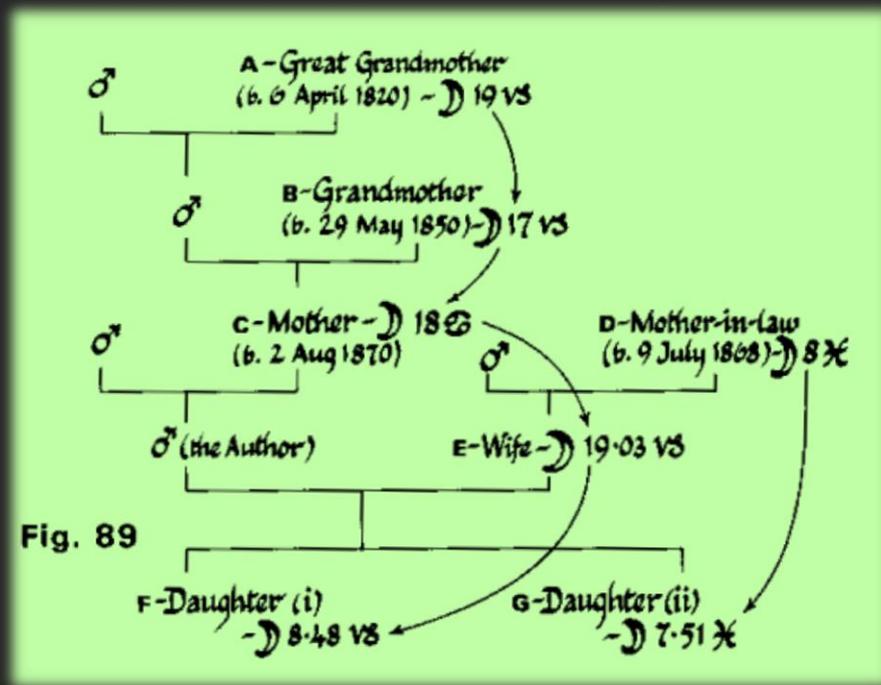


Fig. 89

The point about the positions shown is that A is not related to B, nor C to E, but in each case a son has married someone with the same Moon position as his mother. Tendencies of this kind

constantly operate to preserve family themes, not merely in planetary positions as such but throughout the whole range of the astrological 'code'.

If these things are viewed from the outside instead of from the inside, the question of whom one marries may seem like a magnificent lottery. 'X' misses his train and whilst kicking his heels in the station waiting room, whom should he meet but this marvelous girl who seems so nice and friendly, and in due course . . . This seems like pure chance, but the outward chain of events which produces such situations is deceptive; behind the apparently chance circumstances are a body of formal causes in accordance with which events unfold. The outworking of this body of causes is called Fate, which is the outward aspect of the Wisdom of Providence. It is in no sense arbitrary, but takes place in conformity with the essential nature of the human substances involved, modified by their past free volitional acts.

Taking a wider perspective, we can see that each family embodies, at any particular time, a number of different themes or ideas. Perhaps for generations one might find a medical tradition in which successive generations of sons tend to become doctors. In the same family there may be a more or less latent interest in say, art or the stage, expressed as a hobby or enthusiasm by some members of the family. Eventually a generation is born in which all the medical interest or talent is concentrated in one child while the interest in art or the stage comes to the surface at last and other children follow those lines.

In these circumstances it will often be possible to trace how a particular idea, tradition, characteristic or aptitude follows certain genealogical channels, one branch of the family preserving one theme while another preserves a different one. Obviously, in looking for such successions in terms of aptitudes characteristics, etc., one must be prepared to look at *principles* rather than particular forms of activity. What was an interest in property ownership in one generation might become a town planner or an architect or a building society employee in another. I know of no other astrologers in my family but my father was very interested in horology.

It is perhaps very important to emphasize for the sake of the reader that sometimes family resemblances such as we have been speaking of are obvious. At other times they will only reveal themselves as a result of careful and systematic analysis.

There is one problem which will no doubt have occurred to some students while reading this chapter: the effect upon the time of birth of the artificial induction of labor. Michel Gauquelin has demonstrated⁸⁹ that this effect is a real one in the sense that the sympathetic relationship between the horoscopes of parents and children is infringed where the induction of labor becomes common practice.

The philosophical view of medical practices designed to bring on, speed up or retard childbirth is not necessarily condemnatory. The order of art is superior to the order of nature and what is done wisely and for a good and sufficient reason will tend to harmonize with the larger scheme of things. The criticism of much present-day practice in this field, however, is that it is done unwisely, for insufficient reasons and, in particular, without regard for the best interests of mother and child. This is becoming recognized.

The objections which are raised against the validity of some horoscopes in these circumstances are not necessarily true. There are always factors at work permitting or preventing conception at certain times, allowing or not allowing pregnancy to run its full term, hastening or retarding childbirth. It must be the standpoint of the astrologer that all these apparently chance factors tend to combine, *in toto*, to lead up to the birth at the appropriate symbolic moment. For example, Churchill's mother had a riding accident and Churchill was born 2 months prematurely. Not every

⁸⁹ For discussion of the relevance of the induction of labour to birth times see Gauquelin, Michel, *Cosmic Influences on Human Behavior*, especially Chapters 15 and 16 (see Chapter 4, Note 1 for details). Gauquelin gives additional material in Series C, Vol. 1; See Chapter 4, Note 2 for details.

mother goes riding but small incidents which may hasten or retard labor by a few days or hours are common enough.

There is no good reason why the induction of labor should be regarded as in a different category from all the other evidently fortuitous circumstances affecting the time of birth or conception. The fact that in some populous centers in the West births are induced *on a large scale* does not in itself affect the matter one way or another any more than does the wholesale use of contraception or, for that matter, the large-scale absence from their wives of soldiers or sailors in time of war.

The relevant issue, perhaps, is that what is done well tends to produce ordinate results and what is done ill, the opposite. It should not surprise us unduly if the spirit of an age which sanctions the folly of inducing labor for the convenience of the attendants is also reflected in disharmonies in the births which take place under such conditions - disorientated births for a disorientated age. Looked at from another point of view, we live at a time when the rate of change in an unstable society is such as to accentuate the difference in outlook, or to elongate the 'gap', between one generation and the next. Where this effect is at its worst, which is also in the places where the custom of inducing labor is commonest, one can regard the shift observed by Gauquelin in the usual agreement between the natiivities of parents and children as no more than the astrological reflection of an existing phenomenon.

To sum up, we believe that there is now a case for making a definite attempt to clarify the whole relationship between the description of hereditary forces and effects provided by conventional genetics and the description provided by astrology. Some astrologers have already been thinking along these lines. There is an article by Pam Bennett of the British Astrological Association⁹⁰ which certainly tackles the subject in the right spirit and contains some interesting suggestions. Charles Harvey, President of the Astrological Association, is unusually fortunate in having several generations of birth *times* in his family. He also has made some valuable suggestions, one of which particularly appears to have the ring of truth. He has noticed that *alternate* generations tend to reveal in their charts various kinds of inversions and reflected positions, rather like alternating positive and negative photographic images - black on white, then white on black, then black on white again. This suggestion agrees with the observation that children often seem more like their grandparents, in many respects than their parents. There is also a brilliant study by Charles Harvey of hemophilia in the descendants of Queen Victoria⁹¹.

I believe that the crucial factor which can now contribute to the elucidation of this problem is the more distinct recognition of the symbolism of the whole range of harmonic intervals in relating horoscopic features. In this context - in case the position has not been made sufficiently clear - it would seem that the major aspects refer to broad general similarities or categories of traits, and that the more particular and idiosyncratic hereditary features are shown by smaller harmonic intervals or unusual harmonic numbers.

Note, however, that an *exact* major aspect will include all the sub-harmonics of that interval. Thus an exact aspect of, say, 40° will not only show what is symbolized by the 9th, but also will include the symbolism of the 18th, 27th, 36th, etc. Physical traits in particular may be shown by the shortest intervals, perhaps very short indeed, and this is one reason why accurate birth times are likely to become increasingly important.

Similarly, a particular kind of planetary contact can be maintained 'in the background', as it were, for several generations only to come to the foreground in a later generation in the form of major harmonic contacts. For example 9° or 4 ½° interval contacts (40th and 80th harmonics) might be reintegrated into 18°, 36° or 72° aspects (20th, 10th, 5th harmonics) in a later generation, perhaps

⁹⁰ Bennett, Pam, "Astrology and Heredity", *The Astrological Review*, Fall, 1972.

⁹¹ Harvey, Charles, "Astrology and Genetics: Haemophilia", in *Correlation 3* (a research publication of the Astrological Association, London), XI (1969) no. 2.

under the stimulus of marriage with a partner showing the same class of contacts. For this reason it is important to recognize the need for very detailed analysis of the chart for minor harmonic intervals when studying these things. The same applies in looking for *unusual* harmonics.

To give a simple example, here is a family of 5, father, mother, and 3 children, who generally tend to have strong Neptune contacts. Is there any common contact which links Neptune to the Sun and MC, for example? Yes, there is, but evidently only through a rather unusual harmonic, the 46th of 7° 50', as shown in the following table. In order to follow up this line of inquiry, the *Astrologer's Guide to the Harmonics*⁹² is an essential tool, listing as it does all fractions of the circle and their multiples.

Table 5

		Natal Aspect		Near		Orb
Husband	Sun - Neptune	45° 45'	6/46	= 46° 57'		1° 12'
	MC - Neptune	117° 35'	15/46	= 117° 23'		0° 12'
Wife	Sun - Neptune	172° 27'	22/46	= 172° 10'		0° 17'
	MC - Neptune	0° 30'	0/46			0° 30'
Daughter	Sun - Neptune	125° 50'	16/46	= 125° 13'		0° 37'
	MC - Neptune	23° 37'	3/46	= 23° 28'		0° 09'
Son	Sun - Neptune	47° 44'	6/46	= 46° 57'		0° 47'
	MC - Neptune	116° 30'	15/46	= 117° 23'		0° 53'
Daughter	Sun - Neptune	165° 50'	21/46	= 164° 20'		1° 30'
	MC - Neptune	47° 48'	6/46	= 46° 57'		0° 51'

Obviously, one does not attach much significance to such a short list of positions considered in isolation. They may or may not be significant. The example is intended only to illustrate a point: in researching this subject, one must be prepared to examine unusual harmonics and to make detailed comparisons.

It may be objected that we have no idea what significance should be attached to the 46th harmonic. True, but in this respect, we are in the same boat as the other geneticists. *Their* progress has consisted not so much in *deciphering* the genetic code as in discovering what are its ingredients. We have a good start on them for we already have at least *some* idea how to read our code.

It is too soon to envisage how this branch of knowledge will eventually be applied to man, although it will probably not be in any way we might now expect. The development and application of such things must be allowed to take its own time and its own course in the context of the development of society as a whole. In the 8th book of Plato's *Republic* Socrates admits that although the ideal society he has described in that book will not easily be changed, sooner or later it is likely to fall away from its perfection. The reason he gives for this is that children will be generated at unseasonable times and will grow up to disrupt the established harmony.

Similarly, perhaps the recovery of the understanding of proper times and seasons will ultimately have an important role to play in the regeneration of society. However, it is likely to call for a greater measure of wisdom than prevails in our present councils⁹³.

⁹² Williamsen, James S. and Ruth E., *Astrologer's Guide to the Harmonics*, see Chapter 12, Note 2.

⁹³ There is an interesting side-light to be found on this subject in the *Guinness Book of Records* where we are told that the highest I.Q. ever recorded is that of a Korean boy, Kim Ung Yong (b. 7 March 1963). The unusual thing about this boy is that *both his father and mother were born at 11:00 am on 23 May 1934*. This is analogous to the marriage of

21. THE RELEVANCE OF OTHER CYCLE STUDIES

The picture which has unfolded in this book is one which is built upon the idea of the *harmonics of cosmic periods*. In this context astrology can now be seen to be of one piece with a far larger field of studies which are now engaging men's minds and which depend upon the same principles.

The study of biological rhythms in man and nature has expanded rapidly in the past 20 years - about the same length of time that parallel ideas have been developing in astrology - and now progresses by leaps and bounds. All over the world science has become interested in biological, physiological and other rhythms. *All these studies are, in very truth, aspects of the larger astrology.* It is true of course that there are plenty of scientists who resist the idea that these rhythms are in any way related to planetary and other cosmic movements. However, they have their backs to the wall and the eclipse of their viewpoint is approaching with visible inevitability.

On the other side of the fence there are plenty of astrologers who insist that scientific studies of biological rhythms have nothing to do with astrology. On both sides of the fence the isolationism is due very largely to ignorance of what is happening in astrology as well as of the results of other scientific inquiries. Most astrologers are ignorant of how far biological studies overlap their own ideas, as well as of the new depth of research in astrology.

It is true that there are many differences of opinion about the *nature* of the relationship between cosmic 'influences' and the phenomena related to them. It is some indication of the changing climate of thought that there are pioneers of astrological research who appear to think in traditional scientific cause-and-effect terms and philosophical scientists who are beginning to take a more mystical view of things.

At present most perceptive astrologers are nearer the truth than most orthodox scientists. This is because they have a more vivid realization that efficient causes represent the implementation of formal causes and therefore that the order of existence is a reflection of the order of ideas. In this sense phenomena are, in the last resort, symbolic expressions of noumenal realities. Such ideas, such noumena, are symbolized by ideal numbers and, objectively, by cosmic existences; this is the basis of astrological interpretations. On these terms there is no reason why astrologers should not be able to assimilate into their thinking the biological rhythms discovered by science and with them whatever chain of efficient and material causes scientists discover or conceive of as producing these rhythms.

On the subject of biological rhythms, there can be few people nowadays who have not heard of 'circadian' rhythms, that is, rhythms (whether in man, animals or plants) which are 'about one day' in length. Many of these are directly based upon an exact mean solar day of 24 hours; others are a little longer or a little shorter. In this context we must understand that a sidereal day (the time taken for the earth to turn on its axis once in relation to the Fixed Stars) is about 23 hours 56 minutes 5 seconds. The mean solar day is a little longer because the Sun appears to move forward a little each day in relation to the stars. The Moon moves forward even more, so the length of the mean lunar day is just over 24.8 hours. All the planets move forward in one day, each by a different amount, so there is also a mean Saturn day, a mean Jupiter day and so on. It is possible that some of the circadian rhythms observed in nature are based on some of these varying periods. This is certainly true of some creatures in relation to the lunar day. The crab, for example, follows a lunar day, suggesting, incidentally, that whoever gave the name of 'the crab' to the Moon's sign, Cancer, knew something!

One would suppose that it would be a relatively simple matter, by careful investigation, to find examples of plants and animals which responded to different planetary days. Unfortunately the issue is more complicated than this. We have seen throughout this book that we are dealing, again and

close kindred where any family weakness (or strength, as in this case) is likely to appear in an exaggerated form in the offspring.

again, not simply with planetary periods but with the *harmonics* of planetary periods. For example there are 3 principal lunar months: the synodic of 29.53059 days (the period from one conjunction of Sun and Moon to the next), the sidereal of 27.32166 days (the period from one conjunction of the Moon with a given Fixed Star to the next) and the Draconic of 27.2122 days (the period of the Moon between successive conjunctions with its North Node). There are harmonics of each of these which fall in the circadian period (say 23 to 25 hours) as there are hosts of other harmonics of about this duration derived from other cosmic periods. This will make the allocation of particular cosmic rhythms to particular phenomena a difficult task.

This brings us, conveniently, to the work of the Foundation for the Study of Cycles of Pittsburgh, Pennsylvania. This organization is and has been for years easily the most outstanding of any devoted to the subject of cycle study. The Foundation has been fortunate in commanding the support of those who are interested in economic and business cycles, and it has consequently been the recipient of grants. But the Foundation has never allowed its interest in the commercial applications of cycle study to cloud its zeal for the wider truths of the subject and its researches have been conducted with true scientific impartiality and thoroughness. The inspiration for its work has evidently come, in very large measure, from one man, Edward R. Dewey. The fact that Dewey saw the need for such an organization and found time to initiate and develop it concurrently with his researches is some measure of his far-sightedness and vigor of mind. The work of the Foundation is so important and has so many points of contact with the subject of this book that it deserves a fairly full description.

The Foundation for the Study of Cycles, then, was founded in 1941 in Pittsburgh by Dewey who has been its President since its inception. He already had many years of cycle study behind him and had written a book on the subject. The Foundation describes itself as the oldest organization devoted to interdisciplinary research in rhythmic fluctuations. 'Rhythmic fluctuations' are identified as cycles of phenomena, in any field, which recur with reasonable regularity and over a sufficiently long period of time to be isolated as unlikely to be produced by chance.

In its 30-odd years the Foundation has collected and classified some thousands of such cycles, although many and perhaps most of these are regarded as tentative. They are drawn from the fields of astronomy and astrophysics, biology, climatology, geology, geophysics, hydrology and hydrography, medicine, physics, economics and sociology. Each of these categories is divided into numerous subordinate groups of phenomena each with a long list of entries.

Besides collecting and coordinating these cycle studies the Foundation set out to verify and measure the cycles, to record their latitudes and longitudes, periods, wave-shapes, timings and strength with the greatest possible accuracy. It cooperates with other organizations, acts as a clearing house for scientific work in this field (which now grows rapidly each year) and generally tries to bring the greatest possible definition to the problems and results of work in which periodicity makes its appearance.

As testimony to the probability that the cycles they study are of non-chance origin, the Foundation adduces the following items of evidence⁹⁴:

1. They persist over hundreds and, where records are available, even thousands of years.
2. In economic and social phenomena they persist unchanged in spite of major environmental modifications, such as the Industrial Revolution.
3. After distortion, rhythms revert to the pre-distortion timing and period.
4. They continue to operate after discovery.
5. Rhythms of identical period are found in diverse and seemingly unrelated phenomena as if they were the result of some common cause.

⁹⁴ Dewey, Edward R., *Cycles - Selected Writings*, Pittsburgh, Pa.: Foundation for the Study of Cycles, Inc., 1970, pp. 40-51.

6. Rhythms of identical period in different phenomena *synchronize* so that their crests come at about the same calendar time, thus emphasizing the presumption of interrelationship.

7. Rhythmic cycles of the same period show definite geographical configurations with distortions similar to the distortions of magnetic declinations.

8. Many cycle periods bear simple numerical relationships to each other, thus creating "families" of cycles such as we have noticed in our own studies.

Needless to say, one of the central problems, if not the central problem, which has preoccupied the Foundation throughout its work is the question of what is the regulating or causative factor behind these manifold expressions of the principle of periodicity which, again and again, show the clearest possible internal evidence of a common cause.

Before commenting upon the Foundation's own conclusions it would be as well to take a look at one of their cycle studies. The issue of the Foundation's magazine, *Cycles*, for August 1970 was devoted entirely to a summary of some of the evidence referred to in items 5 and 6 of the above list, in accordance with which it was found that there are numerous cycle periods embracing a widely diverse assortment of phenomena not only as to the precise *length* of the cycle but also as to the *timing* of the peak incidence of activity in the cycle. In other words, the cycles shared a common length and phase⁹⁵.

In this issue of *Cycles* it was stated that some 19 cycle periods of this kind had been closely studied by the Foundation. They range in lengths from 4 years at the shortest to 164 years at the other end of the scale. Of these 19, 17 were of 22 years or less.

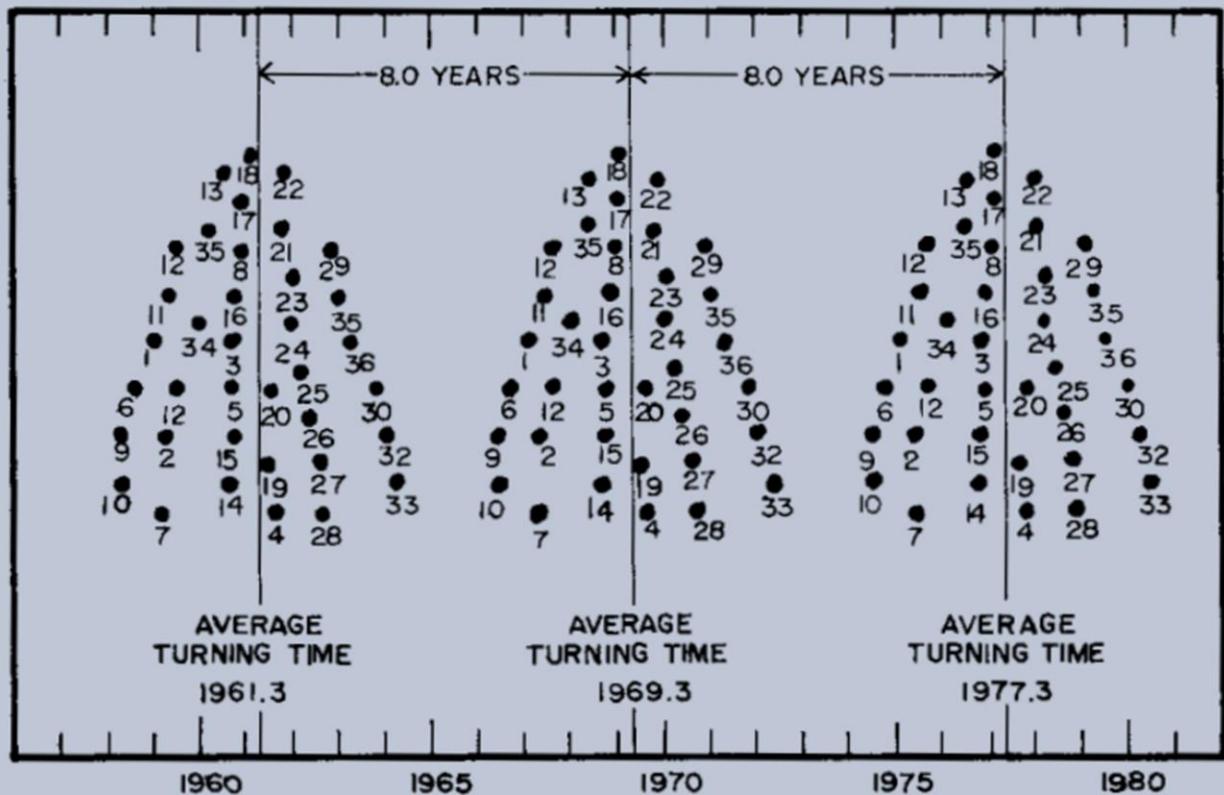
The 8.0 year cycle which we take as an illustration is not by any means the most dramatic of those given, but it illustrates well the variety of material used. Dewey records that 65 different phenomena have been alleged to have a cycle of between 7.95 and 8.01 years, but of these only 37 have been accurately timed. All known cycles of this period which *have* been timed are included in this study.

The way in which the ideal crests (the period of peak intensity as mathematically obtained) of the various cycles cluster is shown in the diagram below. Each dot represents the time of peak activity in one phenomenon and is numbered with reference to the table given. All the dots relate to the time scale marked along the bottom of the diagram; the vertical position is for convenience of spacing and has no significance.

The table which follows the diagram gives the numbered list of phenomena, the span of years for which records exist and which has been used for the determination of the cycle length, the ascertained length of the period and the date of the ideal crest in years and decimals of a year. The original article gives full references for each item in the list of phenomena⁹⁶.

⁹⁵ *Cycles* (Official Bulletin of the Foundation for the Study of Cycles), XXI (1970), no. 7.

⁹⁶ The graph on page 244 and information on the 8.0 year cycle are reconstructed from Dewey, E.R., 'The 8-year Cycle', *Cycles*, IV (1953) no. 5; "The 1956 Postscript to *Cycles: The Science of Prediction*, Part IX The 8-year Cycle", VII (1956), No. 10 and "The 8-year Cycle", Vol. XX (1969), No. 2.



Numbers	Phenomena	Spans of Years	Periods in Years	Dates of Ideal Crests
1	Lynx Abundance, Canada, 1735-36—1950-51 (Secondary Cycle Visible After Adjustment for the 9.6-Year Cycle)	216	7.95	1967.15
2	Pig Iron Prices, U.S.A., 1784-1961	178	7.95	1967.40
3	Rail Stock Prices, U.S.A., 1831-1955	125	7.95	1968.80
4	Crude Petroleum Production, U.S.A., 1861-1964	104	7.97	1969.7
5	Cotton Acreage Harvested, U.S.A., 1866-1964	99	7.98	1968.9
6	Sweet Potato Production, U.S.A., 1868-1964	97	7.98	1966.8
7	Anthracite Coal Production, U.S.A., 1824-1964	141	7.99	1967.4
8	Precipitation, Philadelphia, 1820-1964	145	7.99	1969.1
9	Wheat Prices, England, 1760-1875, 1844-1914	159	8.	1966.49
10	Whiting Abundance, Mersey Estuary, 1893-1927	35	8.	1966.5
11	Red Squirrel Abundance, N. E., U.S.A., 1926-1938	13	8.	1967.5
12	Steel Ingot Production, U.S.A., 1867-1955	51	8.0	1968.00
13	Eggs, Purchasing Power, U.S.A., 1873-1936	64	c.8.	1968.5
14	Cigarette Production, U.S.A., 1880-1961	82	8.	1968.7
15	Goodyear Tire and Rubber Company Sales, 1926-1957	32	8.0	1968.75
16	Barometric Pressure, Alps, 1865-1918	54	8.	1969.0
17	Stock Prices, U.S.A., 1831-1964	134	8.00	1969.20
18	Company G Sales, U.S.A., 1913-1955	43	8.0	1969.25
19	Yield Per Acre of the Leading Crops, U.S.A., 1882-1918	37	8.	1969.52
20	Raw Materials of Manufacturing Production, U.S.A., 1882-1913	32	c.8.	1969.71
21	Coal Production, U.S.A., 1881 (also given as 1882) -1913	33	c.8	1969.93
22	Iron Production, U.S.A., 1881 (also given as 1882) -1913	33	c.8	1969.93
23	Rainfall, Ohio Valley, 1839-1910	72	8.0	1970.10
24	Rainfall, Dakotas, May and June, 1882-1918	37	8.	1970.12
25	Rainfall and Growth of Pines, Prescott, Arizona, c.1867-c.1907	c.41	8.	1970.17
26	Yield Per Acre of the Leading Crops, France	-	8.	1970.49
27	Rainfall, Ohio Valley, c.1800-c.1900	c.101	8.0	1970.5
28	Yield Per Acre of the Leading Crops, United Kingdom, 1760-1914	155	c.8.00	1970.84
29	Sauerbeck's Index of Wholesale Prices, England, 1818-1913	96	8.0	1970.87
30	Barometric Pressure, U.S.A.	-	8.	1971.0
31	Rainfall, Illinois, 1870-1910	41	8.	1971.86
32	Rainfall, U.S.A., 1881-1921	41	8.	1972.10
33	Lead Production, U.S.A., 1821-1964	144	8.00	1972.6
34	Butter, Price Per Pound, New York, 1830-1966	137	8.01	1968.21
35	Sugar Prices, U.S.A., 1700-1964	265	8.01	1968.31
36	Cotton Production, U.S.A., 1790-1964	175	8.01	1971.41
37	Barley for Grain, Acreage Harvested, U.S.A., 1866-1964	99	8.02	1969.42

It will be seen that the average date of the crest for these phenomena, in the period shown, falls at 1961.3 (April 1961) and succeeding 8-year intervals. The majority of the cycles fall within 1 year of

this mean. Notice also that the phenomena listed include weather cycles, cycles in animal abundance and various commercial, industrial, agricultural and economic cycles.

The degree of clustering of the ideal crests is pronounced but it is by no means as dramatic as in some of the studies given. This clustering has not been calculated in terms of probability. However, in some of the more striking cycles the degree of clustering has been measured. In the 6.0 year cycle, where the ideal crests of 38 different phenomena are concentrated in a very narrow time-span, the odds against a chance result are given as less than 2 in 10 trillion. In the case of the 54-year cycle covering 35 different phenomena the result would not occur by chance more often than 5 times in 100 trillion. These 2 cycles are mentioned because they are referred to in the summary of this chapter.

There is very little need for comment upon the illustration given. It will be seen that the real impact of these studies arises not so much because of the similarity of cycle length but because of the *degree of synchronicity* shown. It is the way the rhythms of similar periods coincide in their phasing which implies a common causal agent behind these cycles. It should be remarked that all 19 of the cycles examined do show this synchronicity.

The question we must now ask ourselves, as the Foundation itself has repeatedly done, is what *is* this regulating factor? I cannot give an authoritative history of the Foundation's thinking on this subject, yet simply because the Foundation has always sought to cultivate a thoroughly scientific approach to its problems, within the context of the scientific ideas of the day, I believe it is true to say that there was certainly no strong predisposition, and there may even have been some reluctance, to look to celestial revolutions for an explanation. On the other hand, because the Foundation has sometimes found itself, in the past, like Gauquelin and others, more or less on the wrong side of the pale of scientific orthodoxy, it has in the long run kept itself free from the usual prejudices of current 'scientific' thinking.

I have no doubt that a good deal of thought and scrutiny must have been given to climatological factors as possible regulative agencies in these cycles. But this view merely begs the question. The rigid weather cycles (reflected in, for example, studies of Arizona tree rings over 1,040 years, Nile floods over 1,341 years or Lake Saki varves over 4,189 years) are neither more remarkable nor less than the rigid cycles found in international and civil strife (as reflected in Professor Raymond H. Wheller's Index of International and Civil Battles 600 BC - 1957 A.D., extending over 2,557 years and providing a history of human conflict drawn from all available sources).

In short, if our planet and its inhabitants lived in splendid isolation in the universe it might very well be expected to follow its own chequered career. But since it does not, but rather exists in a cosmic environment to which it is linked by countless invisible bonds, it is natural that sooner or later terrestrial rhythms should be seen to accord with cosmic rhythms, and this is the conclusion towards which the Foundation has been moving, slowly, perhaps reluctantly at first, but always with a certain inevitability and, in the past few years, with growing excitement.

In *Cycles* for April, 1969, Dewey reviews, in a lengthy 'Letter to Members', some of the projects which were waiting to be tackled⁹⁷. Included were matters which had aroused his interest, clues begging to be followed up and results which were probable signposts to new discoveries. Let us have some extracts from this letter so that we may see the lines along which his thought was moving. These are only scattered extracts and they do not do full justice to the care and vigilance with which Dewey approaches his work:

"A 17-week cycle is clearly visible in the last wave of the sunspot cycle. A 17-week cycle in stock prices is also present over the same span of time. The last 17-week cycle in stock prices (in Dow-Jones Industrials) continues backward as far as these figures are available (1897). Its exact length turns out to be 17 1/6 weeks.

⁹⁷ Dewey, E.R., "Letter to Members", *Cycles*, XX (1969), No. 4.

"Does the 17-week cycle in sunspot numbers also continue backward? And with more data, and hence more refinement of measurement, will it also prove to have an ideal length of $17 \frac{1}{6}$ weeks? If so, do the 2 cycles synchronize, either at the actual stock price latitude or at polar timing as suggested by what is known of latitude passage?" (This relates to magnetic declination.)

"If the sunspot and stock price cycles are found to have identical period and phase, can we assume a solar cause for the earthly behavior? Or is there a more fundamental causation factor that affects both sun and earth?"

"Suppose, as we would expect from previous experience, the 2 cycles are identical in period, but with crests of the cycle on the sun coming *after* the crests of the cycle of the same period on earth, is the lag by the amount one would expect from what is known as latitude passage, or is it of some other amount?"

"Is the concentration of variable-star periods in the 17-week range a mere coincidence, or is it in some way connected with this cycle on the sun and on the earth?"

And again, on another important issue:

"A short time ago, in analyzing a comprehensive reconnaissance of sunspot numbers with alternate cycles reversed (i.e. flipped, so that they were above and below the base line, considered as an axis) I noticed 5 peaks on the periodogram at periods that conformed almost exactly to the heliocentric synodic periods of the 5 outer planets⁹⁸. I wish to study this interesting behavior in depth to see if there is further evidence of planetary-solar relationships.

"I would like to know, for each of these 5 cycles, if this correspondence is consistently present throughout the 266 years for which data are available, and if there are variations in length of the various waves that correspond to the variations in the length of corresponding heliocentric synodic periods. Then, too, we need to know the shapes of the various sunspot cycles and whether or not they crest at the actual time of conjunction, or at some other time ...

"It has also been observed that minor peaks on the periodogram of sunspot numbers with alternate cycles reversed have periods that correspond to fractions and multiples of these same synodic periods. Are all these correspondences mere coincidences or are they meaningful?"

"If there are planetary-solar relationships ... are the planetary-terrestrial relationships 1) direct or 2) by way of the sun?"

And again:

"One of our members, who wishes to remain anonymous, has observed that when there are planetary conjunctions in certain celestial longitude⁹⁹ there are advances in stock prices; when the same conjunctions occur in other celestial longitudes there are declines in stock prices.

"This is a very curious observation and some years ago I took the trouble to plot all these conjunctions from 1897 (the earliest daily stock prices) to date by longitude and to compare stock price movements with planetary movements ... There was indeed a rather marked correspondence. I employed a statistician from Cambridge University to evaluate the significance of the correspondence. He said that it could not be the result of chance more often than once in a million times!"

And again:

"The next project which comes to mind for investigation in depth has to do with the 6.41 month cycle that I found in Standard and Poor's Index of Industrial Common Stock Prices 1871-1952. I reported to you on this cycle in *Cycles* in September 1953 (p. 228).

"The reason that I am so interested in this cycle is that its length of 6.41 months is almost exactly $\frac{1}{4}$ of the length of time it takes Mars and Earth to line up with each other (as seen from the Sun). The synodic period of these 2 planets is 25.63 months. $\frac{1}{4}$ of this interval is 6.405 months. This length

⁹⁸ The 'heliocentric synodic periods' are the average time intervals between conjunctions, as seen from the Sun.

⁹⁹ Actually, in the sign Capricorn though Dewey is perhaps a little reluctant to say this!

is only .005 months or about 4 hours away from the stock market length ..." (Actually, one quarter of the heliocentric synodic period is 6.4075, which is even nearer the stock market length).

Dewey then goes on to say how he would verify this relationship, which he is careful not to assume simply on the coincidence of length of period.

He ends his thoughts on these and many similar matters with these observations:

"Of course, this whole enquiry might prove to be a flop. All we have to go on, so far, is an apparent coincidence of period ...

"On the other hand, if these do prove to be correspondences of period, phase and regularity, the problem is no more than posed. The question arises: How could the movements of the planets conceivably have anything to do with mass psychology as reflected in stock market activity? Here cycle study comes to a dead end. The problem must be turned over to the physicist, the physiologist and psychologist. Cycle study has done its work in showing that a problem exists."

Our only observation is that if he does turn the problem over to the physicist, the physiologist and the (modern) psychologist, he will get answers which will beg just as many questions and will leave him not one jot the wiser.

It will be seen that a good deal of Dewey's thinking centers round his discovery that sunspot cycles are related to the synodic periods of the planets. Dewey was the 1st person to make this discovery: see *Cycles* for October 1968¹⁰⁰. Since then this correspondence has been much more fully explained by Dr. R.A. Bureau and Dr. L.B. Craine of Washington State University. Their work was reported in *Nature* magazine¹⁰¹ and summarized in lay terms in *The Astrological Journal* of Spring, 1971¹⁰².

There are numerous terrestrial phenomena which are more or less well-recognized as coinciding with the sunspot cycle. This inspired *The Times* of London, when reporting on the discoveries of Bureau and Craine, to observe in their "Science Report" of 5 December 1970:

"6 of the 7 strongest harmonic frequencies found in the sunspot cycle are definitely matched by Bureau and Craine with periodic alignments of the giant planets. This sort of alignment, with one or more of the other giants either lined up with Jupiter on the same side of the Sun or in opposition on the other side of the Sun is just the relationship studied by astrologers.

"Since it is also clear that variations in the sunspot cycle can affect the earth's environment through their influence on the solar wind, it may be that there is a sound scientific basis for some astrological predictions.

"The radiation from the Sun is one of the prime hazards to manned space flight, so we find the curious anomaly that the dates of future space flights might be chosen using the text book astrological techniques of Kepler to predict low sunspot activity."

It only remains to say that the work of the Foundation for the Study of Cycles is now advancing in scope and speed. They now have a European division: The International Institute for Interdisciplinary Cycle Research at Leiden, and they are collaborating with similar bodies which are springing up all over Europe. They report that as a result of this collaboration there are now 87 scientists engaged in digging up references in 39 branches of science and in 17 languages. This is the first step to a projected 10-volume *Catalogue of Cycles*.

For ourselves, there are 2 things we have found admirable about the work of the Foundation. Both may be due to the beneficent example and lucid mind of Edward Dewey through which the Foundation's work is so often expressed. The first is that in a world in which specialized scientific studies are usually described in a rigamarole of obscure jargon which effectively prevents one from

¹⁰⁰ Dewey, E.R., "A Key to Sunspot-Planetary Relationship", *Cycles*, XIX (1968), no. 10.

¹⁰¹ Bureau, R.A. and Craine, L.B., article in *Nature*, Vol. 228, 5 Dec. 1970, p. 984.

¹⁰² Mather, Arthur, "Planets and the Sunspot Cycle", *The Astrological Journal*, (Astrological Association, London), XIII (1971), no. 2.

discovering what light there is to be gleaned therefrom, the publications of the Foundation are generally written in the most clear and informative prose. The second is that, judging again by its publications, the Foundation still seems to live in a world in which wisdom takes precedence over knowledge. Some sense of the mystery and profundity of common things still remains, and this despite their earthy interest in business cycles! Let us hope that their association with the larger world of present-day science with its often teeming irrelevances does not destroy their intelligibility or their sense of values.

We have seen in this chapter that a well-organized body specializing in cycle studies has found that countless aspects of human and natural activity show cyclic or wave patterns. This has been done through the use of highly sophisticated mathematical techniques developed in over 30 years of intensive work.

Of greatest importance and interest to us is not only the fact that these cycles often show an extraordinary degree of persistence and stability over long periods of time, nor that the same cycle frequencies evidently apply to a wide variety of phenomena showing a high degree of synchronicity of timing throughout, but rather it is that the cycles are often found in '*families*', so that the cycle lengths are fractions or multiples of one another. This is simply another way of saying that such cycles are sub-harmonics of one major wave-length. This is fully in accord with our own findings in collections of birth data of different groups of people; for example, in the nativities of clergy, the 7th, 49th and 98th harmonics of the solar distribution. *Many similar examples* have been found.

The harmonics which we have met in individual nativities are *mostly* (but not all) of a relatively short frequency, say fractions of the solar year. The cycles studied by the Foundation are mostly longer ones and relate as a rule to activities of large groups of humanity (as reflected for example in economic cycles) or in the movements of nature.

Now we have said before that astrology is full of circles or cycles. One of the longest cycles we are accustomed to think of is the precessional period of approximately 25,920 years, commonly divided into what are called Great Ages of of 2,160 year each, such as the Piscean Age and the Aquarian Age. These 'ages' are thought of as relating to just such mass movements in the life of mankind as are studied by the Foundation on a smaller scale. It may not be surprising therefore that out of the group of 19 cycles referred to earlier and singled out by the Foundation as being of wide application, one of them, the 54 year cycle, is an obvious sub-harmonic – the 40th ($40 \times 54 = 2160$) – of a Great Age. Others, such as the 6.0 year and 9.0 year cycles, are in turn sub-harmonics of the 54 year cycle. This may or may not be relevant but it would be entirely in accord with our findings if it were to be so.

There are students of astrology who assert that such things as we have described in this chapter have nothing to do with astrology. The proper field of astrology, they say, is with the inner nature of man, with his inner qualities, impulses and characteristics. These they regard as being 'higher' than outward events and conditions.

This is a misunderstanding of the nature of astrology. Astrology always and everywhere deals directly with *nature* - nature and its operations, through the cryptic order, or upon matter, nature in mankind, nature in individual man, nature in the cosmos; but whether it is inner or outer it remains nature. That which is truly rational and spiritual is above nature and above astrology *except* insofar as it may take for itself a natural and corporeal vehicle, when it remains free, rational and spiritual in itself and therefore above fate and the cycles of time, but is accessible to the astrologer who views it in the manner of the speculative philosopher, that is, using the word speculative in its correct sense (and not its colloquial one, which implies doubt) as derived from the Latin *speculum*, a mirror - seeing the spiritual partially reflected in its outward activity.

22. SUMMING UP

In Chapter 1 of this book we began by saying that there had been in the 20th century a great revival of interest in Astrology and, with this revival, a determined effort to reexamine, reformulate and extend the practical knowledge of the subject. More specifically, all sorts of new techniques and systems have been devised and attempts have been made to introduce new factors and to clarify some of the major problems of the subject.

Nevertheless there has been one overriding obstacle to the complete success of these efforts, namely the lack of any clear understanding, not only of the great system of First Causes upon which the fundamental truth of Astrology rests, but also of the most basic laws and principles which determine the real nature of traditional astrological concepts such as signs, houses and aspects. In other words we still lack the precise means of interpreting the symbolic relationships of the heavenly bodies to one another and to the great circles in which they move in relation to all those many fields in which Astrology is applied and especially in the field of human character and destiny.

The great system of First Causes by which the foundations of astrological truth are established is a topic the illumination of which has not, to my knowledge, been adequately attempted in modern times, although without it our knowledge must remain imperfect and shadowy like all knowledge which is not securely rooted in the vision of spiritual realities. Why should there be any relationship between the heavens and terrestrial life? What exactly is the *nature* of the 'influences' which Astrology studies and by what energy are they communicated? If the effect is viewed as purely synchronistic, what is the basis of this synchronistic correspondence or bond? What is the precise relationship of the heavenly bodies to the human soul and to its corporeal vehicles? Where does their dominion over terrestrial life start and where does it end?

These and many similar questions remain largely unanswered and have not been touched upon in this book. Their elucidation depends, I believe, upon an understanding of the profound Doctrine of Substance whereby every effect in the entire universe is the result of the act of some kind of substance whether spiritual or corporeal, natural, human or Divine.

But even if these primary issues remain uncertain, at least we can now have a much clearer idea of the right conceptual framework for the study of the secondary effects which follow from First Causes and which are normally regarded as the main subject matter of Astrology.

These secondary effects tell us, so to speak, *how* Astrology works as opposed to *why* it works. In order to elucidate these the author has, over the past 20 years, studied collections of astrological birth data compiled both by himself and by fellow researchers. By treating the planetary positions so obtained as if they were iron filings scattered over different astrological 'force fields' it has been possible to form a clear conception, for the first time, of just how (that is to say, upon what model) the astrological forces at work in the nativity actually operate.

The picture so revealed and which we have tried to expound in this book is one of the harmonics, that is the rhythms and sub-rhythms of cosmic circles. These cosmic circles or cycles are potentially of great variety, including, as they do all celestial phenomena which are characterized by periodicity. But the ones we have particularly studied relate to those factors which form the basis of the recognized elements of horoscopic symbolism: the diurnal circles of the planets, their geocentric synodic periods (relating to their motion from conjunction to conjunction), and their geocentric zodiacal positions. All these are geocentric in character, what value heliocentric and other periodic factors have one cannot say, but one can assume the principle involved to be of universal validity once the right application of each factor is known.

The central principle which is seen to be involved in the symbolism of all astrological positions is the one illustrated in Fig. 19 of this book. Every circle in Astrology, as represented by the motion or apparent motion of any body or point from a significant starting-point, through 360°, to the same

relative position, represents some whole or unity with symbolic correspondences in all those fields to which Astrology is applied. Furthermore the division of these circles by different numbers can be understood as applying to the subordinate parts of each of the wholes or unities so symbolized. These symbolic divisions of circles can then be viewed as producing a number of positive and negative poles at equally spaced intervals round the circle (Fig. 19) according to the number by which the circle is divided. The astrological effects follow from the positions of the planets in relation to these points.

There are 2 great benefits which accrue from this more distinct understanding of *how* Astrology works. The first is the realization of the fact that all the traditional basic tools of horoscope interpretation are based on *wave formations* derived from the harmonics of cosmic circles¹⁰³. This knowledge enables one to clarify many areas of doubt; such as the way in which astrological 'forces' build up in the various circles, throwing light on the nature, distribution and orbs of aspects, the character and limits of zodiacal and diurnal divisions and sensitive 'areas' in these circles.

The second important benefit is the demonstration of the significance and value in Astrology of a *far greater range* of number symbolism than has hitherto been recognized, and with this the means for testing and exploring the content of such number symbolism.

We have tried to show, notably in Chapter 21, that this vision of the basic principles of Astrology is thoroughly in harmony with the findings in other disciplines which address themselves to the study of the occurrence of periodic phenomena in biology and in human life generally.

Finally we have indicated the significance of this enlarged view of astrological symbolism in relation to the study of genetics. Because the genetic code and the astrological code both provide a blueprint of the incarnating type they must be parallel expressions of the same theme. This correspondence can now be explored in far greater detail and should be productive of valuable results.

We should emphasize in passing that the new insight into the true elements of astrological symbolism gives us a more credible view of how the nativity can coincide so precisely with the appropriate symbolic cosmic conditions. The major harmonic patterns, being relatively slow forming, determine the approximate time of birth. The higher frequency harmonics indicate possible appropriate moments of birth of shorter duration but which occur more often. Thus in the case of, say, the 100th harmonic of the Ascendant, there will be 100 moments in the day of *equivalent value*, so that, one after another, the wards of a complex combination lock can engage, as it were, to yield a moment of birth which corresponds symbolically with the 'pattern of the life' to be born.

To some, this kind of picture appears to introduce an element of rigid determinism into human life which is repugnant to one's sense of the truth about the human condition. *It* is in matters of this kind that those who are unaccustomed to the problems of mystical philosophy habitually fail to see the point. Mystical truths necessarily involve the element of paradox *since they are concerned with the relationship of 2 totally opposing things, spirit and matter*. Fate and free will must always exist and operate side by side. The total description of the former in the horoscope in terms of principle does

¹⁰³ Interestingly, the revelation that astrological 'forces' manifest as temporal rhythms which ebb and flow, rather than as simple divisions of duration of time, links up with the very oldest teachings. There can be little doubt that Egypt was the cradle or fountainhead of the esoteric teachings of at least the Western tradition. In this connection Isha Swaller de Lubicz (wife of R.A. Swaller de Lubicz, both serious students of Ancient Egyptian thought) provides a number of lengthy commentaries at the end of her book, *HerBak, Disciple*. These are based on her insights into Egyptian esoteric teaching. The commentaries were not translated by Sir Ronald Fraser along with the books themselves. They have only recently been rendered into English by a friend of the writer, Dorothy Smith of Prestatyn. In Commentary Six, on Astronomy-Astrology, the last section is headed "Fate, Grace and Determinism". In this Swaller de Lubicz says, speaking of the Egyptian view of epochs of time: "That which can be foreseen is the date of change in the pattern of the times. But the times are, above all, rhythms and not (periods of) duration. And to these rhythms numbers can be assigned, which are functional values ..."

not in any way inhibit the latter. The human will *cannot* be otherwise than perpetually free because it is the elective faculty of a free spiritual being (though he may not always make positive use of it!). The principles of fate must equally operate at all times to provide the field of action in which free choices are to be made.

Books on occultism and the like are frequently the worst offenders in spreading misconceptions about these matters. They foolishly talk about certain events being 'fated' and others being the result of free choice. *This is nonsense!* These misconceptions also provide the clearest evidence that occultism and mystical philosophy are 2 totally different things. Occultism, being concerned with the cryptic forces operating in nature and matter, retains an essentially materialistic way of looking at things. Mystical philosophy, being concerned with the relationship between spiritual and material aspects of truth, must embrace both and adopt paradoxical mystical modes of thought and expression.

All fate is freely chosen because it is the result of past volitional acts; in the present it provides the field of action in which free will can operate (could one make free choices in a vacuum?). All fate is beneficent in the sense that it provides ideal scope for willing the good. It is beneficent, too, in the sense that without the laws of fate there would be no certainty that any volition, good or bad, would ultimately be connected with its appropriate consequences and life would become a chaos. What was done with good intent might never bear good fruit. What was done with evil intent would not (as it inevitably does) produce those remedial and even punitive conditions in our lives which tend to redirect our efforts to return to the universal harmony.

The destiny with which we are born and which is fully described *in principle* in the nativity, is merely a special application of these general truths. All manifested life is a limitation in the sense that it introduces us to definite circumstantial conditions. The good man, however, is never a prisoner of fortune since what is a limitation from one point of view is an opportunity from another. From this larger viewpoint, all that he meets with affords him opportunities for exercising the marvelous and varied powers of the soul, heroic and gentle, grave and gay:

He who kisses the joy as it flies
Lives in Eternity's sunrise.

Let it not be thought - heaven forbid - that we would seek to diminish the wonder of the soul's incarnation or try to express in a few neat rules and graphs the mysterious workings of Divine Providence in its all-wise and all-just apportionment of human destiny, although, under the law of the attraction of similars, these are, in truth, simplicity itself:

... Fresh
Issues upon the universe that sum
Which is the lattermost of lives. It makes
Its habitation as the worm spins silk
And dwells therein. It takes
Function and substance as the snake's egg hatched
Takes scale and fang; as feathered reed-seeds fly
O'er rock and loam and sand until they find
Their marsh and multiply. (From the Lord Buddha's
sermon in *The Light of Asia*, Book Eight)

One of the noblest uses of Astrology is, as it has always been, its value as an aid to the contemplation of the great verities of man's estate and his relationships to the Cosmos and to God. If this book has contributed a few insights into this great science and so enabled anyone to glimpse

more clearly the mysteries and beauties of the Divine Order and Harmony, the author will be more than satisfied.

APPENDICES

APPENDIX I

A SIMPLE WORKING PLAN FOR THE INDIVIDUAL OR SMALL GROUP OF RESEARCHERS

Having studied this book, the student may feel that he would like to try his hand at some original research in the field of harmonics, and he may wonder how he should set about it. There is certainly plenty of scope for individuals or small groups of students to tackle projects which will help to build up our picture of how harmonics work. At present we are at the stage of groping our way towards an understanding of the numerical basis of structures in the psyche, in human society and in the body. The relationship of these to each other and to numerical structures in nature is similarly unfolding. In this process of exploration there is a great need for an abundance of quite small-scale (as well as larger scale) studies of different sets of data drawn from different fields. Studies of nativities showing psychological traits, disease conditions, vocational allegiances and so on are all badly needed in order that we can begin to distinguish the significance of different harmonics in various contexts and to arrive at a better understanding of the principles by which they are to be interpreted.

Some of the larger groups and organizations in the astrological field are at present organizing computer facilities to cover every stage and aspect of this kind of work so that larger projects can be tackled more easily. But individual students with a taste for this kind of investigation need not feel that they have no part to play. Indeed it is worth emphasizing that all the pioneering work in this field has been done, and in many cases continues to be done, without computers. The student who is prepared to work patiently through the various processes of collecting and analyzing data "by hand" enjoys many advantages over those who are fully mechanized for the job. As he works slowly and steadily at his task, he continually notices small things which escape the attention of the man with the computer. He is in touch with his material from start to finish, and has time for reflection. He can adapt himself to clues which he notices, turning aside to follow up small points which often lead to new discoveries.

Above all, it is the fact that his mind is close to his material which gives him the advantage. I believe it is true that when he has done as much as he can with pen and paper, there is often much benefit from having a *full* harmonic analysis done by mechanical means. This is really impossibly time consuming by hand. Yet even then he will look at the computer printout with a sharper eye and a deeper understanding for having done much of the preliminary work himself.

Even those who do not wish to engage in systematic research, however, may care to tackle a project such as is illustrated in this appendix. When it comes to understanding harmonics there is nothing which teaches one more effectively than working with them.

First of all, what is the minimum size for a collection of nativities to be examined for harmonics? There is no simple answer except that the more unusual or specific the condition studied the smaller will be the collection needed. The more unusual any factor is, the more sharply one may expect it to be distinguished astrologically. A few 100 cases – even less - of those who follow some very unusual occupation may be enough to tell one a great deal; for a more general category such as scientists or writers, a much larger collection will be needed. But a glance at the graph shown in Fig. 80

suggests that the added benefit to be gained in accuracy beyond say 2000 or 3000 cases is small unless one is looking for great detail.

As an example of a fairly small-scale study and the methods one can adopt to carry it through, I am indebted to Charles Harvey for permission to make use of a collection he made of the birth dates of hydraulic engineers. This collection includes the birth data of all those in Who's Who in Engineering (1968) who are listed as being hydraulic engineers or specialists in hydrology or water supply. This is a rather specific class of occupation and carries the particular interest for the astrologer that it is especially concerned with one of the 4 elements. In all, we find that there are 334 specialists of this kind listed.

The first step of course is to extract the names and dates of birth and to list them in due order. In a case of this sort the names will probably be given in alphabetical order so there is no need to give a page reference to one's source book. Having listed the dates of birth, one may decide that one will simply make a study of say the Sun and Moon positions. If one proposes later to examine aspects, one must first remember the difficulties and problems of such a study arising from planetary stations, as described in Chapter 9. Then one would rule columns for all the planetary positions and duly set about entering the noon positions for each date.

Let us suppose that we have entered the position of the Sun for each day at noon and wish to examine what forces are at work regulating its distribution in these nativities. Our list may start off as follows (I do not have the original list of names and birthdays, so these are merely illustrative):

<u>Name</u>	<u>Date</u>	<u>Sun</u>
1. Smith, J.	27 Dec. 1920	5.28 Capricorn
2. Williams, M.F.	14 Nov. 1917	21.33 Scorpio
3. Brown, W.	12 Aug. 1925	19.13 Leo
4. Jones, A. C.	22 Mar. 1919	0.49 Aries
5. Robertson, A.J.	28 Apr. 1931	7.15 Taurus
... etc.		

We now want to know how many Sun positions fall in each degree of the Zodiac. For this we use a 360 degree grid as shown opposite. It is best to number the columns across the top from 0 degrees to 29 degrees; then number the degree boxes at 10 degree intervals up to 360 degrees for use in dealing with aspects. One can put the sign symbols down the left-hand side when one is dealing with zodiacal positions. This is an all-purpose grid and a little experience will soon make its use familiar. Note the details which should be entered at the head of the page.

Working through our list of hydraulic specialists, then, we can put a stroke in the appropriate box for each Sun position. In our example we have put the *total* number of Sun positions for each degree for the sake of legibility. Case 1 goes in at 5° Capricorn, Case 2 at 21° Scorpio, and so on. Because we have started our numbering across the top at 0 degrees, Case 4 goes in at 0 degrees Aries. In this way one need only take note of the whole degree number, although we list the positions in degrees and minutes so as to get as much accuracy as possible when we come to calculate solar aspects.

There is no virtue in treating 0° Aries as covering all positions from 29° 31' Pisces to 0° 30' Aries. It is just as accurate to put the positions in with regard to the whole degree number; either way we have 360 totals and the phase angle can be measured from the point 0° Aries just as easily one way as another, provided the computer is so adapted.

SUBJECT *Hydraulic Engineers* FACTOR *0 in Zodiac* POSITIONS GIVEN *Noon*.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
♈	1			1				1		1	2	1		2	2		2			1	1		4	1	1	3		1		25	
♉		1	1	2	2		1	2	2	1	1		3	1	4	3	1	2	2	1	1		1	1	1	1	2		1	39	
♊			2	1	1			1		2	3		3	2					1	1	1			2		1	2	1	1	22	
♋		2	2	2	1		1	2	3	1	1	1		1	2	2	1	1	1	1	1		1	3		1	1	2	3	2	37
♌		2	2			1	3	3		3	1	1		1	2	1		1	2	1					1	1				23	
♍		1	1	1	4	1				1	3			1	3		1		3	2	1				3	1	1	1		29	
♎		1	1		1	1			4				1	2	1	2	1	1	1	1	1		1	1	2	2				23	
♏		1	2				4	1	1			1	1						3	1	3	3	3	1	2	2		1		30	
♐		2	1		1	1	1			1			1	1	1	2	1	1	1	3	1	1					2	1		22	
♑		1		1	2	2	1	1	1	1	4		1	2	2	1							2	1	2	2	1	1	1	29	
♒		1	2	1	2						3	1	1		1	3	1	1	1	1	2	1		2	2	3	1	1		27	
♓		1	2	1	1		1	1	3	2	2		2	2		3		2		2	1		1	1		1		1		28	
	11	16	10	10	10	5	12	6	20	8	17	6	11	11	17	10	13	9	11	13	15	10	13	7	8	14	15	10	9	7	

NOTES
From:
"Who's Who
in Engineering-
1968."

Having obtained our total number of Sun positions for each degree, there are several things we can do straight away. By adding *across* we can give a total for each sign, by adding *down* we can give the total for each degree of the 12th harmonic (30 degrees in length),

We have totaled the positions for each sign down the right of the grid and these are as follows:

<i>Aries</i>	<i>Taurus</i>	<i>Gemini</i>	<i>Cancer</i>	<i>Leo</i>	<i>Virgo</i>
25	39	22	37	23	29
<i>Libra</i>	<i>Scorpio</i>	<i>Sagittarius</i>	<i>Capricorn</i>	<i>Aquarius</i>	<i>Pisces</i>
23	30	22	29	27	28

The striking feature of these positions which we notice straight away is that the negative signs tend to be high, positive signs low. Insofar as those who deal with water supply and hydrology must have a great deal to do with earth as well as water, this is a satisfactory start.

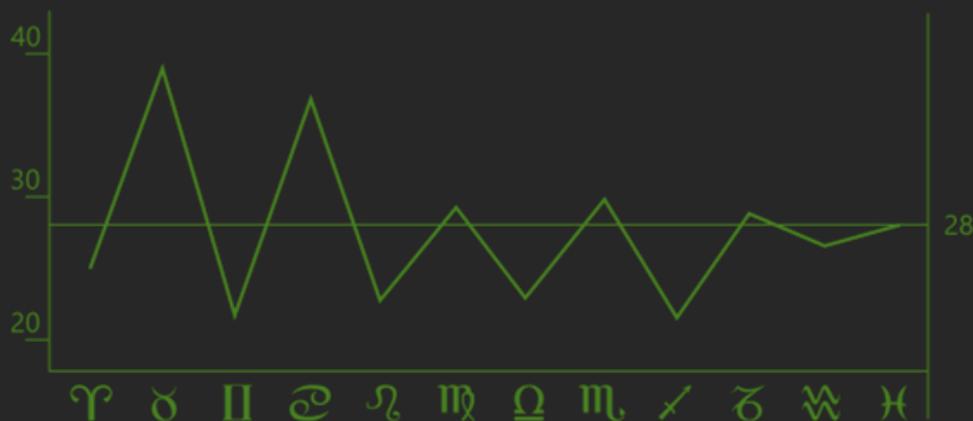


Figure 1

If we actually draw out this distribution pattern (Fig. I) we shall think of 2 things. First, we shall feel sure that there is a strong 6th harmonic (60 degrees in length) giving alternate signs high and low. Secondly we notice a "beat" effect with a powerful oscillation between positive and negative signs at one point in the distribution tailing off to only a very slight contrast at another point. We shall therefore conclude that as well as the 6th, there is a strong adjacent harmonic, either the 5th or 7th, (so that the 2 harmonics coincide at one point and cancel each other out at another, see Fig. 74).

Let us tackle the 6th harmonic first. This is 60 degrees in length. For these longer waves it is quite sufficient to take the total for *each sector of 5 degrees*; this will give us 6 totals in each sign and 12 in each 60 degrees. Reading from our grid then, here are the totals in runs of 60 degrees. These have been added up to give the whole 60 degree distribution pattern (Table 4 below). Ignore the further addition sum in sets of 4s for the moment.

Table 6 - 60° runs by 5° sectors

2	2	7	3	6	5	7	6	9	9	4	4
4	3	5	2	3	5	7	7	3	7	5	8
4	7	5	5	1	1	7	2	7	4	3	6
4	4	4	5	6	0	3	6	2	4	10	5
4	2	2	6	5	3	4	5	9	1	3	7
6	0	3	5	4	9	5	7	6	5	3	2
24	18	26	26	25	23	33	33	36	30	28	32
25	23	33	33	←							
36	30	28	32								
85	71	87	91	= 20° by 5° sectors							

(Total: 334)

It is a good idea after performing an operation of this kind to check that one's total agrees with the number of cases one started with - 334 - so as to make sure one has not lost any positions during the process of transcribing or counting.

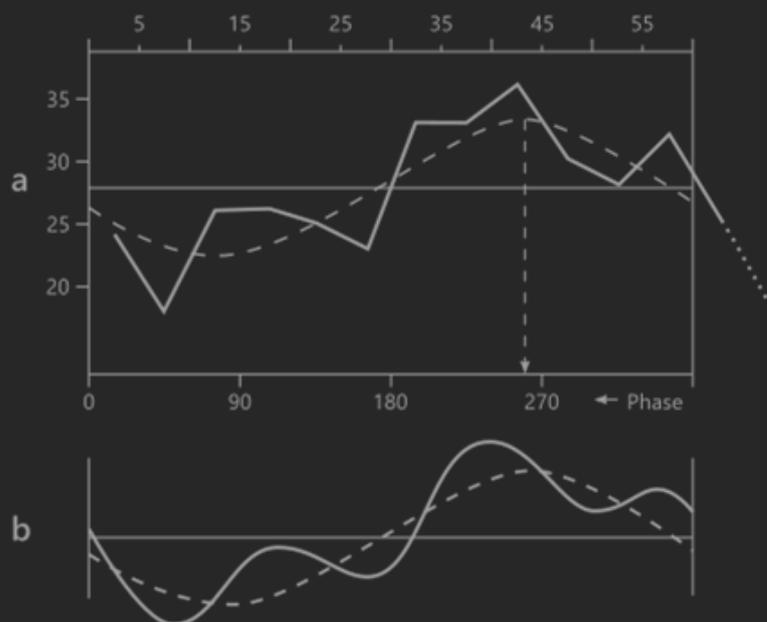


Figure II

We can now draw out our 60 degree distribution pattern in graph form - see Fig. IIa. Looking at this graph we can see our 60 degree wave (the 6th harmonic) and we can also see what appear to be 3 waves super-imposed upon it, as shown in Fig. IIb. This must be a wave of 20 degrees (the 18th = 6 x 3). We can easily check this by going back to our totals in Table 4 6 and putting them down in runs of 4 as shown. This yields 4 totals for each 20 degrees which we can again draw in graph form (Fig. III) to enable us to see the size and phasing of our 18th.

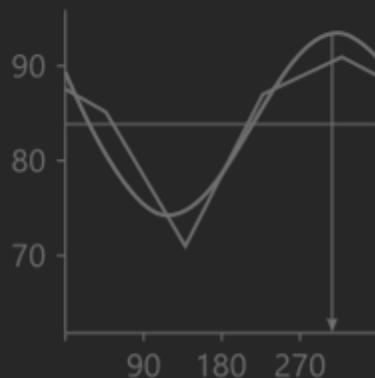


Figure III

In both Fig. IIa and Fig. III we have drawn our phase angle scale along the bottom of the graph. We can see that the 6th harmonic has a phase of about 260 and an amplitude of about 18 % (a rise and fall of 5 on a mean of 28). Similarly the 18th harmonic has a phase of about 290 and an amplitude of roughly 10 % or just over. Be careful when drawing the graph to remember that the first total, in this case 24, falls in the *middle* of the first 5 degrees. This affects where the phase will fall when one is using graphic methods to determine it.

We can now go back to our 30 degree-by-degree distribution totals which we have arrived at by adding *downwards* along our grid. It is sensible to draw this out to help us to see what harmonics, if any, are present. When we do so, (Fig. IV) we have to look rather carefully to see what the chief elements are. It is only by experience that one can learn to spot the significant factors in these graphs, although sometimes they are quite obvious. Of course when we are dealing with a relatively small collection of data spread, as in this graph, through 30 separate totals, the numbers are low and so the element of randomness obtrudes and makes it harder to see what is what. After some study we may conclude that there appear to be 2 interesting features.

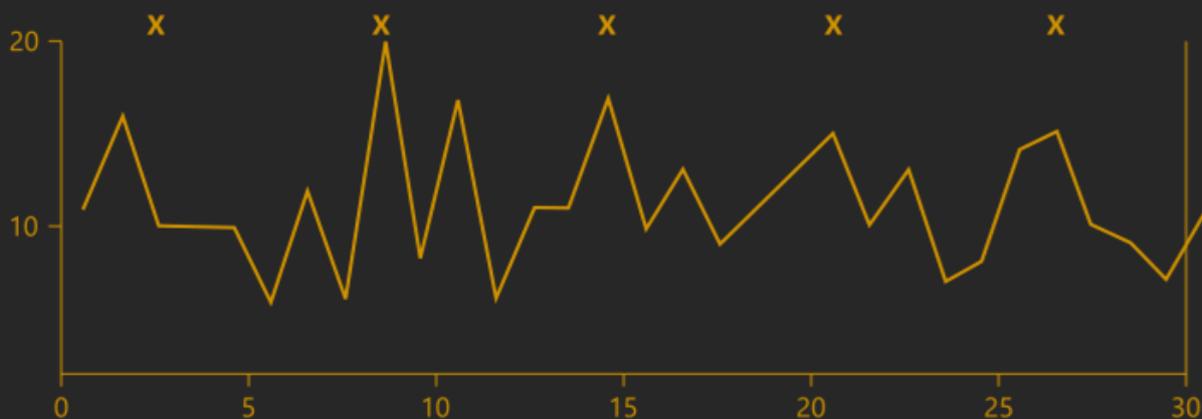


Figure IV

First we notice that there tends to be a peak roughly every 6 degrees which have been marked with crosses. We can test this 6 degree wave by setting down our degree totals from across the bottom of the grid in runs of 6:

Table 7 - 6° runs by single degrees

11	16	10	10	10	5
12	6	20	8	17	6
11	11	17	10	13	9
11	13	15	10	13	7
8	13	15	10	9	7
<hr/>					
53	60	77	48	62	34
<hr/>					
	190		144		

In all these cases we can tell very roughly whether there is a significant harmonic present by asking if one half of the run of totals is widely different from the other. They should differ from the mean by *at least* the square root of the mean distribution. In this case the mean is 167 ($334 \div 2$), the square root of which is about 13. Thus, we are looking for one half of the distribution to be over 180 and the other less than 154. As can be seen, we have totals of 190 and 144 and this gives a very elementary indication of significance. This will be disputed by statisticians but it is a rough sort of guide.

Drawing out our graph from Table 2 7 (Fig. V) we can immediately see the second factor of interest in this distribution, namely that alternate degrees are high and low. Thus the totals for the alternate degrees of the Zodiac can be arrived at conveniently from Table 2 7:

Table 8

Odd	Even
53	60
77	48
62	34
<hr/>	
192	142

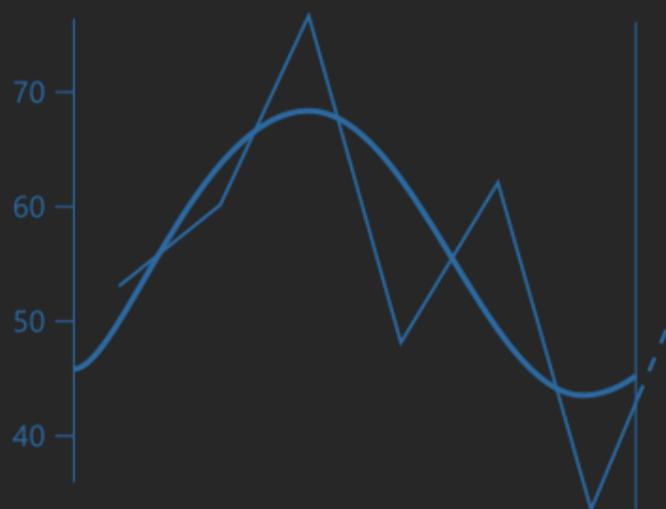


Figure V

These high and low scores for alternate degrees of the Zodiac are just as strong a feature as for alternate *signs* of the Zodiac, in fact the contrasting totals are the same in each case: 192 and 142. The difference is that whereas there is seldom much doubt about which *sign* of the Zodiac the Sun is in, the fact that we are dependent upon *noon positions* on the day of birth for the degree position

means that there is relatively quite a large element of approximation at work here. Therefore the true contrast between odd and even degrees is probably even greater than is indicated by the totals 192 and 142.

This emphasis on odd or even degrees is a feature which tends to appear in many such results. What it relates to I cannot say, and it would be worthwhile for some student to try to discover what it indicates. In the 7302 physicians the emphasis falls strongly in the same way as in the present case. Anyone who investigated this would have to ascertain that this effect was not produced by some unnoticed recurring tendency in the Sun's noon position, although there is reason to think that it is *not* due to this.

Looking back to Fig. V and our 6 degree wave (the 60th harmonic, 1/5th of a sign) we can see that this is a very vigorous presence with a rise and fall of about 12 on a mean of 56, or just over 21 % amplitude. The phase is about 150 degrees.

Before leaving the 30 degree distribution pattern, we may remark that there is evidently no 30 degree wave as such nor one of 15 degrees. The 5th sub-harmonic of this series is easily the strongest and the only significant presence apart from the odd and even degree rhythm.

What next? The 4th harmonic is often a significant feature, though not as often in the Zodiac as in Gauquelin's diurnal positions. We ought to test for this, even though the sign totals (Fig. I) do not suggest its presence. For this we shall set down our 5 degree totals from Table 4 6 in runs of 18 totals (5° x 18 = 90°). (We could make them into 10 degree totals in runs of 9 if we wished).

Table 9 - 90° runs by 5° sectors

Column:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	2	2	7	3	6	5	7	6	9	9	4	4	4	3	5	2	3	5
	7	7	3	7	5	8	4	7	5	5	1	1	7	2	7	4	3	6
	4	4	4	5	6	0	3	6	2	4	10	5	4	2	2	6	5	3
	4	5	9	1	3	7	6	0	3	5	4	9	5	7	6	5	3	2
	17	18	23	16	20	20	20	19	19	23	19	19	20	14	20	17	14	16
	179											155						

If we draw this series (Fig. VI) we can see that there is only a very slight 4th harmonic. The best contrast we can get from our totals is a split of 179 vs. 155 (columns 3-11 vs. 12-18, 1-2) between the highest run of 9 totals and the lowest. There is probably a modest 4th harmonic with a phase of about 180 degrees and a small amplitude which would be confirmed by a similar set of data from another country.

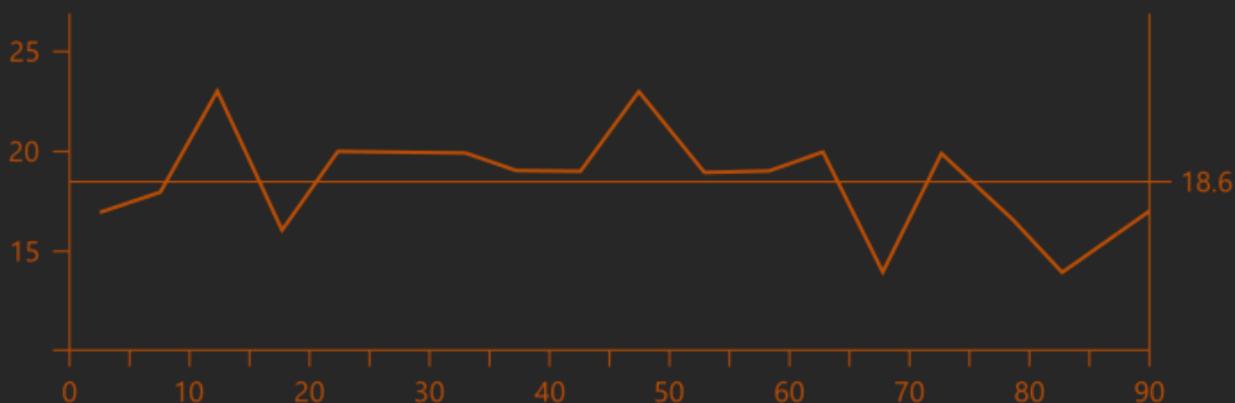


Figure VI

Coming now to the 5th harmonic, we have a slight problem. We cannot keep to our 5 degree block totals because 5 degrees will not divide into 72 degrees. However we can overcome this by taking our totals from the grid in blocks of 6 degrees. This is rather a nuisance but at least it has the advantage that it entirely eliminates the 6 degree wave which we have already noticed. Going back to our grid and taking the totals for each 6 degree sector through the Zodiac, we have:

Table 10 - 72° runs by 6° sectors

2	5	6	6	6	7	7	14	6	5	4	6
2	5	5	7	9	6	6	9	5	8	5	3
2	8	4	5	6	6	4	4	8	5	2	3
7	1	13	6	4	3	5	7	3	6	7	6
2	8	6	1	6	5	9	6	8	7	5	2
15	27	34	25	31	27	31	40	30	31	23	20
31	40	30	31	23	20						
46	67	64	56	54	47	= 36° run					

(Total: 334)

We can split these totals into 2 halves so that one half has 188 and the other 146, a fairly good result. When we draw the graph it seems probable that the principal ingredient besides the 5th (72°) is the 10th (2 halves of 36°). This we have confirmed in Table 5 10 in the usual way, and the resultant graphs are shown in Figs. VII and VIII.

We can see here that both these harmonics are strong, the 5th having an amplitude of over 20 % (phase about 180°) and the 10th of about 25 % (phase about 150°). We can also see an 18 degree wave (20th) crossing and re-crossing the 36 degree wave, but this is not so strong - about 10 % or less.

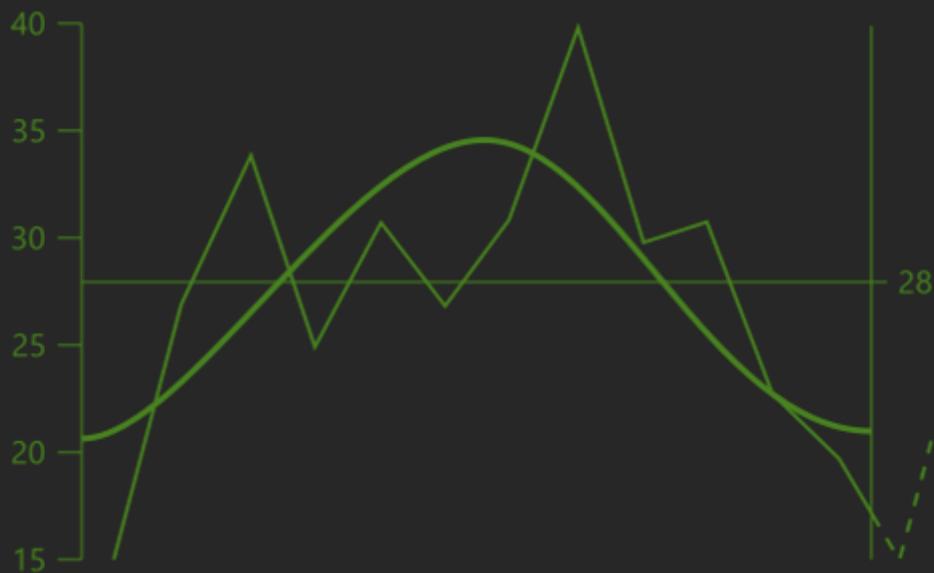


Figure VII

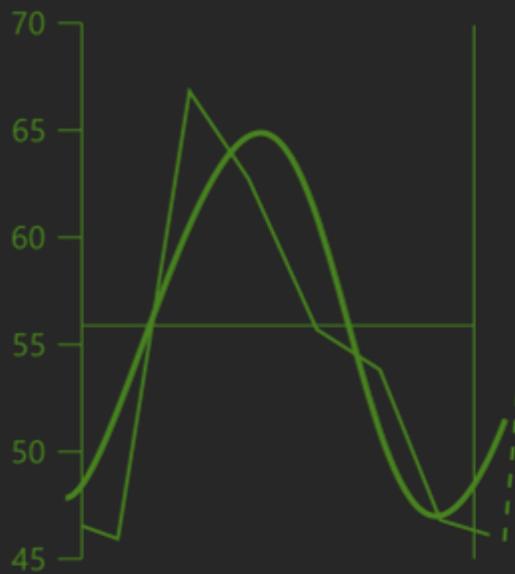


Figure VIII

We said when we looked at Fig. I, showing the distribution through the signs of the Zodiac, that it looked, because of the "beat" effect, as though we should find a 5th harmonic or a 7th. As a matter of fact there is one thing about that "beat" effect which suggests that we might find *both*, a 5th and a 7th. This is that the strong oscillation and the flat part of the graph do not fall exactly opposite each other in the Zodiac as they should if it were a simple combination of 5th and 6th or 6th and 7th.

So let us look at the 7th harmonic - a number, incidentally, which has more than a touch of association with Neptune and might well appear in these watery nativities. Here we have difficulties again because, since the 7th part of the circle is 51° 25.7' approximately, there is nothing we can do to divide up our distribution into exact 7ths. However, a close approximation is really all we need. Thus we are dealing with a wave 51 ½° long.

What we do is to put down our 5 degree totals in runs of 10 totals (= 50 deg. instead of 51 ½° deg.), At 2 points in the Zodiac we drop 1 of our totals so as to keep the harmonics in step as far as possible, thus:

Table 11 [6]

2	2	7	3	6	5	7	6	9	9	= 50° instead of 51° 26'
4	4	4	3	5	2	3	5	7	7	= 100° -//- 102° 52'
3	7	5	8	4	7	5	5	1	1	7 = 155° -//- 154° 17'
2	7	4	3	6	4	4	4	5	6	= 205° -//- 205° 43'
0	3	6	2	4	10	5	4	2	2	= 255° -//- 257° 09'
6	5	3	4	5	9	1	3	7	6	0 = 310° -//- 308° 34'
3	5	4	9	5	7	6	5	3	2	= 360°
20	33	33	32	35	44	31	32	34	33	
<u>Total 327 (+7)</u>										

It will be seen from the successive degree-steps of the true 7th series shown on the right that we are never out of step by more than 3 or 3 degrees. This is a small shift in a wave of 51 ½ degrees. Of course we could if we wished get greater accuracy still by going back to our grid and using separate degree totals but the above method is usually quite accurate enough.

Drawing now our graph (Fig. IX), we see how we have obtained a perfectly clear and convincing result with a vigorous 7th harmonic and its 3rd sub-harmonic winding its way to and fro across the line. The 7th has an amplitude in the order of 18 % (phase about 180°) and the 21st (= 3 x 7) is not much weaker (say 12 – 15 %) and phased at about 270°.

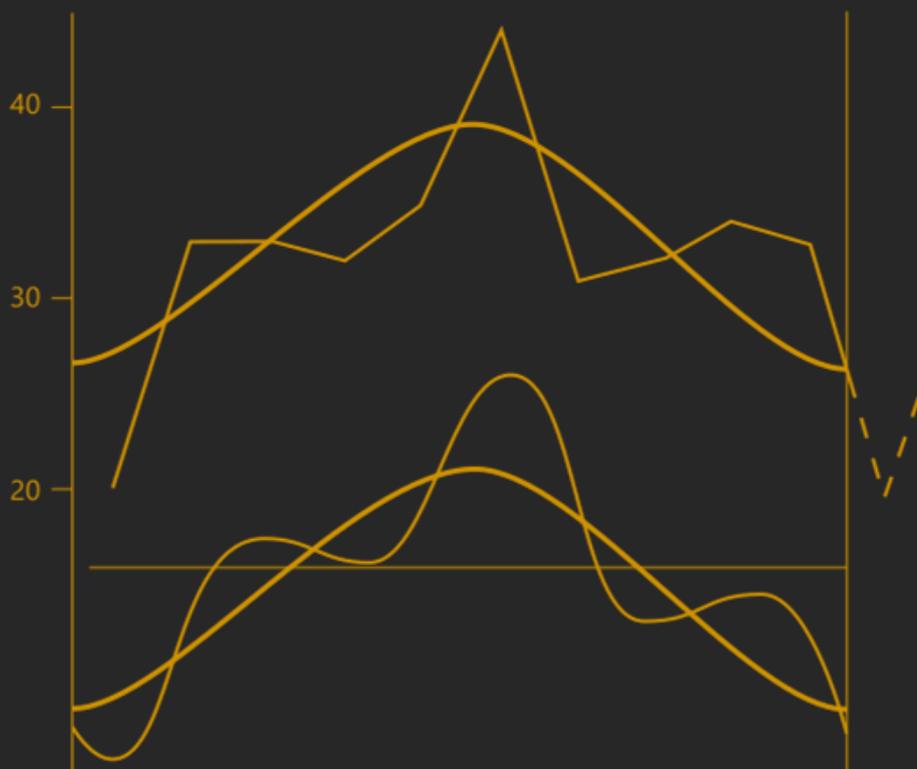


Figure IX

Looking back now over our results, we find that we have been able to extract from this quite modest collection of data the following convincing harmonics:

	<i>Amplitude %</i>	<i>Phase</i>
5 th (72°)	20	180
6 th (60°)	18	260
7 th (51 ½°)	18	180
10 th (36°)	25	150
18 th (20°)	10+	290
21 st (17°)	12+	270
60 th (6°)	21	150

It is worth noting that if we had used our raw degree totals from the grid instead of 5 degree totals, we might well have found some more short waves besides the 60th.

In addition to these, we have noticed a strong tendency for a 180th of 2 degrees. We have not checked the 9th although we easily could use our 5 degree totals in runs of 8 totals (5° x 8 = 40°). But as a matter of fact, if the student cares to try this, he will chiefly notice the 2 waves of the 18th harmonic (20 degrees in length) which we have already spotted.

The above harmonics are well and clearly shown. I would expect most of them to appear in any parallel collection of nativities of hydraulic engineers and hydrologists from another country, provided that their work and background approach was not too different from those given in Who's

Who in Engineering. *This is* a small collection of nativities but the harmonics we have obtained evidently show up so well because the character of the work they are involved with is distinctive.

If one were attempting to analyze the harmonic distribution of aspects in a collection of data such as this, one would begin by listing the angle *from* the slower moving planet *to* the faster one, always measuring round the circle in the direction of its motion. Thus, suppose our original list of names and birthdates gave the positions of the planets, one would tackle say the Sun-Mars aspects as follows:

	<i>Date</i>	<i>Sun</i>	<i>Mars</i>	<i>Angles Sun-Mars</i>
1. Smith, J.	27 th Dec. 1920	5.28 Capricorn	23.10 Aquarius	312
2. Williams, M.P.	14 th Nov. 1917	21.33 Scorpio	6.25 Virgo	75
3. Brown, W.	12 th Aug. 1925	19.13 Leo	29.46 Leo	349
4. Jones, A.C.	22 nd March 1919	0.49 Aries	12.06 Aries	349
5. Robertson, A.J.	18 th April 1931	7.15 Taurus	9.29 Leo	268

In these few cases, we have been unlucky in having to go the long way round the circle to measure the aspect in several cases because the Sun was approaching the conjunction. Notice that we measure the angle to the nearest whole degree, having *regard to the minutes of longitude*, thus in case 3 the Sun is nearer to 11 degrees from the conjunction than it is to 10 degrees. One always measures *from* the slower-moving planet *to* the faster one.

This process of calculating the angle seems very laborious at first but becomes easier after a time. It certainly teaches one why computers were invented and also why, so far, relatively few aspect-studies have been made.

Having obtained our list of angular relationships, we simply go through our list putting a stroke in each appropriate box of our grid, which is numbered for this purpose. Having thus obtained our degree-by-degree distribution of Sun in relationship to Mars, we can proceed with our harmonic analysis exactly as before.

In doing this for the first time, the student will often have to stop and think exactly what he is doing, relating the process and its results to the aspect circle and its relationships. All the time he is doing this he will be *learning to think* harmonically and this is what we want.

When he has obtained his results, they can be listed and if possible published. In the coming decades, more and more such harmonic analyses of different sets of data will be published and at the same time, studies will be published of number symbolism in its different applications to the nativity. From the interaction of these 2 - experiment and hypothesis, hypothesis and experiment - a picture will be built up of the interpretative basis of relationships in the horoscope. It will be a basis far more integral and comprehensive than anything we now possess in astrology.

* * * * *

Footnote:

Students may be interested to know that in the Moon's position in the nativities of hydraulic engineers, the emphasis on the water signs was even more marked over the other 3 elements:

<i>Aries</i>	<i>Taurus</i>	<i>Gemini</i>	<i>Cancer</i>	<i>Leo</i>	<i>Virgo</i>
23	32	25	34	24	24
<i>Libra</i>	<i>Scorpio</i>	<i>Sagittarius</i>	<i>Capricorn</i>	<i>Aquarius</i>	<i>Pisces</i>
19	38	22	29	29	35

However, one must be very cautious about making assumptions on the basis of a literal understanding of the 4 elements. A collection of charts of specialists in aerodynamics showed Air signs to be easily the weakest! A strong 3rd harmonic placed all the emphasis in Fire.

Acknowledgements to Charles Harvey who made both studies.

APPENDIX II

SOME POINTS BEARING ON HARMONIC ANALYSIS

Harmonic analysis is a procedure by which a wide range of mathematical expressions or observational data relating to periodic phenomena can be broken down into a number of components each of which is a simple wave motion. Anyone who has read this book or examined Appendix I will have gathered the general idea of what is involved without any reference to the standard mathematical procedures which characterize harmonic analysis proper.

From the point of view of the material dealt with in this book we may note that any observed distribution of planetary positions can be broken down into wave forms and fully described in such terms. The standard method of harmonic analysis is often known as Fourier analysis after the French mathematician, Fourier, who first satisfactorily tackled this type of problem.

It is not our purpose in this appendix to describe the procedure of Fourier analysis for this can be obtained from an appropriate textbook. In any case the process is extremely tedious if carried beyond the first few terms and is normally best done by computer. In this connection one may mention that standard computer programs for harmonic analysis are generally available.

There is however one issue which is not often dealt with specifically in works which describe harmonic analysis and which is therefore worth commenting upon here. In all harmonic analysis of observational data the aim is to determine what regular harmonic wave patterns are present in the distribution of a given number of totals. The number of totals which describes the distribution will vary. For example Michel Gauquelin, the French researcher, in studying planetary distributions in the diurnal circle, divides the circle by 12 (corresponding roughly to the 12 houses of the horoscope) or by 18 or 36, giving the total number of planetary positions in each sector. These divisions by 12, 18 and 36 show a successively more detailed picture of the distribution. Having regard to the acknowledged element of approximation in registered birthtimes, any division beyond 36 sectors would seem to have little value, although a more detailed analysis based on accurate birthtimes would no doubt prove of great interest.

In all analyses of planetary distributions in the circle of the *ecliptic* a much higher degree of accuracy is possible because planetary motions in this circle are much slower and therefore a total for *each degree* of the Zodiac has always been used in this book. In other words all distributions of Sun, Moon and planets in the Zodiac have been analyzed by 360 totals.

The questions to be considered are: What is the effect of greater accuracy upon the results of harmonic analysis when we use a larger number of sector totals? What, in general, are the limitations imposed upon the scope of harmonic analysis by the number of totals available?

To take a simple example, suppose we are examining the distribution of the Sun through the signs of the Zodiac and so have a total for each of the 12 zodiacal sectors. The total for Aries may be, say, 42. This lumps together all the Sun positions which fall in Aries. But suppose we then go on to count up the number of Sun positions in each decanate (each 10° sector) of the Zodiac. We may then find that within the sign Aries there is a very unequal spread of cases. Perhaps the 1st decanate has 25 cases, the second 10, and the third 7. Although the total is 42, the 12 sector analysis treats this total as if it were centered on the middle of the sign, whereas we know that in fact the majority

of cases falls near the beginning of the sign. This is bound to affect the accuracy of the amplitude and phase yielded by harmonic analysis.

The more numerous the divisions made in studying the distribution and the greater the number of sector totals we have, the more accurate will be the result of the analysis. This might seem obvious but even those who were very well acquainted with harmonic analysis found it difficult to estimate just *how much* the results would be affected for any harmonic by increasing the number of totals in the data used for the analysis.

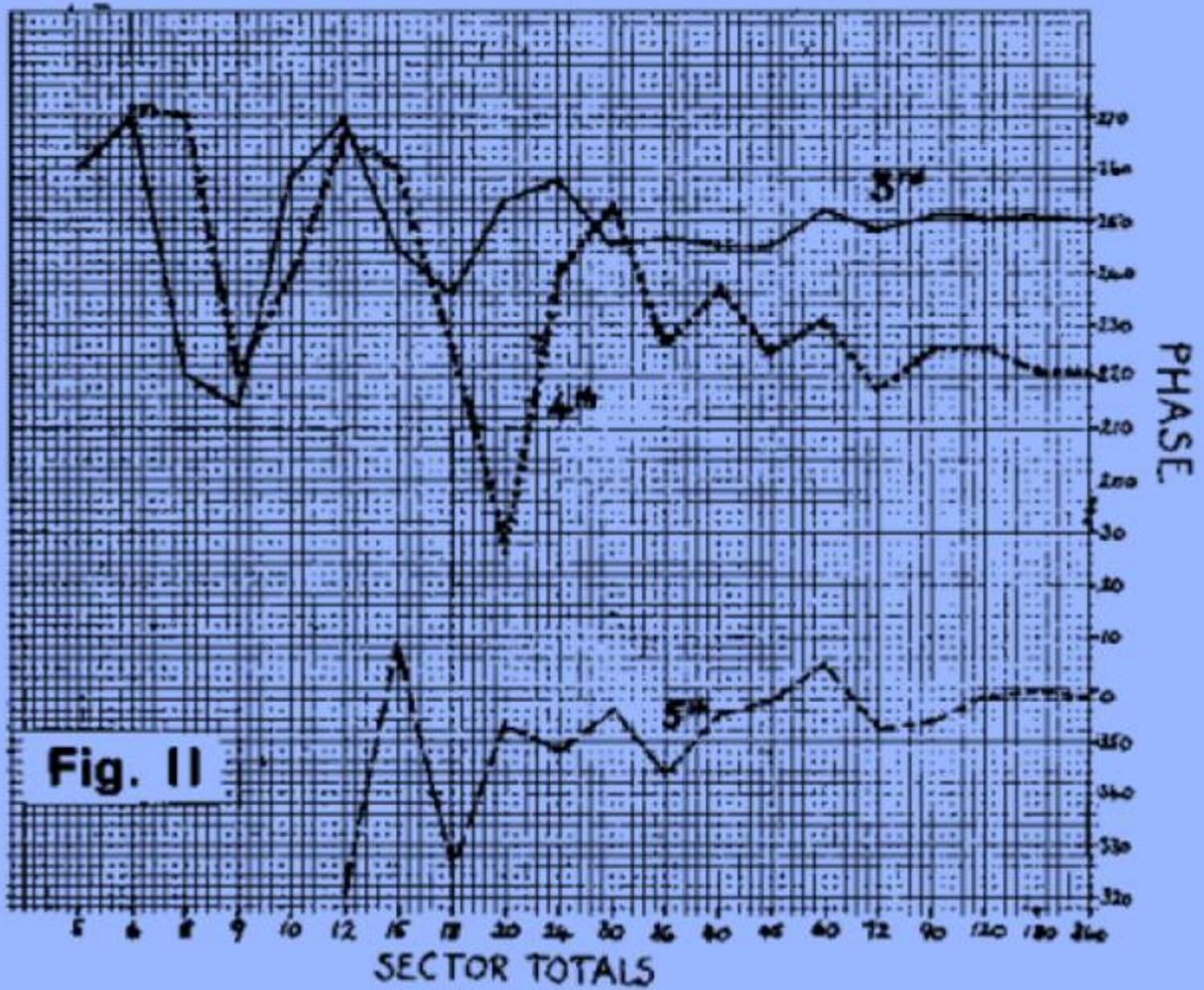
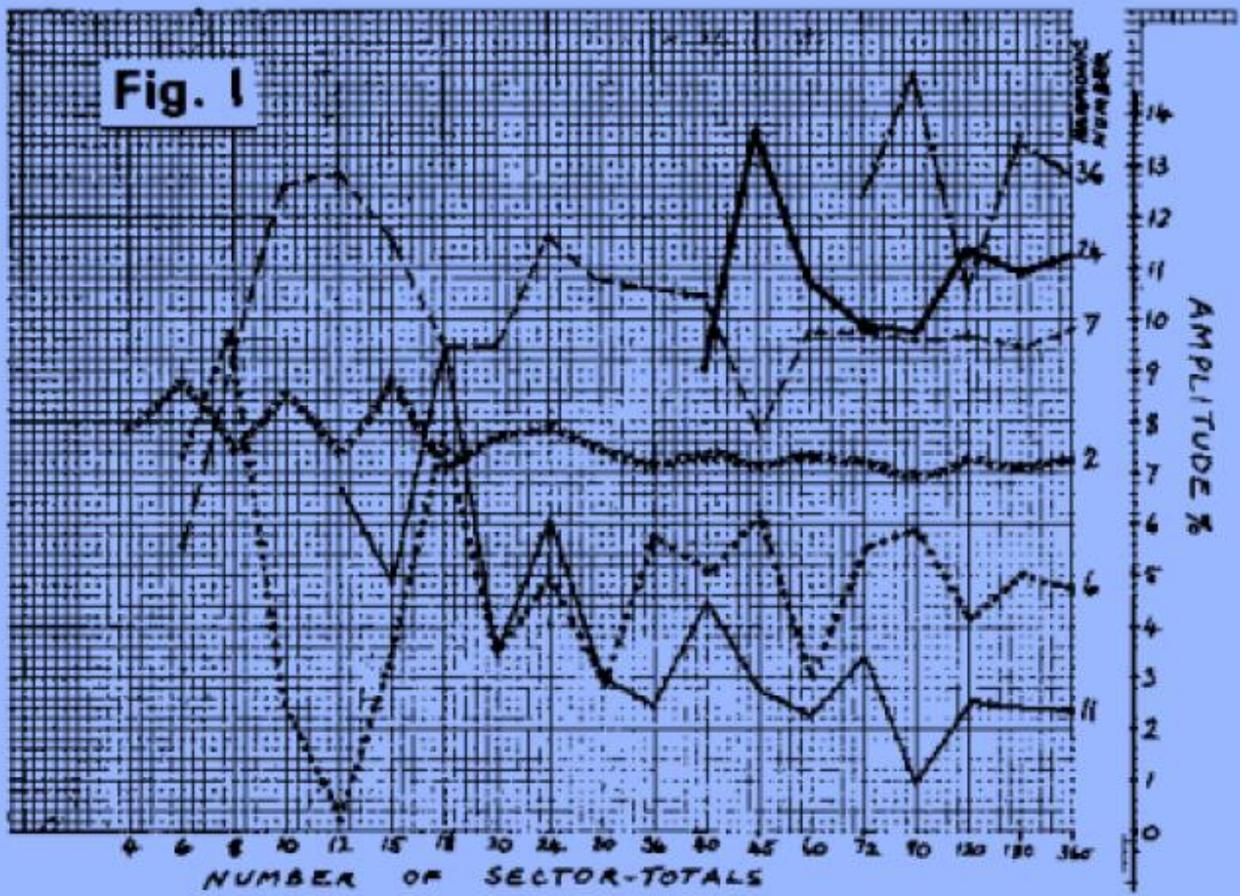
In order to obtain some idea of how much the results would be affected, Colin Bishop of the Astrological Association Research Section and others ran 1 set of actual data through the computer dividing the distribution into different numbers of sectors. For this purpose the Sun positions of 1024 children with poliomyelitis were chosen (see Chapter 8). These positions were originally given as 360 degree totals. It was therefore possible to group this solar distribution into 2 sectors of 180 degrees, or into 4, 6, 8 and soon up to 360 sectors, and to consider how the amplitude and phase yielded by harmonic analysis was affected as the divisions became more numerous.

First as to *amplitude*, some typical specimen results are shown in Fig. I. Along the bottom of the graph is shown the number of divisions of the zodiacal circle by which the distribution was successively analyzed. The vertical scale shows the amplitude for the 2nd, 6th, 7th, 11th, 24th and 36th harmonics as given by computer analysis when the same original data was divided up by various sector totals.

It will be seen that as the number of sector totals increases (that is to the right of the graph) the amplitude yielded tends to become progressively more stable. When there are few sector totals relative to the number of the harmonic the amplitude oscillates, sometimes wildly. Despite these oscillations of value we can say, in a general way, that the amplitude will seldom be seriously distorted (more than by 2 % or 3 % of *absolute amplitude*) provided the number of sectors is in the order of between 4 and 6 times the number of the harmonic. To obtain a reliable result as to amplitude, one should have a number of totals in the data which is 4 times, and preferably 6 times, the number of the highest harmonic analyzed. This will usually yield an amplitude within 2 % or 3 % of the true amplitude. 360 degree totals will usually be fairly reliable up to the 60th or even the 90th harmonic, although there may be occasional exceptions.

The same sort of rule can be shown to apply in relation to phase. Fig. II shows the phase angle yielded by computer analysis of the same polio data for the 3rd, 4th and 5th harmonics. In this case, instead of saying the margin of error will not usually be more than 2 % or 3 % provided the number of totals is 6 times the number of the harmonic, we must say that the error will not usually be more than 20° or 30° of phase.

This modest experiment does at least throw some light on an obscure topic and it is hoped that it will be of help as a very general guide to other researchers.



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Harmonics in Astrology is one of the cornerstones upon which the future of astrology is being built.

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Finally, a practical textbook is available which represents the definitive work in this field ... I was struck by the enormous scope of this book.

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This book is a magnificent introduction to an astrological viewpoint that uniquely combines the precision of science with the richest traditions of our discipline. As a textbook on the harmonic technique, it starts from scratch and carefully explains what harmonics are, how they relate to more familiar concepts and how they can be put to work. Mr. Addey goes to great lengths to show the interpretive power of harmonics in horoscope analysis.

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One of the world's leading research astrologer, JOHN ADDEY holds an advanced degree from the University of Cambridge, England. He is co-founder, former President and Patron of the Astrological Association of Great Britain. Mr. Addey is the author of 2 other books on astrology and many journal articles, which, at last, have now been made more accessible in 2 anthologies published in 1976.