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## THE

## POLYPHONIC PERIOD OF MUSIC

PART I

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# THE OXFORD <br> HISTORY OF MUSIC 

## VOL. I

# THE POLYPHONIC PERIOD. Part I METHOD OF MUSICAL ART, 330-1330 

BY
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## EDITOR'S PREFACE

The histories of music in current use have for the most part adopted a method which is frankly and ostensibly biographical. Their spirit has been largely that of the Saga or the Epic, rousing our admiration for the achievements of princes and heroes, but leaving us uninformed, and indeed unconcerned, as to the general government of the kingdom or the general fortunes of the host. Such a method has no doubt obvious advantages. It is human, it is interesting, it readily compels our attention, it wins from us a full acknowledgement of the debt that we owe to the great masters. But at the same time it is liable to two attendant dangers: first, that of ignoring the work done by lesser men; second, that of placing genius itself in a false perspective. The history of an art, like the history of a nation, is something more than a record of personal prowess and renown. Tendencies arise from small beginnings; they gather strength imperceptibly as they proceed; they develop, almost by natural growth, to important issues : and the great artist has commonly inherited a wealth of past tradition and effort which it is at once his glory and his privilege to administer.

More especially is this true of music, which among all the arts has exhibited the most continuous evolution. Over
six centuries of work went to provide Palestrina with his medium; Purcell succeeded in the fullness of time to a long line of English ancestry ; Bach, though he owed much to Pachelbel and Buxtehude, much to Vivaldi and Couperin, was under still greater obligation to that steady growth and progress which the spirit of German church music had maintained since the days of Luther. Even those changes which appear the most violent in character-the Florentine Revolution, the rise of the Viennese School, the new paths of the Romantic movement-may all be rightly considered as parts of one comprehensive scheme: sometimes readjusting a balance that had fallen askew, sometimes recalling a form of expression that had been temporarily forgotten or neglected, never wholly breaking the design or striving at the impossible task of pure innovation:

To trace the outlines of this scheme is the main object of the present work. The biographical method, admirable in its way and within its limits, has been sufficiently followed elsewhere :-in histories, in monographs, in dictionaries and encyclopaedias of music. But these still leave room for a complementary treatise which shall deal with the art rather than the artist, which shall follow its progress through the interchanges of success and failure, of aspiration and attainment, which shall endeavour to illustrate from its peculiar conditions the truth of Emerson's profound saying that 'the greatest genius is the most indebted man.' In some cases the labour has proved difficult and obscure, partly from imperfection of the record, partly from extreme complexity of causal relations; at any rate the whole ground has been surveyed afresh, and the facts interpreted with as little as may be of prejudice or prepossession.

The work has been planned in six volumes. The first two, by Professor H. E. Wooldridge, deal with the music
of the Mediaeval Church, one closing with the period of Discant, the other tracing the course of Modal Counterpoint up to the work of Palestrina and his successors: the third, by Sir C. H. H. Parry, follows the line of the early Monodic movement from its origin in Josquin and Arcadelt to its culmination in Purcell : the fourth, by Mr. J. A. Fuller Maitland, deals especially with the music of Bach and Handel, and with the harmonic counterpoint which is peculiarly characteristic of their time: the fifth, by the Editor, narrates the rise and progress of the Viennese School, and carries from Haydn to Schubert the development of the great instrumental forms: the sixth, by Mr. E. Dannreuther, describes that phase of the art which is distinctively known as Romantic, and discusses the formative conditions which inspired Weber in the theatre, Schumann and Chopin in the concert-room. With the Romantic period it has been thought advisable to stop. The more recent aspects of musical art, though at least as well worth investigation as those of any preceding age, are yet too near us for complete and dispassionate judgement. With Brahms and Wagner, with Tchaikovsky and Dvořák and Richard Strauss, we are still liable to the faults of a hasty or ill-considered criticism, and must leave to a future generation the task of assigning them their place and explaining the tendencies through which alone they can be interpreted.

It is impossible in so brief an outline even to indicate all the topics of which we propose to treat. Questions of ethnology, questions of aesthetic, questions even of social convention and popular taste, meet the musical historian at every turn, and demand at any rate acknowledgement, and where possible an attempt at solution. Our object has been to account, so far as we are able, for the suc-
cessive stages through which European music has passed since it became, to use an obvious analogy, a living language. The distribution of the work among different hands has been part of a settled policy, designed to secure for each period a treatment which shall be not only full but in a special degree sympathetic. There are but few men who have sufficient breadth of view to deal equally with every type and phase of artistic utterance; of these few there are still fewer whose lives would suffice for the requisite investigation and research. Some of the facts have demanded journeys to remote parts of Europe, others have needed peculiar kinds of knowledge or experience, and though we may gladly admit that England contains writers who alone could have accomplished the whole, it has seemed advisable to aim at such efficiency as may be secured by a combination of labour.

There remain a few words to say on the particular scope and purport of the present volume. Starting from the recorded system of the Greek modes it finds the first germ of polyphony in the magadising practice described by Aristotle and Athenaeus, and traces the apparent modifications of the system to its adoption in the Latin Church. It thence proceeds to estimate the position and work of St. Ambrose, to compare the basis of the earliest Christian hymns and antiphons with that of their Greek originals, and to point out the inveterate error which still speaks of the Ecclesiastical modes as Gregorian. By this route it reaches its first resting-point in the distinction of authentic and plagal, and in the treatises, scientific rather than artistic, of Aurelian and of John Scotus Erigena. A new departure is taken with the introduction of Organum or Diaphony, first in the strict form of the Musica Enchiriadis, then with the greater freedom of Guido's Micrologus, and
so through the alternations of theory and practice from the Winchester Troper to Cotto and Guy of Chalis. Next comes the introduction of measured music, and the establishment of a fixed and intelligible rhythm : tentatively in the Discantus Positio Vulgaris, more firmly in Franco of Cologne, reaching a temporary climax with Walter Odington. From this the practice of Discant takes its origin, the early notation develops into a metrical scheme, and the art of music passes into a phase more consonant with modern principles and modern theories. A special part of the volume is devoted to rhythmic conventions, and particularly to the influence of rests or pauses in determining metrical rules, all of which bear an important part in rendering the material of music more flexible and more amenable to artistic treatment. The devices are still archaic and remote, the methods rudimentary, the results occasionally harsh and unfamiliar; but the germ of our metrical system is there, and needs but time and experience for its full development. The work of Jean de Garlande is rich in examples, and is supported by an anonymous treatise of the late thirteenth century, now in the British Museum.
With the period of Discant this volume comes to its close. Its later chapters are occupied with a description of the various types of composition current at the time:the Cantilena and Rondel ; the Motett; the Hoquet; the Conductus, and the Organum purum. Of these forms some have been known by illustration, some by little more than the name alone, and it is a piece of conspicuous good fortune which has placed at Professor Wooldridge's disposal the MS. of a Notre Dame choir book, recently discovered in the Laurentian Library, which contains specimens of the church music in actual use at this period.

It is probably to the imperfection of the record that we
may attribute the curious break which separates the method of Discant from that of Counterpoint properly so called. At any rate with the consummation of the former there appears a natural interval which, in the course of the present work, is taken to separate the first volume from the second. In the former we are dealing with conditions so primitive as almost to justify the famous paradox that the true ancient history is mediaeval. In the latter we shall find artistic work which can still give the purest and noblest pleasure, and can win our admiration for consummate skill and complete achievement. Yet the age of Counterpoint would have been impossible without the age of Discant; and the tentative and uncertain steps, often misled, often baffled, were destined at last to find a way through which men should venture to the exploration and conquest of unknown regions. In the cause of art no true effort is wasted, and the greatest leader is not always he who enters the promised land.

W. H. HADOW.

## AUTHOR'S PREFATORY NOTE

Since the Editor in his Preface has referred to my use of a MS., marked as Plut. 29. 1, in the Laurentian Library at Florence, a few words, explaining the exact nature and extent of the authority of this MS. so far as we understand it at present, may not be out of place here.
The MS., hitherto generally known as Antiphonarium Mediceum, consists of a large collection of vocal music, in two, three, and four parts, in a handwriting which throughout appears to be of the thirteenth century. It is of great importance, not only from the varied and representative character of its contents, which may be said to constitute it the most instructive and valuable record of its kind as yet discovered, but also from the fact, to which the Editor has referred, that the collection which it contains may be identified with a series, or part of a series, of six volumes, known to have formed a part of the musical library of Notre Dame of Paris in the middle of the thirteenth century; it displays, therefore, work performed in the very centre of the musical activity of the time during its most brilliant period. The identification has been effected by means of a comparison of the MS. with an account of the Notre Dame series given by the anonymous author of a treatise $D e$ Mensuris et Discantu, now in the British Museum (Royal MSS. 12. c. 6), who had apparently seen the six volumes in the cathedral library at Paris. The idea of this comparison
first occurred to Dr. Wilhelm Meyer (of Speyer), Professor in Göttingen, who, in the course of an investigation of the Florence MS., connected chiefly with its poetical contents, was struck by the correspondence of the titles of certain pieces to those mentioned in the anonymous author's account of the Parisian collection. Professor Meyer published the results of his investigation in 1898, in a pamphlet entitled Der Ursprung des Motett's, and it is to a copy of this work, which he himself kindly sent me, that I am indebted for my first knowledge of the facts.
The description of the Notre Dame collection, given by the anonymous author of the British Museum treatise, may here be quoted, together with so much of Professor Meyer's analysis of the Florence MS. as corresponds to it, in parallel form :-

Est quoddam volumen continens quadrupla, ut Viderunt et Sederunt, que composuit Perotinus magnus, in quibus continentur colores et pulchritudines. Pro maiori parte totius artis huius habeatis ipsa in usu cum quibusdam similibus, \&c.

Est et aliud volumen de triplicibus maioribus magnis, ut Alleluia Dies sanctificatus, \&c.; in quo continentur colores et pulchritudines cum abundantia, \&c.

Tertium volumen est de conductis triplicibus, caudas habentibus, sicut Salvatoris hodie, et Relegentur ab arca, et similia, in quibus continentur puncta finalia organi in

The first fascicle of the MS. Laurent. 29. I, (fol. 1-13) contains a collection of four-voiced compositions, beginning with Viderunt and Sederunt.

The second fascicle (fol. I4 and onwards to fol. 65) contains three-voiced compositions, beginning with Descendit de celis, Tanquam sponsus, Gloria, Alleluia Dies sanctifcatus, \&c.

At folio 201 begins a collection of three-voiced compositions, extending through about ro6 pages, and beginning with Salvatoris hodie and Relegentur ab arca.
fine versuum, et in quibusdam non, quos bonus organista perfecte scire tenetur.

Est et aliud volumen de duplicibus conductis habentibus caudas, ut Ave Maria antiquum, in duplo, et Pater noster oommiserans, vel Hac in die rege nato, in quo continentur nomina plurium conductorum, et similia.

Est et quintum volumen de quadruplicibus et triplicibus et duplicibus sine cauda, quod solebat esse multum in usu inter minores cantores, et similia.

Est et sextum volumen de organo in duplo, ut Iudea et Ierusalem, et Constantes, \&c.

Et pluria alia volumina reperiuntur, sed in diversitatibus ordinationum cantus et melodie, sicut simplices conducti laici; et sunt millia alia plura de quibus omnibus in suis libris vel voluminibus plenius patet.

At folio 263, and continuing through about 218 pages, is a collection of two-voiced compositions, in which Ave Maria antiquum is found at fol. 284, Pater noster commiserans at fol. 278, and Hac in die rege nato at fol. 332. The text of this last composition is made up of the initial phrases of the conducts occurring between folios 263 and 313.

Beginning with the sixth fascicle of the MS., at folio 65, and continuing through about 238 pages, is a collection of two-voiced compositions, of which the first two are Iudea et Ierusalem and Constantes estote.

Elsewhere in his treatise the author of the British Museum MS. informs us that the first and second volumes of the collection described by him display the same form of composition as the sixth, that is to say the form known as Organum purum, while the third and fourth are said, in
the account itself just given, to contain the examples of a form known as Conductus. Although these two forms are often referred to by the theorists of the thirteenth century, only a very few specimens of Organum purum, and none at all of Conductus have been hitherto known to exist ; now, however, we see that in the Florence MS. we possess a great number of works in both forms, for two, three, and four voices. Whether the Florence MS. contains the whole, or only a part, of the collection described in the British Museum MS., we cannot at present certainly say ; Professor Meyer is of opinion that much more still remains to be discovered, and that especially in a MS. in the library of Wolfenbüttel (marked Helmstedt, 628) important portions of it are to be found. Also it is still doubtful whether the fascicles of which the Florence MS. is composed are actually portions of the Notre Dame choir books, or whether they are only contemporary copies of the originals; though, since the beauty of the MS. would seem to exclude the idea of a copy, we may perhaps fairly suppose that the Laurentian Library possesses the actual scores which were used by the Parisian singers.
The Florence MS. also contains much interesting music not described,-though perhaps included in his 'millia alia'-by the author of the British Museum MS. Among these may be mentioned a collection of Motetts, remarkable for their early method of notation and for the strictness of their form, extracts from which will be found in their proper place in the present volume. For the identification of their tenors-as well as of others formerly printed by M. de Coussemaker-with passages of Plainsong, I am indebted to the learning and kindness of the Rev. W. H. Frere.

H. E. WOOLDRIDGE.

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# THE POLYPHONIC PERIOD 

## OF MUSIC

## INTRODUCTION

## THE NATURE OF POLYPHONY

In considering the development of the resources of pure sound, regarded as a material for artistic treatment, the phenomena may be seen as arranging themselves in three main divisions or periods, each representing a totally distinct phase of artistic activity in relation to the material and a different view of its capabilities.

The first period represents that phase in which the beauty to be obtained from the material is perceived only as consisting in certain arrangements of consecutive simple sounds; the aim of the artist is single, and its outcome is the coherent individual utterance, or Melody. This was the music of the old Greeks and is still the music of all eastern people.

The second period is that in which the mind awakes to the possibility of a new beauty to be obtained by combining different individual utterances simultaneously; and in this phase the aim of the artist is twofold, for he seeks to adjust the mutual relations of the separate melodies in such a manner as not only to elicit the full effect of their combination but to preserve at the same time a relative independence
for each; the outcome is a complete union, maintained upon the principle of an absolute equality; between the individual and the collective elements of the composition, and this is Polyphony.

The third, or strictly Harmonic period, the period in which we now are, represents the phase in which the principle of equality between the individual and the collective elements has been abandoned, and melody, even when apparently most free and self-developed, is entirely controlled by harmonic considerations.

Of these three periods that with which we are chiefly concerned is the second, the period of Polyphony. The gradual development of the separate melodies and of the rules which govern their simultaneous employment, the growth of the artist's perception of the capabilities of his new material of combined sounds, of the special beauty which belougs to its nature, and of the degree in which scientific treatment may be effectively applied in it, the progress, in short, of contrapuntal Music from its rise onward to its first perfection and complete constitution as a Fine Art, is the subject indicated in our title.

In the beginging of our work a close connexion will be seen as existing between the Polyphonic and Melodic periods, since it was from the older system that Polyphony received the whole of its original technical means, a rational scale and a theory of the consonance and dissonance of its various intervals respectively; towards the close, on the other hand, the imminence of the Harmonic period will be perceived, and it will be necessary to point out that many of the later phenomena of Polyphony which appear as inconsistent and insubordinate are signs of its approach.

## CHAPTER I

## THE ORIGIN OF POLYPHONY

The origin of Polyphony lies no doubt in the reduplication of the individual utterance or melody by mixed voices in the choral song. The effect of this reduplication would naturally be perceived as more agreeable than that of the singing of equal voices, and recognition of the double sound as the source of pleasure, demonstration of the real character of the interval, and conscious use of it as a form of art, might well be the first steps in the process of evolution.

The first sign of a direct advance towards Polyphony is to be found among the Greeks. They had taken note of the particular effect created by the simultaneous employment of the voices of men and children or of certain voices and instruments in the same melody, and already in Aristotle's time had given it the name of Antiphony, contrasting it with the less pleasing effect of equal voices or instruments of like pitch which they called Homophony; and they were moreover perfectly aware of its real nature as consisting in the consonance of the octave ${ }^{1}$. Furthermore, there seems to be evidence of some sort of conception of its use as an artistic form, for while the effect itself was defined as antiphony the

[^0]practice of it received a special name and was called magadizing ${ }^{1}$. This name seems to imply something more than a fortuitous mixture of the voices of men and children, resulting in the consonance of the octave, and suggests a conscious process with an aesthetic purpose; the magadis was a harp-like instrument of many strings which would admit of the reduplication of a melody ${ }^{2}$, and we may perhaps suppose that the effect of the natural unconscious mingling of voices in chorus being often imitated upon the magadis by the deliberate artifice of striking each note of the melody in octaves ${ }^{3}$, vocal antiphony became at length in turn a conscious process taking its name from the instrumental imitation. Be this, however, as it may, the essential fact of the enployment by the Greeks of the octave progression under the name of magadizing is certain, and that it was consciously employed as a distinct means of aesthetic pleasure is probable.

Homophony, the consonance of the unison, could hardly have been supposed to offer the material for a separate form, since in unison the voices are indistinguishable. Yet the Greeks evidently conceived of consonance, suitable for simultaneous singing, as something so smooth as to render the distinction between the voices only very slightly perceptible, and it is no doubt for this reason that in Aristotle's time, as we learn from the Problems, the consonances of the fourth and fifth, in which the distinction is very obvious, were not sung simultaneously. Antiphony, in which the fact of difference is perceptible while the consonance is as smooth

[^1]as unison, alone provided a suitable medium for the magadizing process ${ }^{1}$.

Thus it will be seen that the Greek practice with respect to the employment of mixed voices which is here described, though important from our present point of view, does not really depart from the essentially melodic principles of the period to which it belongs; for it is clear that the especial suitability of the octave progression for its purpose consisted in the fact that in it the obviously different voices were in effect singing the same note, and it is evident also that the idea that voices could be permitted to sing obviously different notes simultaneously, even though those notes might be techuically consonant, was not entertained. The Greeks, therefore, who employed and defined antiphony had not formed even the slightest conception of polyphonic music in its true sense; yet inasmuch as the essential principle of that music, the equal union of the individual and collective elements, is actually present in antiphony, we may say that the rudimentary form of art which as we have seen was known as magadizing was in fact the first parent of Polyphony.

The conclusions at which we have just arrived are founded almost entirely upon the evidence of the Aristotelian Problems, and represent chiefly, therefore, the Greek practice as it existed in the fourth century b.c.; but it has sometimes been supposed that the actual development of the principle of Polyphony, though not to be traced in Greek music of the great period, might well have been begun in that of later

[^2]times, and perhaps through the experimental use of the consonances of the fourth and fifth.

It will be evident from what has been said that no further progress in the direction of Polyphony could be made until the intervals of the fourth and fifth had been recognized as possible media for the magadizing process; this would obviously be the next logical step towards the new form of art, and, by accustoming the ear to the difference between the voices in intervals which were techuically consonant, would prepare it to endure other sounds, necessarily arising from the independent movement of polyphonic melodies, which were demonstrable in theory as dissonant.

Historians therefore have looked eagerly into the works of the later Greek theorists and the later literature generally, in the hope of finding some reference to the practice of magadizing fourths and fifths; recently however this hope has been abandoned, and it is now acknowledged that there is no reason to suppose that the Greeks ever proceeded in the practice of magadizing beyond the consonance of the octave.

And indeed this result of the inquiry might have been expected. The governing principles of Greek art were so deeply established, and the details of its practice were so closely connected with those principles, that there was no room for the development of new essential forms within it ; even when exhausted the system maintained its authority, and only upon its absolute decay and dissolution did such forms arise. Greek music, therefore, whose task was the evolution of a rational scale and of the melodies to which its various forms might give birth, must naturally, even in its decline, have neglected the development of a principle so foreign to its vital purpose as that which we now see to be actually contained in the magadizing process. To us this process appears as the beginning of all the riches that we possess ; in the older world it could lead to nothing, and though it might be
reasoned about, and used with pleasure as a kind of art form, it could not be more at last than it was at first-the exact reduplication of a melody at the distance of an octave.

In the decay and dissolution, therefore, of Greek music we must look for the development of the new principle. Nor must we look for it among the Greeks themselves; the ebbing life of the old system was to be received and appropriated by new races, Italians and northern people, and the development and constitution of Polyphony, under which form Music was next to flourish, was to be the work of a new era.

# CHAPTER II 

## THE MATERIALS OF POLYPHONY

## GREEK MUSIC

Before passing on to consider the work of the new era in its most important aspect-that namely in which it is seen as discovering and developing the new principle of Polyphonywe must pause for a moment to consider the actual technical resources of Music at the time of its adoption by the Italians; and we must inquire not only what those resources were, but also what were their relative degrees of vitality at that moment. The Italians, as we shall see, did not adopt those resources in their entirety, and our inquiry may suggest a reason for this fact.

The basis of Music is of course the Scale, which selects from all possible sounds those which are most suitable to the purposes of melody, and arranges them in a rational order of progression. It will not be necessary for our present purpose to trace the growth of the scale from the original tetrachord, which at first appeared as the natural limit of possible melody, to the full double-octave system, including all the sounds within the natural compass of human voices, which was for the Greeks its final and standard form ; we may at once proceed to consider it in its complete shape, which is here shown upon the opposite page, with the old name of each note and its modern equivalent.
The Greater Perfect System
THE DOUBLE-OCTAVE SCALE, OR PERFECT IMMUTABLE SYSTEM OF THE GREEKS


The original octave scale of the Greeks was composed of the two disjunct tetrachords Mesôn and Diezeugmenôn, and included the notes between E and e ; and these notes were first named simply, Hypate, Parhypate, Lichanos, Mese, in the lower tetrachord, and Paramese, Trite, Paranete, Nete, in the upper one ${ }^{1}$. Upon the extension of the system by the addition of a tetrachord at each end of the scale the names given to the notes in the original tetrachords were again adopted in those which had been conjoined with them, but the distinctive name of each tetrachord of the full system was now added as a kind of surname to all the notes within that portion of the scale, as the table shows.

This was the Greater Perfect System of the Greeks; the Lesser Perfect System was based upon the ancient sevenstringed scale consisting of the two conjunct tetrachords Mesôn and Synemmenôn, the tetrachord Hypatôn being afterwards added as in the Greater System; and the union of these two systems, with the addition of the note Proslambanomenos, the low A, to complete the double octave, constituted the Perfect Immutable System shown in our illustration.

In this union of systems it will be seen that both modulation and exact transposition to the fourth above or fifth below are rendered possible; for it is evident that if any series of eight notes proceeding by way of the tetrachord Diezeugmenôn be repeated in the fourth above or fifth below proceeding by way of the tetrachord Synemmenôn, the intervals in both cases will occur in the same order.

Of the various intervals contained in this scale some appear to have been from the earliest times perceived as consonant and some as dissonant, the ear being the judge ; but in the sixth century b. c. Pythagoras discovered, or as some

[^3]think learned from the Egyptian priests, the law which governs them and brings them within the compass of theoretical knowledge. He proclaimed the remarkable fact, of which the proof existed in his famous experiments with stretched strings of different lengths, that the ratios of the intervals perceived as consonant could all be expressed by the numbers, $1,2,3,4$. His method of demonstration was afterwards improved and rendered more exact by the invention of the monochord, and his law may now be stated as follows.

If a string be divided into two parts by a bridge, in such a manner as to give two consonant sounds when struck, the length of those parts will be in the ratio of two of the four smallest whole numbers. If the bridge be so placed that two-thirds of the string lie to the right and one-third to the left, so that the two lengths are in the ratio $2: 1$, they produce the interval of the octave, the greater length giving the deeper note. If the bridge be so placed that three-fifths of the string lie to the right and two-fifths to the left the ratio of the two lengths is $3: 2$, and the interval produced is the fifth. If the bridge be again shifted to a position which gives four-sevenths on the right and three-sevenths on the left the ratio is $4: 3$, and the interval is the fourth; thus-


Diapente (5th).


The remaining intervals contained in the Octare, which were perceived as dissonant, require higher numbers to express
their ratios. Those intervals therefore whose ratios are the most simple were also for the Greeks the most consonant.

The division of the scale into tones and semitones shown in our full-page illustration is proper to the diatonic genus, the oldest kind of music, for in this genus the tetrachordthe interval of the perfect fourth-was composed of a semitone and two tones, the semitone being always in the lowest place. And here it may be explained in passing that in all the genera the number, order and names, both of the tetrachords and of the notes contained in them, was the same, and that the distinction between one genus and another consisted entirely in the manner in which the tetrachord was divided; while Hypate Hypatôn therefore, Hypate Mesôn, Mese, \&c., the limiting notes of the various tetrachords, were fixed, the remaining notes, Parhypate and Lichanos in the lower tetrachords and Trite and Paranete in the upper ones, were movable, that is to say their intervals were different according to the genus employed, and upon this difference depended the peculiar emotional quality or ethos of each genus.

With the detailed characteristics of the chromatic and enharmonic genera this work has of course nothing to do; it will be sufficient to point out that although for the older Greeks they formed one of the most important of technical resources they played probably no part, or at all events no appreciable part, in music at the time of its inheritance by the Italians. Even during the period of their development and perfection as means of musical expression-a period which appears to have been identical with the great or classical period of Greek art of other kinds-they must have been found, considered as practical methods, exceedingly complex and difficult in performance, and their gradual disuse may have been in great part due to this cause; but whether this be so, or whether it be that the particular kind of expression obtained by the constant juxtaposition of minute and excessive
intervals, which is characteristic of the scales of these genera, failed by degrees to please, it appears to be the fact that already in Ptolemy's time (the second century A.d.) they had fallen to a great extent out of employment, and from the brief and perfunctory manner in which they are treated of by the latest classical writers on Music, Martianus Capella (fifth century A. d.) and Boetius (sixth century A. d.), we may even perhaps conclude that this decline in favour had in their time reached the point of general neglect.

Another technical resource possessed by the Greeks which like the chromatic and enharmonic genera was passing at this time out of use, or was at all events no longer used to the full extent of its capacity, is to be found in the keys or schemes of transposition. These keys afforded a method, closely analogous to our own, by means of which all scales might be raised or lowered to any pitch at pleasure; the scale of $E$ for example might be taken on $F, F \#, G, \& c$., or on $D \#$, $\mathrm{D}, \mathrm{C} \#, \& \mathrm{c}$., the system proceeding upwards or downwards by semitones. This change was not effected empirically, but by means of a definite supposed transposition of the whole of the Greater Perfect System to the pitch required, to any semitone, that is to say, contained in the compass of the octave scale; since therefore the octave divided into semitones contained thirteen possible notes it consisted also of thirteen keys or recognized modes of transposition. The keys were formerly only seven, but the system was completed by Aristoxenus during the classical period; later two others were added at the upper end of the system, but these, though they may have been found of use practically, possessed no theoretic value, being only repetitions of two already existing.

This system of keys, like the chromatic and enharmonic genera, had been regarded in the classical period as an important means of expression, for there can be little doubt that the older Greeks attached a special ethical value to the particular pitch at which a melody was sung, a value which

TABLE OF THE GREEK KEYS ${ }^{1}$

| Note in Greex Scale. | Greex Key. | Modern <br> Equivalent for Greet Kry. |
| :---: | :---: | :---: |
| Mese $\quad$ A | Hyperphrygian ( $=$ Hypodorian ) | A minor |
| Semitone | Hyperionian | G\# minor |
| Lichanos mesôn G | *Mixolydian | G minor |
| Semitone | *Lydian | F\# minor |
| Parcypate mesôn $\mathbf{F}$ | Aeolian | $F_{\text {minor }}$ |
| Hypate mesôn $\quad$ E | *Phrygian | $\mathrm{E}_{\text {minor }}$ |
| Semitone | Ionian | $\underset{\text { (or } E b \text { minor) }}{\mathbf{D}}$ |
| Lichanos Hypatôn D | *Dorian | D minor |
| Semitone | *Hypolydian | C\# minor |
| Parhypate Hypatôn C | Hypoaeolian | $\mathrm{C}_{\text {minor }}$ |
| Hypate Hypatôn B | *Hypophrygian | B minor |
| Semitone | Hypoionian - | At minor <br> (or $B b$ minor) |
| Proslambanomenos A | *Hypodorian | A minor |

* The seven oldest keys.
${ }^{1}$ The modern equivalents are here shown, for the sake of convenience, in the notation of our chromatic scale $A-a$; it must, however, be observed that in the Greek notation the system is in the Hypolydian key, which gives $\mathbf{F}$ minor for the Hypodorian scale, and so upwards by semitones.
we are now not very well able to appreciate, but which apparently was by them clearly perceived and generally recognized; it is evident, however, from Ptolemy's treatment of the subject that in his time, about A. D. 100, the particular key in which a melody should be sung was no longer regarded as a matter of special solicitude, and that it was left to be decided entirely by the taste or couvenience of the performer.

The chief proof of the failure of the Aristoxenean system of keys to maintain its authority is perhaps to be found in the fact that Ptolemy, after criticizing it, proposes as a substitute the well-known system of Modes or Species of the diatonic scale. This system may be regarded in two points of view ; either, that is to say, as affording an improved method of transposition-and this it would appear was the aspect chiefly insisted upon by Ptolemy-or, on the other hand, as the source of distinct rules of melody. The diatonic double-octave scale is of course susceptible of seven different octachordal sections, each of which will display the two semitonic intervals in a new position and will therefore, if the first note of each section be taken as its final or keynote, create a new and special scale and a special character of melody in each scale; thus each section of the double-octave system becomes in itself a rule of melody founded upon the particular order of its intervals in relation to the final note, and this was undoubtedly the aspect in which the system of Modes or Species of the octave presented itself to the composers of the Graeco-Roman period. Whether it was at this time in any sense a new aspect it is difficult to say. Certainly the conception of the octave as consisting of seven species did not originate even with Ptolemy; it had existed long before his time, and had been applied not only to the diatonic but also to the enharmonic scale by older writers, in whose works moreover the names adopted by Ptolemy for the seven species, which were those of the seven oldest keys, are also to be found. But the history of this conception, and the

THE SEVEN MODES OR SPECIES SHOWN AS SECTIONS OF THE SEVEN OLDEST KEYS, FROM WHICH THEY ARE NAMED

Mixolydian Key.


Lipdian Key.


Pheygian Key.


Dorian Key.


Hypolydian Key.


Hypophrygian Key.


Hypodorian KEy.


THE SEVEN MODES OR SPECIES REDUCED TO THE FUNDAMENTAL SCALE OF A AND SHOWN AS SECTIONS OF THAT SCALE

nature of the connexion which seems to have existed between the species and the keys in older times, is still involved in some obscurity, and the question whether the doctrine of the species was at first much more than a theoretical proposition, whether more than one species was actually in use, and if so how many were employed, is still the subject of discussion among writers upon Greek music-a discussion which, failing the discovery of many more specimens of that music than we at present possess, will hardly be satisfactorily concluded. If, however, those are right who maintain that in the earlier proposition of seven species the theoretical character predominates, the novel element in Ptolemy's treatment of this conception would consist in his demonstration of its practical value; and his recognition of the Modes as a technical means superior to the keys, and his adoption of the names of the notes of the original complete scale for the notation of each special scale, should then be regarded as events of the highest importance in the history of music.

The question, which naturally arises, whether all the Modes were of equal practical value for the later composers as rules of melody, may be partly answered by a reference to the scales generally recognized as proper to the Cithara, since this instrument supplied both the accompaniment to the narrative and lyric songs and the instrumental solo, which were at this time the prevailing musical forms. The citharodic Modes are generally said to be five-the Dorian, the Hypophrygian or Iastian, the Hypodorian or Aeolian, the Phrygian, and the Lydian; the Modes omitted are the Hypolydian, in which the fourth is a tritone, and the Mixolydian, in which the fifth is imperfect; the Hypolydian, however, seems to have been allowed in practice,

The melodies written in these scales ranged between the final and its octave (with liberty to take the note next below the final), and ended upon the final; but two varieties were recog-
nized, the intense Iastian, in which the melody ended upon the third of the scale, and the relaxed Iastian, in which the range was extended to the fourth below the final; and it would appear that these two varieties were also recognized for the Hypolydian scale. A hybrid scale, combining the Iastian and the Aeolian, and called Iastaeolian, was also in use.

Of the seven existing specimens of Greek music which are of sufficient length to give a clear indication of their scales, two are written in the Aeolian, one in the Iastian, one in the relaxed Iastian, and three in the Dorian. All, with one exception, belong to the Graeco-Roman period.

The following table shows the Citharodic Modes with their practical variations in relation to the existing compositions :-

Mixoiydian . . . . . . . No example.
Lixian . . . . . . . . . No example.
Phrigian . . . . . . - . No example.
Dorian . . . . . . . . . Three examples ; the Hymns to Apollo and to the Muse, and (?) the Hymn to Apollo found at Delphi.

Hypolydian . . . . . . . No example.
Intense Hypoiydian . . One of the little instrumental pieces given by , Bellerman's Anonymus would seem to be in this scale.
Relaxed Hypolydian . No example.
Hypophrygian or Iastian . One example; the little inscription discovered hy Mr. Ramsay, beginning "Ooov 5 ग̂s $\phi$ aivov.
Intense Iastian . . . . No example.
Ralaxid Lastian . . . One example; the Hymn to Nemesis.
Iastaeolian . . . . No example.
Hypodobian or afolian . . Two examples; the instrumental pieces given by the Anonymus (three); and the music to the first Pythic of Pindar.
C 2

As it will be necessary for the purpose of comparison to refer to some of the details of Graeco-Roman practice, one of the Hymns is here given in modern notation.

## HYMN TO THE MUSE.



It will be observed that, together with the change of rhythm, at the words Ka入入ıóтєla roф́́ a change takes place in the melody also, which now extends its range to the fourth below the final. This seems to point to the fact that relaxed scales not officially recognized were sometimes employed.

It will be evident from this brief survey of the techuical means of Greek music that already in the second century A.d. a great change had taken place in the practical methods of dealing with the materials of the art, and that two important resources, upon which the ethos of music was held in the classical period largely to depend, were passing out of use, while their place was partly occupied by another of totally different scope and value. This view of the situation is borne out by a recent writer of authority. 'The main object of Ptolemy's reform of the scales,' says Mr. Monro ${ }^{1}$, 'was to provide a new set of scales, each characterized by a particular succession of intervals, while the pitch was left to take care of itself. And it is clear, especially from the specimens which Ptolemy gives of the scales in use at his time, that he was only endeavouring to systematize what already existed, and bring theory into harmony with the developments of practice. We must suppose, therefore, that the musical feeling which sought variety in differences of key came to have less influence on the practical art, and that musicians began to discover, or to appreciate more than they had done, the use of different "modes" or forms of the octave scale.
'Along with this change we have to note the comparative disuse of the Enharmonic and Chromatic divisions of the tetrachord. The Enharmonic, according to Ptolemy, had ceased to be employed. Of the three varieties of Chromatic given by Aristoxenus only one remains on Ptolemy's list, and that the one which in the scheme of Aristoxenus involved no interval less than a semitone. And although Ptolemy distinguished at least three varieties of Diatonic, it is worth notice that only one of these was admitted in the tuning of the lyre-the others being confined to the more elaborate cithara. In Ptolemy's time, therefore, music was rapidly approaching the stage in which all its forms are based upon a single scale-

[^4]the natural diatonic scale of modern Europe.' We can hardly be wrong in supposing that the tendency here described continued in increasing proportion.

Finally, we may devote a moment's consideration to the probable condition of music, regarded from the point of view of its aesthetic value, at the time of its adoption by the Italians. The materials for a judgement are extremely scanty, and if we have to deplore the absence of examples in our attempts to make clear to ourselves points of technique still somewhat obscure, even more must we do so in endeavouring to realize the gradual changes which undoubtedly took place in melody as a consequence of the natural progress of the art; for while in considering the growth of technique we are assisted by a number of theoretical treatises of different dates which leave comparatively few points unexplained, in attempting to form an estimate of the aesthetic condition of the art at any particular time we derive far less help from these sources. Even from these, however, considered as guides to the contemporary practice, we may gather something to the purpose if we bear in mind the artistic principle that the aesthetic quality of production in any phase of art is always highest in that period in which the technical means proper to the phase are most developed. Since, therefore, the treatise of Aristoxenus, the contemporary and pupil of Aristotle, most clearly reveals to us the existence of this period, we may conclude that in or about his time Greek music, having reached the highest point of technical development suitable to its nature, had also attained the summit of aesthetic significance; and upon the same principle we should conclude that later treatises, such as that of Ptolemy, in which the means in use are seen as restricted in number and scope, and the latest of all, such as that of Boetius, which are obviously merely scholastic compilations and are scarcely suggestive of any contemporary practice whatever, indicate the periods of decline and decay.

But a stronger conviction of the decadent character of music
at the time of its adoption by the Italians may be gained from a consideration of the influence which chiefly operates in the rise and progress of a great creative epoch-the general aesthetic impulse, arising out of a new view of the capabilities of all artistic materials, which inspires the special structures of the various forms with life and supplies the force which is required for their development. In this aspect all the arts are seen as advancing together, and as nearly abreast as the special conditions of each structure will allow. Together they rise to a relative perfection, which is for each the complete utilization of the powers of its special material as perceived in the particular epoch, and together, when their work is accomplished, they rapidly decline.

This phenomenon was witnessed in the great creative period of European art; in the interval between the years 1520 and 1600 each of its various forms had reached its culminating point, and during the fifty years which followed all failed through the exhaustion of the impulse which had raised them. In all that we know of Greek art the operation of the same law is to be observed, and there is no reason to suppose that in that part of it which we do not know the law was broken, or that the history of Greek music, if we could complete it, would afford the solitary exception. Indeed it is as certain as anything can be of which we have not absolute proof, that if a sufficient historical series of examples could be discovered, the later specimens would be found to exhibit the same degradation, in sentiment, energy, and beauty, which is evident in the contemporary work in other fields which has come down to us.

## CHAPTER III

## THE MATERIALS OF POLYPHONY

(continued)

## GREEK MUSIC IN THE LATIN CHURCH

The beginning of the new era may be said to be marked, in our present point of view, by the public recognition and triumph of Christianity and its ritual worship, which thenceforward might develop in security.

At this moment all the conditions with respect to music in Italy would appear to have been exactly those which are most favourable to the rise of a new phase of artistic activity. Not only was a new field of labour prepared in the ritual of the Church, and a fresh impulse supplied by the new religion, but it must also be remembered that the Italians had as yet expressed nothing of their own in music, which for them had always been an exotic art professed and performed by Greeks, or if they themselves had attempted anything the attempt had been a mere imitation of the Greeks; considered, therefore, in relation to the expressive part of music they were a new race, though perfectly familiar with the great prevailing theory of composition. Thus on the one hand we see the occasion or impulse acting upon the untried race, and on the other, ready for adoption, technical resources still excellent and a method still sound which their actual possessors could no longer develop, contenting themselves with the employment of old forms to no new purpose and with decreasing energy. We should expect therefore to find that the natural effect of the
conjunction of these two conditions was at once evident in the music of the public worship, and that this was soon enriched with native compositions animated by a new and energetic spirit; for although it is clear that the chants and fragments of melody which had been used by the Church in its depressed condition were reverently preserved, it is difficult to suppose that liberty and honour could fail to produce great expansion and much inclination towards original work.

We should not, however, expect to find that any great change was on this account at once apparent in the art of music; on the contrary, the early Church must have been at first entirely dependent upon the examples afforded by existing forms in its attempts towards individual expression. We may admit of course that its view of these may have been governed by a distinct principle of selection; the secular and degraded ceremonial forms would naturally have been rejected as unworthy of imitation, and models would be looked for in the graver kinds of music, in the hymns to the gods and the long narrative cantatas of the Graeco-Roman citharodi, but it will still remain none the less evident that the music of the Cbristian ritual, from the nature of the conditions under which it came into being, must for a long time have strongly resembled in its general outlines the music which was going on around it; we should expect therefore to find deeply-marked traces, at least, of the Graeco-Roman practice in the first efforts of the Church.

And turning to the oldest Christian compositions, the Hymns and Antiphons of the Office, of which the earliest examples date from the end of the fourth century, we find these expectations fully justified, not only as regards the number of melodies, which is very considerable, but also as regards their technique, which differs in no important respect from that of the current pagan lyric song. In both the same scales are employed, and (if we may judge from the small number of Greek examples) the same scales were neglected; in both the
melodic range, the points of repose in the scale, and often the actual formulae, are identical; in short we find in Christian music the old music continued, with just that degree of difference which might be expected in the work of a new race which has something new to express.

This view of the early Christian music, in which it presents to us so forcible an illustration of the law of complete continuity in artistic effort, has hitherto been obscured by the ecclesiastical tradition of a rule of four Greek Modes-Phrygian, Dorian, Hypolydian, and Hypophrygian-imposed upon the Church by St. Ambrose, and of a great revision and introduction of four new Modes by St. Gregory. But this tradition can no longer be maintained. That the hymns composed by St. Ambrose are the earliest specimens of Christian composition known to exist is undoubted, but that they can have constituted an imposed rule, or any part of such a rule, is most improbable, for it is clear that the scales employed in these compositions are nothing more than the scales of the Graeco-Roman citharodi, and that the Hymns conform in all respects to the current classical practice; moreover, the story of the Gregorian revision, and adoption of the plagal forms of the supposed original four modes, is now contradicted by the recently discovered fact that the Christian music as exhibited in the Antiphonary continued upon the old classical basis, without any change of importance, certainly until the end of the seventh century, or nearly a hundred years after the time of St. Gregory, and possibly until about the year $900^{1}$.

Examples of all the scales to be found in the earliest hymns are bere given (from Gevaert) in modern notation. They are the Dorian or E species of the octave; the Iastian or G species, the relaxed Iastian descending a fourth below the final; the intense Iastian ending upon the third of the scale; the Aeolian

[^5]or A species; and the Iastaeolian, or combined Iastian and Aeolian, in both of its forms. It will be observed (compare the list given above of the scales of the existing Greek compositions) that of the Mixolydian or B species, the Lydian or C species, the Phrygian or $\mathbf{D}$ species, and the Hypolydian or F species, the hymns contain no examples.

Dorian.


Ae-ter - na Chris-ti mu - ne-ra Et mar-ty-rum vic - to - ri - as


Lau-des fe-ren-tes de - bi-tas Lae-tis ca-na-mus men - ti - bus.
Iastian, relaxed.


Iam sol re-ce-dit ig-ne-us In-fun-de a-mo-rem cor-di-bus.
Iastian, normal.

$\downarrow$ Iastian, intense.


Con-di-tor al-me si-de-rum Ae-ter-na lux cre-den-ti-um


Chris-te re-demp-tor om-ni-um Ex-au-di pre-ces sup-pli-cum.

## Azolian.



De-us cre-a - tor om - ni-um Po-li-que rec-tor ves - ti-ens


The two following examples are Iastaeolian; the first begins in the Iastian and ends in the Aeolian, the second begins in the Aeolian and ends in the Iastian intense.


Et tem-po-rum das tem-po-ra Ut al-le-ves fas-ti-di-am.
Of the Antiphons it will be sufficient for our present purpose to note that they exhibit the same scales as the hymns, with the addition of the Hypolydian; this scale appears in all its forms, and examples of each are here given.

Hypoiydians.


Relaxed Hypoifdian.


Intense Hypolydian.


We have now seen that the similarity between the first Christian music and the Greek contemporary practice was complete as regards the technical basis : we may next, before passing on, point out a few of those differences in the character and design of the Christian melodies, which, as we have said, we should expect to find in the work of a new race with something new to utter.

In the first place, as regards the general character of their expression, we are struck by their greater simplicity as compared with Greek examples, a simplicity arising not from timidity in the composer, but from the nature of the new conditions and the new object now kept in view. The intention and value of a Greek composition, both words and music, was purely artistic, and the aim of the composer was directed towards the perfect rendering of the general poetic character of the words, and even to exact verbal expression; the aim of the Christian composer was entirely different, for the intention and value of the words set by him is not artistic but religious. The venerated texts of the ritual do not invite a critical appreciation of their aesthetic merit; indeed, their effect in the assembled congregation is often quite independent of the actual sense of the words employed, and merely because they are sacred, and proper to the common worship, they both arouse religious feeling and serve to express it. It is not the exact
character of the words therefore, but this general religious sentiment, this common fervour animating the whole congregation, that the Christian composer seeks to render in the music to which the texts are to be sung. Hence the greater simplicity and breadth of his music, in which the dry, odd phrases and the artistic preoccupation of the Greek hymns give place to a smooth and flowing melody, the expression of a sustained enthusiasm, but controlled by the 'meek heart and due reverence' proper to the place and occasion of public worship. Hence also its general adaptability, and the freedom which enables the singer to set the same melody to many texts.

Another difference, arising out of the nature of the new religious sentiment, consists in the greater sweetness and tenderness of the Christian melody. For instance, the old Roman hardness is seen in the examples of citharodic song, in the employment, as a matter of course, of melodic passages in which the interval of the tritone is paramount, thus:-


An examination of the new music, on the other hand, reveals a striking difference in this respect. It is true that passages in which the tritone though indirect is still sufficiently strident are not unknown in early Christian melodies, but they occur chiefly in compositions in the Dorian and Hypolydian modes, where the interval forms a part of the modal fifth, and where, therefore, if the essential character of the Mode is to be pre-
served, it is difficult to avoid them, for the earlier melodies seldom ranged beyond the fifth; in the melodies of the Iastian and Aeolian modes, however, the fifths of which do not contain this interval, such passages are comparatively rare, and it is probably owing to the ease with which the tritone may be avoided in these modes that the enormous majority of the early compositions are written in them ${ }^{1}$. This change of feeling, then, is especially characteristic of Christian music ; and it may be said that the tendency towards the disuse of the tritone, proceeding evidently from a dawning sense of its harsh and unsympathetic character, continued to increase among the Christian composers, and that the employment of the tetrachord synemmenôn, by means of which it might be avoided in certain modes likely to display it, became by degrees more frequent; this tendency, however, was generally kept in check, even in the construction of polyphonic melodies, by respect for the received scales of the modes and for their individual character, and by fear of confusion.

In the cases of two modes only was this attitude of reverence for the exact scale of the mode systematically abandoned. When the full range of the Aeolian was employed, it seems to have been usual, in ornate melodies, to raise the sixth of the scale in certain figures, thus :-


[^6]Also when the full range of the Relaxed Hypolydian (C-c) was employed the highest note but one of the range (b) was always depressed, thus:-


Already, in the year 900, this last practice-the effect of which is to create our modern major scale-was extended to the normal Hypolydian, and was continued in both scales throughout the polyphonic period.

Another indication of the new tendency towards sweetness and smoothness is to be seen in the abandonment of the excessive interval of the major sixth. This interval occurs at least three times in the existing Greek compositions; in the whole of the early Christian music there seems to be only one example of it, and that doubtful, and it was soon definitely excluded by rule.

Such, then, is the true 'Ambrosian' music. It will be seen from the table bere given that its modes are eight in number, and that they are all included within the modal fifth of the ancient Dorian, the oldest known musical scale.

Final B, Intense Iastian.
, A, Aeolian.
„ A, Intense Hypolydian.
,, G, Iastian.
, G, Relaxed Iastian.
, F, Hypolydian.
„ F, Relaxed Hypolydian.
, E, Dorian.

It would appear that not only the theory of composition in these modes, but the whole of the melodies also, were at first preserved entirely by oral tradition, referred probably to the sanction of the college of chanters founded by Leo the Great (440), for there is no trace at this time either of written music or of ecclesiastical treatises upon theory; but the system would seem to have continued, notwithstanding, intact and in full vigour until the great catastrophe of the year 547, which swept away the last vestiges of the ancient world, and in which the classical theory of music disappeared. From this date onwards for, many years melodies of great beauty, written in the old scales, were added to the ritual; but it is certain that already, about the year 600, composers were writing in ignorance of theoretical principles, and that all memory of the names, nature, and origin of the modes in use was entirely lost ${ }^{1}$.

No documents exist to enlighten us as to the course of music during a period of two hundred and fifty years after the date just mentioned, though we know that the ritual was enriched during this period with the fine additions already referred to, which prove that composers were active, and that the art in spite of every apparent hindrance was advancing. But at length, about the middle of the ninth century, appeared the earliest known theoretical treatise written by a churchman-the Musica Disciplina of Aurelian

[^7]| GRAECO-ROMAN MODES. |  | ECCLESIASTICAL MODES. |  |
| :---: | :---: | :---: | :---: |
| Final. | Name. | Final. | Name. |
| B | Intense Iastian |  | (Transposed a 5th lower ; see below.) |
| A | Aeolian |  | (Transposed a 5th lower; see belovo.) |
| A | Intense Hypolydian |  | (Transposed a 5 th lower; see below.) |
| G | Iastian | G | Authentus Tetrartus ${ }^{\text {a }}$ |
| G | Relaxed Iastian | G | Plagius Tetrarti |
| F | Hypolydian | F | Authentus Tritus |
| F | Relaxed Hypolydian | F | Plagins Triti |
| E | Dorian | E | Authentus Deuterus |
|  |  | E | Plagius Deuteri (with Bb) [formerly Intense Iastian; see above.] |
|  |  | D | Authentus Proti (with Bb) <br> [formerly Aeolian; see above.] |
|  |  | D | Plagius Proti (with Bb) <br> [formerly Intense Hypolydian; see above.] |

[^8]of Réomé ${ }^{1}$-in which we find a new theory of eight modes presented to us in a more or less systematic manner.

The modes indicated by Aurelian-which are in fact the true ecclesiastical or 'Gregorian' modes in their first formare in substance the same as before; a great change, however, has now taken place in the method of their presentation; the old names have disappeared and are replaced by numbers, some of the modes have been transposed, and the whole system has been rearranged. It may be well therefore, before proceeding further, to give the details of the new system, as they are displayed in the compositions of this period, together with the probable method of their evolution from the GraecoRoman modes. These may be seen upon the opposite page.

Here it will be noticed that the four primary or standard scales of the old system, the Dorian, Hypolydian, Iastian, and Aeolian (transposed a fifth lower), occupy the leading positions in the new system under the generic title of Authentic or Governing modes. They also receive new particular names; the transposed Aeolian is called the first mode, Protus; the Dorian becomes the second, Deuterus; the Hypolydian the third, Tritus; and the Iastian the fourth or Tetrartus. The secondary or derived scales, the 'intense' and 'relaxed'forms of the Iastian and Hypolydian, are now called Plagal or Oblique modes, and each is coupled with an Authentic mode; the Intense Hypolydian becomes Plagius Proti, the Intense Iastian Plagius Deuteri, the Relaxed Hypolydian Plagius Triti, and the Relaxed Iastian Plagius Tetrarti.

The terminology of this system sufficiently proves that its source was Greek; moreover, Aurelian himself expressly declares the fact. 'Those,' he says, 'who do not relish my doctrine, or think to find errors therein, must be told that all the distinctions here mentioned, and indeed the whole discipline of music, are of Greek origin.' The history of

[^9]the system is obscure, but since the first trace of it is said to have been found in a collection of liturgical song, called Octoechos, compiled by St. John of Damascus about the year 700, we may suppose that it was elaborated by the GraecoSyrian Church during the seventh century; moreover, there seems to be good reason for the belief that it was imposed upon the Western Church by one of the Graeco-Sicilian Popes, perhaps by Agatho himself (678-682), who is known to have effected the definitive regulation of the melodies of the office ${ }^{1}$.

It is difficult to avoid the conclusion that the idea of the new system must have arisen from the perception of a highly important aspect of the old scales, which is suggested by a consideration of the 'relaxed' forms of the Iastian and Hypolydian. In this aspect a subordinate scale is perceived, accessory to the standard scale, by means of which the melody, while still confined within the compass of an octave and still preserving the character proper to the standard scale as a consequence of the special order of its intervals, ranges through a different series of sounds. The new theory of eight modes appears to have been an attempt to realize the scheme thus suggested by means of a rearrangement of the materials existing in the old system. The Iastian and Hypolydian being already supplied with subordinates, each ranging a fourth below the standard final, the theorist proceeds to accommodate the two 'intense' scales, as well as may be, to the transposed Aeolian and to the Dorian.
The system thus evolved is defective. It is true that if we choose to consider the finals of the two 'intense' scales as the governing notes, and assume in each case that the scale begins upon the final instead of upon the second note below itwhich in the 'intense' scales is the true initial-it is possible by transposing them a fifth lower to make them fit into the empty places and pass for the two required plagal modes. But the result is not satisfactory; the new modes thus

[^10]TABLE OF THE EIGHT ECCLESIASTICAL OR GREGORIAN MODES IN THEIR FIRST OR GRAECO-SYRIAN FORM
authentus Tetrartus; known later as Mode VII.
(Old Iastian; $A$ species.)

Plagius Tetrarti; known later as Mode VIII.
(Old Relaxed Iastian; a species.)


Authentus Tritus; known later as Mode V. (Old Hypolydian ; F species.)

Plagids Triti; known later as Mode VI.
(Old Relaxed Hypolydian; $\boldsymbol{F}$ species.)

Adthentus Drdterus; known later as
Mode III.
(Old Dorian; $E$ species.)

Plaglus Dhuteri; known later as Mode IV.
(Old Intense Iastian; range $G-g$, final $B$; transposed a fifth lower, and beginning upon the final.)


Adthentus Protus; known later as Mode I.
(Old Aeolian; A species, transposed a fifth lower.)

Plagites Proti ; known later as Mode II.
(Old Intense Hypolydian; range $F-f$, final $A$; transposed a fifth lower, and beginning upon the final.)

obtained do not perform the same office with regard to their respective authentic modes as the true Plagal or old 'relaxed' scales with regard to the Authentic Tritus and Tetrartus; the fact of transposition in no way alters the scale, nor does a range of a third below the final create a true Plagal character, such as is possessed by a 'relaxed' scale, while the alteration of the initial note creates a difference which is just sufficient to cause confusion and no more; the new Plagius Proti and Plagius Deuteri therefore remain essentially Iastian and Hypolydian, and have no real connexion with the modes with which they are coupled. Furthermore the necessity of employing the tetrachord synemmenôn in the three transposed scales was in itself destructive of the symmetry of the system, and in the case of Plagius Deuteri it even creates a false fifth, as will be seen from the Table given upon the previous page.

A system so illogical and unsatisfactory as this could not long be maintained, and musicians, guided probably by Boetius, found in the old classic species the basis of a reform. This reform was by no means drastic or violent. The leading feature of the Graeco-Syrian scheme, the system of authentic and plagal modes, which was evidently firmly established, and which had no doubt revealed itself as the means of greatly enlarging the resources of melody, was retained; three of its authentic modes also, the Deuterus, Tritus, and Tetrartus, being recognized as identical with the $E, F$, and $G$ species of the Greeks, were left untouched; the Authentic Protus, however, was altered by the elimination of the $B b$, and was made to conform entirely to the $\mathbf{D}$ species of the Greeks. The Plagal Tritus and Tetrartus of the Graeco-Syrian scheme (the old relaxed Iastian and relaxed Hypolydian) were also preserved, and the principle upon which they had been constructed, that is to say the division of the original scale at the fifth and the removal of the tetrachord an octave lower, was adopted as the model for the reform of the Plagal Deuterus

# TABLE OF THE ECCLESIASTICAL MODES IN THEIR FINAL FORM 

| adthentic. | Plagal. |
| :--- | :--- |
| Mode I. | Mode II. |
| Formerly Autgentus Pbotus. | Formerly Plagius Proti. |


Mode III.
Formerly Adthentus Dedteedes.
Mode IV.
Formerly Plagius Dedteri.


| Mode V. | Mode VI. |
| :--- | :--- | :--- |
| Formerly Authentus Teitus. | Formerly Plagius Teiti. |



Mode VII.
Formerly Authentus Tetrabtus.

Mode VIII.
Formerly Plagits Tetearti.

and Protus. By meaus of these alterations musicians were put into possession of a consistent and uniform system, which preserved its authority and its usefulness until within comparatively recent times, and the influence of which is still to be perceived even in our own day.

The preliminary part of our work is now concluded. We have marked the origin of the polyphonic principle in the Melodic period of music, we have noted its undeveloped and dormant existence during the whole of that period, and we have exhibited the growth meanwhile of the technical materials which were to be adopted by it upon its eventual waking and first activity; we are therefore prepared to consider its actual rise and progress, which may be said to date from the period at which we have now arrived. But here, before passing on, a final question of considerable interest presents itself, with respect to the circumstances which had at length rendered possible the development of the polyphonic principle. This principle, which we saw to be entirely foreign to the nature of Greek music, was now to be adopted by the Christian composers, and to become the essential characteristic of their work. Yet we have seen that hitherto Christian music had been, as regards its outward manifestation, practically the same as the Greek. This fact was very apparent in our brief survey of the system which was to supply Polyphony with its material; we then perceived the complete continuity of the art through the point of junction between the Antique and Christian worlds; we saw that certain resources, once highly prized by the Greeks, were passing out of use during the period which gave rise to Christian music; and we found that the Christian composers, neglecting these resources, adopted exactly those which were most employed by the practitioners of their; own time, and that their music conforms to the rules of those practitioners not only in this general respect, but also as: regards comparatively minute details. The connexion and technical resemblance being thus complete, the new music
would seem at first sight to offer as little room for the development of the polyphonic principle as the old. Down to the ninth century, the work of the Latin Church being musically speaking nothing but the reanimation and rehabilitation of the dying art of the Greeks, Christian music, equally with the Greek, illustrates strictly the melodic principle, and seems equally with the Greek to exclude every other. Why then, it may be asked, did Christian music eventually develop new forms impossible to the Greek ? Why, when it had reached the culminating point of its advance upon the old melodic basis, did it not at once fall, like the Greek, into a condition of stagnation and decay, the natural lot of every art which has exhausted the possibilities proper to its original technical resources? What special inward force enlarged its scope, developed Polyphony, and created the magnificent epoch which closed with Palestrina?

The mainspring of the whole development of music by the Italians and northern people lies of course in the fact that in music the new races found for the first time an art to cultivate; and cultivation, in these circumstances, was sure sooner or later to reveal fresh technical possibilities in the apparently exhausted material. The question might therefore be answered in a general way by a reference to the freshness and abounding energy of the new race, and every succeeding advance during the five centuries which followed might also be considered as an effect of the original impulse. But a more particular answer should be given. The perception of these fresh possibilities was not absolutely spontaneous, nor due to the mere observation by an untried race of the inherent powers of the material, nor did Polyphony now arise merely because it was at this time a possible new form of technique. An occasion or impulse was also necessary. The development of an art is not casual, but moves in obedience to certain laws based upon the natural correspondence existing between its two main constituents, the powers of its material on the one hand, and the properties of
the object to be represented on the other ; it may occur either through the perception of some new property in the object, suggestive of a new treatment of the material and resulting in a new form of expression and an enlargement of the technical resources, or conversely through the discovery of some new technical means for which the object is then seen to provide suitable employment. In the art of music therefore, as in all others, not only a new technical means, but a new quality or principle in the object must be perceived in order to set forward a new development and to create a new epoch, and since the art of music finds its object in the world of feeling and sentiment, the principle which we seek, corresponding to the possible new form of technique, and finding its complete expression only in that form, must be emotional in character.

But in what direction are we to look for the rise of such a principle; what recent circumstance in the history of music can be seen as able or likely to originate it?

In our present point of view, the controlling circumstance in the history of music at this period was undoubtedly the employment of its resources in the public worship of the Church. But for this circumstance music would probably not have been, as it was, the first of the arts to rise again in Italy. Had music upon its adoption by the Italians remained a secular pastime, it is difficult to see when or by what means its fresh growth could have been begun; it might have lain for an indefinite period in the same condition as the formative arts, which remained for many centuries after the recognition of Christianity ineffective and ignorant of their true direction. But music was never unsure of its aim. From the first it found in the public worship of the Church a field exactly suitable to its fresh development-a new range of representation, a new kind of emotion to express.

Here, then, in this circumstance of its new ecclesiastical use, we may look to find the source of the emotional principle which is to be seen as chiefly animating Christian music,
the inward force which at the critical moment enlarged its scope and continued its life with fresh vigour.; and we may identify it with the essential principle of Christian public worship, a principle unknown to the Greeks and impossible of application in the formative arts even when they were devoted to religious uses-the congregational principle.

We have seen that music upon its first adoption by the Church at once surrendered itself to the expression of congregational feeling--to the utterance, that is to say, of the general sentiment of the assembled community; we saw that it thus abandoned the old Greek principle, which is that of the purely individual utterance preoccupied by the artistic problem, and created a new kind of song of greater breadth and of more general application, in which the individual utterance, now governed by the common fervour, is brought to represent the collective state of mind; and in this first manifestation of the congregational principle, as perceived in its main or general aspect, Christian music found the inspiration which enabled it to perform its first important task, the exhibition of a new perfection upon the old melodic basis.

But it is evident that the influence of the congregational principle upon music could not be exhausted in its first effects; the expression of its immense essential energy must inevitably be continued in some new phase of activity, and its further development was certain. Moreover, the actual direction of this development towards the more comprehensive expression of the common worship, a closer yet more ideal representation of the assembled community, is clearly indicated. The congregation was now to be manifested in its particularity, and though still perceived as collective and united in virtue of the common act of worship, was to be recognized also in its individual and manifold elements; the individual utterances therefore were now to be seen as various yet united in one whole, as distinct yet blended in a general consonance.

The musical expression of this further development of the congregational principle, this recognition of two elements, variety and unity, belongs entirely to Polyphony. For it is clear that the old technical symbol of the union of the individual and collective elements which was suitable to the Greek and early Christian music-the reduplication of the melody at the distance of an octave, in which the different voices are in effect singing the same note, will not suffice for the expression of the new element of variety, which requires that the voices shall be singing obviously different notes; translated into terms of technique, therefore, the new element implies separate parts for different kinds of voices, and the juxtaposition of distinct melodies. On the other hand, the element of unity, the necessity for consonance, remains, and the distinct melodies therefore must be controlled by the laws of musical agreement; the movements of the individual voice, which formerly ranged at will among the sounds of the scale, must now become subject throughout to the consideration of regard for others, through which alone the general concord can be maintained, and the musician, renouncing the freedom upon which the beauty of much of his former work depended, must write henceforward in obedience to strict law. Thus Christian music entered upon the path of contrapuntal composition, which was to be its second and greater task, and the circumstances having at length become favourable to its development the dormant principle of Polyphony became active.

## CHAPTER IV

## ORGANUM OR DIAPHONY

We may of course suppose that the Greek practice of magadizing, in which as we have seen lay the fundamental principle of Polyphony, was continued in the Latin Church, and that the simultaneous utterance of the melody by the voices of boys and men was recognized by the Italians, as by the Greeks, as a distinct musical effect, arising from a series of repetitions of the consonance of the octave. But no advance apparently beyond the Greek position with regard to this practice was made during the earlier period of the history of the Church, and we look in vain, in the treatises upon music by Christian writers down to the seventh century, for any clear proof of the definite acceptance of magadizing as an artistic means, or for any acknowledgement of the change of principle, the transfer of the idea of consonance from melody to harmony, which is actually involved in its adoption. It was no doubt during the two centuries which followed, centuries sterile in respect of literary production but fruitful and significant with regard to music, that these necessary first steps forward in the direction of Polyphony were made; for in the earliest treatises written after the reawakening of literary effort, towards the close of the ninth century, we find distinct reference to a form of art called organizing, which consisted in the singing of concords by concurrent voices, and also
a definition of consonance revealing for the first time that view of its nature in which it is seen as existing not between intervals but between simultaneous sounds ${ }^{1}$.

It would appear, therefore, that the practice of symphonious singing and playing, called organizing, which probably at this time prevailed both within and without the Church, was now no longer regarded by the theorists with indifference as an
${ }^{1}$ The utterances of some of the ninth century writers, however, such as Aurelian of Réomé and Remy of Auxerre (though these are quoted by M. de Coussemaker in his Histoire de l'Harmonie au Moyen Age as making mention of simultaneous singing of concords), leave us in considerable doubt, owing to the ambiguity of their language, with respect to their recognition of music of more than one voice. When for instance Aurelian says, 'In harmonica (mnsica) quidem consideratio manet sonorum, uti scilicet graves soni acutis congruenter copulati compagem efficiant vocum,' or Remy, 'Harmonia est consonantia et coadunatio vocum,' both may well be following older writers, both Greek and Latin, who use the word Harmonia in a general sense, or, if specially, to denote melody. Vox also, in the older writers signifies the note, and allusions to the mutual adaptation, mixture and blending of notes in one whole would in their works refer to the construction of songs for a single voice. In the absence therefore of further definition, which is not supplied, the intention of Aurelian and Remy is not clear. But Regino (Abbot of Prum in 892) leaves us in no doubt as to his meaning, and, though he makes no mention of special forms of simultaneous singing of concords, defines consonance and dissonance, from the polyphonic point of view, in an extremely clear and interesting manner, thos:' Diffinitur autem ita consonantia; consonantia est dissimilium inter se vocum in unum redacta concordia. Aliter; consonantia est acuti soni gravisque mistara, suaviter uniformiterque auribus accidens. Et contra dissonantia est duorum sonorum sibimet permistorum ad aurem veniens aspera atque inincunda percussio. Consonantiam vero licet aurium sensus diiudicet, ratio tamen perpendit. Quotiens enim duae chordae intenduntur, et una ex his gravius, altera acutius resonat, simulque pulsae reddunt permistum quodammodo et suavem sonum, duaeque voces in unum quasi coniunctae coalescant, tunc fit ea quod dicitur consonantia. Cum vero simul pulsis sibi quisque contraire nititur, nec permiscent ad aurem snavem atque unum ex doobus compositum sonum, tunc est quae dicitur dissonantia.' De Harmonica Institutione, ro.

Hucbald (monk of St. Amand, born abont 840) is even more explicit :-' Aliud enim est consonantia, aliud intervallum. Consonantia siquidem est duorum sonoram rata et concordabilis permixtio, quae non aliter constabit nisi dno altrinsecus editi soni in unam simul modulationem conveniant, ut fit cnm virilis ac puerilis vox pariter sonuerint, vel etiam in eo quod consuete organisationem vocant.' De Harmonica Institutione.

It is worthy of remark that the name here given by the Frankish writer to the practice of symphonious singing is, like that given to it by the old Greeks, an adaptation of the name of the instrument upon which it might be imitated or accompanied.
accident or pleasant trick of performance, but was beginning to engage their serious attention and to reveal some glimpses of the important principles contained in it. No formal recognition of its methods, however, seems to have been accorded until the end of the following century, when a writer, supposed to be Otger or Odo, abbot of St. Pons de Tomières in Provence, in a treatise called. Musica Enchiriadis (until lately ascribed to Hucbald of St. Amand), frankly accepts the whole system in its existing state as a part of music, and presents it in the form of a completely regulated procedure. A commentary upon this work, of similar date, called Scholia Enchiriadis, exhibits much of the same material in the form of a dialogue between master and pupil, in simpler style and with more numerous examples.

From these sources we discover that the advance in the direction of Polyphony which at this time had already been effected by practical musicians was even greater than might have been supposed; for not only is it evident that in addition to the old magadized octave the consonances of the fourth and fifth were now sung in parallel movement, both simply in two parts and in various combinations of three and four voices, but it appears that a new and more complex kind of symphonious performance, in which concord is mingled with discord, and in which the organizing voices may almost be said to display a certain measure of independence, was also in use.

Moreover the view of consonance in which it is seen as existing rather between simultaneous than consecutive sounds is now firmly established and developed; the consonances are described under the name of symphonies; and the origin both of the new view of them and of their new designation is traced to the practice of symphonious singing, which is called Organum or Diaphony.

Attempts have often been made, and indeed even quite recently, to establish a real distinction between the things
signified by these two names; and this attempt has generally been directed towards an expression of the difference existing between that kind of music which was composed entirely of similar concords and that which admitted the presence of dissimilar concords and the union of concord with discord, and sometimes one and sometimes the other has been called either Organum or Diaphony; but it must be said that in the works of the old writers, from whom alone our knowledge of the subject is derived, no such distinction is to be observed; indeed, these authors are always most careful, as if in fear of misapprehension, to insist upon the fact that both names signify the same thing, and that they are in fact nothing more than alternative appellations of the music, of whatever kind, which consisted in the synuphonious utterance of separate voices ${ }^{1}$. And indeed, for the contenuporary musician, the difference between the two kinds of music then prevailing was in no respect significant or suggestive of distinct names, the one kind arising naturally out of the other ; nor does it appear that at its first invention the freer sort was considered as in any way intrinsically better or more agreeable to the ear than its parent. For us, however, and from our present point of view, a difference of the most vital kind is easily perceived; for while the strict kind of Organum or Diaphony is evidently no more than a logical extension of the ancient practice of

[^11]magadizing, in which the individual element of Polyphony was overpowered by the collective element and sacrificed to it, in the freer kind the individual element at length receives recognition, if not an opportunity for development.

The consonances or symphonies upon which the whole system depended were six in number ; three simple, the Octave, Fifth, and Fourth, and three composite, the double Octave, the Octave with the Fifth, and the Octave with the Fourth. Corresponding to these two kinds of symphonies or consonances the strict Organum or Diaphony was also of two kinds; simple, or consisting of the simple consonance sung by two voices, and composite, in which one or both voices were doubled at various intervals, thus creating composite consonances and different combinations of voices.

These methods may best be illustrated by examples taken from the Musica Enchiriadis and the Scholia Enchiriadis.

It may perhaps be assumed that the parallel movement of the simple consonances and of the double octave needs no separate exhibition, and we may proceed at once to consider an example of the composite Diaphony of the Fifth. Here it is to be observed that the simple consonance first uttered by the vox principalis, singing the melody or subject, and the vox organalis, singing the accompaniment in the fifth below in parallel movement with the subject, is embellished in two ways; the vox principalis is doubled at the octave below, and the vox organalis at the octave above, thus at once giving rise to three new intervals, namely, the octave and the fourth, which are now heard advancing in parallel movement both above and below the original fifth, and the octave with the fourth, which is perceived as existing between the extreme voices. It is of course obvious that had an organum of three parts been desired one only of the original voices would have been doubled, and the octave would then have been the limiting interval of the composition; this will be evident from the arrangement of the brackets in our illustration.

THE FIFTH, COMPOSITE.

lae-ta - bi tur Do-mi nus in o-pe-ri-bus su is.

In the case of the composite Diaphony of the Fourth the doubling of the two original voices at the Octave gives the consonances of the Fifth and Octave above and below the simple Diaphony, the Octave with the Fifth being now perceived between the extreme parts.


A question of considerable importance is raised by this example. It will be observed that, as a result of the regular movement of the Diaphony of Diatessaron, the discordant interval of the Tritone Fourth is twice heard, sung between the two original voices, and it will also be obvious that the interval of the Imperfect Fifth, although it did not occur in our previous example, must be of equally possible occurrence in the Diaphony of Diapente, for in that method $F$ in the upper voice must be accompanied by $B$ 曷 in the lower as certainly as Bh in the upper voice must in the Diaphony of Diatessaron be accompanied by $\mathbf{F}$ in the lower. What then at this time, it may be asked, was the method of dealing in performance with these two intervals? Were they sung as they are written, or were they made perfect by the substitution of $B b$ for $B h$, or was the phrase containing them altered in some other manner?

With regard to the treatment of the discord of the Imperfect Fifth, it may be answered, we are without distinct information ; the treatises from which we derive our knowledge of

Organum or Diaphony do not clearly refer to the use of this interval or to any difficulty which might be said to arise from its occurrence between two voices; indeed, we are told on the other hand not only that the Diaphony of Diapente was heard with pleasure ${ }^{1}$, but that it was regarded, from the point of view of continuous consonance, as only second in perfection to the symphony of the octave itself ${ }^{2}$. With regard to the treatment of the Tritone Fourth, however, we are not left in doubt, except indeed with respect to the consistency of the author of the Enchiriadis; for although in chap. xiv. of his work he has said of our example of the Fourth composite that the voices will be perceived as sounding agreeably together ${ }^{3}$, in chap. xvii. we are told that the symphony of Diatessaron, regarded from the point of view of continuous consonance, is, on account of the Tritone (which as we have seen occurs in our example), so defective as to be often quite unsuitable for Diaphony, without alteration. In this point of view the Tritone, which may occur in all scales, is realized as discordant and impossible, and its avoidance is regarded as a necessity. Accordingly we find that when in the Diaphony of Diatessaron the regular movement of the vox organalis would give rise to the interval of the Tritone, regular movenient is abandoned, and an alternative method adopted ${ }^{4}$.

This alternative method was based upon the facts which were understood as governing the existence of the Tritone. For the writers of this period the interval arose out of the

[^12]conjunction of the minor third of one tetrachord with the major second of another ${ }^{1}$, thus :-


The vox organalis, therefore, can never go below the fourth sound of the lower tetrachord. In those cases in which the vox principalis begins in such a manner that the vox organalis cannot accompany at the Fourth without passing below this fourth sound, then the vox organalis must begin upon the same note as the principalis and hold it until it is possible to follow the principalis at the Fourth; and in the same way the organalis must also close in unison when the close of the principalis will not admit of an accompaniment at the Fourth ${ }^{3}$.

The method is well shown in the following example:-

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FREE ORGANUM; THE FOURTH, SIMPLE.
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[^13]
particula (line, verse, or division of the song), nec infra tetrardum sonum descendat positione, nec inchoatione levetur, obstante triti soni inconsonantia, qui tetrardo est subsecundus.' Mus. Enchiriadis, cap. xvii.

1 'Ad banc descriptionem canendo facile sentitur, quomodo in descriptis duobus membris (Rex coeli, \&c. et Titanis nitidi, \&c.), sicut subtus $\mathbf{C}$ tetrardam sonum, organalis vox responsum incipere non potest, ita subtus eumdem non valet positione progredi, et ob hoc in finalitate positionum a voce principali occupetur, ut ambse in unum conveniant, quod modo altiora, modo summissiora loca, organum petat.' Ibid., cap. xvii.
${ }^{2}$ 'Quemadmodum in binis prioribus membris: primae tres syllabae, quae sonant tetrardum $C$, archoum $D$, deuterum $E$, responsum organale sub tetrardo non habent, videlicet propter deuteri soni inconsonantiam ad sonum tritum, qui tetrardo est subsecundus; sic et in sequentibus his commatibus (Te humiles, \&ce, et Se iubeas, \&c.), dum excelsioris exstent levationis ac positionis, celsiori quoque loco, eadem lege et organum coarctatur. Similiter enim in tribus principalibus sonis, tetrardo $G$, archoo A, deutero B, vox organalis rite sub tetrardo respondere nequit, sed moram in eodem agit, dum in subsecundo eius ratum responsum non invenit.' Ibid., cap. xviii.

It may be observed that sometimes, as an alternative method, the lower voice takes the major third or the perfect fifth to the B \&, as here, at the words famuli, flagitant, modulis, and variis.

In addition to the foregoing example the author gives, as a further illustration of the influence of the Tritone upon the Diaphony of Diatessaron, a number of transpositions of the chant-fragment Tu Patris, \&c., as follows :-


With respect to this example it is pointed out that, although a consonant opening is possible, a corresponding treatment of the close is out of the question, owing to the occurrence of $\mathbf{E}$ in the melody, to which the organal response is $B b$.

Tonus Deuterve (plagalis).


Here is shown the proper treatment of the organal response, which cannot proceed regularly either at the opening or at the close.

Tondes Teitus.


In this mode, we are told, no organal response is possible, probably because of the occurrence of the Tritone between
the reciting note of the melody and an accompaniment in the fourth below.

Tonus Tetrardus.


Here the response cannot conveniently descend at all into its proper region, the second note in the opening and the last note but one before the close involving the discordance of the Tritone if strictly accompanied. The proper treatment is shown.

Such then are the views of the author of Musica Enchiriadis with respect to the symphony of Diatessaron and to the manner of dealing with the false interval of the Tritone which is peculiar to it. He recognizes the discordance of the Tritone as the cause of a distinct inferiority in the symphony of Diatessaron as compared with those of Diapente and Diapason, and he lays down the rules of a method which avoids the use of the offending interval.

It is worthy of remark that the author of the commentary called Scholia Enchiriadis, while also recognizing the inferiority of the symphony of Diatessaron from the point of view of parallel singing, and adopting the rules already given for the treatment of Diaphony in that interval, assigns a different reason for the freedom of the vox organalis. He makes no mention of the Tritone, but on the other hand draws our attention to the fact that whereas in the symphony of Diapason both voices are singing absolutely in the same mode and in the symphony of Diapente almost absolutely so, in that of Diatessaron the difference of mode is obvious and unmistakeable; and we learn that it is the impropriety of this combination of two different modes or
species of the scale, throughout the whole of a composition, which in his view gives rise to the necessity for a free treatment ${ }^{1}$.

It would appear from this treatise that when strictly parallel fourths are given in the contemporary works as examples of the composite Diaphony of Diatessaron they must be considered either as merely theoretical or as representing a method which was already passing out of use, for in the combinations exhibited in the author's own illustrations of the treatment of this interval the vox organalis is always, and its reduplication often, free; this will be evident from the following selected specimens:-

## THE FOURTH, SIMPLE.

Dox principalis.
(Scholia Enchiriadis.)


1 'Discipulus. Quare in Diatessaron symphonia vox organalis sic absolute convenire cum voce principali non potest, sicut in symphoniis aliis? Magister. Quoniam, ut dictum est, per quartanas regiones non iidem tropi reperiuntur, diversorumque troporum modi per totum simul ire nequeont, ideo in diatessaron symphonia non per totam vox principalis vozque organalis quartana regione cousentiunt. Discipulus. Vellem quoque diuoscere, quomodo per quartana loca troporum sit genus dissimile? Magister. Facile id senties; sive enim uno tono altius transponatur, seu quarto loco inferius, modus diversi tropi aperto auditu fit discernibilis. Canatur ad infra scriptum modum :-


[^14]

THE FOURTH, COMPOSITE.
Vo organalis doubled at the $8 v e$ above.
(Scholia Enchiriadis.)


Nos qua vi vi -mus be - ne-di-ci-mus Do-mi-nam
Vo principalis.


Nos gui vi vi-mus be ne -di ci -mus Do-mi-num
Vow organalis.


The following example is especially interesting, since it contains, if the notes given are correct, an alteration not only in the vow organalis, but in the reduplication of the principals also :-

[^15]THE FOURTH, COMPOSITE.


THE FOURTH, COMPOSITE.


* Thas in Gerbert. It is of course possible that this is a mistake, and that the passage should repeat the opper principalis exactly.
 The date at which the free kind of Organum was first
developed from the strict is of course unknown, but its
method, arising as it does out of inconveniences due entirely
${ }^{1}$ It has hitherto been generally supposed that the free Organum was entirely confined to the simple or two-voiced form, and that the treatment of the composite forms was strictly parallel; even M. Gevaert, in the chapter upon Organum and Diaphony included as an appendix in his Melopée Antique, do., 1895 (in which he also attempts to assign a different signification to each of these terms), seems to countenance the notion in his definitions:-'Ongandm proprement dit, une harmonie à deux voix, composée a'intervalles simultanés divers; LA DIAPHONIE à deux trois ou quatre voix formée d'une succession de consonances identiques.' The origin of this curious error is probably to be found in M. de Coussemaker's Memoire sur Hucbald, Paris, 1841, in which he has wrongly translated the examples just given above in the text, exhibiting them as strictly parallel throughout. Neither the examples themselves as given in the original treatise, nor the old writer's careful description of which they are illustrations, present any difficulty whatever; we can therefore only suppose that in dealing with this part of the subject, M. de Coussemaker, having read his author with less attention than usual, assumed that the parallelism of the Organum of the Octave and Fifth, which is in fact strict, was continned in that of the Fourth, and that he thus wrote mechanically, without reference to the text of the Scholia, examples which he unfortunately declares to be those actually given as illustrations in that work. These misleading examples of the Memoire sur Hucbald were reproduced without alteration by M. de Coussemaker in his Hucbald et ses Traités, Paris, 1845 (?), and again in his very important Histoire de l'Harmonie au Moyen Age, Paris, 1852, which has ever since been universally accepted, and upon the whole with good reason, as the highest authority upon its subject.
to the nature of the scale, may very well be of almost equal age with that of the purely parallel movement. Indeed, if the difficult passage so often quoted from the Divisio Naturae of Scotus Erigena ${ }^{1}$ can be supposed to throw light upon the subject, it would seem that the free Organum of the Fourth may already have been in existence about the middle of the uinth century, that is to say, about one hundred and fifty years before the probable date of the Enchiriadis; for the writer's description of the alternate separation and coming together of the voices quite admits of application to this method. Apart from this doubtful passage, however, there seems to be no actual reference to the free Organum until the period at which we have now arrived, when it was described as a part of the general account of Organum in the treatises which have just been considered.

Two other works of this date ought to be mentioned-a MS. now in the Cathedral Library at Cologne ${ }^{2}$, and another which in some MSS. of the Enchiriadis-that of Paris for instance-takes the place of the chapters xiii. to xviii. which were printed in the editions of Gerbert and de Coussemaker ${ }^{3}$. In these works the free Organum of the Fourth is chiefly discussed, and by the author of the Paris MS. the organizing of the Fifth is not allowed ; in most respects, however, they conform so closely to the treatises which we have examined that it has not been thought necessary to describe them.

The next account which we possess of the methods of Organum or Diaphony is contained in the Micrologus of Guido of Arezzo, written about one hundred years later than the Scholia Enchiriadis, during the first half, that is to say,

[^16]of the eleventh century. In the system described in this work no very great progress beyond the former one is apparent. We may note, for instance, that the old strict forms of composite Diaphony were evidently still held in some esteem, for Guido mentions three as in use in his time, and these appear from his description and from a single example to be the wellknown forms of the strict Diaphony of Diatessaron for three voices; moreover, it would seem that musicians were not confined to these three forms, or at all events not in theory, for Guido adds that the reduplications of the simple Diaphony may in all cases be carried out to the full extent of the possibilities of the material ${ }^{1}$.

But although the strict Diaphony was still at this time in use, it is clear that both by Guido and by others it was considered as antiquated, and that the free kind was altogether preferred. This preference marks the advance, real though small, which had been made during the century which had elapsed since the time of Otger ; for while formerly musicians had perceived in the freedom of Diaphony only the advantages for the sake of which it had been invented, means, that is to say, of avoiding certain inconsonances and inconveniences, they were now inclined to see in it distinct intrinsic merits, and definitely preferred it for its own sake ${ }^{2}$; so that its rules were now no longer merely sufficient for the avoidance of the Tritone or of the parallelism of two different modes, but were also, though very tentatively, directed towards the production of a series of combined sounds, not necessarily concords, of which the ear might approve and of which apparently it was to be the principal judge.

With respect to the number of voices employed at this time in the newer or free kind of Diaphony, it may be said that

[^17]although the very concise directions given by Guido refer entirely to the conduct of the organal voice, and the examples are in two parts only, nothing prevents the supposition that the doubling of parts at the octave was practised in this as well as in the strict or parallel form; Guido nowhere forbids it, and indeed the manner, for instauce, in which he passes from the discussion of the strict Diaphony to consider the freer kind seems almost to imply that the two were by no means totally distinct. 'Having now,' he says in effect, 'sufficiently explained the duplication of the voices, we may treat more particularly of our method of dealing with the lower (or organal) voice ${ }^{1}$.' Moreover, we have already seen that the practice of doubling the parts in free Diaphony was apparently common in the time of Otger, and it is difficult to suppose that a method which had been firmly established one hundred years previously, a method based upon existing principles and at the same time in no way opposed to the natural progress and development of the art, should have been discontinued in the time of Guido.

Passing however from this point, which is perhaps not very important, we may go on to consider the method of treating the organal voice which is given in the Micrologus.

The symphony of the Fourth is still the foundation of the free Diaphony, and it now moreover constitutes the extreme limit of separation between the voices ${ }^{2}$, for the perfect fifth which we have seen in the older music is no longer allowed. The remaining intervals, both those which were used and those which were neglected, are the same as before, but a change

[^18]of considerable importance in the point of view from which they are to be considered has taken place; for whereas formerly they were unnamed and regarded as chance juxtapositions of the voices due to the conduct of the lower voice in obedience to a certain rule, they are now seen in their true character and receive their proper appellations; their points of difference moreover are studied, and they become to some extent the subject of choice ${ }^{1}$.

Nevertheless the actual existence of these intervals is still due, as before, to the observance by the lower voice of that rule of practice which forbids its descent below a certain note of the tetrachord governing the melody or any particular section of it which may be in question. It will be remembered that the notes indicated by this rule in the time of Otger were $G$ in the upper tetrachord and $C$ in the lower, and that they were then the fourth sounds of their respective tetrachords. The system of tetrachords which explains this has already been shown (p. 53), and an excellent example of the application of the rule under the old conditions was given in the twopart composition Rex coeli Domine, where for instance, in the concluding sections, se iubeas flagitant is seen as governed by the upper tetrachord and variis liberare malis by the lower, the vox organalis in neither case descending below the fourth sound. But the tetrachords implied in Guido's Diaphony are arranged in a different manner from those of his predecessors; they are conjunct, and their scale begins upon $\mathrm{A}^{2}$, thus :-


[^19]The lower limit therefore of the organal voice in each tetrachord is now the third sound, and the notes are F and $\mathrm{C}^{1}$.
From this it would seem that the risk of a Tritone Fourth has now nothing to do with the prohibition of a descent below F or C respectively, nor indeed does Guido mention either that explanation of the rule or the reason given by the author of the Scholia Enchiriadis, the creation, that is to say, of parallel modes of different character by the use of continuous fourths; he puts forward in fact, as we shall presently see, another explanation altogether, based upon the impossibility of closing in unison in a proper manner if the rule be not observed.

It is certainly a curious circumstance that the three writers who have given reasons for this rule of not passing below certain sounds differ entirely from each other in their explanations of its necessity, and we are tempted to inquire whether the rule may not perhaps have been much older than the explanations, existing as a tradition of performance, and presenting to the theorists a phenomenon for which they felt themselves bound to give a musical reason. And in this point of view we must not omit a notice of the fact, mentioned by M. Gevaert (Mélopée Antique, \&cc., Appendix) that in the tenth century C was the lowest note both of the organ and of the cithara. A possible key to the puzzle may perhaps be found in this circumstance, but it must be remarked that although it might account for the rule as regards C , it will not apparently help us to understand the frequent avoidance of a descent below $\mathbf{G}$ or $\mathbf{F}$.
Returning, however, to the methods of Guido we find that his practical instructions, as a whole, relate partly to the means of avoiding this passage of the lower voice below the Tritus or third sound, and partly to the formation of closes. These may

[^20]perhaps best be shown in his own examples of their application as follows:-


In this example, in Mode VIII, the melody, ranging almost entirely above the final, $G$, is governed by the tetrachord to which G belongs, and the organal voice is careful not to descend below the third sound of that tetrachord, F. We may also note that in the occursus, or coming together of the parts at the end, the unisons upon the two closing notes of the melody (which are also apparent in several sections of the former example Rex coeli Domine), are disguised by delaying the passage of the lower voice ${ }^{1}$. In the following example, however, which is in Mode IV, the older method is adopted.


The variant is given by Guido in order to show the pleasant effect of coming to the unison by way of a major third between the voices ${ }^{2}$.

An important example is a Diaphony upon the antiphon for the office of St. Agnes, in Mode I:-

[^21]

In Guido's comment upon the first section of this example he gives his reason for refusing to descend below the Tritus $\mathbf{C}$. He says that when the melody falls to $C$, a close in which the lower voice should move upwards to that note is not possible, because the occursus cannot proceed by way either of a tone or major third with the upper voice, but only by the semitone or minor third, which are not allowed ${ }^{1}$. His difficulty may be illustrated thus:-


Guido's reasons would seem to require further explanation. It is sufficiently clear, however, that for him it is the B which creates the necessity for the rule, and we must suppose, since no other objection to this note from Gnido's point of view is obvious, that the real cause of its unsuitability lay in its 'leading' quality. This, however, Guido does not say, nor

[^22]does he apply his objection to the corresponding note E in the tetrachord next above, which renders the occursus from below upon $\mathbf{F}$ equally impossible.
This kind of omission, perhaps not always unintentional, is rather characteristic of Guido's comments upon his illustrations. With respect, for instance, to the second and third sections of the example which we are now exanining, we may perhaps suppose that the manner in which the final notes are accompanied is due to the fact that the closes are of a light and passing character; but we receive no information on this point from Guido; he merely indicates the fact that the lower voice moves chiefly in fourths, and that the parts do not come together. 'The Diaphony of Diatessaron,' he says, 'is here more pleasing than the occursus.' With respect to the last section no difficulty arises, and we are content to be told to notice the close upon the final of the mode, and the satisfactory manner in which the occursus is conducted by the interval of a tone between the voices.
The examples which remain to be noticed refer more especially to exceptions or licenses. In the first, in Mode I, we may observe an instance of the forbidden descent of the organal voice below the Tritus C. No reason is given or excuse offered, but Guido points out that the voice after this escapade to $\mathbf{A}$ returns at once to $\mathbf{C}$ in order to secure a proper position in the approaching occursus.


The timely arrival of the organal voice upon the note which is to form the lower member of the occursus is also seen in the following example, in Mode VI; but a more striking feature
of this close is the maintenance of the organal voice upon the Tritus F , while the melody in its long concluding flourish touches the corresponding note in the lower tetrachord, Tritus C.


A more remarkable instance of this last device, in which the Organum is held throughout upon the Tritus F, while the plagal melody pursues its course both above and below and finally ends in the lower tetrachord upon the Tritus $\mathbf{C}$, is next given. From Guido's comment upon it, joined to some previous remarks, we gather that the melody in such cases was to be sung very quickly, and that no pause suggestive of a melodic close was to be made until the final occursus ${ }^{1}$.


These last two examples are extremely interesting, and may possibly present to us the actual contemporary method of organizing the more florid figures of ecclesiastical melody.

Guido's final example, which he describes as being in Mode VI, illustrates a method of closing suitably from below upon the upper C, by the use of the tetrachord synemmenôn,

[^23]giving $B^{b}$ in the lower voice; his illustration, therefore, is written in the upper octave, to which in the Greek scale the alternative $B b$ belongs, instead of in the lower, as is usual with him.


Guido's examples, and his comments upon them, have here been exhibited at some length, in order to establish, as clearly as may be, the truth of the statement made above, namely, that the free Diaphony was in the beginning of the eleventh century already preferred for its own sake, and that the ear was now in fact often the real judge of its success. And this we may gather not only from the character of the examples themselves, but also from the nature of such rules as are given ; for these are chiefly practical, and, unlike the rules of the strict Diaphony which depended upon the old established concords, are based upon no apparent theoretical principle. The explanations of them which are attempted are generally vague and obscure, and even when definite seldom convince us of the necessity of the course prescribed. They are in fact, so far as we can see, the rules of a practitioner, who can only successfully support them by an appeal to custom, and to the general feeling among men of experience that in given circumstances certain combinations will sound better than certain others.

Regarded in this point of view, Guido's examples and comments would seem to reveal a period of considerable musical activity of the most promising character, and it might well be supposed that some further manifestation of the free system displayed in the Micrologus-a system apparently so much in sympathy with the beautiful florid ecclesiastical melody-would
soon have become evident; it might also even be conceived as possible that by means of successive improvements in this system the contrapuntal music of later times might suitably have been developed. But, as a matter of fact, it would appear that the actual course of events was by no means such as we might have expected; for already in the works of the writers upon Organum who come immediately after Guido no trace of either of the systems exhibited by him is to be found; they disappear in fact entirely, and the system which takes their place is now based upon a principle unrecognized by Guido, and presents a totally new appearance.

This circumstance, which comes upon us with the force of a surprise, is at first sight somewhat difficult of explanation. Yet in the point of view from which we regard the art of Music we should assume, as a probable reason for this abandonment of Guido's systems, that the path of actual progress did not lie in the direction which they indicate; and this assumption, which is in accordance with all that we know of the history of art of all kinds, will in fact be found to be sufficiently justified if we shortly examine the nature of the change which took place and of the principles which were involved in it.

Hitherto we have regarded the two systems of Organum or Diaphony, the strict and the free, chiefly from the point of view of the intervals employed; and we have seen that, while the strict sort was based entirely upon the traditional concords, the freer kind admitted sounds which formerly had been held to be impossible, because discordant. We have seen, moreover, that in the strict Organum the voices were confined in each composition to one kind of concord, which was sung under the melody and moved with it continnously throughout, and that in the free sort the introduction of the discordant sounds among the concords created new and various intervals between the voices. But we have now to take notice of the fact, with respect to the free Diaphony, that in addition to
the novelty of the mutual situations caused by the hitherto untried intervals, a new relation of another kind was established between the parts; for whereas in the older method their only possible progression was parallel, the newer method gave rise to an oblique movement, and even in one case, where the occursus was made by a major third, to a contrary movement. Of these two movements the oblique, arising as it does out of the characteristic rule of not passing below certain sounds, is in fact, though still mingled with the parallel, a characteristic feature of the free Diaphony, and may be said to be firmly established in that system; the contrary movement, on the other hand, is foreign to the systems which we have already examined, and is indeed rather discouraged than otherwise by Guido, who, even when he admits it, recommends another way of closing as preferable.

The sudden appearance therefore of the new system which immediately succeeded that of Guido, and in which, as we shall see, the influence of the parallel and oblique movements is reduced to a minimum and the contrary movement is apparent as the leading principle and characteristic feature, is indicative of a change of the highest importance in musical thought, and marks the beginuing of an entirely new view of the possibilities of the material of part music; a view, in fact, not suggested by either of the systems displayed by Guido, and revealing principles which his methods of composition could not from the nature of the case supply. Moreover, since we have seen that the path of progress in Polyphony must be considered to lie along that line which tends towards the preservation of a balance between the individual element or element of variety, and the collective element or element of unity, we must regard the change of system as entirely beneficial to the art of symphonious singing, because completely destructive of the crushing domination of the collective element as seen in the strict method of organizing. For the oblique movement of the free Diaphony, though it established the
recognition of the individual element in Polyphony and gave rise to a certain measure of progress, was still but an offshoot of the continuous parallelism of ancient times, and is therefore expressive only of a partial independence insufficient for the full development of music; in the principle of the contrary movement, on the other hand, and in the unfettered variety of the vocal progressions to which it gives rise, we recognize the declaration of individual freedom in the largest measure compatible with respect for the general law. Hence its immediate triumph and supersession of the former system, and its assumption of an authority which was thenceforward complete.

With the death of Guido, therefore, about 1050, and the advent of the new principle of the contrary movement, the first period of part music, the period of Organum or Diaphony, may be said in fact to be closed. Its chief task, the first liberation of the composition from the bonds of the strict continuous consonance of one kind inherited from the Greeks, had been accomplished, and the cultivation and development of the more fruitful elements which had been evolved in the course of the work were now to be undertaken, upon fresh methods, by the succeeding generations.

## CHAPTER V

THE NEW ORGANUM AND THE TRANSITION TO<br>MEASURED MUSIC

Although we may no doubt safely conclude, with respect to the original sources of the new Organum, that it was derived from the free species of the Fourth which was considered in our last chapter, the complete process by which the actual transition was effected is not only unknown to us, but is also at first sight somewhat difficult to imagine. The change was in fact very considerable, partly on account of the wide difference of principle which, as we have already seen, exists between the old and the new kinds of vocal progression, and partly from the absolute novelty of the symphonious relation now established between the voices; for, as we shall presently see, the combination of dissonant intervals with consonance of one kind, which constituted the characteristic and important feature of the older free Organum, entirely disappears in the new system, and gives place to a carefully varied mixture of all the traditional concords. Considered as a whole, therefore, no method could well be more different from another than the method of the new system from that of the older one, and we must deplore the absence of the few links in the chain of description and example which are needed to make clear to us the intermediate phases of so remarkable a development.

Our inability to trace the actual process of transition from the old to the new Organum is not due, as might perhaps be supposed, to the absence of musical treatises during the transitional period, but rather to a complete silence with respect to this branch of the subject. Berno, for instance, Aribo Scholasticus, and William of Hirschau, the writers upon music who immediately succeeded Guido, all agree in the omission of any account of the methods of Organum, as if indeed it formed in their opinion no true part of music at all.

The reason for this momentary reaction, for such it would seem to be, from the warm interest in the subject which is evident in Guido, is not very apparent; but whatever .the reason may have been, the silence of these writers deprives us of the assistance which we have been accustomed hitherto to receive in a complete description of contemporary methods and a full explanation of their purpose. Indeed, we should be left in entire ignorance with respect to the development of symphonious singing between the date of Guido's death and the beginning of the twelfth century, were it not that we are fortunately able to turn to a few specimens of the work of that period, composed with a view to practice and quite apart from theory, from which we may learn something.

Of these the most important perhaps for the history of Organum are contained in an English MS. known as the Winchester Troper, now in the library of Corpus Christi College, Cambridge, and dating probably from 1080 at the latest, in which some of the pieces-certain kyries, alleluias, and other portions of the divine service, are shown in two parts. Unfortunately the music is noted in neumes, without stave or clef, a circumstance which renders an exact translation in full impossible; but the MS. is useful notwithstanding for our present purpose, since the parallel, oblique, and contrary movements can all be perfectly discerned in it, in situations similar to those which they might occupy in the free Organum of the Fourth, as we have seen it in the Enchiriadis
and the Scholia. The chief interest, however, of the MS. resides in certain passages of contrary movement, appearing not at the closes, as had been usual hitherto, but in the course of the sentences, and displaying a more elaborate and extended form than that of the old occursus. The most distinct of these, perhaps, is contained in a composition with Greek text, beginning 'Alleluya ymera agias,' where the two first syllables of the word 'ethnike' are treated in the following manner:-


The actual position of the organal passage in the scale cannot at present be determined, and the notes have therefore been shown without a clef; there can be no doubt, however, with respect to the fact of contrary movement of a new kind.

It is to be hoped that notwithstanding the difficulties which stand in the way of translation, the exact nature of the musical contents of this valuable MS. may in the course of time become more clear to us; and in that case it is not impossible that, among other results, we may be able to establish, through the Troper, some connexion between the Organum which we have already seen and another very remarkable kind, apparently quite independent of rule, which is exemplified in the remaining specimens of the practical work of this period to which reference has been made, and from which probably the method afterwards called discant, and therefore the whole of polyphonic music, was subsequently derived. But the consideration of these questions must be postponed
for the present, and our attention must be given to the new development of the learned Organum which appears in the beginning of the twelfth century.

The earliest known expositions of the new Organum are contained in the Musica of Johannes Cotto, written about the year 1100, and an anonymous treatise of similar date, $A d$ Organum Faciendum, now in the Ambrosian Library at Milan.

The first of these works is a treatise of the usual learned and dignified kind, chiefly devoted to the consideration of music from the point of view of the single voice, and remarkable for its dissertations upon notation and upon the supposed corruption of the ecclesiastical melodies. The author, following perhaps in this respect the example of Guido, devotes only one short chapter to the subject of organizing, which it must be said he treats in a somewhat dry and perfunctory manner, enunciating its rules very briefly and giving no examples. Nevertheless the information which he affords is of great importance. The Organum, we find, is now constructed entirely of consonances, and the arrangement of these is decided chiefly by the various kinds of progression adopted by the voices ${ }^{1}$. Varieties of progression therefore form the principal means of the new Organum and are the chief subject of the author's instructions. From these we learn that, although the similar movement of the voices is by no means forbidden, a contrary progression is upon the whole preferred ${ }^{2}$; while crossing of the parts also is not only allowed, but indeed appears even as a characteristic feature of the current system. This latter fact is evident not only from a passage contained in Cotto's definition of Organum already quoted at p. 48 (note), of the

[^24]present work—altero rectam modulationem tenente, alter per alienos sonos apte circueat-but also from his rules for closing, which direct that if the principal voice comes to a pause among the grave sounds the organal voice must end at the octave above, if the pause be among the acute sounds the organal voice must descend to the octave below, while at a close upon or near mese the organal voice must come to the same part of the scale and end in unison ${ }^{1}$; it is clear, therefore, that in certain given circumstances a direct inversion of the original relation of the voices must take place. Finally, it may be said that this author allows the use of two or even three notes as the equivalent of the single note of plainsong, in place of the simplex motus or usual note under note progression. He probably also intends to sanction the use of two or three notes of the plainsong against one of organum, a practice which may sometimes be observed in Guido's examples ${ }^{2}$.

But if Cotto, evidently a member of the literary class to which Berno, Aribo, and William of Hirschau belonged, describes the contemporary Organum imperfectly and in a grudging spirit which is well displayed in his closing words -Et de diaphonia istud tantillum nos dixisse sufficiat-the anonymous writer of the treatise in the Ambrosian Library, on the other hand, devotes the whole of his work to the subject of the new practice, and is moreover enthusiastic and bold even to rashness in his assertion of its merits, exalting the Organum indeed in dignity and importance far above the

[^25]plainsong ${ }^{1}$; his opinion, in fact, is so entirely opposed to the ecclesiastical view, and the possibility of its maintenance by a clerical advocate seems so remote, that we may perhaps suppose the author of the treatise to have been a layman.

The principal feature of the work is a classification of the various elements of the current practice, reduced to five modes, which are shortly described by the author. Examples also are given, in which it may be noticed that the vox principalis is now below the vox organalis, instead of above as formerly, and that the theme taken by the lower voice is the same in all the examples.
The first mode, he says, occurs when the first note of the Organum is ' conjunct ${ }^{2}$,' (that is to say at the unison or octave with the melody), thus:-


The second mode occurs when the first note is ' disjunct ${ }^{3}$,'

[^26](that is to say at the fourth or fifth with the melody), thus:-


The third mode is concerned with the notes which compose the body of the music, proceeding in fourths and fifths ${ }^{1}$, thus:-


The statement of the fourth mode is obscure, and its example, which might have helped us, has been omitted from the $\mathrm{MS}^{2}$.

The fifth mode arises from the augmentation or diminution of the organal notes ${ }^{3}$, thus:-


1 'Tertius modus sumitur a mediis vocibus, quae -mutantur per diatessaron si sunt in diapente, et e converso.' Conssemaker, Histoire de l'Harmonie au Moyen Age, p. 233 .
${ }^{2}$ 'Quartus fit a diverso principio, vel a diverso medio, non tantum ab uno sed ab utroque.' Ibid., p. 233.
${ }^{3}$ 'Quintus per multiplicationem oppositarum vocum, angendo vel auferendo.' Ibid., p. 233.

This classification would seem to be purely arbitrary and of no real value whatever, since the peculiarities here described and shown in the examples, though undoubtedly distinct, do not command a sufficiently wide range of influence upon the composition as a whole to deserve the name of modes. If, for instance, the special direction given by the initial interval to the progression of the three or four notes which follow-and its influence could seldom extend further-is to constitute a mode, then modes might be multiplied to almost any extent, and every small form of movement and arrangement of intervals might claim to be placed upon the list. It is in fact difficult to avoid the conclusion that the author's scheme represents merely a strong desire on his part to dignify the current practice, for which he expresses so much admiration, by exhibiting it in a systematic form similar to that which was adopted, with good reason, in the learned explanations of the ecclesiastical plainsong. His failure may be accounted for by the fact that no sufficient material for such a scheme as yet existed, nor indeed does any such material seem to have effectually presented itself to musicians until in comparatively modern times, when it was gradually fashioned into the form of the five orders of counterpoint; considered, however, as the prototype of this fine analysis of music our author's ineffectual scheme is exceedingly interesting.

Besides this attempt at classification the author puts forward a number of rules for practical composition; and from these, though they are apparently not exhaustive, it is evident that the contemporary organizers already possessed a fairly clear notion of the best method of proceeding in view of the ideal of this kind of music, which Cotto defines as the production of change and variety in the consonances by means of the movement of the voices. For there is no doubt that the rules are devised quite as much with the object of securing freedom and change of movement as in order to create variety of sound. We are told, for instance, that if the unison or octave to the
plainsong are employed as the opening notes of the organal voice-the author's ' First Mode'-the note next taken should be either at the fourth or fifth, but that if on the other hand the opening note be at the fourth or fifth—the author's 'Second Mode'-it may be followed by the octave; in general however, in passages of moderate length, all notes after the first, except the final which is usually either in unison or at the octave, should be at the fifth or fourth, but in passages of greater length the octave and unison may occasionally be introduced.

The author supplements these rules by several methodical sketches of compositions of which he explains the construction note by note; they are of considerable interest, and one of them may be given as representative of all.
' If the melody,' says the author, 'opens with $\mathbf{E}$ followed by $G$ the organum begins upon the upper octave and then falls to c ; then the melody taking aFG the organum replies with d a G, and thus both voices come together upon the same note. Again the melody proceeds with FGE, and the organum starting from $c$ rises through $d$ to effect a conjunction ( $8^{\mathrm{re}}$ ) upon $e$, and since the melody next rises to $G$ the organum will again come to c , and the final close will be in unison upon a.


Here again the dicta res, presenting to us as it does the shadow rather than the substance of instruction, would seem to be of little practical value, but we have to remember that the frequent repetition of such explanations, applied to a large number of examples, might very well create in the mind of the student, by the constant direction of attention upon the various
progressions of the voices, a clear idea of the course to be pursued in all circumstances.

Nevertheless it must be admitted that the author's text, taken as a whole, is the least valuable portion of his work, and we willingly turn for a moment to consider the examples by themselves, apart that is to say from the author's use of them, and merely as the earliest theoretical specimens of the new Organum which we possess. And in this point of view it is interesting to note, in the first place, that they both illustrate and supplement the axioms laid down by Cotto in his treatise. It is plain, for instance, from these examples that while Cotto's fundamental rule that the Organum should be made with consonances varied by the movement of the voices was generally observed, considerable latitude was at the same time permitted with respect to the degree of variety to be employed. In the illustration of the author's so-called Third Mode, for example, the parallel movement occurs five times, similar movement twice, and contrary movement twice; in the illustration of the so-called Second Mode, on the other hand, the parallel movement occurs only once, and similar movement twice, while contrary movement is to be found in seven progressions. In one or two fragments of composition included in the treatise, but not given expressly as illustrations of the text, the use of the contrary movement is seen as still further extended; as for instance in the following specimen, where we may note not only that the parallel movement has entirely disappeared, but that with the exception of the first three notes, where the movement is similar, and those at the junction of the sections, where it is oblique, contrary movement is employed throughout:-


This specimen also affords an interesting example of interchange or crossing of parts, for it will be remarked that throughout the first section the organal voice sings below the principal, and returns to its normal position in the second. Another kind of interchange is also to be seen in the example of the so-called Fifth Mode, where a device corresponding to Guido's Organum suspensum is employed; the author, however, gives no particulars with respect to it, and though we see that it was allowed to the organal voice we are not told whether it might be employed, as in Guido's system, by the principal, or whether this was forbidden. The flourish, it will be observed, is executed below the principal, and was probably sung very quickly, like that below the Organum suspensum.

In two other respects also we observe the signs of a considerable latitude in the application of the prevailing rules. In the author's treatment of B in the upper voice, for instance, we may note that he constantly takes that sound as a fourth to F, correcting the discordance by a flat. The rule, of coursesince the old practice of standing still upon $\mathbf{C}$ had been given up-was to avoid the tritone by taking $B$ in the upper voice only as an octave or fifth to the voice below, since the admission of $B^{b}$ in the upper voice must, it was feared, lead inevitably to its introduction, for organizing purposes, into the lower or principal voice, and thus bring about an ever increasing corruption of the plainsong. The author of this treatise, however, though he quotes Guido's remarks upon the use of $\mathrm{B} b$, in which the device is treated as inadmissible and superfluous ${ }^{1}$, not only uses the note freely in the upper voice, but also, though more sparingly, in the lower.

[^27]Guido's remarks (taken from the Prologue to his Antiphonary) refer of course only to the melody or principal ; but from his own examples of Organum, already

The second instance of latitude in the observance of rule occurs in the closes of the examples of the so-called Modes, where we find that Cotto's rule for the final conjunction when the principal ends upon or near to Mese is twice obeyed and twice neglected, the voices in two cases coming, as enjoined, to the unison, but in one case also to the fourth and in the other to the fifth. This treatment was probably adopted as a part of the general display of the possibilities of the art as now constituted, which seems to have been the chief object of these examples.

The most striking feature of this author's exposition of the new Organum is probably his construction of so many various examples upon one melody. The power to do this was of course within the reach of all from the moment at which the contrary movement was first devised, but the exhibition of the method in this and perhaps similar treatises must have been, for many of the contemporary musicians, a revelation of unsuspected resources, and of an apparently unlimited field for the exercise of invention. For us, on the other hand, the author's method of proceeding is not only significant of a great advance in the art of music, as the result of the new system of organizing by varied concords, but also points out its future direction, and already suggests the means by which the materials of Polyphony were to be completed; and in fact, as we shall see, existing compositions prove that the first actual expansion of the polyphonic principle, the addition of a third real part to the original two, dates from this period, and that the fourth part followed soon after.

In passing from this treatise a final example of its methods, upon a comparatively extended scale, may be given. Being more or less complete in itself it affords a better idea of the

[^28]music of the divine worship at this time than could be obtained from the fragments hitherto exhibited. It was performed either simply in two parts, or with both voices reduplicated at the octave.

## TROPE OR PARAPHRASE OF THE KYRIE.

(MS. in the Ambrosian Library, Milan.)


That the system here exemplified preserved its theoretical authority, at least during the first half of the century which followed, seems clear from the evidence of the two treatises which are next to be mentioned; for the methods displayed in these works, while they reveal certain characteristics which may be said to be in advance of anything which we have as yet seen, are nevertheless in substantial agreement
with the doctrine of Cotto and the anonymous author of the Milan MS.

The first of these works is a little summary of the rules of composition, in the old French vernacular, dating probably from the beginning of the twelfth century, which, like the treatise last described, has been printed by M. de Coussemaker in his Histoire de L'Harmonie au Moyen Age ${ }^{1}$. Compared with the works which we have just examined, its chief points of difference are the abolition of the interval of the fourth, which, as we shall see, is here excluded from the list of possible concords, and the satisfactory and practical character of the rules for the treatment of the octave and fifth. We now no longer find a mere description of the actual movements of the notes in a given example, but definite instructions for the progression of the organal voice-or rather, as this author calls it, the discant ${ }^{2}$-in a certain number of cases. We are told, for instance, that if the melody begins with an upward progression, the first note of discant must be the octave to the first note of melody, in order to leave ample room for a contrary movement of the discant downwards; while on the other hand, if the melody descends, the discant will begin upon the fifth, in order that the proper contrary movement upwards may not create too great a divergence. Then if the melody proceeds upwards one degree the discant will fall two from its octave, as shown in the subjoined example (a); a rise of two notes in the melody is met by a fall of one in the discant (b); a rise of three notes in the melody obliges the discant to stand still (c) from lack of room

[^29]to move (since the fourth, as has been said, is not allowed by this author), and at a rise of four notes in the melody the discant is forced to abandon the contrary movement, and rises also, moving one note ( $d$ ); and in general, when the melody continues to rise, and there is no room for the contrary progression, parallel fifths are recommended until a descent in the melody again admits of free treatment. The same principles apply to the discant upon a descending melody, in which the voices begin at the interval of a fifth. If the melody falls one note the discant rises two ( $e$ ); if the melody falls two notes the discant rises one $(f)$; at a fall of three notes in the melody the discant stands still upon the fifth (g); at a fall of four notes the discant descends one note ( $h$ ), and if the melody continues to descend a discant in fifths is again recommended as the proper course; but the discanter must be careful always to close upon the octave.


The rules given in the treatise of Guy, abbot of Chalis, written probably not earlier than the middle of the twelfth century, reveal a somewhat richer and more complicated method than that which we have just examined, but no change in the general principles of music. We may indeed note that the fourth, which was banished in the former treatise, here appears occasionally, and that the word discant seems to be unknown to this author. The rules are twenty-one in number; they are exceedingly clear and precise in statement, and provide for the conduct of the organal voice in almost all the circumstances which could have been likely to arise. The various consequences, for instance, of a beginning at the octave
with a rising melody, at the fifth with either a rising or a falling melody, aud at the unison with a falling melody, are all very fully described, and generally with two alternatives for each progression of the plainsong; attempt also is made to establish a grammatical method of singing both above and below a stationary note. The effect of these rules is displayed in the following examples:-

## THE ORGANUM AT THE OCTAVE.



## THE ORGANUM AT THE FIFTH.



THE ORGANUM AT THE UNISON.


ORGANUM ABOVE A STATIONARY NOTE.


## ORGANUM BELOW A STATIONARY NOTE.



The rules of Guy de Chalis, who lived, as has been said, during the latter half of the twelfth century, may be taken probably as representing the perfection of Organum, considered simply as a method of extemporizing a second part upon the plainsong, entirely in concords, in equal notes with the plainsong, and mainly in contrary movement; but they must not be supposed to indicate the limits of music, either in the time of their author, or even at a period considerably more remote; they exhibit only the work of theory, the careful improvement of the received tradition upon established lines, the operation of taste and judgment; the operation of the creative impulse, working independently upon the same tradition, they ignore. Yet the creative impulse, already awaking to a sense of the individual freedom contained in the principle of contrary movement, had, long before-before the embodiment even of the principle in didactic form-produced results of the greatest importance for music. And this will be evident in a comparison of the system which we have just examined with the examples of practical composition which are now to be taken into consideration.

With the exception of the pieces contained in the Winchester Troper, the earliest practical compositions which we possess are the specimens of irregular Organum in contrary movement
which have been already referred to as appearing in MSS. of late eleventh and early twelfth century date. This Organum is here called irregular, not only because it conforms neither to the old rules of which Guido was the latest exponent, nor to the more modern system of Cotto, but because it appears as purely experimental, admitting a large number of inconsonant intervals which however are not in any way distinguished, as regards the principle governing their use, from the consonances. Its immediate source, as has already been said, cannot be traced at present; it appears, as a perfectly unforeseen phenomenon, immediately after the time of Guido, whose own system reveals no trace either of the principle of contrary movement, or of any independent use of dissonance. Its application, as we shall see, was extended both to liturgical and extra-liturgical compositions; the method therefore was probably not, as might be supposed, of purely secular origin, but may have been developed, even to a considerable extent, within the church.

One of the earliest examples of this kind of Organum known to exist is a little composition, written in`an early twelfth century hand, interpolated in a Cornish MS. otherwise of the tenth century, now in the Bodleian Library (Bodley 572) ${ }^{1}$. Here the difficulty with respect to translation does not arise, for the piece is in the simple alphabetic notation, in which the first octave of the scale from the lower A upwards is represented by the letters which denominate the notes, and the second by a simple continuation of the alphabet. The subject

[^30]of the composition is part of a hymn to St. Stephen, a version of which occurs in the Sarum Antiphonal, where the passage is noted thus:-


This, it may be supposed, would be the version adopted by a composer probably of the west country; nevertheless, it will be seen that in the close and in one or two other portions of the two-part composition the notes given are different from those of the Sarum use; while upon the word purgatos also a few conjunctive notes have been omitted. The composition is as follows:-

## UT TUO PROPITIATUS.

Bod. Lib. (Bodley $57^{2}$ ).


${ }^{1}$ This composition was the subject of an interesting article in the Vierteljahrsschrift für Musikwissenschaft, 1890, by Dr. Oscar Fleischer, who seems to regard the work rather as an adaptation than as an original composition. His reconstruction of the organal part, containing in his view the original subject, deserves to be recorded here as a monument of ingenuity :-


This example would seem to be divided by a wide interval as regards the method of composition if not also in time from the Winchester Troper, for the method is now apparently completely free. The trammels of the parallel and oblique movements have almost entirely disappeared, contrary movement being employed wherever possible, while all restrictions also respecting the character of the intervals to be used have apparently been removed; the dissonances of the major and minor third are now frequently introduced, and indeed would seem to have become almost as vital a part of the material of Organum as the orthodox concords themselves, while the major sixth also makes here and there a hesitating and tentative appearance, and even the second and the seventh are represented. We may remark, however, that no system appears in the use of the dissonant intervals, and no trace of a principle, except such as may be found in the fact that of the discords the third is that which is most frequently used; and this use of the third, no doubt, was due not only to its position as part of the old occursus, but also to a growing feeling with respect to the interval itself which was soon to bring about a considerable alteration in its status; on the other hand, the true character of the sixth was not at all perceived by the composer of the piece before us, for while we find eight intervals of the second there


Dr. Fleischer, having revealed this pleasing melody, is struck by the pentatonic character of its scale, and suggests that we prohably have before us the tune of some Gaelic folk song, afterwards worked upon by a learned composer of the time. This theory of a tune in the upper part was probably suggested by the first three sections of the composition, which give as they stand the same result as Dr. Fleischer's reconstruction; for his treatment of the rest, however, and for his speculations with regard to the whole, it must be doubted whether there is any real warrant.
are only four sixths. Yet amid all this confusion we may still perceive, from the large number of fourths (seventeen) employed, and from the two cases in which they are used in parallel movement with three consecutive notes of the melody, that the method of this composition originates in the free Organum described in the Enchiriadis and the Scholia.

That the use of all sorts of intervals was not confined to England at this period seems clear from another specimen, of rather later date than the last, contained in a MS. in the Bibliothèque Nationale, at Paris (No. 1I39). It is noted in neumes, without clef, but now upon a stave of two lines; translation therefore with some approach to certainty is possible, as indeed M. de Coussemaker seems to have proved in a rendering published in his Histoire de l'Harmonie au Moyen Age, which is substantially as follows:-

## MIRA LEGE, MIRO MODO.

Bibl. Nat. Paris MS. II 39, Histoire de l'Harmonie au Moyen Age (Conssemaker), Monuments, Pl. XXIII.


Mi-ra le ge, mi-romo-do, De-us for-mat ho-mi-nem,
Vox principalis. $\quad b$

'The note covered by the circumflex accent represents the plica, a grace note, the nature of which will be explained later.


Before passing to an examination of this example it may be well to take note of the fact that the disposition of the melody or subject in the lower place-a circumstance which was observable in the MS. of the Ambrosian Library, and again in our last example, is seen also here, and that it now represents a change in the method of Organum which was both general and permanent ; this will be evident as we proceed, for in future examples the organal voice will be found always above the theme. With respect to the reason for this sudden reversal of the old method we are at present quite without information; notwithstanding the comparative magnitude of the change, its necessity in the view of the contemporary musicians has never apparently been explained, and it remains among the many enigmas, still unsolved, which are presented to us by this period-1050 to 1150-the dark age of polyphonic music.

The subject of this composition is not, like the last, a fragment of ecclesiastical melody arranged in notes of equal length, but a metrical song; and although we may perhaps doubt whether the words given are those for which it was first made, it is evident that the pleasant melody itself has not been tampered with, and that the whole setting is cast in the original form of the subject, which is a triple (Trochaic) rhythm in strains of which four are regular and one irregular. With respect to the intervals employed in the Organum, it may be said that they have been chosen with less freedom than those of the example last given, for we find here no seventh, and the seconds are only used in passing. The important place given in the former example to the fourth is now taken by the fifth, for this interval appears twenty-two times, and once in parallel movement above three consecutive notes of the subject; the fourth, on the other hand, is only to be found in nine cases. The thirds and sixths are used in about the same proportion as in the former example, that is to say the third seventeen times and the sixth four times; the unison appears sixteen times and the octave eight times. Thus, in comparing this example with the former one, we may notice the important fact, illustrative no doubt of the influence of theory upon practical composition, that the tendency is largely towards an increase of concord; for while in the Ut tuo, \&c., the proportion of concord to discord was less than two to one, in the Mira lege it is about two and a half to one. This will appear from the following table:-

| Interiais. | Concord. | Discord. |  |
| :--- | :---: | :---: | :---: |
| Ut tuo, \&ec. | 74 | 46 | 28 |
| Mira lege. | 76 | 55 | 21 |

Of the example as a whole it may be said that it resembles wOOLDRIDGE
the former one in a complete absence of rule or system in the use of the discordant intervals, with however the same possible exception in the case of the thirds. We may also note that the device of putting more notes than one against one of the theme, or vice versa, increases, and is more intelligently applied than in the former example; and finally that the fifth is now used in closing, as well as the octave and the unison.

With respect to the reason for the substitution of the fifth for the fourth as the governing interval of this kind of Organum, it is difficult to arrive at a satisfactory conclusion. It was probably an innovation, since at present we know of no free organum of the fifth, and may possibly have been the result of a simple inversion of the former governing interval, arising as a natural consequence from the inversion of the principal and organal voices. But whatever the reason may have been, the superior importance of the fifth was ever afterwards maintained.
In the confused method of composition revealed in these examples we see probably the archaic phase of artistic music. If we may hazard the conjecture, it would seem to represent an attempt to employ the inconsonant intervals of the old free organum in a new manner, and thus to extend the application of principles which had already made their appearance by a kind of accident in the pre-artistic period of symphonious singing. We may in fact perhaps not unreasonably suppose that delight in the variety of sound and comparative freedom of progression which were the result of the introduction of the inconsonant intervals in the free portions of the old Organum suggested an attempt to create a similar freedom and variety in those parts which were still dominated by the parallel fourths.

In this point of view it might perbaps naturally be expected that in the works of the learned writers upon Organum coming next after Guido, we should have found traces of some attempt to regularize the inconsonant intervals, rather than a system
which excludes them and introduces instead an arrangement of mixed concords; but the course which was actually taken by the theorists will easily be seen to have been the natural and indeed the only possible one if we consider, with respect to the inconsonant intervals, that while the true limits of their application, from the point of view in which they had been originally adopted, had already been reached, their use had not resulted in the evolution of any progressive element. The introduction of the inconsonant intervals into the old organum was in obedience to no essential and fruitful musical principle, but merely to a rule-variously explained by different writers, but arising in any case out of the strict conditions of the old parallelism-which obliges the organal voice from time to time to hold a certain sound instead of passing below it; and it is the continuance of the melody under these circumstances, by the principal voice, which actually creates the discordant intervals. The organal voice is in fact scarcely a free agent, having little or no liberty of choice except in the note before the close; and though it is evident from Guido's account of the system that the inconsonant intervals, thus rather mechanically introduced, had become in his time a source of pleasure, and that for a while the endeavour to advance the art of music by a careful and attentive treatment of these intervals was undertaken, it is equally evident that no real extension of their use, or such as could ever bring about the rational freedom of the organal voice, was possible in the old free organum.

The pleasure therefore which was evidently taken in the mere sound of the inconsonant intervals at this time, and which, from its preparing the ear to be the judge of symphonious combinations, had created the appearance of development in the old free organum, could not hinder the theoretical exclusion of these intervals, nor maintain them against the apparent fact that their use had evolved no principle capable of extension; and though practical composers may have bad recourse to experiment with the object of discovering such a principle,
and so of preserving the inconsonant intervals, it is evident that the experiments which seem to have been made were still at least inconclusive, even if they do not lend support to the axiom that empirical methods are foreign to the true line of progress in any art whatever. In short, we may say that no real place, theoretically speaking, for the inconsonant intervals as yet existed among the materials of music ; their opportunity indeed had not yet come, and many years were still to elapse before the principle which actually governs their use could be entirely perceived.
Reviewing the work of this time, both in its theoretical and practical aspects, we are chiefly struck by the great progress actually made during a transition extending apparently over little more than fifty years. Not only may it be said that an art of music now begins to appear, but also that the art has already taken up positions of great importance for its future development; for by the substitution of the contrary movement for the similar and oblique as the governing mode of progression, and by the deliberate mixture of discord with concord -even though the true meaning of this latter process was not as yet perceived-principles were established whose influence not only controlled the methods of the relatively finished practice which immediately followed, but was felt throughout the whole of the polyphonic period.
But, striking as the progress thus effected must appear, a glance at the existing examples of the new artistic music at once reveals the fact that one very important elenent of free composition is still wanting, namely, a musical measure. The measure of those examples in which measure is present at all is, as in all hymns and songs, in simple accordance with that of the words for which the music was composed; but although this method is sufficient for small pieces, in which one kind of metre can be maintained without fatigue throughout in all the parts, it bars the way to any attempt towards extended or varied compositions, or to the employment of essentially
different kinds of metre at the same time. The freedom therefore which had been bestowed upon music by the principles of contrary movement and premeditated discord, and which was manifested in the flowing counter melody or free organal part, was to some extent neutralized by the bonds of similar rhythm so long as these were maintained; liberation from these bonds was necessary before any fresh extension of the limits of music was possible, and this liberation, which could only be effected by the establishment of a purely musical standard of measure, was to be the work of the period which we are next to consider.

## CHAPTER VI

## DISCANT OR MEASURED MUSIC

## 1

THE MEASURED NOTATION AND ITS RELATION

TO FIXED RHYTHMS

The wide divergence of the methods of artistic music from those of strict Organum, which was exhibited in our last chapter, rendered necessary a special distinguishing name for the new system; and the name which was chosen, Discantus, a double or diverse song, though it indicates nothing that was not already contained in Organum, not only proved sufficient for its original purpose but was also continued after the advent of musical measure. A special name, Cantus mensurabilis, was indeed often adopted by many authors, to describe the music in which measure was present throughout as opposed to that in which it was either non-existent or only partially applied, but the new name did not exclude the older one, and both continued to be used indifferently for the same purpose.

The origin of musical measure is obscure, but it is difficult to resist the conclusion that it arose from the desire, at a time when metrical progression was the only known means of imparting life and purpose to the composition, to employ
essentially different kinds of metre in different voices at the same time. Originally, as our examples of the early practical music indicate, a metre of one kind, that is to say essentially either duple or triple, must have been used either alone or possibly in company with another of the same kind; and this method could of course occasion no difficulty, since even when the metres were different, as for instance in the mixture of dactyl with spondee, the proportion would be equal; but the attempt to mix duple metre with triple would create confusion, and it would at once be perceived that the only way to accomplish this object, to accommodate the dactylic metre for instance to the trochaic or the iambic to the anapaestic, must be the discovery of a common musical measure in which the duple and triple proportions of these metres might be blended.

No doubt the singing of several real parts together in similar metre had already, in the period represented by our last examples, established a simple idea of measure, suitable to the necessities of the case, in which the musical long was in principle exactly equal to two metrical breves; and in fact references to such a conception of measure are to be found in the works of the theorists. The anonymous treatise, Discantus Positio Vulgaris, for instance, given by Jerome of Moravia as the embodiment of the oldest rules for measured music, describes the long note which contained three beats as 'exceeding the measure,' because it is more than two ${ }^{1}$; and Walter Odington, writing later, says distinctly that among the earlier 'organists' the long had two beats, or times, 'as in the metres ${ }^{2}$. Moreover, there are material traces of the fact; at least one little note formula ( ${ }^{(1 n}$ or ), held by all

[^31]the mensuralists to signify a triple proportion, was employed by certain musicians, even in the latter half of the twelfth century, to express the sequence of two equal notes ${ }^{1}$; and this custom is extremely suggestive of a period in which the figure formed part of a binary system, applicable to either kind of metre separately.

Apart, however, from these instances, and some others which seem to reveal the fact that a duple proportion was for some time struggling to maintain itself against the triple ${ }^{2}$, the whole of the theoretical and practical work of the twelfth and thirteenth centuries describes and exemplifies a ternary scheme. It would appear, therefore, that the more natural and eventually triumphant kind of measure failed at this time to satisfy the immediate needs of musicians, and gave way before a system in which the long note was valued as three or divided into two unequal fractions-a short valued as one, and a long valued as two ${ }^{3}$-and that the triple proportion was thus definitely established as paramount, and was eventually extended, with certain modifications, to every kind of musical equivalence and to all forms of notation.

It is not uncommonly supposed that this decision in favour of a triple as opposed to a duple proportion was due to the influence of ecclesiastics, and to their desire to signify the participation of music in the adoration of the most holy Trinity. This notion, however, is quite incorrect, and can only have arisen from a superficial consideration of the remarks of the

[^32]theorists with respect to the subject. In these remarks the two ideas are certainly connected, but the connexion gives rise to nothing more than an assertion of the mystical signification of the ternary number; the triple proportion, in fact, being taken as established, attention is then drawn to the similitude which exists between it and the highest perfection ${ }^{1}$. And indeed it would be strange if practical men, writing upon a practical matter within their competence, should have been unanimous in so great an absurdity as this which has been imputed to them; for no artistic means probably, and certainly none of so much importance as that which we are now considering, was ever yet adopted from inartistic considerations; and the true explanation of the victory of triple proportion, if it is to be discovered, must be looked for in the conditions of -the art itself at the moment when proportion was first applied.

The suggestion•offered above, namely, that the musical measure of this period was probably adopted as a means of creating a practical agreement between essentially different kinds of metrical rhythm, finds great support in a saying of Walter Odington, that the long note of the triple proportion, the key and centre of the new system, derived its origin from the dactylic and anapaestic metres ${ }^{2}$. The bearing of this statement upon the question will be perceived if we consider the manner in which these metres, in themselves duple, are adapted in the mensural system to the accompaniment of the trochaic and iambic metres, in which the rhythm is triple. The metres to be combined and their adaptations may be shown side by side in the following manner :-

[^33]| Poetic Metres. |  | Poftio Metres in Common Musical Measure. |  |
| :---: | :---: | :---: | :---: |
| Trochee (3) | Iambus (3) | Two Trochees (6) | Two Iambi (6) |
| $\begin{array}{ll} - & 0 \\ 2 & 1 \end{array}$ | $\begin{array}{ll} \cup & - \\ \text { I } & 2 \end{array}$ | $\begin{array}{llll} - & u, & - & u \\ 2 & 1, & 2 & 1 \end{array}$ | $\begin{array}{llll} \cup & -, & \cup & - \\ 1 & 2, & 1 & 2 \end{array}$ |
|  |  |  |  |
| Dactyl (4) | Anapaest (4) | Dactyl (6) | Anapaest (6) |

Here it will be seen that in the adaptations the dactylic and anapaestic feet maintain their duple proportion in arsis and thesis, while the new triple measure in each half of the foot brings the whole in each case into equality, both in proportion and accent, with two trochees or two iambi. We can hardly suppose that the mensural system here shown could have been evolved apart from these adaptations, or that the perfection with which they are achieved was the result of chance coincidence, and we may perhaps therefore understand Odington's saying that we owe the triple long to the metres which he mentions, in the sense that musical measure arose out of the process here displayed.

Several examples of composition belonging apparently to the period during which the tentative rules of the Discantus Positio Vulgaris were gradually evolved, and in which is displayed the transition from poetic to musical measure, are to be found in various collections. Of these the earliest probably is a setting of the metrical sequence Verbum bonum et suave, of very early twelfth century date, which exists in a MS. now in the Library of Douai. It is noted in neumes of a simple character, upon a large stave, and with clefs; there are six verses of words
and three of music, each verse of music being once repeated to different words; the first, third, and sixth are here given, and all the music. It will be noticed that the composition contains instances of the equivalence of four breves to the triple long, mentioned in the early treatise ${ }^{1}$.

## VERBUM BONUM ET SUAVE.

Library of Douai. Histoire de $l$ 'Harnonie au Moyen Age (Coussemaker), Monuments, PI. XXIV, XXV.




It would appear from this example that the learned doctrine of the New Organum had not been altogether without effect upon the work of the practical artistic composers. Theoretical dissonances are not now abolished, it is true, but a method is introduced into their treatment. which certainly indicates an approach towards the theoretical position, and an appreciation of its leading principle. It will be observed that the inconsonant intervals are no longer treated with the same freedom as in our former examples, even the thirds for instance being not consecutive, but in all cases (except one) both preceded and followed by one of the orthodox concords; and in this circumstance we may perhaps perceive a confession of the theoretically inconsonant nature of the interval. And, as we shall see, the principle of treatment here indicated is carried further in its application, and becomes more clear, in the specimens which immediately follow; for in these compositions it is displayed not only in a rule of avoiding consecutive dissonances, but also in the fact that the guarded dissonances which are allowed now fall exclusively upon the weak beat of the rhythm. If therefore the method of the piece just given was in some degree an approach towards the learned theory, this method of the rather later examples is still more so, for it is a confession of the practically unsuitable character of these
intervals as compared with consonances, since the composer now admits that they are to be treated lightly, and to be passed over with less emphasis than the entirely satisfying orthodox concords.

The change just described is well shown in a little composition (dating apparently from the early years of the twelfth century, though written in a later hand) now in the Library of Lille, and given in facsimile by M. de Coussemaker in his Histoire de l'Harmonie au Moyen Age. It may be translated as follows:-

## AGNUS FILI VIRGINIS.

Library of Lille, Histoire de l'Harmonie au Moyen Age (Coussemaker), Monuments, Pl. XXVI.



This is the first of our examples of this period of which it can be said that it is written in the original in the square notation. The system which it represents is however still exceedingly primitive, the rule of interpretation being that all single notes, whatever their shape, are of one and the same value, and that all groups of notes, whatever their number, are to be valued as collectively equal to the single note or group above or below which they stand.

It may be well, before passing on, to draw attention to the chromatic alterations suggested in the upper part of this example. These are in accordance with the rule for falsa musica at this period, which enjoined that the imperfect fifth and the tritone fourth, occurring as intervals, or simultaneously in a situation requiring concord, should be made perfect by chromatic extension or diminution ${ }^{1}$; the considerations which guided musicians in the application of this rule in discant were chiefly such as already governed the alteration of plainsong, namely care for the melody.

Another kind of chromatic alteration, adopted entirely from plainsong, probably already existed in discant at this period.

[^34]An idea of its nature may be gathered from the examples appended by Jean de Garlande to his short account of it, which may perhaps be interpreted as follows :-


Our next example is especially interesting, for it is not only a very primitive specimen of writing in three parts, but contains also the earliest attempt at present known to produce imitations by one voice of passages uttered by another. It is probably of the same date as our laşt illustration, since the method of notation is the same in both : all single notes, that is to say, are of the same value, and the groups are equal to the notes, single or otherwise, to which they are opposed. It will be observed that again a large number of discords, including several tritone fourths, appear upon the weak beats of the rhythm, while with five exceptions, four of which are thirds and sixths, the strong beats are marked by concord.

## CUSTODI NOS.

Bib. Nat. Paris MS. 813, Histoire de l'Harmonie au Moyen Age (Coussemaker), Monuments, PI. XXVII.


cus - - to - di . . . . . . . nos.
wooldridge I

The lowest voice still takes the theme-here probably some well-known hymn or spiritual song; the part next above is composed with direct and sole reference to this, and obeys therefore the rules of two-part composition; the upper part or triplum is an added voice, governed now by one of the lower parts and now by the other, both as regards the nature of its intervals and the character of its movement ${ }^{1}$. And here again it is interesting to observe that rules which in substance remained in force for three-part compositions throughout the period next following are to be found clearly recognized in this early specimen. Concerning the passages of imitation, it is difficult to say to what their appearance in the music of this time is due, unless they may be supposed to represent the partial development of accident; their principle, so far as it was understood, was afterwards displayed in a special form of composition called the 'Rondel,' but in general music the use of imitation is not frequent. Its full significance was not in fact perceived until a much later period.
The basis of the mensural system having now been indicated, and seen to consist in a fundamental triple value, divisible primarily either into three equal or two unequal parts, we may next proceed to consider the method of notation by means of which these values, in all the necessary varieties of their application, were visibly expressed. This method, though simple enough in the early period of its existence, while its purposes were still confined to the presentation of the cardinal facts of the mensural system, became highly complicated as time advanced and the system extended, so much so indeed that an author's explanation of it will frequently be found to constitute the principal part of his treatise; and if we may judge from the strength and directness of the reproaches

[^35]sometimes levelled by learned theorists at those of their brethren who were so unfortunate as to differ from them, we may even suppose that considerable warmth of feeling was sometimes aroused by questions with respect to the more or less logical expression in notes of a musical phrase or formula. Yet, though we may often regret that the discussion of these questions was so much indulged by the theorists, and carried on often to the exclusion of information with regard to other matters which we would willingly possess, we must admit that the discussions were generally founded upon real distinctions, and were therefore in a sense necessary to the building up of a method of considerable importance not only for the time being but also for the future; for the simple system, which in our own day serves for the presentation of rhythms far more intricate than any with which the mediaeval composers were called upon to deal, is undoubtedly directly derived, through a continuous process of pruning and simplification, from the elaborate finished method of the thirteenth century.
Notwithstanding, however, the importance in a certain sense of the matter of these discussions, it is obvious that from the point of view in which our present inquiry is undertaken the methods of notation must appear as of secondary interest, compared with those of the music which they are intended to represent. It has been considered sufficient therefore, in the description which is to follow, to exhibit only the generally accepted forms of the first complete system of mensural notation; the somewhat obscure phases which marked its period of growth, and the heresies which still existed at the time of its final settlement, will be left out of account.
Material signs, by which the long and short notes of the mensural system might be visibly distinguished from each other, were, as we have seen, at first lacking. The two-voice parts continued to be written in the notation of the ecclesiastical song, that is to say in neumes or other signs devoid of
special signification as regards time, and in the rehearsal of a discant the values of the individual sounds were defined by the conductor and committed to the memory of the performers ${ }^{1}$. But when the inconvenience and loss of time which must have been occasioned by this cumbrous method ${ }^{2}$ had become, as we may suppose, sufficiently apparent, material signs were adopted; and at once two well known figures-the first parents in fact and simple source of our own multiple forms of notation -the long and the breve, made their appearance in music. The characteristic shapes of these figures were derived from forms already existing and well known to musicians; discant was already noted either, as we have said, in the ecclesiastical system of neumes, or in some transitional and simplified form of it, such perhaps as that shown by M. de Coussemaker in his facsimile of the hymn Mira Lege or the already square shapes of Custodi nos in the same volume; and either of these forms would include the two fundamental signs chiefly used to express notes not in ligature, the punctum or old grave accent, which signified a descending note, and the virga or old acute accent, which was used when the note ascended. These were the two signs, hitherto unassociated with the idea of exact duration, which, in the square shapes in which they had last appeared as unmeasured, musicians now adapted to the new purpose of

[^36]expressing time-value; and thenceforward the virga became the longa or long note, and the punctum the brevis or short note of Discant.


No new sign was adopted to express the value of the long note of three times; it was considered sufficient to repeat the longa just shown above, which, under the same name and with an understanding respecting the circumstances which were to give it triple value, served to designate the complete note, the foundation and source of the whole system. This note, in its triple sense, was called longior longa, or longa perfecta, while the long of two beats was called either longa imperfectaas needing the addition of another sound to make up the ternary number of the complete note ${ }^{2}$-or longa recta, the true

[^37]long ${ }^{1}$, or sometimes longa directa; and this was no doubt the note of the cantus planus in the older binary system. There were also two other notes of the same name. One was the longa plica, a long (either perfect or imperfect) to which a short stroke was added in order to indicate a grace, included in the value of the note, and taken either upon the note following below or the note following above; in the first case the long was called longa plica descendens, and preserved its normal position, in the second it was called ascendens, and was inverted ${ }^{2}$. The other note of the same name was the duplex longa, or longa superabundans, also perhaps a relic of an older binary system; this note was valued as two perfect longs, or six beats (not three perfect longs or nine beats as the ternary system would require) ${ }^{3}$, and was used sometimes in the compositions of this period to express the tenor or cantus planus, but is seldom, except in early music, found in the texture of the upper parts. Both these notes may be considered as extraneous to the actual system; the plica from its merely ornamental character, and the duplex from its binary value.
dicitur quia sine adiutorio brevis precedentis vel sequentis nullatenus invenitur.' Ars Cantus Mensurabilis (Cousse. Script. i. 117).
${ }^{1}$ 'Recta longa appellatur illa que continet duas rectas breves tantum.' Jean de Garlande, Cousse. Script. i. 97.

2 ' Plica est nota divisionis eiusdem soni in gravem et in acutum, et debet formari in gutture cum epiglotto.' Anon. Quedam de Arte Discantandi, Bib. Nat. Paris, MS. 812.

Pseudo-Aristotle gives the time-value of the grace note, namely one beat, or one-third of the perfect long and half of the imperfect. Of the longa plica he says: 'Habet autem omnem potestatem regulam et naturam quam habet perfecta longa, nisi quod in corpore dno tempora tenet et unum in membris.' (Jean de Muris, Speculum Musicae, explains, 'id est in plica vel inflexione). . . Est plica imperfecta in forma perfecte similis, sed regulam imperfecte tenet et naturam, et continet unum tempus in corpore, reliqnum in membris.' Cousse. Script. i. 273.
${ }^{3}$ 'Duplex longa valet sex tempora.' Anon. De Arte Discantandi, Bib. Nat. Paris, MS. 1107.

LONGA.

| Perfacta. | $\left\|\begin{array}{c} \text { Imper- } \\ \text { FECTAVEL } \\ \text { RHCTA. } \end{array}\right\|$ | Duplix. | Pilca. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\dagger$ | $\dagger$ | $\dagger$, |  | $\wedge$ |  | 1 |
| 0 - | 0 | \%o. | 0-9 | $0 \times$ | 0 - 0 |  |
| Modern Equivalents ${ }^{1}$. |  |  |  |  |  |  |

The division of the complete long note into two unequal fractions could also be effected by means of breves alone. In this case the lesser fraction was again represented, as in the longa-brevis division, by the breve of one time, the brevis recta, and the greater by the brevis altera, valued as two times. The breve, like the long, admitted the grace note, which was exhibited in the brevis plica, a figure similar in form to the longa plica but inverted in the lateral sense, that is to say, with the longer stroke now upon the left side.

BREVIS.

${ }^{1}$ Hitherto it has been usual, in the translation of the plica into modern notation, to exbibit a note of full value followed by a superfluous grace note in smaller type; but since the grace note, according to the rules given by the theorists, is to be counted as part of the principal note, and encroaches in a fixed proportion upon the normal duration of that note, it has been thought desirable that in our translations and illustrations of value this fact should be clearly expressed. The circumflex accent placed above the grace note is intended to indicate the other important fact relating to it, namely, the method of pro-duction,-_'in the throat with the epiglottis,'-or as Pseudo-Aristotle more fully explains, 'per compositionem epiglotti cum repercussione gutturis subtiliter inclusa,'-which seems to have been peculiar to it.

The principle of a triple proportion was also applied to the brevis recta, which was divided into two unequal fractions represented by two kinds of semibreves, minor and major; these, like the two kinds of breves, were identical in form, but the first was valued as one and the second as two. Again also the plica was admitted. It appears at first as a stroke joined to the lower right hand side of the lozenge which represents the semibreve.

SEMIBREVIS.


The mutual relations of the various parts of this scheme may in conclusion be briefly shown in the following diagram :-


The system just described must appear as extremely arbitrary and illogical, for it presents to us on the one hand notes of the same form but of different value, and on the other notes of different form having the same value; while the existence of two kinds of breves, brevis recta and brevis altera, which together perform exactly the same office as the imperfect long and breve, is an especially perplexing circumstance, at first sight impossible to understand. But we have to remember that the mensural system was not first brought forward as a complete design expressing an independent idea, but that it probably grew, as has been said, out of the necessity of bringing the poetic metres, which at first formed the only rule of measure, to a common proportion. We have already seen in what manner the perfect longa, which according to Walter Odington had its origin in the dactylic and anapaestic metres, might arise from such an adaptation; and it may now be suggested that the brevis altera also may be due to the same source, and may have been evolved through the same process. In this point of view the mensural notation of these metres is the result of a compromise by which the figures formerly representing the binary values of the dactyl and anapaest were retained while the values themselves were abandoned; the long was still represented by a long and the breves by breves, but the long was now valued as three, and the two breves necessarily became unequal in order to make up between them the triple proportion. While the figures representing the ternary metres, therefore, preserve their original meaning in the Cantus Mensurabilis, the binary metres are represented in it by a figure whose original meaning has given place to an arbitrary and artificial significance. This will be clear from the example:-


Yet since the two short times of the binary metres are still technically breves, and are figured as breves, they still also retain the name; a distinction however being necessary, the unnatural breve receives a special qualification.
In some such way as this probably, that is to say in the adaptation of binary forms to the triple proportion, breves of different value were first perceived as necessary, and as performing an office different in its nature from that which pertained to the combination of the breve with the imperfect long.

This suggestion of the origin of an important mensural form in the alteration of a metre may still appear somewhat improbable, unless we take into consideration the enormous influence which was exercised upon music at this time by the metrical rhythms. These had already, apparently, before the completion of the mensural notation, been reduced, by means of the common triple proportion, to a system of formulae, called Modes, the importance of which in the opinion of the time may be estimated from the fact that it formed a distinct and complete subject of discussion in every important treatise, from the Discantus Positio Vulgaris, before 1150 , down to the De Speculatione Musicae of Odington in the first quarter of the fourteenth century. In these modes, used either singly or in combination, all music was theoretically supposed to be written, and all the figures devised to represent the duration of sounds were also considered as specially expressing them; indeed, the connexion between these formulae and the visible signs of music, which will become fully apparent as we proceed, was so close that the author of the great treatise Ars Cantus Mensurabilis (generally supposed to be Franco of Cologne ${ }^{1}$ ),

[^38]in the opening sentence of his chapter upon the mensural

Iohannis Ierusolimitani.' It would also appear that in a MS. treatise by Giovanni Ciconi, in the library of Pisa, mention is made of him as 'Magister Francho de Colonia, prothonotarius.' Cousse. L'Art Harm., \&c., p. 22.

Very early in the history of this treatise a claim to its anthorship was put forward by another person. Hieronymns de Moravia, a writer of the thirteenth century, introduces the copy of it which is given in the text of his work thus: 'Subsequitur positio tertia Iohannis, videlicet de Burgundia, ut ex ore ipsius audivimus, vel, secundum vulgarem opinionem, Franconis de Colonia.' This general refutation of a common opinion may have been intended by Hieronymus to possess a particular application to a treatise by one Petrus Picardus which he has also included in his own work. This anthor from time to time paraphrases and once writes down without alteration the words of Ars Cantus Mensurabilis; and though he perplexes us for a moment by giving both Franco and Johannes as the anthorities for his statements, 'dictaque mea arti magistri Franconis de Colonia necnon et arbori magistri Iohannis de Burgundia, quantumqne potero, conformaho,' yet he eventually makes clear his opinion that Ars Cantus Mensurabilis is not by John of Burgundy by his comment apon one of the paraphrases, 'ut in magna arte magistri Franconis prius dicti latius declaratur.' The only contribution in fact of John of Burgundy to the treatise of Picardus appears, in that author's opinion, to be the 'tree' (probably a diagram of the same nature as our own jnst given above in the text), whose illustrative powers he refers to several times with evident admiration. Notwithstanding, however, the claim of John of Burgundy, ex ore ipsius, recorded by Hieronymns, it is difficult to resist the conclusion that the common opinion of his contemporaries was the right one. John of Burgundy, if we may judge from the scarcity of the references to him in the treatises, was of comparatively small reputation, while the famous work to which he laid claim bears all the marks of a master mind: it is original and dignified in style, and highly authoritative in the enunciation of its doctrine, a work in fact which corresponds in every way both to the musical reputation of Franco of Cologne (of whom the Anonymus of the British Museum says that be was one of the final revisers of the mensural notation), and to the intellectual qualities implied by his high ecclesiastical position. Nevertheless, until the claim of John of Burgundy to the authorship of this treatise, supported as it is by Hieronymus of Moravia, is disposed of by more direct evidence than we at present possess, a certain small degree of donbt must still remain with respect to the common and more probable opinion. It may be mentioned that two other treatises: Tractatus de Consonantiis Musicalibus (Cousse. Script. i. 296), and Quedam de Arte Discantandi (Bib. Nat. Paris, MS. 812) copy from Ars Cantus Mensurabili, but make no reference to its author.

Mention ehould also be made of another very important contemporary workwhich is to be found perhaps in its original form in Bib. Nat. Paris, MS. 8r3, with the title De Arte Discantandi-beginning with the words Gaudent brevitate moderni. The contents of this work have been reproduced more or less completely in a considerable nomber of treatises-for instance in Abbreviatio, \&c. a Iohanne dicto Balloce (Cousse. Script. i. 292), in Tractatus de Discantu (Ibid. i. 303), in De Cantu Mensurabili (Ibid. i. 319), also in the treatise of Robert
figures, defines notation as 'the representation of vocal sound regulated according to some one of the modes.'
The modes differ slightly in number and arrangement in the various treatises, but the most usual form of the system is as follows:-

de Handlo (Ibid. i. $\mathbf{3}^{83}$ ), and in parts of the treatise of John Hanboys (Ibid. i. 403). In all these works the original, which must have been, apparently, of the same period as Ars Cantus Mensurabilis, but a little earlier in actual date, is ascribed to 'Franco.'

This fact formerly created a confusion which is well seen in the fifteenth century treatise of John Hanboys. This writer evidently thought that Ars Cantus Mensurabilis and Gaudent brevitate, dc., were from the same hand, since the basis of his treatise, or rather commentary, consists of a compound of both works, the result however being always ascribed to 'Franco.' Yet the difference in style should alone have been sufficient to show that the author conld not be the same in both cases, for whereas the style of Ars Cantus Mensurabilis, is, as has heen said, excellent, that of Gaudent brevitate, \&c., is dry, methodical, and less marked by literary quality. And we in fact now know that during the short period which represents the climax of the mensural system another Franco, Magister Franco Primus as he is called hy the Anonymus of the British Museum hat better known as Franco of Paris, lived and wrote contemporaneously with the master of Cologne; if therefore Franco of Cologne wrote Ars Cantus Mensurabilis in the treatise Gaudent brevitate, dc., we may probably see the work upon which rests the fame of Franco of Paris. That they should have been often confounded need occasion no surprise; not only would

The instructions which were necessary for the guidance of singers through the labyrinth of the mensural system were, with respect at all events to notes not in ligature, neither so numerous nor so complicated as might perhaps be supposed; for the maintenance of one object as paramount throughout the process of regulation, the production that is to say of a continuous flow of rhythm upon a basis of equal measures each containing three beats or times, tended strongly towards the simplification of his task. In the production of this rhythm, and therefore in his choice between duple and triple, or duple and single values for notes of the same shape-or in other words, in his application of the principles of perfection or alteration to the written note-he was obliged, it is true, to consider somewhat carefully the notes immediately antecedent, and still more carefully those which were immediately to follow, but the various circumstances affecting his decision were easily classified, and were provided for in rules not difficult to remember. This will be evident from the rules themselves, which are liere given from the earliest treatises, with the original examples.

## Rules for the Long.

Showing when it is to be considered as Perfect and valued as three, and when as Imperfect and valued as two.

1. The long, when it is followed by another long, is to be valued as three; each will thus make up the full measure. Example:-
the similarity of their names and dates of activity and their promulgation of the same doctrine tend towards such a result, but the fact also that their works represent very little that is original, and may rather perhaps be described as crystallizations of the settled musical thonght of their age, must have tended to invest them with so much of the character of abstractions that even in their own time both may well have been merged in one idea of supreme authority.

## FIFTH RHYTHMIC MODE.

(Molossus.)

2. Followed by a single breve the long is to be valued as two; the single breve will then complete the substance of the full note. Example:-

> FIRST RHYTHMIC MODE.
> (Trochee.)

3. Preceded by a single breve the long is also to be valued as two; the breve again destroys the perfection of the long, and itself completes the substance of the full note. Example :second rhythmic mode.

Third subdivision.
(Diiambus and Amphibrach.)

4. Preceded or followed by either two or three breves, or their equivalent, the long is valued as three, since either two or three breves will of themselves make up the value of a full note. Example of two breves interposed: 一

## THIRD RHYTHMIC MODE.

Second subdivision.
(Dactyl and Choriambus.)


Example of three breves, or their equivalent, interposed :-


From the foregoing examples it will be evident that in the earlier period of discant the value of the long depended largely upon the nature of the mode actually in use at the moment, and also that in general the mode was easily distinguishable; but doubtful cases sometimes arose, in which it was uncertain whether an essentially ternary mode or one of the converted binary forms was intended, and in such cases a point or stroke of division, modi divisio, was employed to decide the question. In the following example, for instance, the four given notes might indicate either the choriambus-the first
ordo or subdivision of the third or dactylic mode-or a trochee followed by an iambus; the point of division removes all doubt, and we see that each breve must be taken into the full note represented by the long nearest to it, leaving a value of two beats only for each long.


Rules for the Breve.
Showing when it is to be considered as Brevis recta and valued as one, and when as Brevis altera and valued as two.

1. Two breves, between two longs, or between a pause and a long, or between a long and the stroke or point of division, require alteration in order to make up the value of a full note; in this case the second breve becomes brevis altera and is valued as two. Example:-

## THIRD RHYTHMIC MODE.

Third subdivision.
(Double Dactyl and Choriambus.)

2. Three breves, between two longs, \&c., are not subject to alteration, since together they make up the value of a full note.
3. Four breves, between two longs, or between a pause and a long, are not subject to alteration, since the first three are grouped to make up the value of a full note, and the fourth is taken into the full note represented by the following long, which thus becomes imperfect. But four breves, between two longs, with a point or stroke of division between the second and third, fall under the rule for two breves; in each pair the second becones brevis altera, to make up the value of a full note. Example:-

FOURTH RHYTHMIC MODE.
First subdivision.
(Anapaest and Pyrrhic.)

4. Five breves, between two longs, or between a pause and a long, require alteration; the first three are grouped to make up the value of one full beat, and the fourth and fifth together -the fifth becoming brevis altera-make up the value of another. Example:-

SECOND RHYTHMIC MODE.
Fifth subdivision.
(Diiambus.)


Semibreves also were subject to perfection, counting three as the value of the breve; in general they followed the same rule as breves, the semibrevis major corresponding to the brevis altera, and the semibrevis minor to the brevis recta; thus:-

|  | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |  |
|  |  |  |  |  |  |



The pauses (omissiones vocis rectae), which expressed in silence the values of the various notes, were six in number. They were the pausa perfecta, extending through three beats and answering to the perfect long; the pausa imperfecta, of two beats, occupying the time of the imperfect long or the double breve; the pausa brevis, of one beat; and finally the pauses of the semibrevis major and semibrevis minor, occupying two-thirds and one-third respectively of the single beat. The material signs by which these periods of rest were exhibited consisted of vertical strokes drawn in proportional length through the spaces of the stave; the pausa perfecta therefore occupied three spaces, the pausa imperfecta two, the brevis recta one, the semibrevis major two-thirds, and the semibrevis minor one-third of a space; the sign of the finis punctorum, or end of all things, corresponding to the modern double bar, was drawn through the whole stave. These signs were also used in a nonmensural sense, as strokes of division; sometimes, as we have already seen, to warn the singer of a change of mode, and sometimes to indicate the group of notes which was to be sung to a particular word or syllable.

The mensural system of pauses is commonly shown in the contemporary treatises in some such manner as the following :-


Thus far our view of the work of the mensuralists has been directed chiefly to the proportional regulation of the notes which, both in the ecclesiastical song and in the measured discant, represented single sounds adapted to single syllables of the text. We have now to consider the treatment of other notes, also existing originally in the ecclesiastical song, of equal importance with the syllabic notes but devoted to a somewhat different purpose, which were also adopted by the mensuralists and brought into regulation. These are the figurae or notes in ligature, representing groups of sounds, which form so characteristic a feature of the ancient melodies.

The relation of these figures to the text in the ecclesiastical song was sometimes the same as that of the plain notes, each figure being then appropriated to a single syllable of ordinary duration, but sometimes also the syllable was extended through more than its natural length-often indeed for a considerable space of time-and the figures were grouped in greater number above it. With regard to their performance, it would appear that the figurae were, in their original use, far less subject to regulation than even the single notes, for these last were to some extent controlled by the rhythm of the words. It is true that the figure, when occupying the place of a single note, that is to say when placed above a single syllable, was to be executed as a whole within the time of that syllable, but the quantity of the notes composing it seems to have been exempt from rule; moreover, when the figures were grouped in greater numbers above an extended syllable the whole passage must have been practically uncontrolled, and the individual values of the notes must have been indefinable.

Three examples may be given, showing the use of these figures in the ecclesiastical song; one demonstrates the syllabic, and the other two the free manner of employing them :-


Such then was the original office of the figures adopted by the earlier mensuralists to represent the fixed metrical rhythms which constituted the first regular melodic forms of discant. In their new employment their relation to the text remained the same as before; that is to say, they were still placed sometimes singly above a syllable of ordinary duration and sometimes in greater number above an extended syllable, but their manner of performance was entirely altered; their exquisite freedom, to which so much of the charm of the florid ecclesiastical cantus is due, was necessarily abolished, and every ligature, and every note in a ligature, was made to receive a fixed time value, and a place in the new system of measurement in triple proportion.

The principal figures, as they appear in the works of the mensuralists, with the neumes from which they were taken, and their later proportional value in modern notation, are here shown:-

| Ascending Figdres. |  |  | Descending Figures. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Podatus. | Torculus. | Salicus. | Clivis. | Porrectus. | Climacus. |
| $\sqrt{ }$ | $\sqrt{6}$ | $\sqrt{ }$ | $\int$ | $\eta$ | $\Omega$ |
| - | - |  | 且 |  |  |
| -0-0 | 00.0. | -00 | p-o | O-0. | $0-0$ |

In considering these figures, it will be observed that in the clivis, or old circumflex accent (acute to grave), as also in its two derivatives, the climacus and the porrectus, the original sign or neume begins with an upward stroke leading to the first note, and that the second note descends; while on the other hand in the podatus or anticircumflex (grave to acute), and its derivatives the salicus and torculus, the neume begins at once with the first note, ascending to the second. These characteristics are faithfully repeated in the corresponding mensural forms; and from this circumstance arose apparently the generic qualification of these borrowed forms of ligature, which were said to be cum proprietate, or according to the model existing in the neumatic notation. It will be observed further, from the translations in modern notes, that the figures here given are appropriated solely to the representation of those forms of rhythm in which the first note is short-the Iambic, that is to say, and the Anapaestic ${ }^{1}$; and from this circumstance doubt-

[^39]less arose the rule, Omnis ligaturae cum proprietate brevis est prima.

The entire appropriation of these figures by the Iambic and Anapaestic rhythms is somewhat remarkable if we consider the fact that the system here shown, which includes the two great radical forms of ligature together with their main derivatives, may be said, from the mensuralist's point of view, practically to exhaust the resources of the neumatic notation. Whatever the reason for this particular appropriation may be, however, it is at present unknown to us, and we may pass on at once to consider a question of more practical character : What, in these circumstances, were the means employed for the representation of the Trochaic and Dactylic forms of rhythm, in which the first note was long?

Clearly, considering the wide difference which exists between forms in which the first note is short and those in which it is long, the remaining neumes offered nothing suitable to the purpose, for with the exception of certain purely expressive and ornamental figures these were but extensions of the rootsigns, representing a greater number of notes, and were unfit for the demonstration of forms of rhythm exactly opposite in character to those which had already been appropriated to the principal figures. Two courses, however, were still open to the mensuralists, either of which might provide a method for the notation of these rhythms, and both were in fact adopted. One was the actual utilization of the figures just described, by means of an adroit shifting of the musical accent through the interposition of single notes or pauses; the other was the appropriation of certain new ligatures-produced by means of an alteration of the original figures-already invented by the older mensuralists, but used by them in a totally unsystematic manner.

The principle followed by the older mensuralists in the invention of the ligatures which were now to be used for the purpose of expressing rhythms in which the first note
was long was a very simple one, and little more than the inversion of that which governed the adaptation of the original figures; for in the invented forms, if the ligature began with the stroke ascending to the first note, the second note moved upward, and if with the plain note, the note following descended; or in another point of view it may be said if the figure had at first a stroke upon the left it was now deprived of it, and if it was originally without a stroke it now received one. Hence the qualification applied to figures of this kind, which were said to be sine proprietate, because they contradicted the proper forms; hence also the final rule, Omnis ligaturae sine proprietate prima est longa.


These figures, in which the first note is an imperfect long, are evidently less useful, and were in fact less used, than those borrowed directly from the ecclesiastical song. For it will be seen that, although all are suitable to the Trochaic measure, the ligatures of three notes cannot express the Dactylic, of which the first note, in the mensural system, is a perfect long. In the notation of the dactyl, therefore, the method which was mentioned above as alternative to the appropriation of the new figures, namely the adroit shifting of the musical accent of the original forms, was adopted, and it may be said that even for the representation of the Trochaic rhythms the latter method was also most frequently in use.

Our observations have probably established a sufficiently clear idea of the conditional value of the first note in ligature, but we may, before proceeding further, shortly summarize them, and complete the subject with a few words respecting the final and intermediary notes.

In all ligatures which begin with an ascending stroke the first note is short if the second descends (cum proprietate), but long if it proceeds upwards (sine proprietate); in those on the other hand which are without a stroke it is long if the second descends (sine proprietate), but short if it proceeds upward (cum proprietate).
In imitation of the classification according to the position of their first notes these figures were also distinguished according to the position of their finals, and were said to be either cum perfectione or sine perfectione. This perfection, which is not related to the perfection of the triple proportion, was ascribed to those figures in which the last note was placed either lower than the preceding note or perpendicularly above it, while those which consisted of an oblique bar descending, or in which the final was placed in the ordinary manner above the preceding note were imperfect. In the examples just given above, therefore, all the ligatures are cum perfectione, except the first two of the second example. The effect of this distinction is very simple. In the figures cum perfectione the last note was a long; in those sine perfectione it was a breve. All intermediary notes were breves, except in certain cases in which the semibreve was brought into ligature.
It only remains therefore to speak of the figures by means of which the ligature of semibreves was expressed. Their distinguishing feature is the stroke proceeding upwards from the first note ${ }^{1}$ $\left(W_{n}\right)$, and since this is the opposite treatment to that of the ligature 'with propriety' ( ${ }^{(1)}$ ), the figures are said to be 'with opposite propriety.' In ligatures of two notes 'with opposite propriety' both are semibreves; in ligatures of three notes the first two are semibreves, and the last is valued either as a long or a breve, according to the rules for the perfection and imperfection of ligatures; in ligatures of four notes the

[^40]three just mentioned are again valued in the same manner, while the intermediate note is a breve ${ }^{1}$. The theorists seldom allow the ligature to extend beyond four notes, but in practice five and six notes together in one figure are sometimes found; in these cases, in the ligature of five notes the former rules hold good for the first two notes and the final, while the intermediate notes may be either two breves or a third semibreve and a breve, according to the circumstances; in ligatures of six notes the first two and the final are again valued as usual, while the intermediate notes are a third semibreve and two breves.


We may now proceed to give examples displaying the best manner of expressing in ligatures the various modes of rhythm, according to the highest contemporary authorities; and in these most of the figures already given above, whether borrowed or invented, and both methods of employing them, will be found in use.

[^41]
## FIRST RHYTHMIC MODE.

(Trochaic.)
Jean de Garlande.


Franco of Cologne.


Waitrar Odington.


Here we find both methods, the employment of invented figures and the shifting of the accent of borrowed ones, recommended by these high authorities. The examples of the second mode, in which the first note is short, will show the accent restored to its original position.

> SECOND RHYTHMIC MODE.
(Iambic.)
Franco of Cologne.


Wainrr Odingeon.


In the third mode, in which the first note is long, we are already prepared again to find the shifting of the accent. We may also notice the expedients resorted to by composers for the representation of the perfection of the initial note, which is placed out of ligature by Jean de Garlande, while by Walter Odington it is forced into juxtaposition with the following figure.

## THIRD RHYTHMIC MODE.

## (Dactylic ${ }^{1}$.)

## Jean de Garlande.



[^42]

These Anapaestic figures, which by the simple expedient of writing a perfect long at the beginning of the series are here made to express the Dactylic rhythm, will now be seen restored to their proper position in the fourth mode, and bearing their proper accent.

FOURTH RHYTHMIC MODE.
(Anapaestic.)


Franco of Cologne.


[^43]The fifth mode was composed entirely of perfect longs divided into groups of three, corresponding to the old rhythm of the Molossus, but was not expressible in ligature ${ }^{1}$, except by a licence which changed for the time being the value of the figures employed. Jean de Garlande gives an illustration of the only acceptable form, as follows :-

## FIFTH RHYTHMIC MODE.

Jfan de Garlande ${ }^{2}$.


The well-known figures were also used to express the sixth mode, which was composed entirely of breves, again divided into groups of three. They were made available by the simple device of adding a plica to the imperfect longs of the ligature, which were thus divided in half.

[^44]Jran de Gartande.


In the foregoing examples, most of which were taken from the Tenors of contemporary motetts, we not only sufficiently perceive the method by which the figures of the neumatic notation were adapted to the representation of the modes of measured rhythm, but we also obtain our first real glimpse of the kind of melody to which these modes gave rise; and we find that, in spite of the somewhat rigid character of the new method - a method adopted not from any special consideration for the improvement of melody itself,-most of these short fragments are more than tolerable, and some highly agreeable. This is not very surprising, perhaps, if we consider their origin, for they are indeed for the most part adapted fragments of ecclesiastical song, in which, since the original intervals have been carefully preserved, much of the former beauty is still to be perceived through the comparatively stiff disguise of the proportional rhythm. Yet it will be evident that, notwithstanding their pleasing qualities, the strict rhythmic modes could not, in the shape in which they are revealed in our examples, suffice for the purposes of composition. If these little passages, for instance, were extended, and continued in
the unbroken form which is characteristic of them, they would soon cease to please; for except in dance music, where the interest is sustained by a perception of the relation of each rhythmical unit to the larger rhythm of the strains, the constant flow of one kind of melodic figure must always in time become wearisome and cloying. And the existence of this possibility was in fact fully perceived, and its nature perfectly well understood, by the mensuralists, who in order to avoid it made use of two means-the breaking up of the melody into broad phrases marked out by pauses, and the mixture of the modes.

The first method we have already seen exhibited, in its most limited shape, in the example of the fifth rhythmic mode; in its more extended forms it somewhat resembles a division into strains, though without the perfect regularity and balance of that process. This will be evident from the two following examples of Tenors, of which the first is from the motett Huic ut placuit, by an unknown author, and the second from the motett $O$ natio nephandi, ascribed to the author of the treatise Discantus Positio Vulgaris; both are in the fine MS. in the Library of the Faculty of Medicine at Montpellier ${ }^{1}$.

## I.

Mode (ecclesiastical) VIII.
Montpelliter MS.
First Rhythmic Mode.


[^45]
# II. <br> Mode (ecclesiastical) II. 

i. Montpellier MS. Third Rhythmic Mode.

(2)

(3)

(4)

(5)

(6)
ii.

(I)
(2)

(3)

(4)

(6)
iị.

(3)

(4)

(5)

(6)

It will be seen that the first example consists of a single strain of three phrases, two of which contain four measures and one five, the whole thrice repeated. The second and more extended example consists of three very long strains, of which the first and third contain forty-one measures each, and the second forty-three; these measures are grouped in each strain in three broad phrases of melody, excellent in themselves and varied in a masterly manner. The idea of repetition also is already perceived; the last strain opens with the first and second phrases of the first, and shortly after introduces the first and part of the second of the second strain. The composition as a whole, regarded from our present point of view, may be said to reveal the existence of a system for the management of rhythm, upon an extended scale and apart from metrical words, which though as yet incomplete is in harmony with more modern ideas.

The methods by which the second means of obtaining variety, the mixture of modes, was effected, were in theory two in number, of which the first and most decisive was the simple
juxtaposition of rhythmical figures not belonging to the same mode, and the second the omission of part of a figure and the substitution of an equivalent pause.

With respect to the first of these methods it may be said that it presents no difficulty whatever; the examples which are given in the treatises in illustration of it are at once seen to effect the object proposed, and from the compositions of the time we find that its application was universal. But the second method is exceedingly difficult to understand, owing to the apparent impossibility of reconciling the language of the theorists respecting it-if we are to understand them literally -with anything that we know of the contemporary practical music.

The theory is this. Pauses which express the value of the whole figure do not of course produce any effect upon the rhythm, but the omission of the long note in the first mode or of the short note in the second, and the insertion of equivalent pauses, are said to change the mode; the same result is obtained in the third mode by the omission of the longest note, or in the fourth by the sacrifice of the two short ones. The change is sometimes said to be made by the omission of pauses; the effect, however, is of course in either case the same, as will appear from the illustration.


The examples given by the author of Ars Cantus Mensurabilis in illustration of this theory are as follows:-

FIRST MODE.


SECOND MODE.


Now it will be observed that in each of these fragments the passage which follows the pause presents, from its beginning with the initial value of another mode, the appearance of a change of mode, and yet that in both cases the original rhythm, if we count the pause, flows on without interruption; we should therefore naturally conclude that the change here shown is rather apparent than real, for we have hitherto regarded the first and second modes as the converse of each other, and only to be alternated by a break in the rhythm. But the great theorist in giving these examples says distinctly and without qualification that the modes are changed by the pauses ${ }^{1}$, and he is supported by Jean de Garlande ${ }^{2}$ and Walter Odington ${ }^{3}$. This is a somewhat embarrassing circumstance, for it is evident that, if the mode of the passage fervens

[^46]shown above is really the second, and the pause is to be valued as part of the rhythm, then the second mode begins, not as has hitherto been supposed with a strong beat, but like the Iambic rhythm of the Ambrosian hymns, for instance, with a weak beat. This is a consequence of considerable magnitude, and one which, if it were accepted, would throw the whole of the mensural system, as we understand it, into confusion, for if we turn to the practical music of the time, we find that the independent parts cannot be reduced to score upon any other understanding than that which is in fact definitely established by many passages in the treatises themselves, namely that the first note, whether long or short, of the rhythmic figure falls in all modes upon the strong beat of the perfectio or 'bar' of three times. In the melodies of single parts also, written in obviously mixed modes and beginning with the figure of the second, it is impossible to find any sense if the initial note is taken upon a weak beat. To go no further for examples of this fact than the author of Ars Cantus Mensurabilis and de Garlande themselves, we may point to the fragments given by those writers as examples of the variation of the second mode by simple juxtaposition; here, if we are to assume a weak beat upon the first note of each bar in that mode, the passages marked with a star become unintelligible.

Franco.

$$
\text { Second Mode. } \quad \text { * First Mode. }
$$



## Jean de Garlande.

Second Mode.

* First Mode.


Second Mode. *First Mode. * Second Mode.


We see therefore already some cause for doubt whether the language employed by the theorists with regard to this method is to be taken quite literally, and with all the consequences which it implies; but there is still another point of view in which the subject may be regarded, which will afford an additional reason. The composers of this period were exceedingly careful of the natural accent of the words to which their music was set, and the strong and weak accents of the text were made, in the vast majority of cases, to correspond exactly to the musical mode of rhythm employed: yet if we look for a moment at Franco's examples Maris stella and $O$ Maria, we shall see that a weak beat upon the first note of the second mode would give fervéns and $O$ Máriá matér deí, which is the reverse of the natural accent. The correspondence which actually existed in the music of this period between the accent of the words and the musical rhythm is illustrated in the following examples, and a glance at them will probably be sufficient to confirm us in our belief that the rhythmic figure of the second mode begins, like those of all the others, with a strong beat ${ }^{1}$.


SECOND MODE.
'Anonymus of Cambrat.', v -


[^47]THIRD MODE.


FOURTH MODE.


But although we may be said to have rejected the notion that the initial of the second mode can have been taken in the learned music upon the weak beat, we have still to reckon with the fact that the pause of transmutation, if counted in the rhythm, does actually throw the first note after the change upon that beat, and is in fact inconsistent with any other form of the second mode. And at present there appears to be only

[^48]one way out of this difficulty, namely to suppose that the pause is not counted. If the pause, notwithstanding its apparent time value, could be either regarded as a mere substitute for the stroke or point of division and as implying no cessation of sound, or understood as the equivalent of the pausa debita of the mode which represents the value of the foot of rhythm, not only should we then be able to reconcile our original idea of the second mode with the plain statement of the theorists that the modes are altered by the pause, but the natural accents of the words, which are dislocated in almost all cases if we suppose a weak initial beat, will fall into their proper places in relation to the melody.

This explanation of the matter, however, though it appears in fact to be the most probable one, does not remove all difficulty; for we must not lose sight of the fact that its acceptance would reduce the device of change of mode by signs of time-value to a mere theoretical trick, and we should be obliged to admit that the definite statements of the learned writers have for once no real relation to practice, and that the mirabilis potestas of the pause, perceived by the author of Ars Cantus Mensurabilis, is as purely imaginary as the mystical significance of the ternary number.

But returning from this long digression, we have to consider for a moment, before passing from the subject of rhythm, a few more characteristic examples of interchange of mode. In those of the third and fourth modes which here follow, from Jean de Garlande, we may notice that though the transmutation is again independent of the given pause, the application of the pause as part of the rhythm raises no difficult questions such as have just been discussed in the case of the first and second modes. This is due to the fact that the pauses which are here said to effect the transmutation cannot give rise to a weak beat upon the beginning of either figure; for the complete figures of the third and fourth modes are spread in each case over two 'perfections' or bars of three
times, each perfection beginning of course with a strong beat; and, since the change cuts the figure in half, the note next following the change must necessarily begin upon the strong beat of a perfection.

Jean de Garlandr.


The next example is a mixture of the first four modes, but since it begins and ends with the figure of the third, it is given as a variant of that mode by de Garlande :-



The building up of the method here described was the subject of a continuous effort extending apparently from the beginning of the twelfth century to the second half of the thirteenth, and carried on both in France and England, but chiefly in France, and at first especially by the musicians of Paris. Its earliest theoretical traces are to be found in two anonymous treatises, Discantus Positio Vulgaris already referred to above, and De Musica Libellus, now in the Bibliothèque Nationale at Paris (MS. 6286), both of which probably date from the second half of the twelfth century. The method as it is displayed in these treatises is imperfect and elementary, but we are informed by a later writer, the Anonymus of the British Museum (Royal MSS.), whose historical sketches of this period constitute one of the most interesting features of his work, that more complete rules, relating both to notation and to the perfection and imperfection of longs and breves and the values of ligatures, were to be deduced from the compositions of Leo, or Léonin, chief musician as it is supposed of Notre Dame in Paris, contained in a great repertory of organum upon the Gradual and Antiphonary which was for many years preserved in the choir library of that cathedral; and these rules, we are also told, were again apparent, abbreviated and simplified, in the adaptations and compositions of Léonin's successor Pérotin, preserved in the same collection ${ }^{1}$.

[^49]From this period onward improvement seems to have been rapid; the advance may be observed in the treatises of Jean de Garlande and of Pseudo-Aristotle, both belonging to the beginning of the following century, and is seen to culminate in Ars Cantus Mensurabilis and the works of the Anonymus of the British Museum and of Walter Odington, which may
temporis pro brevi longa ponebantur, et tres ligate simili modo in pluribus locis pro longa brevi, \&c.
' Et nota quod magister Leoninus, secundum quod dicebatur, fuit optimus Organista, qui fecit magnum librum organi de Gradali et Antiphonario pro servitio divino multiplicando; et fuit in usu usque ad tempus Perotini Magni, qui abbreviavit eumdem, et fecit clausulas sive puncta plurima meliora, quoniam optimus discantor erat, et melior quam Leoninus erat, \&c. . . .'

The author then enumerates some of Perotin's own compositions, and continues: 'Liber vel libri Magistri Perotini erant in usu usque ad tempus Magistri Roberti de Sabilone, et in choro Beate Virginis Maioris ecclesie Parisiis, et a suo tempore usque in hodiernum diem, simili modo, \&c., prout Petrus notator optimus, et Iohannes dictus Primarius, cum quibusdam aliis, in maiori parte usque in tempus Magistri Franconis Primi et alterius Magistri Franconis de Colonia, qui inceperunt in suis libris aliter pro parte notare; qua de causa alias regulas proprias suis libris appropriatas tradiderunt. . . . Abbreviatio erat facta per signa materialia a tempore Perotini Magni, et parum ante, et brevius docebant; et adhuc brevius Magistri Roberti de Sabilone, quamvis spaciose docebat, sed nimis deliciose fecit melos canendo apparere. Qua de causa fuit valde laudandus Parisius, sicut fuit Magister Petrus Trothun, Aurelianis (sic), in cantu plano, sed de consideratione temporum parum nihil sciebat aut docebat; sed Magister Robertus supradictus optime ea cognoscebat et fideliter docebat. Post ipsum, ex documento suo, fuit Magister Petrus, optimus notator, et nimis fideliter libros suos, secundum usum et consuetudinem magistri sui, et melius notabat. Ex tempore illo fuit qui vocabatur Thomas de Sancto Iuliano, Parisius antiquus; sed non notabat ad modum illorum, sed bonus fuit secundum antiquiores. Quidam vero fuit alius Anglicus, et habebat modum Anglicanum notandi, et etiam in quadam parte docendi. Post ipsos et tempore suo fuit quidam Iohannes supradictus, et continuavit modos omnium supradictorum, usque ad tempus Magistri Franconis, cum quibusdam aliis magistris, sicut Magister Theobaldus Gallicus, et Magister Simon de Sacalia, cum quodam Magistro de Burgundia, ac etiam quodam Probo de Picardia cuius nomen erat Iohannes le Fauconer. Boni cantores erant in Anglia, et valde deliciose canebant, sicut Magister Iohannes filius Dei ; sicut Makeblite apud Wyncestriam, et Blakesmit in curia domini regis Henrici ultimi.' (Henry III.) Cousse. Script. i. $34^{2}$ and 344.

The '\&c.' which occurs so frequently in this MS. is to be accounted for by the apparent fact that the treatise was delivered in the form of lectures; it would seem that at the '\&c.' the author abandoned the MS. for a time, and supplied comments and explanations extempore.

## be grouped between the years 1250 and $1320^{1}$. As might

${ }^{1}$ It will be noticed that the acconnt here given of the mensural theorists differs considerably from that hitherto received; the order of succession indeed, in the group, remains much the same as before, but the group itself has been transposed to $\times$ period some sixty or seventy years later. This change is due to a consideration of the important facts brought forward by M. de Coussemaker (from M. Gatien-Arnoult, in the Revue de Toulouse, 1866), in the introduction to the third volume of his Scriptorum, \&c., in 1869, respecting Jean de Garlande. Formerly this author was supposed to be identical with oue Gerlandus, canon of Besançon about the middle of the twelfth century, but the identification rested on no better evidence than the approximate similarity of the name. M. Gatien-Arnoult however introduces us to a new personage, whose name is not approximately but exactly similar to that of the writer on mnsic, and whose residence was chiefly in Paris, the centre of musical life. The Jean de Garlande of this account was an Englishman, and a student of Oxford, and must have been born about the year 11go. His English surname, if he possessed one, seems to be unknown ; that by which he is actually distinguished dates from the period of his migration to Paris (about 1210), and is derived from the place in which he there lived and taught, the Clos de Garlande, afterwards Rue Gallande. It is not known whether he ever returned to England; we are told only that in 1218 he took up his abode in the University of Tonlouse, and that his venture not succeeding he returned to Paris in r232, and was still living there in 1245 . It is true that this account does not actually connect its subject, who is known as a grammarian and poet, with the authorship of any work on music, and that the identity therefore of the Parisian teacher, and the anthor of the famous treatise De Musica Mensurabili Positio still remains only probable; yet considering the principal circumstances,the exact similarity of name, and the residence in Paris during a period of the highest musical activity,-the probability is considerable. Accepting this identification then as a guide to the date of de Garlande's treatise, it will appear that this might have been written, roughly speaking, at any time between the years 1210 and 1250 ; but since its doctrine, though in the main agreeing with the settled form, still retains a strong archaic tinge, the work cannot be very far removed from the twelfth century, and may therefore date from the period of de Garlande's first residence in Paris, that is to say not later than 1218. From this date we obtain the others given above in the text. - The similarity between the methods revealed in the Tractatus de Musica of Pseudo-Aristotle with those of de Garlande fixes the date of that treatise as contemporary with his, while the settled and authoritative character of the teaching contained in Ars Cantus Mensurabilis, a character which could hardly have been developed in less than thirty years, suggests 1250 or thereabouts for the date of that work, and also for that of the treatise, so often copied and quoted by later writers as by 'Franco,' beginning Gaudent brevitate moderni. Quandocunque punctus quadratus, \&c. (see note to p. 122). If that date be accepted the Anonymus of the British Museum (Royal MSS,), who mentions the names of the two Francos, but none later, and who must therefore be almost if not quite a contemporary of those writers, may have written his admirable work about 1260 . Odington's date is already approximately fixed, since we know that he was still living in Oxford in 1316.
be supposed, the line of progress was in the direction of simplicity, both in the signs themselves-and especially as regards the ligatures - and in their application to the expression of the current rhythms. In the earlier periods, for instance, writers endeavoured to make the same ligature applicable to various modes of rhythm, and even as late as the time of Jean de Garlande and the Pseudo-Aristotle the triple ligature with propriety and perfection was used to express both the Anapaestic and Trochaic forms; in Ars Cantus Mensurabilis, however, and in the treatise of Walter Odington, we find this practice severely blamed; and it appears as a final rule that the value of the ligature must be constant, depending no longer upon the mode but entirely upon the shape of the figure itself, which in future is only to be used for the expression of those rhythms to which its settled value is applicable.

## II

## THE MUTUAL RELATIONS OF THE INDIVIDUAL VOICES.

The period with which we are at present engaged is marked, as regards the relations of the voices considered in their composite character, by several occurrences not less striking and important than those which we have seen affecting their conduct when considered separately. Chief among these is the revision of the theory of consonance and dissonance, by which this was brought into accordance with the practical methods of the artistic music.

We have already seen that the artistic music may be said to have formerly yielded something to theory in its practical rule, gradually evolved, of excluding dissonance from a position upon the strong beat of the rhythm: it was now the turn of theory to make concessions, and to admit to a position
upon the strong beat, and therefore among the consonances, intervals which had hitherto, from the beginning of things, been reckoned as dissonant.

The first of these intervals to be admitted were the major and minor third. Probably a practical demand for their admission, shown in a tendency during the transitional period to employ them upon the strong beat-as for instance in our example Custodi nos, at p. II3-already existed, but our knowledge of the practical work of this period is so small that this cannot be affirmed with certainty. As regards the fact itself of their admission, for which we must of course look to the learned writers, we find that the earliest existing treatise, Discantus Positio Vulgaris, makes no mention of it ${ }^{1}$, and from this we may perhaps conclude that about the middle of the twelfth century, which is the probable date of this treatise, the position of the thirds was at all events still doubtful; in the little treatise De Musica Libellus, however, now in the Bibliothèque Nationale at Paris (MS. 6286), a work which cannot be much if at all later than 1180, and therefore not far removed in date from Discantus Positio Vulgaris, we find the thirds definitely admitted among the consonances. 'It is to be observed,' says this author, 'that the unison and octave are perfect consonances; the major and minor third imperfect; the fourth and fifth intermediate ${ }^{2}$.' It would seem probable therefore that at some time during the second half of the twelfth century, between the dates of these two treatises, the practical employment

[^50]of the third as a consonance began to be accepted by theory as possibly, even if not demonstrably, reasonable. It is evident however that these intervals were not admitted without qualification, and that a real and important difference between them and the classical concords was still seen to exist, and was strongly insisted upon; for in order to receive them the theory was recast, and the great distinction between perfect and imperfect consonance, which still prevails in our own day, was invented.
The theoretical division of consonance into three species, invented probably, as has been said, for the purpose of justifying an incorrigible practice, is set forth, with all the parade of scientific accuracy which distinguishes the more voluminous theorists, by Jean de Garlande ${ }^{1}$; and his account is practically repeated in substance in Ars Cantus Mensurabilis, which displays the settled and authoritative system of the middle of the thirteenth century. The anthor of the latter work, however, adds some further distinctions:-‘The unison is more concordant than the octave, the minor third than the major third, and the fifth than the fourth. Also, both the perfect and intermediate species of consonance are more concordant than the imperfect ${ }^{2}$.'
A change also took place at this time in the theoretical

[^51]position of the major and minor sixth. These intervals, though not as yet perceived as consonant, were now no longer classed with the intolerable dissonances,-such as the second, the tritone, and the seventh, which were only allowed as passing notes not affecting the discant,-but were recognized as not disagreeable to the ear, and fit to be employed independently, provided that they were supported on both sides by consonance, and placed moreover in a situation in which they would attract little attention and be lightly passed over, that is to say upon the weak time of the perfection, or beat of three times. In order to express this view the theorists invented a division of the dissonances corresponding to that already employed for the consonances. That of Jean de Garlande, for instance, is again triple, and again displays perfect, imperfect, and intermediate degrees ${ }^{1}$; while the author of Ars Cantus Mensurabilis is content with two divisions, combining the perfect of de Garlande with the intermediate ${ }^{2}$. From these writers we gather that the

[^52]introduction of the change was gradual, and that while at first the major sixth belonged to the order of imperfect or tolerable dissonances, the minor sixth was still regarded as impossible. Other writers, however, go further in the direction of concession. The Anonymus of the Library of S . Dié, whose treatise is of the Franconian period, brings the major sixth into consonance ${ }^{1}$. 'The imperfect consonances,' he says, - are the major and minor third, good between fifth and fifth, or in coming from fifth to unison, or the reverse, and the major sixth which is good before an octave.' Finally, the Anonymus of the Bibliothèque Nationale, fonds Latin, 14741, writing in the old French vernacular before the close of the thirteenth century ${ }^{2}$, and the Anonymus of the British Museum (Royal MSS.) ${ }^{3}$, belonging to the same period, both bring the minor sixth also into the consonant genus, classing it of course with the major interval in the imperfect species.

This important change in the theoretical rules of discant, might very well be ascribed, even entirely, to a general recognition of the pleasant sound of the intervals of the third and sixth, gradually revealed by experiment with both voices and instruments; and in any case the improvement must have been largely due to such means. But a special cause has of late been suggested as preponderant, and deserves examination.

In this most recent view, put forward by Dr. Hugo

[^53]Riemann ${ }^{1}$, the change was due to the influence of the English practice, and more especially of those native popular methods of part-singing in this country, of which some account was given by Giraldus de Barri in the twelfth century, in his Cambriae Descriptio. Notwithstanding the vagueness of the account given by Giraldus (the only author by whom any reference to the popular part-singing is made), Dr. Riemaun feels justified in assuming as probable that the English methods consisted in uniform progressions of thirds and sixths. He bases this assumption chiefly upon the fact that the English are known to have been at a later period actually in possession of such methods, peculiar to themselves; and he sees in these later methods-in the Gymel or two-part orgauizing in thirds, and in the Faulxbordon or three-part organizing in thirds and sixths, with which we first make acquaintance in the works of Chilston, Leonel Power, and Gulielmus Monachus, all writing towards the close of the fourteenth century-the survival or continuation of the methods described by Giraldus. These early methods then, which it is assumed consisted of progressions of thirds and sixths, becoming known in France, are supposed to have powerfully affected the artistic discant, the chief seat of which was in France, and especially in Paris.

It would be pleasant no doubt to us in England to think that elements of harmonic beauty of so much importance as these were supplied to music by the native instinct of our forefathers; but for that very reason, if for no other, we are bound to inquire carefully into the character of the evidence on which the hypothesis rests. What in fact do we actually gather from the account given by Giraldus? The usual method, he tells us, of popular singing in Britain, as elsewhere, was in unison; but two special and exceptional

[^54]kinds of treatment existed aniongst us, one in Wales and the other in Northumberland. Speaking of the Welsh, he says: 'In their musical songs they do not utter the tunes uniformly, as is usual elsewhere, but manifoldly, and in many manners and many notes; so that in a multitude of singers, such as it is the custom of this people to bring together, as many songs are to be heard as there are singers to be seen, and a various diversity of parts, finally coming together in one consonance and organic melody under the smooth sweetness of B flat ${ }^{1}$.' Two conclusions may safely be drawn from this account; first, that these performances were conducted in the scales of $\mathbf{F}$ or $\mathbf{G}$ with the $\mathbf{B}$ flat, and second, that the part-singing can have had nothing to do with either Gymel or Faulxbordon, and.must have been allied rather to the old attempts to extemporize discant in many parts than to the methods of uniform progression which are proper to organizing. The Northumbrian practice, on the other hand, consisted in a distinct two-part song, which may therefore possibly have borne some relation to the later Gymel; but the account unfortunately gives no information with respect to the intervals employed, nor even informs us whether they were mixed or uniform. Giraldus says only that the performance consisted of 'not more than two differences of tone or varieties of pitch in the voices, one murmuring the lower part, the other the upper, in a manner at once soothing and delightful ${ }^{2}$.' The only special reference to the use of thirds in England is in the treatise

[^55]of the Anonymus of the British Museum (Royal MSS.), written at the end of the thirteenth century, which mentions that they were allowed in the sense of concords by the best musicians of several countries, and among others by some of the English 'organists' ${ }^{1}$; the fact however is there connected, not with the Northumbrian song, but with the artistic practice of the West of England, and it is difficult to connect this with the methods described by Giraldus. Indeed it may be said that no known documents exist which can with any show of probability associate the use of thirds and sixths with the popular practice, or which represent it as at any time exclusively English.

Considering then the difficulty at present of tracing the origin of Gymel and Faulxbordon in the English popular practice of the twelfth century, and considering also the fact that neither the Anonymus just quoted, nor Jean de Garlande, nor Walter Odington, all of whom were Englishmen, or were at all events well acquainted with the methods of this country, make any mention of our supposed habit at this period of organizing in thirds and sixths-though in view of the new use of these intervals in French discant mention of such a practice, had it existed, would seem to be not inappropriate,-we must as yet hold it at least doubtful whether our country can really lay claim to any special share in the introduction of thirds and sixths among the musical concords.

The appearance of the new intervals of discant was necessarily accompanied by new rules for the movement of the individual voices; and these, like the intervals themselves, were introduced gradually. Their final form is perhaps best displayed in the short statement of the Anonymus of the

[^56]Bibliothèque Nationale ${ }^{1}$, in his little treatise in the old French vernacular already referred to, a work which may profitably be compared with the older vernacular statement of rules, in the same library, printed by de Coussemaker in his Histoire de $l$ 'Harmonie au Moyen Age, and described at p .87 of the present volume. Both treatises belong rather to the practical than to the theoretical side of musical literature, consisting in fact of not much more than authoritative directions with respect to the best method of composing in two parts; and a comparison reveals very clearly the extent of the enlargement of musical resources which resulted from the introduction of thirds and sixths.

The author of the later treatise gives at the outset special rules for the treatment of the new intervals: 'The minor third,' he says, 'requires the unison after it, the major third the fifth, the minor sixth the fifth, and the major sixth the octave.' It is worthy of remark that the imperfect character of the new consonances is clearly indicated in these regulations with respect to their progression, which is already perceived as limited by a certain natural insufficiency in the intervals themselves which requires their passage to a perfect consonance, and by an inherent tendency moreover to resolve into perfect consonance in one direction rather than in another. Thus the major third and major sixth are seen as tending to an 'outward' resolution, while the minor third and minor sixth proceed most naturally in the opposite direction.


But the natural progression of the imperfect consonances may be delayed by a parallel movement of the voices, continuing the interval, provided that the movement be conjunct,

[^57]and not continued for more than three notes. This indeed is the only kind of parallel movement now permitted, that of perfect consonances being expressly forbidden in this treatise ${ }^{1}$. It is not improbable therefore that, in the new allowance, we may see the later equivalent of the permission to move in parallel fifths which was accorded by the older discant ${ }^{2}$ when the persistent conjunct movement of the tenor in a given direction rendered a continuance of contrary motion impossible. It will be remembered, for instance, that upon a tenor proceeding upwards by degrees the old method requires the following progression:


Now in the case here shown the temptation to come to $\mathbf{A}$ in the discant upon the tenor $F$, and thus to continue the contrary movement, must have been considerable, and experiment would soon reveal the agreeable effect, not only of this progression, but also of the continuance of thirds in parallel movement instead of the old fifths. And this treatment is in fact commonly enjoined in the work which we are at present considering; for instance:-‘If the tenor ascends four degrees then it must be accompanied by (a) octave, fifth, third, unison, in a closing passage, and (b) octave, fifth or (c) third, followed by two thirds, if the passage continues;' thus :-
(a)
(b)
(c)

${ }^{1}$ See note on notes appendans, p. 160.
${ }^{2}$ See p. 87.

A possibly later form of treatment introduces the sixth :-


In descending passages these methods were practically reversed:-
Opening passages.


Middle passages.


These examples show that discant was, at the time when they were written, already approaching very nearly to the condition of plain counterpoint; and we may even find in the instructions given for the treatment of notes not in conjunct movement indications almost of a foresight of harmony. The instructions for the accompaniment of the melodic interval of the fourth, for instance, are most remarkable. 'If the tenor falls a fourth, the discant, if it has a third for the first note, takes by preference a fifth in similar movement instead of an ascent to the octave (a). Also, if the tenor rises a fourth,
it is better that the discant, if it has a tenth for the first note, should rise to the octave rather than fall a third to the fifth (b).'

## (a) Good. <br> Not so good.



## (b) Good. <br> Not so good.



Here apparently the harmonic view of the authentic and plagal cadences is clearly indicated.

It should be added that although the date of this method is perhaps most suitably placed about the close of the thirteenth century, its principles appear to be somewhat in advance of those which prevail in the compositions of that period so far as we know them, and we may perhaps therefore suppose that the practice which it represents is not so much that of the learned musicians as that of the extempore discanters of the time. Innovation and experiment, indeed, were marked characteristics of the extempore practice throughout the earlier polyphonic period, and many improvements derived from the suggestions of this practice were, after due observation of their effect, adopted and incorporated in the orthodox system of music. We may suppose therefore, from a comparison of this method with the written compositions of the time, that the close of the century found several existing improvements still unaccepted by the theorists; the learned writers remaining generally unconvinced of the merit of progressions containing parallel
imperfect intervals, and at the same time disinclined to give up the parallel perfect intervals which had been hitherto freely used, and which were indeed strongly characteristic of their system.
Having now described the various means developed by musicians during the early mensural period, we may proceed to consider the method of their application in the production of an artistic result. This method, in its general aspect, was exceedingly simple, and may be described in a few words. The elements of measured composition were still the same as those of Organum, a given subject, or Tenor, and a discant upon it; but not only was the subject now measured, but it also displayed a strongly rhythmical character, due to its complete arrangement in some one of the recognized metrical modes. The discant also was conducted entirely in a metrical mode, though not necessarily that of the subject, and was governed in its relations with the subject chiefly by one rule, namely, that in all modes, at the beginning or strong beat of each measure or 'perfection,' the voices must be in consonance ${ }^{1}$. No rule was given for the weak beats, which might be either in consonance or not ${ }^{2}$, but from the works of the best composers of this time we find that consonance was in fact usually preferred throughout.
Probably the most striking and characteristic, though not actually the most enduring, feature of this method is the system of metrical modes, controlling both subject and discant, and imparting a special and unvarying character to the music. An account of these formulae and of their influence upon

[^58]notation has already been given at some length in this work, and the important part which they played in the general construction of mensurable melody was then probably sufficiently demonstrated. It is indeed evident, both from the treatises and from the compositions themselves, that no other method of arranging musical sounds was considered as strictly proper to the system of the thirteenth century, and that these rhythmical figures in fact constituted, during this period, the actual foundation and vital form of the work. It may be well therefore, before proceeding to examples of composition, to devote a short space to the consideration of the most usual combinations of the modes, arising out of their simultaneous employment by two voices in discant. The examples here given are taken from the treatise of Jean de Garlande, where a long and profusely illustrated chapter is devoted to the subject.

TROCHEE AND IAMBUS.


TROCHEE AND DACTYL.


[^59]
## 170

## TROCHEE AND MOLOSSUS.



TROCHEE AND TRIBRACH.


IAMBUS AND DACTYL.


IAMBUS AND ANAPAEST.
2nd Mode.

is here drawn, will be met with again occasionally in these examples; it was inserted deliberately for the sake of ornament (color), and always takes this form of a kind of appoggictura proceeding to the note itself with which it is discordant.

IAMBUS AND MOLOSSUS.
2nd Mode.


IAMBUS AND TRIBRACH.
6th Mode.


DACTYL AND ANAPAEST.
3rd Mode.



DACTYL AND MOLOSSUS.


DACTYL AND TRIBRACH.
6th Mode.


andpaest and molossus.


## ANAPAEST AND TRIBRACH.

6th Mode.


## MOLOSSUS AND TRIBRACE. <br> 6th Mode.



These examples not only provide us with excellent types of rhythmical mixture, but they also enable us already to form some practical idea of the kind of part-writing which is characteristic of the early mensural period. In its method this is seen as exceedingly weak and tentative, deficient in resource, and embarrassed by the rigour of its essential conditions; while in its effect it is perceived as harsh, empty, and harmonically pointless. The strength and excellence of the composer, in fact, is still chiefly shown in the melodies of the individual voices, which are always easy and flowing, and sometimes, as in many of de Garlande's examples of the sixth metrical mode, as good as it is possible for simple music in strict rhythm to be. Before we quit the thirteenth century, however, we shall witness, in our examples, some approach towards that striking improvement in part-writing for which the rules last quoted in this work have already prepared us; the feeble passages in unison will in a great measure disappear, imperfect concords will be found to be
largely employed, and a notion of the sense and coherence which arise from harmonic relations will even be seen as dawning upon the minds of composers. Yet even in the later examples it will appear that artistic invention was still unable to deal exhaustively with the actual means at its command. The struggle towards an enlargement of the capacity of the governing material, the struggle which is characteristic of all arts during their periods of growth, had been necessarily rewarded by an increase of power which extended far beyond the immediate needs of the artist, and by the creation of a field of effort of which only a very small part could at first be at all perceived. It should not surprise us therefore to find that, although most of the resources which belong to the first two orders of counterpoint were now at the disposal of the musician, and although a double cantus in which both voices might move in complete liberty, yet in perfect obedience to law, was in fact within his means, he still renounced the free exercise of the imagination, and for a long time remained content-except in dealing with two special forms of composition in one of which an ancient method was continued-with an almost mechanical construction of the upper voice parts upon the basis of material arranged throughout in a predetermined strict rhythmical shape.

## III

## Forms of Composition

Although the various special forms of composition proper to this period may at first sight appear more numerous than might have been expected, it will be found upon examination difficult to assert that any were superfluous. It will be seen that each corresponded to some need arising either from the popular or the ecclesiastical use of music, or displayed some special aptitude of the art considered in its purely technical aspect; and since the aims of all are reproduced more or less
exactly in the music of later times, it must be assumed that all were healthy and indeed necessary elements in the first work of development.

These various forms may be classified in the following manner:-
(a) Compositions in which all the parts have the same words. Such are Organum communiter sumptum, the Cantilena, and the Rondel or Rota.
(b) Compositions in which each part has its own special words. Such is the Motett.
(c) Compositions in which not all the parts have words. Such are the Hoquet or Ochetus, the Conductus, and Organum Purum vel proprie sumptum ${ }^{1}$.
Not all these forms were of equal antiquity: Organum Purum was older than the rest, and may therefore now be first examined.

The great age and authority of Organum Purum, which was in all probability the survival of an old method of florid discant in free rhythm and extempore upon the long notes of the plainsong, may perhaps partly account for the respect in which it was held by the authors of the thirteenth century treatises, for these writers apparently considered it as still the most noble and beautiful kind of music. Their opinion, however, was no doubt largely justified by the merits of the method, for the freedom which was its chief characteristic, in whatever degree it may have been present in the composition, implies the existence of beauties which in the regular style were impossible, and must in itself have possessed

[^60]an ineffable charm for ears too much accustomed to repetitions of the well-known metres in fixed measurement.
Of the method itself unfortunately no absolutely clear or complete account can yet be given. This fact, however, is not due to any actual scarcity of information, for at least three writers of the first rank-the Anonymus of the British Museum (Royal MSS.), the author of Ars Cantus Mensurabilis, and Walter Odington-have taken the matter in hand, all of course being abundantly informed and not less clear than usual in statement ; our difficulty therefore arises from no fault of the authorities, but from the fact that their discussions deal with the method in certain aspects only, and that they were addressed to a public already well acquainted with the process in question; the points not touched upon could then be filled in from the knowledge of the reader, while the allusions to practice also would be well understood, and would in fact be little more than direct appeals to experience. For us however, possessing no antecedent knowledge, the accounts given in the treatises, even when illustrated by the compositions now at our disposal, are not quite sufficient; so that while some of the essential features of the method stand out clearly enough, others, also of considerable importance, remain in obscurity and can only be guessed at.
The free Organum (proprie sumptum) was generally contrasted by the theorists with an Organum of another kind, already referred to in our classification, called Organum communiter sumptum, a form of the current strict music. Moreover it would seem that at different times the contrast was perceived from slightly different points of view; for while the early writers regard the opposed forms for the most part in their relation to the metrical modes, the later men take note chiefly of their position with regard to the mensural system.
In the first point of view the essential distinction between the two kinds of Organum resides in the regularity or irregularity of their rhythmical forms; the strict species organizing
in some recognized mode, the free not so. From the description for instance of the strict species, given in Discantus Positio Vulgaris, the oldest treatise upon measured music which we possess, it would appear that the chief characteristic of that species was the purity of its metrical character, and for this reason no doubt it is called pure Organum by the author ${ }^{1}$. The actual contrast however between this Organum and the free species is not demonstrated in Discantus Positio Vulgaris, though no doubt it is intended to be inferred. We are only told with respect to the latter-which is apparently identical with the form here called Organum duplex - that it was a twofold discant in which the melody, in relation to the lower voice, was diverse and consonant; that the pauses corresponded, but that the notes did not, because the long notes of the tenor were protracted ${ }^{2}$. The last sentence contains an important piece of information with respect to the method.
In the treatise of Jean de Garlande the rhythmical test is strongly insisted upon, and the contrast between the two kinds of Organum is well displayed in the names which he assigns to them-rectum and non rectum. 'All organum,' he says in effect, 'is sumg in some mode, either regular (rectus), by which is meant one of those in which discant is sung, or irregular (non rectus), that is to say a mode in which the rhythmical figures are not strictly taken. Longs and breves are strictly taken in the first regular mode (as in the strict Organum), but though they may also sometimes be taken in an irregular mode in the same way as in the first mode it is not strictly, but in a casual manner. Whatever

[^61]then is sung in an irregular rhythm is called Organum non rectum ${ }^{1}$.'
The Anonymus of the British Museum (Royal MSS.) a writer of the Franconian period, but a strongly conservative theorist, adopts, as we should expect, the view of Jean de Garlande; and in fact a large portion of the concluding chapter of his treatise is devoted to a description of the irregular modes, seven in number exclusive of variants, in one or other of which the upper part of the free organum-Organum purum as it was now called-was usually cast. One or two of these are intelligible, and the first is even to be recognized in a known composition of the time ${ }^{2}$; as regards the rest, however, it is unfortunately impossible at present to arrive at any decision with respect to the exact nature of the melodic figures which the author intended to describe; for his meaning is never illustrated by noted examples, and is moreover conveyed in this part of his work in special language of a highly technical character, to which at present we have no complete key.
During the latter half of the thirteenth century, the period which must now apparently be recognized as Franconian, Organum, as has been said, was perceived chiefly in its relation to the mensural system. The contrast in this point of view between its two kinds is exhibited, though somewhat confusedly, in Ars Cantus Mensurabilis, the representative treatise of this period, in the chapter upon the various species of measurable music. 'Measurable music,' says the author,

[^62]' is measured either purely or in part. Music purely measured is discant, because discant is measured throughout; music partly measured is Organum, because Organum is not measured throughout. Organum is taken in two ways, proprie and communiter. Organum proprie sumptum is the same as Organum duplum, which is also called Organum purum ; Organum communiter sumptum, on the other hand, is some ecclesiastical song measured in time ${ }^{1}$. From this it would appear that, notwithstanding the author's formal distinction, the latter species of Organum should properly belong to discant; the main point however, the difference between measured and partly measured Organum, is sufficiently made out.
Walter Odington speaks of Organum purum only. 'There is,' he says, 'one kind of organic song in which alone the object is the putting together of immeasurable voice parts; it is called Organum purum, and this kind is the oldest, and is in two parts only ${ }^{2}$.' Simon Tunstede also, a writer of the fourteenth century, discusses the subject once more; he again draws the distinction, upon the mensural basis, between the two kinds of Organum, but he copies in this matter from Ars Cantus Mensurabilis, and adds little of his own that is of value.

Organum purum, then, appears as an unique and exceedingly ancient form of composition, dating evidently from a period antecedent to the institution not only of fixed time rules, but even of settled metrical rhythm in music. The freedom which it thus inherited is sufficiently declared in a general manner in the passages just quoted, but the extent of that freedom

[^63]and the nature of the particular methods of its manifestation during the mensural period are nowhere completely revealed. By a consideration, however, of the available examples in notation, and of the rules and comments of the treatise writers, we may perhaps arrive at a fairly adequate view of the main features of the system.

We may begin with Odington's description of the method of composition. ' $\mathbf{A}$ few notes of plainsong being taken as the theme or Tenor, they are arranged in some mode, and the upper part is made to proceed by concords and the less discordant discords at pleasure. The upper part begins upon the octave fifth or fourth above the Tenor, and ends in the octave fifth or unison ${ }^{1}$. This is very indefinite, and might serve equally well for a description of discant but for the example, which is as follows:-


This example, by its obvious disregard of mensural equivalence between the parts, at once reveals its freedom from the prevailing rules of proportion; for it is evident that the upper part contains a far greater number of notes than could be regularly disposed above three double longs. Some allowance therefore must have been made, and one of the parts, if not both, must have been composed in view of a special understanding with respect to the method of performance.

[^64]What was the nature of this understanding? Since measure was not here applied to both parts together, as in discant, can it have been applied to one or the other alone, entirely or partially?

With respect to the Tenor we may at once perhaps safely conclude that the duration of its long sounds was not fixed according to any measure of time, but was governed entirely by the conduct of the upper part. This, as we shall see, is apparently asserted by Jean de Garlande, for instance, and in Ars Cantus Mensurabilis, and it may also perhaps be implied in the expression ductae longae, used with respect to the tenor notes by the author of Discantus Positio Vulgaris. Moreover, while this course presented few difficulties, the inverse process would have been practically impossible. We have seen that if an upper part such as this of Odington's example were measured, it could not be fitted to three measured double longs; but it may also be remarked that a similar failure must occur if the upper part were free, owing to the insurmountable difficulty of adjusting long unmeasured passages, of various lengths, to equal notes of fixed duration. With an unmeasured Tenor, on the other hand, holding a single long note during the continuance of the passage in the upper voice, no difficulty, whether the upper part were measured or free, would occur ; for the actual limits of the florid passages were well defined, the close of each being indicated in the written composition either by a consonant note not in ligature or by a pause following a consonant note either in or out of ligature, and in performance (as there is some reason to think) by a certain slackening of the pace upon the penultimate note; and by these means among others, the Tenor, whether singing from score or not would, with practice, easily be able to perceive the points at which it might be necessary for him to relinquish any note of his part and to move to the next, without mensural agreement ${ }^{1}$.

[^65]The remaining circumstances which decided the movement of the lower voice are not all clearly explained, but perhaps it will not be rash to assume that, while the Tenor generally held his note until the end of a passage, he might also sometimes move at the appearance in the upper melody of some well-marked note, not closing, in consonance with the note next following in his own part; on the other hand, it would also appear that if discord with some imminent important note would result from the continuance of his own holding note, and if movement to the next were unsuitable, he might either 'feign concord,' by which is probably meant that he might invent

If then this view, in which the Tenor is first seen as giving a note to be organized, and as afterwards waiting and depending for guidance in its own movements upon the convenience of the organal voice, may be considered as sufficiently established, it would seem that we must look to the organal voice for a justification of the statements of the theorists with respect to the existence of measure in this kind of
rhythmical point of view, continues :-'Et eius equipollentia (i.e. Tenor), tantum se tenet in unisono (unison in a single part consists in the holding or repetition of a sound), usque ad finem alicuius puncti (the passage in the upper part is here meant), ut secum convenit secundum aliquam concordantiam.' Cousse. Script. i. 114. The author of Ars Cantus Mensurabilis is equally explicit with regard to the unmeasured character of the Tenor:-"Sciendum quod purum organum haberi non potest, nisi super tenorem, ubi sola nota est in unisono.' and he adds the remark, which Tunstede has adapted, that when the tenor notes were more numerous (as they would be if measured), the result must be discant:-_'ita quod quando tenor accipit plures notas simul, statim est discantus.' Cousse. Script. i. 134 .
${ }^{2}$ By well marked or important notes are here chiefly meant those which are figured as longs, respecting which the author of Ars Cantus Mensurabilis says:--Quidquid est longum indiget concordantia respectu tenoris; sed si discordantia venerit, tenor taceat, vel se in concordantiam fingat.' Cousse. Script. i. 135. Walter Odington, after explaining that discant cannot be of less than two parts, adds:-'Organum autem aliquando est unius . . . ut dum attendens concordiam, tenor aliquando tacet.' Ibid. i. 245. The Anonymus of the British Museum (Royal MSS.) speaks of this practice only in reference to the first note of the Tenor:-- Et nota quod primus punctus tenoris mediat continuando, et resonat in locis in quibus magis competit secundum concordantias suppositas, et quiescit secundum discordantias disconvenientes, \&c., prout melius competit.' Ibid. i. 36r.
music; but it must be confessed that if those statements are to be taken as referring to measure according to strict rules, and marked by an evenly recurring beat of three times, it is difficult to find their justification in the accounts which we possess of the treatment of the upper part. This difficulty arises naturally, for instance, from a consideration of the rule given in Ars Cantus Mensurabilis for the treatment in the upper part of Organum of the notes not in ligature, from which we learn that ' whatever is noted with a simple longa is long, with a brevis short, with a semibrevis of shorter value still ${ }^{1 '}$; for while on the one hand we there gather that Organum, unlike the old cantus ecclesiasticus, accepts the shape of the plain note as a sign of value, on the other it seems possible, from the author's abstention from mensural distinctions such as perfecta, imperfecta, altera, and his adoption of the general terms longum, breve, semibreve, that this value may not have been entirely dependent upon the circumstances which would have governed it in the cantus mensurabilis.
This impression is strengthened if we consider the language used by the Anonymus of the British Museum (Royal MSS.), in the mysterious sixth and seventh chapters of his treatise, language which is even more disheartening to the student in search of proofs of measurement in the upper part of Organum purum than that of the author of Ars Cantus Mensurabilis; for from this account of the method it would appear that notes were valued sometimes according to their positionwhen the long notes are the first, last, last but one, and first of all ligatures-and sometimes, though subject to the consideration of position, according as they are concordant or discordant, the concordant notes being long and the discordant short ${ }^{2}$; indeed, the final impression to be derived from so much

[^66]as is intelligible of this very obscure account may very well be that in the system of Orgonum purum measure, as it was understood in the thirteenth century, finds no place at all.

On the other hand we may remember that nothing has been said by the theorists, in discussing this form of composition, from which we could definitely and without doubt conclude that the upper part is not to be translated according to the main rules of measurement in triple proportion. The Anonymus himself, in closing his account of the regular modes of discant, speaks of others (afterwards described by him as the modes of Organum), as 'commonly called "unused," as if irregular, though not really deserving that name ${ }^{1}$; and from this we may infer that no wide technical distinction, such as that between measured and unmeasured, existed between the regular and irregular modes, and that the latter were perbaps characterized only by the absence of metrical rhythms. Again, Pseudo-Aristotle tells us that the regular modes were chosen out of many which formerly existed, but he makes no allusion to the triple proportion as the ground of selection. And the author of Ars Cantus Mensurabilis, though he mentions the absence of measure in the Tenor, says nothing respecting a similar freedom in the upper part; such a feature, had it existed, would have been eminently worthy of remark, yet the author confines his notice to the scarcity and excessive length of the lower notes.
And turning to the examples themselves of this form of
quacunque ligatura sive fuerit duum vel trium, \&c. Item omnis punctus ulterius erit longus et concordans. Item omnis punctus penultimus ante longam pausationem, sicut in fine puncti vel clausule, est longus. Et omnis punctus penultimus similitudinarie perceptus longus per modum, sive fuerit concordans, sive non. Item omnis punctus duorum, primus si fuerit in concordantia, longus, si fuerit in disconcordantia, brevis, in quantum de se et non in quantum penultima predicta. Iterato omnis punctus ultimus duorum, si fuerit concordans, longus, si fuerit discordans, brevis,' \&c. Cousse. Script. i. 363.
${ }^{1}$ 'Iterato sunt et alii modi qui dicuntur modi inasitati, quasi irregulares, quamvis non sint, veluti in partibus Anglie et alibi, cum dicunt longa, longa brevis; longa, longa brevis; et sunt plures tales veluti inferins plenius demonstrabitur.' Ibid. 328.
composition, of which we now fortunately have access to a considerable number, we find that it is always perfectly possible to translate the notes of the upper part in measure, according to the rules of the earlier theorists-of Jean de Garlande and Pseudo-Aristotle for instance-and that the results are always satisfactory, and sometimes indeed display very remarkable beauty; and this fact is in itself a strong argument in favour of the existence of a mensural intention. On the other hand the attempts of the present writer to construct from the given figures, upon a non-mensural basis, phrases containing any clear musical meaning, have entirely failed. With no intention therefore of pretending to prejudge a question which is now only for the first time brought within the view of historical students, and which must eventually be decided by the verdict not of one but of all, the writer has thought it desirable, in the specimens which follow, to represent the upper part as measured, in the belief that the versions thus obtained may substantially represent the intention of the composers, subject probably to a certain freedom of execution as regards the time ${ }^{1}$.
It will be observed that each of our examples contains a portion of pure discant, a portion, that is to say, in which both the upper and lower parts are measured in time; and this intrusion upon the Organum purum, for which the theorists had not sufficiently prepared us, seems to be a necessary feature of the method, for it occurs in all the specimens examined by the writer. In some it occupies a very considerable proportion of the composition, while in others it is much reduced; in some again it is concentrated in one portion of the work, in others it is distributed, and appears in small quantities from time to time. These passages are always in regular modes, in which the swing of the triple rhythm is extremely noticeable, while the true Organum purum, which

[^67]constitutes the remainder of the composition, stands out, through the totally different character of its phrases, in striking contrast. This revelation of the mixed nature of the method casts a new light upon the saying of the author of Ars Cantus Mensurabilis, already quoted at p. 183 of this work, that Organum purum can only exist above the long holding notes of the Tenor, and that when the Tenor notes are numerous and close together it becomes discant. His illustration also, which formerly seemed to represent two distinct ideas, may now be considered as a single composition.

Ars Cantus Mensurabilis, cap. xiii.


Before passing on to the examples, a word may be said with regard to the rests in the music of the rather early period from which our specimens are taken. The rests do not exhibit their actual value; a small hasty scratch,-which may also indicate equivalence,-expresses every kind of pause. Sometimes it may signify a mere breathing, sometimes a definite pause of breve lengthy sometimes again a pause equivalent to the perfect long. In the following translations the rest has been indicated by a comma above the stave; if actual value seems to be intended that value is shown in its proper place, but if a mere breathing is supposed the comma alone suffices to express it.

[^68]


## Organum Duplum vel Purum.

## IUDEA ET IERUSALEM.

Bibl. Mediceo-Laurenzians, MS. Plut. 29. 1, fol. lxv.



Organum Duplum vel Purum.
CONSTANTES ESTOTE.
Bibl. Mediceo-Laurenziana,
MS. Plut. 29. 1, fol. lxv.





## DISCANT OR MEASURED MUSIC

## Organum Duplum vel Purum.

TANQUAM SPONSUS.
Bibl. Mediceo-Laurenziana, MS. Plut. 29. I, fol. $\mathrm{lxv}^{\mathrm{b}}$.


02



METHOD OF MUSICAL ART




## Organum Duplum vel Purum.

virgo dei genetrix. of Racipoud
Bibl. Mediceo-Laurenziana,
 "Coutinetion fremi



DISCANT OR MEASURED MUSIC 203

fir



Lente .



Clounia Organdm Duplum vel purum. TANQUAM.
Bibl. Mediceo-Lanrenziana,
MS. Plut. 29. 1, fol. cxlviii.



It would appear that the form of composition displayed in these examples is alone rightly called Organum purum. Other forms however existed, compositions of three and four voices, in which the characteristic structure of Organum purum, unmeasured long notes in the tenor held under passages of varying length in the upper parts,-was maintained, and these apparently were called Organum triplum and quadruplum. Such compositions, however, differed materially from Organum duplum in the character of the upper parts, which were from the nature of the case less free and written more often in the regular modes than the upper part of the older kind; and it is on this account perhaps that the name of Organum even is refused by the Anonymus of the British Museum to this kind of music ${ }^{1}$. Tripla simply, or Magna tripla, \&c., are the names given to such compositions by that author, who thus again reveals his opinion that the distinctive characteristic of Organum is not so much the unmeasured length of the tenor notes as the freedom of the single upper voice.

[^69]

## Organum Triplum. <br> descendit de celis.

Bibl. Mediceo-Laurenziana, MS. Plut. 29. I, fol. xiv.

wooldridee
$\mathbf{P}$

METHOD OF MUSICAL ART


DISCANT OR MEASURED MUSIC
先目
 5
$\square$









## Organum Triplum. <br> diffusa est gratia.

Bibl. Mediceo-Laurenziana, MS. Plut. 29. I, fol, xii.


sa








- . te - re - a.




48 . .


## Organum Quadruplum.

## VIDERUNT OMNES.




(2)














discant or measured music



3







In the large collection of specimens of this form of music contained in the Florence MS., from which our examples are taken, we may perhaps see a part, if not the whole, of the 'great book of organum upon the Gradual and Antiphoner,' first composed by Léonin, and afterwards abbreviated and largely re-written and also enriched with many new and original works by Pérotin. Our main reasons for this identification have already been given in the preface to the present work, but it may also be said here that our view receives a partial

[^70]confirmation from a consideration of the methods employed in the MS., for these, so far as we can judge of them at present, indicate a phase of organum easily conceivable as contemporary with Pérotin, a phase which is apparently far removed from archaism, but in which, as it would seem, the last refinements have not yet been added ${ }^{1}$. We perceive, for instance, no trace of the ancient ligatures of five notes at least -mentioned by the author of Discantus Positio Vulgaris as proper to organum,-which received no rule, and were to be sung ad placitum; ligatures of five notes are indeed of frequent occurrence in the MS., but the ease with which such figures are included in a proportional scheme upon a ternary basis would seem to indicate the fact that the period of archaic freedom was now past. On the other hand we have many reasons, derived both from the details of the composition and from the system of notation, for supposing that the methods of this MS. date from before the period illustrated by Ars Cantus Mensurabilis and the treatise of Walter Odington. This seems clear, for instance, from the apparent absence from the MS. of the forms of Copula given in those treatises. Copula, it may be explained, was an important feature of organum, in duplum and triplum; it consisted of a short passage occurring, according to Odington, always upon the penultimate long note of the tenor, and constituting the final ornament of the composition ${ }^{2}$. It began with a long note

[^71]ad libitum, was continued in either the second or the sixth regular mode of rhythm-sung very quickly-and ended, as it began, with a long note. It was shown in two ways, one for each mode, thus ${ }^{1}$ :-

COPULA LIGATA
(Second Mode)


COPULA NON LIGATA
(Sixth Mode)


It is probable that copula is contained in some form not yet certainly to be identified in the MS., since both Jean de Garlande and the Anonymus-whose doctrine, like the music of the MS. itself, dates from before the time of Franco-refer to it as a feature of great importance; unfortunately, however,

Triplum Alleluia, Posui Adiutorium, mentioned by the Anonymus-see p. 179 (note) of this work,-and said by that author to be put 'in loco copule,' may be taken to prove that the final character did not prevail exclusively in his day, since the passage in question occurs upon the eighth long note before the close.
${ }^{1}$ 'Copula est velox discantus ad invicem copulatus. Copula alia ligata, alia non ligata. Ligata copula est que incipit a simplici longa, et prosequitur per binariam ligaturam cum proprietate et perfectione, ad similitudinem secundi modi; ab ipso tamen secundo modo differt, scilicet in notando et proferendo; in notando, quia secundus modus in principio simplicem longam non habet; copula vero habet. . . . In proferendo etiam differt copula a secundo modo, quod secundus profertur ex recta brevi et longa imperfecta; sed copula ista velociter proferetur, quasi semibrevis et brevis, usque ad finem.
'Copula non ligata ad similitudinem quinti modi (Franco's fifth mode was the usual sixth) fit. Differt tamen a quinto dupliciter: in notando et in proferendo. In notando differt a quinto, quia quintus sine littera ubique ligabilis est, sed copula ista nunquam super littera accipiatur, et tamen non igatur. . . . In proferendo differt etiam a quinto, quod quintus ex rectis brevibus profertur, copula vero velocius proferendo copulatur.' Ars Cantus Mensurabilis; Cousse. Script. i. 133-4.
'Copula ligata facienda est super unum punctum vel plures sicut organum : verum aliquando triplex est. Et accipit longam notam in principio non mensuratam, et procedit per binariam ligaturam. Copula non ligata eodem modo fit, sed non ligatura. Ista vero species sive ligata sive separata semper apponitur in fine punctorum, nisi omnes decenter possunt pausare.' W. Odington, Cousse. Script. i. 248.
intelligible particulars respecting it are not to be found in either of these writers, and the copula to which they refer therefore remains for the present indistinguishable ${ }^{1}$.

Among the circumstances relating to the system of figuration employed in this MS. which seem to characterize it as belonging in its origin to a period antecedent to the settlement of notation, we may chiefly refer to the apparent ignorance of the writer with respect to the figures sine proprietate, which as we saw were adopted by the later mensuralists in order to assist in the expression of certain modal rhythms, and to avoid the necessity of employing the same figure for different purposes. The MS. contains apparently no example of this kind of figure, and the writer's intention seems to be conveyed throughout by means of the old ligatures cum proprietate et perfectione, used either simply in their iambic and anapaestic sense, or with a shifted accent to indicate the trochaic and dactylic measures. The date of the actual invention of the figures sine proprietate is uncertain; so far as is known at present they make their first appearance in the treatises of Jean de Garlande and of Pseudo-Aristotle, whose period, as we have seen, may perhaps be said to coincide with the first quarter of the thirteenth century. The only earlier treatises of any importance for measurable music, Discantus Positio Vulgaris and De Musica Libellus, contain no allusion to the invented figures. The writer of Discantus Positio Vulgaris makes no

[^72]mention even of ' propriety,' and it is clear that the old figures derived directly from the cantus ecclesiasticus alone existed in his day. In the somewhat later treatise De Musica Libellus propriety indeed appears, but it belongs to single notes as well as to ligatures; it has nothing to do with value, and refers merely to the distinctive form. Thus, the 'propriety' of the long is a square form with a stroke upon the right side descending, that of a breve is the absence of the stroke; the 'propriety' of a descending ligature is a stroke upon the left side, that of an ascending ligature is the absence of the stroke, and so on; and here again most probably no knowledge of the invented figures is to be supposed. The methods therefore of that portion of the Florence MS. with which we are at present concerned would seem to agree with those of the earliest treatises, so far as regards the exclusive use of the figures cum proprietate; yet, since their use of these figures is apparently more systematic and consistent than that which is inculcated in either Discantus Positio Vulgaris or De Musica Libellus, we may suppose that they should be referred to some period later than the probable date of De Musica Libellus but earlier than that of the treatises in which the figures sine proprietate would seem to be first used; and this period may perhaps be assigned to about the year 1200.

Another circumstance connected with notation which would seem to indicate the date just mentioned as approximately that of the methods exhibited in the Florence MS. is the use of certain forms, not to be found in the later settled mensural system, some of which also appear in the older portions of the Montpellier MS.,-in the Quadrupla, for instance, and in certain pieces ascribed to Pérotin and (wrongly) to the author of Ars Cantus Mensurabilis. The chief of these are as follows :-
(a)


The first, (a), in the Montpellier MS. sometimes also 9\%, is occasionally used to express the value of the perfect long. It was derived probably from plainsong, and no doubt originally illustrated in the mensural system the transition from the period of 'equivocal signs' of which the Anonymus speaks', to that which is marked by the strict differentiation of the forms according to their value. The second, (b), sometimes also in the Montpellier MS. 7 月 4 , is identical with the first in principle, and represents the long plica. The third, $(c)$, is a form adopted apparently from motives of convenience to express the long plica in those ligatures in which the last note is placed perpendicularly above the penultimate: in the first shape we see the long plica ascending from the binary ligature represented by an additional note not counted-as in the previous figures; in the second, the true position of the final note in the ternary ligature is reversed in order to display the plica. The fourth figure, (d), has already been shown in our example of the fourth mode of rhythm, from Jean de Garlande ${ }^{2}$. It expresses a ligature of three notes, 'with propriety and perfection,' of which the first two are upon the same sound.

Attention may also be drawn to a figure known to the mensuralists as precedens cum currentibus. This is one of the older figures derived from plainsong, and is shown thus:-


The shorter forms ( $a$ and $b$ ), consisting of a long and either two or three semibreves, are constautly found in discant, and are there valued as shown below. The more extended forms ( $c$ to $h$ )-in which the semibreves are usually from

[^73]four to seven in number, occasionally eight, but very rarely more in unbroken series-are peculiar to Organum and Conductus.

No perfectly intelligible rules for the actual valuation of the extended forms are to be derived as yet from the treatises. We know that the currentes were sung very quickly and without strict regard to measure; but whether the figure as a whole was to be rendered in accordance with the principle governing our first examples ( $a$ and $b^{1}$ ) below, or whether it should appear as in $b^{2}$, is not certain. But considering the difficulty of executing such figures for instance as $f, g$, and $h$ above upon the principle adopted in $b^{1}$, that is to say within the limits of one 'perfection,' it has been considered probable that the actual intention of the extended figure in organum and conductus would be well expressed by the rule-clearly discernible in the MS. when the test of equivalence is possible, as in triplum and quadruplum-which assigns two 'perfections' as a possible limit when the figure contains not less than three currentes. This rule affords all necessary space for the execution of any number of semibreves up to and including nine, as will be seen from our suggestions of possible forms here following :-


With the foregoing exceptions the notation presents to us only familiar forms, arranged also, in the free portions of the R 2
organum often, and in the discant portions always, in a familiar manner-that is to say in such groups as are proper to the expression of the six regular modes. In the discant portions this regularity was, as we have seen, presumably real and complete; in the free portions however, or in other words in all that was sung above the long holding notes, the regularity was probably apparent only, for there can be little doubt that in this situation the time values of the figures indicating the well-known modal phrases were interpreted in performance with great freedom, and with a licence affording considerable scope for the ingenuity of the singer; and thus as it would seem arose the numerous irregular modal varieties, of which probably the list with alternatives given by the Anonymus contains only a few. But the familiar forms, as we have said, were not always arranged in a familiar manner; often, in the free portions of the organum--especially in duplum-all appearance of regularity disappears, and a constant and ever varying mixture of the figures indicates the presence of the seventh irregular mode, the mode chiefly characteristic of organum purum, in which all the rest were supposed to be blended ${ }^{1}$, and by means of which an effect of complete liberty and entire absence of premeditation, highly suggestive of the derivation of this method from extempore invention, is produced. And this liberty, which is characteristic of everything that is sung above the long holding note, extended also naturally to the pauses, which as we have seen received no material sign of value in the written composition, and were in performance entirely at the discretion of the singer ${ }^{2}$.

Considering therefore the great variety of possible interpre-

[^74]tations of the modal figures written above the long notes of organum purum, and the obscurity which at present veils the significance of some of the terms used by the Anonymus in his description of the irregular varieties, no attempt has been made in our present efforts towards translation to represent the exact time-value of the uttered sounds; and since the Anonymus says distinctly that the material signs of the regular modal figures were, with a few exceptions, sufficient to express the intention of their irregular counterparts in the written music of his time ${ }^{1}$, it has been thought that here also the mensural equivalents of the regular figures may perhaps for the present be allowed to perform a similar office.
With respect to the conductus, the remaining important form of composition in which not all the parts have words, the information left to us by the theorists is smaller in quantity and less precise in its character even than that upon which we depended for our first notions of organum purum. One or two facts, however, stand out more or less clearly in the descriptions which have been given, and of these the most valuable-since it reveals the essential characteristic of the conductus-is that mentioned both by the author of Ars Cantus Mensurabilis and by Odington with respect to the nature of the lower part; for from their treatises we find that in this form of composition, and in this form alone among the dignified kinds of music, the tenor was not taken from the ritual melodies of the church. These writers do not, however, altogether agree in their accounts of the actual source of the tenor; the author of Ars Cantus Mensurabilis holding that it must be entirely invented by the composer ${ }^{2}$, while Odington informs us

[^75]that it might also be adopted from some already existing extraliturgical source. From the author of Discantus Positio Vulgaris we obtain the important information that the composition was framed upon a metrical basis, and we are also told that it admitted the secondary consonances-a statement from which we may perhaps infer that these consonances, commonly described as imperfect, were used in the conductus in a larger proportion than in music founded upon the cantus ecclesiasticus ${ }^{1}$. Finally, Walter Odington mentions that in this method the unusual device of taking several notes in direct sequence upon the same sound was a peculiar feature. He also compares the conductus generally with the Rondel, and may be said to define it as a work of the same nature as the Rondel, though deprived of the essential constructive feature of that form, namely the carefully ordered imitation of one part by all the rest in turn. In his view therefore all the parts of the conductus were equally melodious and displayed the same kind of melody ${ }^{2}$; and this indeed appears from his example, the only specimen of this form of composition to be found in the works of the theorists, which is here given.

factas, qui tenor dicitur, eo quod discantum tenet et ab ipso [tenore] ortum habet [discantus]. In conductis vero non sic, sed fiunt ab eodem cantus et discantus. . . . Qui vult facere conductum, primum cantum invenire debet pulchriorem quam potest; deinde uti debet illo, ut de tenore faciendo discantum.' Cousse. Script. i. riz2.
${ }^{2}$ 'Conductus autem est super unum metrum multiplex consonans cantns, qui etiam secundarias recipit consonantias.' Ibid. i. 96 .
${ }^{2}$ 'Conducti sunt compositi ex plicabilibus canticis decoris cognitis vel inventis, et in diversis modis, ac punctis iteratis, in eodem tono vel diversis. . . . Rondellus


The Anonymus of the British Museum gives no information with respect to the methods of composition proper to this kind of music, but we learn from him that the conductus was a highly important form, and that it had been largely employed by the greatest masters. He informs us, moreover, that it was of several kinds-simplex, duplex, and triplex; a four-part kind also is referred to, but its existence, except in a somewhat rudimentary shape, appears to be doubtful, since to the author's mention of quadruplices among the finished forms he adds si fuerint. Room for speculation also exists with respect to the nature of conducti simplices. From the author's classification -simplices, duplices, triplices, et quadruplices (si fuerint)-we might naturally suppose that the simple kind was for one voice only; and remembering that the Anonymus ascribes to Pérotin a conductus simplex upon the words Beata viscera, \&c., and considering the fact that among the compositions for a single voice in the Florence MS. a Beata viscera, \&c., is to be found, we may perhaps be somewhat strengthened in this supposition. On the other hand, from the author's statement, contained in his remarks upon the misuse of the word organum -In triplo quandoque simplex organum dicitur, ut in simplicibus conductis-we cannot but infer that the simple conductus might also be in three parts. In this latter view therefore the
vel cum littera vel sine littera sit. Si vero non alter alterius recitat cantum, sed singuli procedunt per certos punctos, dicitur Couductus, quasi plures cantus decori conducti.' Cousse. Script. i. 247 .
'simplicity' of the conductus would refer rather to its method of composition than to the number of its voice parts; and in fact, in the pieces contained in the Florence MS. which can be identified as conducti, we may certainly observe two methods, one essentially simple and the other essentially elaborate, the admixture of which in one composition would indeed seem to constitute the classical form of this kind of music; and that the simple method was often used alone, in such a manner as to justify the appellation conducti simplices, we learn from the Anonymus himself, who speaks of conducti for two, three, and four voices, in which the elaborate portions were entirely absent; and such pieces he says were much in favour with less experienced singers. It is possible, therefore, that the name of conducti simplices was applied in two senses, and might designate either a composition for one voice, or a composition in which the simple method only was employed.

But passing from this point, we may proceed to give, from observation of the existing complete specimens, some further particulars respecting the composite and chiefly prevailing form of conductus; and may especially indicate the nature of the difference, and the origin of the remarkable contrast of character, which exists between the simple and elaborate methods.

Broadly speaking, in this form of composition the simpler method is displayed in the treatment of the metrical wordsfor it may be explained that the words of the conductus, which are given to the tenor or lower part, are always metrical-when they proceed straight forward in continuous rhythm; all the parts then moving together follow the simple accents of the poem, and are written moreover in accordance with the old principle-exemplified in our former specimens Verbum bonum and Custodi nos-which assigns a single long note or its equivalent to each syllable of the text, and in which every note or group of notes, however figured, is equal to the note or group to which it is opposed; and in this simple and
fundamental method all the music properly belonging, so to speak, to the poem is expressed. This portion of the work however was evidently, from the technical point of view, its least important part, for it is upon the ornamental portions that the strength and skill of the composer were chiefly exerted. The ornament consists of long passages of the later measured music, resembling in style the discant portions of organum purum, but generally of greater extent and exhibiting greater variety of resource, interpolated at irregular intervals in the texture of the simpler portion, and taken upon prominent syllables, among which the first of the initial word of each stanza, and the penultimate of the last word, generally received the most extensive embellishment. These extraneous ornamental interpolations were the caudae, which adorned, as the Anonymus tells us, the greater part of the fine collection of conducti in the library of Notre Dame, and which we find in profusion in the specimens, probably derived from that collection, in the Florence MS. In their melodic character they display as a rule much of the rude and lilting kind of beauty which belongs to the triple metres of the mediaeval use, and form a strong contrast to the more smoothly moving spondees of the simple portion of the work; while from the harmonic point of view we may again observe both the accidental clashing of the voices in their progress towards the perfect concord, and the more deliberate discords placed for the sake of 'colour' in certain well recognized positions, which are characteristic of the early mensural period, and which we have already seen in the elaborate forms of organum.
The juxtaposition in this form of composition of two kinds of music, not only widely different in character but also representing two distinct phases of progress different in point of time, is a somewhat remarkable circumstance, and may well give rise to the supposition that just as in organum purum we saw a later and arbitrary embellishment of the antiphon, so in these great compositions we may perceive an analogous process
applied perhaps originally to ancient extra-liturgical hymns, and more recently to similar themes composed-in order to maintain the essential form of the conductus-in the ancient technique.

Among the devices adopted in the embellishments of the conductus will be found not only the various applications of sequence and imitation, so far as they were known at this period, and the figures which might seem to indicate the presence of some form of copula, all of which were to be seen in organum purum, but a new kind now makes its appearance, a kind mentioned in our list of forms of composition in the same class with organum and conductus, but apparently at this period more often met with in practice as a temporary device used to give interest or variety than for its own sake or in a continuous form-the Ochetus or Hoquet. The nature of this device is partly indicated by its name. It consisted essentially in a sudden hiatus in the voice-'truncation' is the word used by the theorists-governed by the rhythmical mode of the passage. Thus, in modes consisting of longs and breves either the long or the breve is omitted in the hoquet from its proper situation, and this is signified in the written music by an equivalent pause; moreover, for the sake of continuity, the hiatus created in one voice is filled by another, and in general if one voice omits the breve the other is silent in the place of the long ${ }^{1}$, thus:-


[^76]In our examples of conductus the hoquet will be found in its most simple form, that is to say in the fifth mode of rhythm -in which the hiatus is always of the value of a perfect longand in very short passages, but from the treatises and compositions of the Franconian period we may discover that it was afterwards much cultivated, and brought to express the truncation of breves ${ }^{1}$.

No specimens of conductus quadruplex written in the classical form have as yet been observed in the Florence MS., and this circumstance to some extent confirms the doubt with respect to their existence which was expressed by the Anonymus of the British Museum. The specimen given from the MS. among the pieces here following exhibits apparently an earlier phase of the form than that which is displayed in the examples for two and three voices, since not only the music of the text, but the cauda also, seems to be written in the older method in which each group of notes equals the long. The discordant passages of consecutive sevenths and seconds which occur before the close must probably be accepted as a recognized feature of important compositions in four parts, since a similar device occurs also in the same situation, in our example of organum quadruplum.

[^77]

## Conductus Duplex.

pater NOSTER COMMISERANS.
Bibl. Mediceo-Laurenziana,
Plut. 29. I, fol, cclexviii ${ }^{\text {b }}$.




pe - na.




-     -         -             -                 -                     - tar. Qui

${ }^{1}$ Thus in MS.





${ }^{2}$ Thus in MS.




-     - . - - - . tans, et tra - dit



${ }^{1}$ Thus in the MS.



It is evident from this specimen that the scheme of the conductus includes (though the treatises do not mention the fact) a point of organum purum upon the penultimate note of important divisions of the composition. In the following example, which is by the great Pérotin, this device is again seen, used moreover in great variety, and also much more frequently than in the specimen before us.

Pérotin also, it will be observed, uses the pause of the perfect long less often than the composer of Pater Noster, and thus creates constantly a fullness and continuity of sound which is often noticeably wanting in compositions such as this just given, in which the long pause is much employed.

## Conductus Duplex.

DUM SIGILLUM.



WOOLDRIDGE





> - - - tus; nec si - gil - lum




METHOD OF MUSICAL ART









1 'Sunt quidam boni organiste et factores cantuum qni non regulariter inxta considerationem predictam ponunt discordantias loco concordantie vel concordantiarum. Et hoc per quamdam subtilitatem ponimus punctorum sive notarum et sonorum, sicut tonus ante perfectam concordantiam, sive fuerit penultima vel aliter, quoniam recta regula est.' Anon. B. M., Cousse. Script i. 358. 'Si penultima fuerit tonus in duplo supra tenorem, ut in organo puro, optime erit concordans, quamvis tonus non sit concordantia.' Ibid. This note applies also to many other passages of these examples, which the reader will discover for himself.

. . . sunt








## Conductus Triplex. SALVATORIS HODIE.

Bibl. Mediceo-Laurenziana,


| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
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METHOD OF MUSICAL ART


$296 \quad$ method of musical art






DISCANT OR MEASURED MUSIC











DISCANT OR MEASURED MUSIC



Conductus Quadruplex.
VITUS ABIT.






If we may define the conductus, in accordance both with the statements of the theorists and with the examples just given, as essentially a composition of equally free and flowing melodies in all the parts, in which the words are metrical and given to the lower voice only, we should necessarily include in this kind of music our former examples Verbum bonum, Agnus fili, and Custodi nos, which, if they be conducti, fall naturally into the subdivision sine cauda. These examples may therefore perhaps constitute our specimens of this class as it exists in the French collections. One more of the simple kind, written upon the hymn Veri Floris, will now be given from an English source, and a few others, also existing in our English libraries, which seem to display a tentative approach towards embellishment, and which therefore perhaps may be included in the subdivision cum caudis, will accompany it. Though derived from English sources these compositions, with one exception, display little variation from the French manner, and might very well be of French origin; but with regard to the single exception, which is undoubtedly by an English composer, since it is written to English words, a remarkable difference from the French manner is perceptible-a difference, it may be said, which is equally to be perceived in all specimens of the distinctly English music of this period which have been preserved. We here find ample proof of the predilection for the imperfect consonance of the third which was ascribed at this time to the English composers, and we may observe a method-peculiar apparently to our country-a symmetrical crossing of groups of notes, giving for instance $f g a$ in one part and $a g f$ in the other-which seems to have been designed in order to ensure their constant appearance. We may note, moreover, as characteristic of the English music, that the composition is written in one of the most usual ecclesiastical modes-in this case the seventh-but with $B b$ at the signature.

## Conductus Duplex.

VERI FLORIS.
Mus. Brit. MS. Harl. 524.




cum, Pre ter u - sum la - i - cum, Sen - sum tra

? Conductus Duplex.
0 LABILIS 0 FLEBILIS.

prim - or - di 0 . . Ten dat ad non



* MS. illegible.



Conductus Duplex.
exultemus ${ }^{1}$.
Cambridge Univ. Lib.
MS. Ff. 1 , I7.

${ }^{1}$ It will be observed that the Latin stanza here given is complete in itself, and that the French phrases (which it may be said occur in all the stanzas of this hymn in the same situation) are interpolated.


## Conductus Triplex.

 SALVE VIRGO.Mus. Brit. MS. Arundel 248.




Conductus Duplex.

## QUEN OF EVENE.

Mus. Brit. MS. Arundel 248.

$\begin{array}{lllllllll}\text { 1. Quen } & \text { of . . } & \text { ev } & \text { ene } & \text { for } & \text { thi } & \text { blis } & \text { se } \\ \text { 2. Bring } & \text { hus . } & \text { mo } & \text { der } & \text { to } & \text { thi } & \text { so } & \text { - ne }\end{array}$


No compositions clearly to be identified as conducti and noted in accordance with the later settled rules have as yet been discovered, and we are therefore at present unable to give specimens of this kind of music illustrating the periods either of the Francos or of Odington. But from the example, small as it is, supplied by the latter theorist in his treatise ${ }^{1}$,

[^78]we may perhaps gather that in his time a certain advance had been made-an advance in which probably all existing forms of composition shared-both in the character of the voice parts and in the general harmonic effect; for while the fragments of individual melody in that example may be said to display greater ease and independence of style than the earlier phrases, the harmony also is now apparently more complete, the common chord for instance being constantly employed in the place of the earlier bare fifth.

But although it is probable that with respect to the details of this kind of music, a certain amelioration might be perceived in later examples, if these could be discovered, it is not to be supposed that any structural improvement or general development indicative of life and progress would be observable, for there can be no doubt that already in the time of Odington both the great classical forms of composition-Conductus and Organum purum-had begun to suffer neglect, and were in fact passing out of use.

This may certainly be inferred from the statements of Odington's younger contemporary Jean de Muris, who in his great panegyric upon the older music-written about the middle of the fourteenth century, and probably soon after the death of the elder theorist-deplores the complete abandonment at that period of Organum and Conductus, and reveals, as regards the first of these, the almost entire ignorance of composers with respect even to its method. The Motetus he says and the Cantilena now engaged exclusively the attention of musicians; the old forms were quite laid aside, and, together with their authors, were treated with open contempt by the less able and less energetic musicians of the day ${ }^{1}$.

[^79]With regard to one of the two kinds of music mentioned by De Muris as usurping in his time the position formerly held by Organum and Conductus,-the Cantilena,-we are without exact information. That it was at that period no new form is evident from the reference to it in a passage already quoted in this work (p. 176, note) from Ars Cantus Mensurabilis; notwithstanding this fact, however, the definition of its distinctive character is nowhere to be found. From the coupling of the Cantilena with the Rondel, not only by the author of Ars Cantus Mensurabilis in the passage just referred to-in cantilenis in rondellis et in cantu aliquo ecclesiastico-but also, and with a significant addition, by Jean de Muris-in conductis in motellis in fugis in cantilenis vel rondellis-it has been supposed that the cantilena and the rondel were practically identical, but written in the one case to sacred and in the other to secular words ${ }^{1}$. But the evidence seems scarcely sufficient to support the conclusion, and the supposed distinction at least entirely disappears if we consider that in the rondels that are best known-those of Adam de la Hale, the illustration given by Walter Odington in his chapter 'De Rondellis,' and the great English example 'Sumer is icumen in,' we find in the first case secular words, in the second sacred, and in the third both. This fact, however, does not touch the question respecting the musical identity of the two forms, which must still remain for the present undecided.

The method of the rondel is described by Walter Odington as follows: 'Let a melody, with or without a text, in one of the regular modes of rhythm, and as beautiful as possible, be devised, and let each voice sing this in turn. And at the same time let other melodies be devised to accompany it in the

[^80]second and (if there be three voices) in the third voice; let them proceed in consonances, and so that when one voice ascends another descends, and let the third not follow too closely the movement of either of the others, excent verhaps for the sake of greater beauty. And let all of these melodies be sung by each voice in turn ${ }^{1} \cdot$ His illustration of this theory is as follows:-

## Rondellus.

De Speculatione Musice, cap. De Rondellis.


[^81]

From this it appears that the Rondel of the learned composers was not, as following the analogy of the contemporary English Rota and the Round of more modern times we might perhaps have been inclined to suppose, a Canon, in which all the voices sing one melody, each entering upon it at regular intervals after the leader. Here the voices begin together, each singing its own melody, which is afterwards exchanged for that of some other voice; moreover, when the three original phrases have been sung by all the voices in turn their capabilities are seen to be exhausted, and fresh subjects are then invented and treated in the same manner as the first. The method, therefore, differs considerably from that of the canon, yet the final audible result is much the same-a species of double counterpoint, that is to say, in which each phrase of the music is displayed in three situations and in three different relations.

It should, however, be remarked that the true effect of double counterpoint would only be produced by those choirs in which the various parts were sustained by voices of various pitchtenor, counter-tenor, and treble for instance, or bass, tenor, and counter-tenor-as in more modern music.

That this method of execution by unequal voices existed, probably side by side with the more simple one indicated by the clefs employed, seems clear from several passages in the contemporary treatises, and chiefly in those of Jean de Garlande and the Anonymus of the British Museum (Royal MSS.). The account given by the Anonymus may perhaps be considered as decisive. He says: 'It is to be observed that three methods are adopted by discantors properly so called. The first method is by close proportions, and in this the discant keeps within the range of a fourth or fifth from the tenor; another makes use of the more remote proportions, which are contained within the range of an octave from the tenor; the third employs proportions still more remote, extending to a twelfth, a double octave, or even more, beyoud the range of the tenor ${ }^{1}$.' The first of these methods seems to apply either to duplum or to equal voices in greater number; the other two can only refer to unequal voices, and in fact describe the respective situations of the third and fourth parts, triplum and quadruplum. Of the more remote ranges, such as the triplex diapason for instance, the author says that they were rarely written for voices, but that they were commonly employed in playing upon organs, and also that even wider ranges still were possible to stringed and the smaller wind instruments, or upon the 'well-tuned cymbals ${ }^{2}$.'

[^82]No examples of the rondel entirely composed in the manner of Odington's model have as yet been brought to light, nor can we even be said to be acquainted with any works at all bearing that name, except those of Adam de la Hale. These are of great interest in many respects, but in their examination we experience a disappointment. Considering their date-for Adam de la Hale was a contemporary of the two Francos-it might well be expected that these compositions ${ }^{1}$ would throw some light upon the earlier practice of this kind of music -the rondeau as their author writing in the vernacular calls it-and we look with interest for some sign of the special treatment peculiar to it. Nothing of the sort, however, is to be discovered. We find the rondeau exhibited in two kinds, one of which is distinguished by its extreme brevity while the other is of moderate length, but it is evident that both derive their only title to their description from their text, which is in fact sometimes written in a rough kind of poetical rondeau form, and is in all cases apparently subject to a method of continued repetition to the same music, which might thus proceed interminably; musically speaking they are not rondels at all, but simple three-part songs, containing no interchange of melodies whatever, and no imitation except such as occurs within the limits of each separate part, from the repetition of its own phrases, in accordance with the poetical scheme of the text.

The briefer kind of rondeau may be exhibited in the following characteristic example, from a MS. in the Library of Cambrai, given in facsimile by M. de Coussemaker in his Histoire de l'Harmonie au Moyen Age.

[^83]
# Rondeau. <br> hareu li maus. 

Bibl. de Cambrai.

> Adam de la Hale.

> ${ }^{2}$ Hareu li maus d'amer M’ochist Il me fait desirer
> Hareu li maus d'amer
> Par un douch regarder
> Me prist
> Hareu li maus d'amer
> M'ochist.

It would, of course, be perfectly possible to sing this music in canonic imitation, in the manner of the modern round, and the extreme brevity of the composition even suggests that it may have been treated in that manner, since otherwise the performance would have been finished within a few moments from the time of its commencement. This supposition cannot, however, be insisted upon, for it will be obvious from the example now to be given that the more extended kind of rondeau will not admit of a similar interpretation.

[^84]
## Rondeau.

## FINES AMOURETES.



We may of course with certainty include among the rondel forms of music the great English Rota (as it is called by its author), 'Sumer is icumen in,' so often mentioned by historians and with ever increasing surprise and admiration. It will here be shown both in the shape in which it stands in the original and also in that which it exhibits in performance according to the author's directions. And first we may examine the copy of the MS.

MS. Harl. (B. M.) 978 , fol. $11^{\text {b }}$.


Su-mer is i - cum-en in, . . Lhude sing cuc-cu. Growep sed and bloweb
Per-spi-ce chris-ti-co-la que dig-na-ti-o, Ce-li-cus a-gri-co-

med and springble w-de nu Sing cuc-cu, Awe ble-tep af -ter la pro vi-tis vi-ci o Fi-li-o Non par-cens ex-po-su-

lomb, Lboup af - ter cal - ve cu. Bul-loc ster -tep, bucke ver-teb it Mor-tis ex-i-ci o. Qui cap-ti-vos se mi-vi-vos



Hanc rotam cantare possunt quatuor eocii. A paucioribus autem quam a tribus vel saltem duobne non debet dici preter ece qui dicunt pedem. Canitur autem aic: Tacentibus ceteris, unus inchoat cum hie qui tenent pedem; et cum venerit ad primam notam post orucem inchoat alius, et aic de ceterí. Singuli vero repausent ad pausaciones ecriptas, et non alibi, epatio unius longe note.


This amazing production, the sole example probably of its species, which exhibits the leading qualities of this kind of music, ingenuity and beauty, in a degree still difficult to realize as possible to a thirteenth century composer, unites two distinct technical methods, namely that of Odington, and that which was suggested as possible in the case of the short rondeaux of Adam de la Hale. Odington's method is seen in the music of the two lower voices ; for this, consisting as it does of two melodies which begin together and are afterwards repeatedly interchanged, constitutes a true rondel, though restricted to the original subjects and in two parts only. The method on the other hand which was suggested as possible in the shorter rondeaux of Adam de la Hale is seen, though now upon a magnificent scale, in the four upper parts. These display a true canon in the unison; since the melody, consisting of two independent stanzas, is begun by the leader alone, and taken up by all the rest in turn, each entering at his appointed interval of time and upon the same note of the scale. There is no break in the canon, which is strict throughout, and ceases
only with the last note of the complete melody, sung by the leader. The melody of the canon is in the first mode of rhythm, alternate long and breve; that of the rondel or pes is in the fifth mode, all longs-with the exception of the binary ligatures; and in both cases the long pause, the pausa debita of both modes, is employed.

Although the original MS. copy of this composition has often been made the subject of description and comment, one remarkable feature, the alteration that is to say which has taken place in the notation of certain portions, may perhaps still be referred to with advantage.

There are two kinds of alteration in the MS.; alteration after erasure, and alteration without erasure. The alterations of the first kind were described by Mr. Rockstro, but with no account of their effect upon the composition, in his article upon the Rota published in Sir G. Grove's Dictionary of Music; and in the notes to the Plainsong Society's volume, Early English Harmony, edited by the present writer, attention was also briefly drawn to the alterations without erasure. Both kinds may now be rather more fully discussed.

We may take the latter kind first. It is evident, from a consideration of the alterations without erasure, which by a more or less adroit stroke of the pen have transformed certain lozenges into longs, that the rota when originally set out upon the page contained very few longs. The notes which occupied the space of a 'perfection,'-those of the pes and of its echo in the canon, and the notes at the end of sections,-were alone written according to their real value as longs; all the rest of the music, which is in trochaic rhythm, was expressed, except in the case of the two ligatures in the pes, by means of simple lozenges. The notes of the greater part of the composition therefore had no value of their own, but were intended merely to indicate the place of the sound in the scale, the fixed metre of the words supplying the necessary measures of time. This method-which appears also, applied
sometimes to exceedingly complicated metres, in the Florence MS.-is obviously closely allied to that of plainsong, and must therefore be of great antiquity; and although it would certainly be rash to assume that this fact affords any reason for supposing the MS. to be of an earlier date than that now generally assigned to it (about 1240)-since upon this point the palaeographical evidence may be considered as conclusive-the appearance of this ancient method in the first writing out of our example may well suggest a doubt with respect to the composition of the rota itself, which has hitherto been supposed to be not only of the same date as the MS. in which it is found, but the actual invention of the writer whose hand has preserved it.

The erasures, and subsequent alterations of the melody, may perhaps be ascribed to the reformer of the notation. They are probably not earlier, since their author, though he still writes lozenges for breves ${ }^{1}$, expresses the long note of the rhythm by means of its proper figure.
The alterations of both kinds may perhaps best be shown in an attempt to restore the canon to the shape in which it first appeared in the MS.; and this may be compared with the illustration of its present condition just given on p. 326 .

Probable form of the Canon before the Alterations.


Su-mer is i-cum-en in,
Lhude sing cuc-cu. Growepsed and hloweb Per-spi-ce chris-ti-co-la que dig-na-ti-0, Ce-li-cus a-gri-co-

[^85]
med and springp the $w$ - de nu. Singeuc-cu, Awe ble-tep af - ter la pro vi tis vi-ci o fi-li o Non par-cens ex-po-su-

mu-rie sing cuc-cu. Cuc-cu cuc-cu, Wel sing-es bu cuc-cu ne swik a sup-pli-ci = $\quad$ Vi - te do-nat, et se-cum co-ro-nat in ce-

(Hoc repetit unus quociens opus est, faciens pausacionem in fine.

Sing cuc-cu nu. Sing cuc-cu.


Hoc dicit alius, pausans in medio et non in fine, sed immediate repetens principiam.

Sing cuc - cu. Sing cuc-cu nu.

* Notes afterwards erased and replaced by others.

The alterations of the melody-which it will be seen are with one exception confined to passages near the closethough naturally of considerable interest, are not of very great importance ; all are in some sense improvements, but none can be said to affect the essential form of the work, which was as distinct before they were made as it is at present. It is evident, therefore, that this famous page of MS. does not present to us, as has sometimes been supposed, a record of the writer's efforts towards the transformation either of an original subject or of some previously existing melody into a canon, since the music already apparently displayed an almost perfect specimen of this form of composition when it was first written down.

And here, before passing on, we may refer for a moment to the character of the melody, which, joined to the bucolic sentiment of the poem, is so largely responsible for another prevailing notion with respect to this composition, namely that the subject of the canon, whether actually manipulated in the existing MS. or not, is probably a popular pastoral song which has been adapted to a contrapuntal purpose. We now see that this popular and pastoral character may very well be purely accidental; for in the specimens of Organum purum, for instance, and of the Conductus, which have been given in the present work-and especially in those of the measured portions of Organum-we may find in abundance passages exactly similar in character to those of the rota. All that we can say therefore of the lilting phrases of the rota is that the character which they display would appear to be that which is natural and proper to the first or Trochaic mode of rhythm, since it seems to be necessarily developed by that mode in every kind of music in which it is employed, whether ecclesiastical or secular.

The rendering in modern notation of the music of the rota, which next follows, has been influenced in one or two respects by a consideration of the fact that the emphatic rhythm of the melody was originally expressed by signs destitute of mensural
value, and that the trochaic metre of the poem affords the only key to the notation. In this point of view it has been considered probable that the binary ligatures with propriety and perfection which are employed in the composition should be translated as trochees, and not according to the settled mensural rules, which would interpret them as iambi ; and this view is apparently sanctioned by Jean de Garlande, a theorist contemporary with the writer of the MS., who systematically employs such ligatures to express trochees in one of his illustrations of the first mode of rhythm, the mode in fact in which, as has been said, the canon is written. Furthermore it has been considered that the little figure which occurs immediately before the cross, consisting of three lozenges of which the first has an oblique tractus, should also, as part of the original notation, be translated apart from mensural rule and exhibited as three equal breves. It will be found that these departures from recent custom create improvements not only in the rhythmic flow of the comvosition but often also in the harmonic effect.

Concerning the authorship of the rota and its place of origin nothing entirely convincing can be said at present. It seems indeed very possible that the page of MS. which contains it may have been written in Reading Abbey, and that the alterations may also have been made there; it is even possible that the writer of the MS. may have been-as is now generally supposed-one John of Fornsete, though it must be confessed that the evidence upon which this attribution rests appears upon consideration to be somewhat fantastic. The identification of the scribe, however, is of no real importance unless it can be shown that the invention either of the canon, or of the alterations, or both, is due to him, and this, though suggested, has not as yet been satisfactorily demonstrated ${ }^{1}$.

[^86]
## Rota.

## SUMER IS ICUMEN IN.

Mus. Brit. MSS. Harl. 978.





CLOSING PORTION OF EARLIER VERSION.

wooldridge
Z


Two forms of composition still remain to be noticed, Organum communiter sumptum, and the Motett.
As regards the first it must be said that its nature cannot at present be indicated with certainty. Hitherto we have been fortunate upon the whole in our identifications; but the circumstance through which we were enabled partly to define and to exhibit Organum purum and Conductus-namely the mention in a contemporary treatise of individual compositions still in existence, as examples of those forms, has no parallel in this occasion, since no writer refers to individual compositions of Organum communiter sumptum. Indeed the only definite mention of this form by name, which occurs in Ars Cantus Mensurabilis, is purely general, and of no use to us in the absence of specimens; while on the other hand, in the music itself of this period which has been preserved, we do not at present perceive any class of works which might appear from their nature to constitute the examples of which we stand in need.

Organum communiter sumptum is included by the author of

Ars Cantus Mensurabilis among those forms of composition in which all the parts have the same words ${ }^{1}$, and is further defined as ' an ecclesiastical cantus measured in time ${ }^{2}$ '; it is contrasted moreover with Organum purum vel proprie sumptum, in which only the tenor has words and the notes of the plainsong are of indefinite length. Yet it is not to be found, as we might perhaps have been inclined to suppose, in the measured portions of such compositions as Iudea et Ierusalem or Constantes estote, since these do not fulfil the requisite conditions with respect to the words; nor, considering that organum communiter sumptum is probably the same as the organum rectum of Jean de Garlande ${ }^{3}$ and the 'pure' organum of Discantus Positio Vulgaris ${ }^{4}$, can we safely identify it with the old ecclesiastical organum of note against note in concords and contrary movement, since organum rectum and 'pure' organum would seem to be clearly described in the treatises as displaying the plainsong in perfect longs, and the discant in imperfect longs and breves. It must be confessed, however, that this method also would seem to be inconsistent with the employment of the same words in all the parts.
It would serve no useful purpose, in the present state of our knowledge, to discuss this matter further; we may proceed therefore at once to the examination of the motett, concerning which, fortunately, our information is if not exhaustive, at least comparatively considerable.
The motett was distinguished, apparently, by two well marked peculiarities, one of which is indicated in Ars Cantus Mensurabilis, where in the list of musical forms Motetus appears as the only member of a class in which each voice has its own special words, and the other in the earlier treatise Discantus Positio Vulgaris, where this kind of composition is said to be made upon a measured cantus firmus whose notes are arranged in certain fixed forms ${ }^{5}$. This latter view is also

[^87]that of Walter Odington, who moreover adds the information that the substance of the tenor must be some known song ${ }^{1}$. A separate text for each voice, then, and a tenor arranged in definite recurring figures, are the distinctive features of the motett ; and of these the latter, as most important in our immediate point of view, may first be considered.

Two examples of the tenors of motetts, displaying fixed recurring forms throughout, have already been given in this work ( $p \mathrm{p} .143-4$ ), and in the remarks also by which these were accompanied a motive was suggested for the employment of the method, namely the desire to communicate life and meaning to melodies without words, in metrical rhythm. The actual appearance and probable intention of these fixed figures, therefore, being to some extent known to the reader, we may proceed to demonstrate the system of which they are a part, and through which alone they perform their office.

This system was known to the treatise writers as the system of ordines, or regular arbitrary dispositions of the contents of the rhythmic mode. It corresponds roughly to the poet's treatment of the metrical part of verse, and consists in a demarcation of the contents of the mode, by means of pauses, in sections of various length; and thus the metre is brought to express, apart from words, distinct and intelligible ideas.

The nature of the process may be indicated in the following manner:-


It will be obvious that here two kinds of musical ideas, represented by the first and third of these ordines on the one hand and the second and fourth on the other, are expressed; in the first kind the phrase ends with the second or weak beat of the foot, while in the other it returns to the first or strong

[^88]beat; and since the idea conveyed by the latter method is the more complete and satisfactory of the two, a mode divided into ordines of this construction is called perfect, while the opposite method, in which the ordo ends with the weak beat, constitutes the mode as imperfect ${ }^{1}$. The effect produced by the application of this system to melodies in the first five rhythmic modes is here shown.

## ORDINES OF THE MODES PERFECT AND IMPERFECT.

> Ordo I.

Perfcet. First Mode.

[Balactm.]
Imperfect.

$\& c$.
Perfect.

## Second Mode.


[Balaam.]
\&c.
Imperfect.

\&c.
Perfect.
Third Mode.


Imperfect.

\&c.
${ }^{1}$ ( Modus perfectus dicitur esse, quandocumque ita est quod aliquis modus desinit per talem quantitatem vel per talem modum, sicuti per illam qua incipit. Dicitur modus perfectus, ut dicatur prima longa, altera brevis, et altera longa; et sic de singulis modis vel maneriebus. Omnis modus dicitur imperfectus quandocumque ita est, quod aliquis modus desinit per aliam quantitatem quam illam qua incipit; ut cum dicatur prima longa, altera brevis, altera longa et altera brevis.' J. de Garlande, Cousse. Script. i. 176 .

Perfect.
Fourth Mode.


Imperfect.



Imperfect.


> Ordo II.


Imperfect.

\&c.


Imperfect.

\&c.


Imperfect.



Imperfect.


Perfect.
Fifth Mode.

[Eius.]
Imperfect.

\&c.
Ordo III.


Imperfect.


Perfect. Second Mode.


Imperfect.


Perfect.
Third Mode.


Imperfect.



Perfect.
Fifti Mode.

[Eius.]
Imperfect.
 \&c.
Such then being the system of ordines or modal phrases which governs the external form of the tenor of the motett, we may next proceed to deal with the question which naturally arises respecting this part of the composition-what is the nature of its substance, and from whence is it derived ?

The question is answered by Jean de Garlande, who defines the chief points-the nature of the substance, its origin, and its relation to the external form, in precise though apparently enigmatic words. His account may first be given, and afterwards we may undertake its elucidation. 'The ordo,' he says, ' proceeds from an original, and the original from a root. The root consists of a given cantus ${ }^{1}$.' His example follows :-


Latus.
$\& c$.


Latus.


[^89]From this example we perceive that the author has taken a passage, apparently of plainsong, as his root, and, regardless of its former purpose and meaning, has rearranged it in a mode of rhythm; and in this form it becomes the original, from which ordines may be derived by means of interpolated pauses at proper intervals. The particular fragment of plainsong here utilized is evidently indicated by the word ' Latus,' and for the explanation of this we must go to the Anonymus of the British Museum, the commentator of Jean de Garlande ${ }^{1}$, who has dealt rather more fully than his master with this question, and who indeed actually describes the method of proceeding.

From the treatise of the Anonymus it appears that 'Latus' was the name of one of the tropes, or long florid passages of plainsong unbroken by pauses and taken upou a single syllable of text, which are found so frequently in the ritual music of the church; these received as names the syllables upon which they occurred in the ecclesiastical cantus, and retained them even after their conversion to the purposes of measured music. The words of this author are sufficiently clear. 'Take then,' he says, ' one of these tropes, such, for instance, as Latus which is obtained from the antiphon Immolatus est Christus, and write the notes down; then afterwards set them out in other figures, unless those in which they appear should be sufficient, as best suits the modal ordo that you desire.'
Elsewhere, in describing the composition of a discant in the first mode, the author gives an even more explicit account of the method. 'Let the tenor be thus: F, G, F, D, F, followed by the breve pause, then• $\mathbf{F}, \mathbf{F}, \mathrm{A}, \mathbf{G}, \mathbf{F}$, with the breve pause;

[^90]and by this we may understand the second ordo of the first mode to be intended. And it is called Omnes, like its root which is extracted from Viderunt Omnes; and so, being repeated twice, three times, or more, it will be sufficient so far as the tenor is concerned.' Below will be found the passage (from the Gradual for Christmas Day) to which the author refers, and also the tenor made from it according to his directions.


The repetitions of the subject here recommended are a necessary feature of the process. Few tropes were in themselves of sufficient length to serve as material for the whole of the tenor of a motett unless set out in very long notes, as for instance in the Motett Radix veniae, presently to be given in this work, where Latus appears in an extraneous mode composed of longs and double longs. As a rule, therefore, the subject was repeated at least once. This might be done either openly or in a disguised manner ; in the former case the ordines were so arranged that the last notes of the subject coincided with the conclusion of an ordo and the beginning of the next ordo with the first notes of the repetition, in the latter the end of the subject and the beginning of the repetition were made to occur within the limits of an ordo, thus effectually concealing the fact of repetition in the ordines which followed, and giving to notes already heard, in the same sequence as before but now differently divided, the appearance of complete novelty.
A few more examples of the tropes used as tenors, with their reconstruction in modal form, may be given.

## REGNAT.

From the Alleluia of the Assumption.


An Extraneous Mode founded on the Fifth.
From the Motett Flos de Spina, Montpellier MS., fol. $78^{8{ }^{\text {b }}}$.


## manere.

From the Gradual of S. John Evangetist.


Fifth Mode Perfect, first Ordo.
From the Motett Demenant Grant Joie, Montpellier MS., fol. 1 Ir ${ }^{\text {b }}$.



## LAQUELS.

From the Gradual of Holy Innocents.


Fifth Mode Perfect, second Ordo.
De Garlande's example.


But not only the long florid passages of ornament, without words, occurring in the music of the ritual, were made to serve as subjects for the tenors of motetts; the substance itself of the cantus also frequently performed this office, as will be seen from the following examples:-
${ }^{1}$ Two notes of the root have been omitted here.

## BALAAM.

Third Section of the Sequence Epiphaniam Domino.

ru ti-lans in-quit stel-la.
First Mode Perfect, first Ordo.
From the Motett $L i$ doz termines, Montpellier MS., fol. $249^{\text {b }}$.


ANGELUS.
Alleluia verse of Easter Monday.


First Mode Perfect, first Ordo.
From the Motett Gaude Chorus omnium, Montpellier MS., fol. 71 ${ }^{\text {b }}$.


1 This is the end of the subject and beginning of the repetition. Hera the fact is disguised, but at its next occurrence a few notes are altered in time in order to bring the subject once more to its original position, and so to a proper conclusion.

BEATA VISCERA.
Communion in Mass of the Assumption.


Fifth Mode Perfect, first Ordo.
From the Motett Beata Viscera, Montpellier MS., fol. $81^{\text {b }}$.


IN SECULUM.
From the Gradual of Easter Day.


Fourth Mode Imperfect, first Ordo.
From the Motett In omni fratre tuo, Montpellier MS., fol. $66^{\text {b }}$.


We have now obtained a fairly clear idea of the nature of the music written for the tenor in the motett. We recognize its origin in the ritual music of the Church, and we perceive the method also by which it has been brought to exhibit its characteristic form in measured music; we may therefore next proceed to consider for a moment the questions relating to the management of the words which belong to it.

The text of the tenor is represented almost always in the motett by a syllable, or word, or at most two words, placed under the opening notes, by way of indication. Yet we have seen that the quantity of text existing in the root from which the tenor is taken may vary considerably in different cases. It may in fact consist not only of a single syllable or a single word, but may also include a whole sentence, or even-as in Balaam-a complete section of a composition in which every note has a syllable of text. In what sense then are we to understand the guiding word in the tenor of the motett? Does it imply a reference to the complete words of the root, and are these, whether many or few in number, supposed to be sung throughout to their proper notes in the tenor, from the memory of the experieuced singer? Or is it to be taken literally, and are we to suppose that even when many of the notes in the original passage have words, only the initial or guiding word or phrase is to be regarded, and the whole of the tenor then carried upon a single syllable?

The main question may perhaps be decided by a reference to the fact that the tenor of the motett is invariably written, in all modes which admit of the practice, in ligature; even in the fifth mode, consisting of perfect longs, the first ordo of the perfect-a very popular form of tenor-was always, before the time of Franco, represented by the ternary ligature with propriety and perfection proper to the fourth mode. Therefore, considering that the existence itself of a ligature depends upon its representation of a modulated but unbroken sound, it is clear that a passage written in ligatures throughout is from beginning to end
'sine littera.' Nor does the separation of the ligatures by means of pauses appear to afford any means of escape from this conclusion, for even if we suppose the text to be now set out above the detached figures of the tenor, syllable by syllable, it is evident that the words in that case would no longer, except by accident, fall upon the notes proper to them in the plainsong ; the method, therefore, can scarcely have been permissible, since the relation of words and notes in the plainsong would seem to have been always strictly respected by the composers of mensural music. It would appear then as probable that the words in a root containing much text were abandoned, and the tenor merely vocalized, as in those cases in which the subject was derived from a single syllable of the cantus.

In a third class of subject, however, with texts that is to say of two or three syllables only, we may perhaps perceive the possibility of a different treatment. It seems not improbable, for instance, that in such tenors as those in our examples corresponding to the roots $L a--t u s, O m-n e s$, Reg - nat, both syllables may have been sung in their proper places upon the first and last notes of the passage. This notion is suggested by a method of writing the guiding word which has been adopted in the Florence MS. There, for instance, in the tenors formed upon the roots Tan - quam, Quo - ni, $L a-$ - tus, the two syllables are written under the first and last ordines of the notation, as in the plainsong. In Bethleem, however, Doce, and Nostrum, are given, like the titles in M. de Coussemaker's extracts from the Montpellier MS., at the beginning of the tenor, the syllables not divided.

As regards the treatment of words of three syllables, we again apparently have the authority of the Florence MS. for supposing that the arrangement in the plainsong might be followed. We there find a tenor, Glo--ri-a, in which the first syllable carries the whole of the theme except the last two notes, which are received by the final syllables; and this also is the arrange-
ment of the corresponding plainsong. We may therefore not unreasonably suppose that in our examples founded upon the roots $M a-n e-r e: .$, , $L a-q u e-u s, \ldots$, the first two syllables might be given to the corresponding notes of the tenor, and the remainder of the passage vocalized upon the third syllable, as in the plainsong.
We may conclude our notice of this subject with a very striking example of the possible utilization of three syllables in the tenor, which will be found in the Florence MS., fol. $383^{\text {b }}$. It will be observed that the second syllable is differently placed in root and tenor, but the difference is probably not intentional, and is moreover quite unimportant.

## DOMINO.

From the Gradual of Easter Tuesday.


The tenor of the motett, then, being provided according to the method just described, the discant was next made upon it, and afterwards the triplum, or upper part. Respecting the nature of these parts there is little that is new to be said. Their phrases still display the bold metrical rhythms, to which we have become accustomed in other forms of composition, rhythms

[^91]more striking in character and more obviously suggestive of poetical words than those which were as a rule adopted for the tenor. But in other respects-in the relation of the upper parts to the tenor, for instance-certain peculiarities may be observed, which, considering that the motett was the only form of serious composition of this period destined to survive, are interesting, from their revelation of something approaching a capacity for development in the form itself, and a sense of purely musical arrangement in the composers.
The first of these peculiarities to be noticed, since it is characteristic of the earliest examples, is the close correspondence between the tenor and the upper parts in respect of phrasing. The phrase or section of the upper parts is made to correspond generally to two figures of the tenor, so that the tenor pauses alternately alone and in company with the discant and triplum; sometimes, however, all the voices pause together after each figure of the tenor, and sometimes only after three or four, according to the length of their respective phrases. And this in the earliest period seems to have been the only existing notion of a method for establishing musical relationapart from that which exists through the harmonic agreementbetween all the parts. In the two upper parts we again find the mutual relation created by occasional imitation and interchange of phrase with which we are already familiar in organum and conductus, but nothing of this sort exists between the upper voices and the tenor.

A relation of another kind between the tenor and the upper voices is, however, sometimes created through the words of the various parts in the motett, by means of a periodical simultaneous agreement in the vowel-sounds uttered by the voices. An instance of this may be seen in the second of our illustrations here following, the Motett Qui servare, where the tenor vocalizes throughout upon the syllable $H e$; it will be observed that in the poem which was afterwards written to accompany the discant of the motett, in the long syllable at the end of
each section of the composition, the same vowel-sound, $e \ldots$, is always clearly to be perceived. This practice, however, is by no means common.
Not all the questions relating to the text of the upper parts are strictly relevant to our subject ${ }^{1}$, yet it may be said that probably we ought not to suppose that the motett sprang at once into complete existence in the form described in the treatises,-as a composition that is to say in which all the parts have different words. Following the most direct analogy, and remembering the evidence which exists in all the music of the early period that we have seen of a strong love of vocalizing discant, we might even indeed almost suppose that the words in the motett were at first only to be found in the tenor ('for the tenor,' says the author of Ars Cantus Mensurabilis, ' is to be considered as a text '), and that the remaining part or parts were sung, like those of organum and conductus, merely upon some vowel. Later probably, in that case, a text was carefully composed to suit first the suggestive metrical figures of the discant, and afterwards those of the triplum. Later still the whole method of providing upper parts was enlarged, and the composers of motetts, in their advance to welcome every exercise of musical ingenvity, often renounced the composition of original discant, as if it were child's play, and engaged themselves in the far more difficult task of adapting the notes of already existing songs as discant to the figures of the tenor; and with the notes of these songs they took the words also.

The oldest examples of the motett which we possess are apparently those contained in the Florence MS. They are of great interest for two reasons. In the first place they would seem to illustrate a period in the history of this form in which the fully composed motett has received words in the discant voice, while the triplum still vocalizes; and thus they may be

[^92]














supposed to lend support to the hypothesis just suggested above. In the second place they afford a striking example of the ambiguous system of notation. We have already pointed out that the Rota 'Sumer is icumen in' was probably first written almost entirely in signs of one kind, and consequently without special value, and that a mode of rhythm supplied the key to the 'longitude and brevity' of the notes to be sung. The same system is to be seen in these motetts, which are written entirely in longs, except where two sounds are to be given upon one syllable, when the notes are shown in ligature. At first the reader is somewhat bewildered, but assuming that in the upper parts the first mode of rhythm is generally intended as the basis of construction, the compositions may be translated with little difficulty.

## Motetus.

## HOSTEM SUPERAT.

Bibl. Mediceo-Laurenziana,
MS. Plut. 29. I, fol. cccci ${ }^{\text {b }}$.



## Motetus.

## QUI SERVARE PUBEREM.

Bibl. Mediceo-Laurenziana,
MS. Plut. 29. r, fol. ceclxxxi ${ }^{\text {b }}$.




Motetus.
in bethleem.
Bibl. Mediceo-Laurenziana,
MS. Plut. 29. I, fol. ceclxxxii.



* Thus in the MS. Passages of this kind frequently occur. It will be observed that in the great majority of cases the discantus is consonant, and that the dissonance is in the triplum.




## Motetus.

## DEO CONFITEMINI.

Bibl. Mediceo-Laurenziana, MS. Plut. 29. I, fol. ccclexxiii.


* Thus in the MS.

* Thus in the MS.


## Motetus.

LAUDES REFERAT.
Bibl. Mediceo-Laurenziana;
MS. Plut. 29. I, fol. ccelxxxiji ${ }^{\text {b }}$.


* Thus in the MS.

$$
\begin{aligned}
& 020, \cos ^{2}
\end{aligned}
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## Motetus.

RADIX VENIAE.
Bibl. Mediceo-Laurenziana,


## METHOD OF MUSICAL ART





These motetts belong apparently to the early historical period which saw the transition from equivocal to measured notation, a period which may perhaps be said to have been closed by the treatise "Discantus Positio Vulgaris, and in passing from them we note, as their chiefly remarkable characteristics, the strictness with which the system of ordines is maintained in the tenor, and the freedom and apparent spontaneity of the melodies composed upon the rigid formulae of the ecclesiastical theme. In the examples belonging presumably to the later period which begins with Discantus Positio Vulgaris and is closed by the works of the Franconian period, we may already from the beginning perceive certain changes in these respects, changes at first seen only as indicating a tendency towards revision of the method, but afterwards even affecting the actual structure
of the composition. Structural change was not to be observed, so far as we were able to see, in any shape in the more hieratic kinds of music, in organum purum that is to say and in conductus, and its appearance in the motett may be taken probably to denote an especially strong and progressive vitality in this form of composition.

The first change to be observed relates to the old method of establishing relation between the tenor and the upper parts, by means, that is to say, of the coincidence of pauses, and consists in the liberation of the upper part from the common obligation ; the discantus now therefore still pauses with the tenor, while the triplum wanders at will. This method is seen in our example Gaude chorus omnium here following, in which also is to be observed a very early instance of a Freuch triplum, probably adapted from a current song.
The next innovation consists in the liberation of the discantus and the consequent abolition of all coincidence of pauses, except such as may occur by accident. Yet the notion of a formal relation between the tenor and the upper parts was not yet given up; it now appears in the form of a coincidence between certain phrases in the upper parts and certain figures in the tenor. The tenor, it will be remembered, consists of an ' original' set out in modal figures and repeated as often as may be necessary. Any figure of the tenor may be selected as the subject of this kind of coincidence, which is then created by the singer of the discantus, who, at each repetition of the tenor original, accompanies the selected figure by the phrase of discant which was first composed for it, the remaining figures receiving fresh discant. The coiucidence, like the repetition of the tenor original, may take place either directly or indirectly; in the latter case the original phrase of discant appears in its repetitions in a different part of the scale from that which it occupied at first. This device, in which the triplum sometimes participates, is shown in our examples Virgo decus and Veni sancte spiritus, and in the latter imitations and
interchange of phrase betweeu the two upper parts are also seen.

As we approach the Franconian period important signs of change become manifest. The most significant of these probably is the evident desire for greater freedom in the tenor. The short modal ordines begin to disappear, the subject is disposed in long phrases unbroken by rests, and is sometimes introduced and followed by notes not in the original, while during the Franconian period itself the root of plainsong was often abandoned, and a passage, with its words complete, from some French song, served as the groundwork of the motett.

In our illustrations of this period, the example Alle psallite cum luya probably marks-if it be really a motett-the highest point attained at this time in purely formal writing in this kind of music. The principle of interchange which we have already often seen in casual operation in the older forms is here treated systematically, and now supplies the single motive for the complete composition; the general treatment also of the work, which begins in a simple manner and becomes more and more rich as it proceeds, displays an idea of musical effect apparently unknown to the older composers. The tenor, it will be observed, is freely treated; each of its three phrases being of different length, and each once repeated in order to receive the inverted discant of the upper parts.

Our illustration $A$ Paris affords an example of the employment of a long passage, with words, from a French song, in place of the figured tenor, and in Li douz penser we see the whole of a song, with its words, brought into the lower parts. This destroys the principle of the tenor and creates a complete similarity between all three parts of the motett-except that probably in the lower part the subject is given intact, while in the upper parts the original melodies have no doubt suffered considerable alteration.

The result of the method of adaptation of existing work, in preference to that of original composition, is seen in the bald
and uninteresting character of the upper parts in the later motetts as compared with those in the work of older times. In the work of the earlier period we were at least able, in the absence of harmonic beauty, to find satisfaction in the simple and pleasing melody of the individual parts; in the new method however, which excludes original composition and substitutes for it a process of constant expansion or compression of a given subject, the greater part of such beauty and character as the original song may have possessed is lost. It is difficult indeed, in examining the motetts of this latest period, to say in which of their characteristic features their musical merit can have been thought to consist, for the melodies are less agreeable and the harmony is no better than before; and we are in fact only deterred from regarding such motetts as A Paris and Li douz penser as decadent by our conviction, again and again confirmed, that in a period of healthy and growing art, such as this with which we are at present engaged, no movement is retrograde and no effort sterile, but that all forms and phases of production, having their reason in the natural constitution of the art which they illustrate, are both necessary and beneficial.

## Motetus.

## GAUDE CHORUS OMNIUM.

Lib. of Medical Faculty, Montpellier;
Quoted in
Discantus Positio Vuligaris.
See Cousse. Script. i. 96.


Angelus.

n'a de moi gre - ver, fors que veutestre amie a tel qui lipuist do-ner.




Motetus.
Virgo Decus.
Lib. of Medical Faculty, Montpellier; MS. H. 196, fol. $96^{\circ}$.

Quoted in Discantus Positio Tulgaris. See Cousse. Script. i. 96.



cep - ta ven - i a per-du - cat nos ad gau - di - a.


## Motetus.

## VENI SANCTA SPIRITUS.

Lib. of Medical Faculty, Montpellier ;
MS. H. 196, fol. $9^{22}$.




## Motetus.

## alle psallite.

Lib. of Medical Faculty, Montpellier ;
MS. H. 196, fol. 39.2.




Motetus.
A PARIS.
Lib. of Medical Faculty, Montpellier;




## Motetus.

## LI DOUZ PENSER.

Lib. of Medical Faculty, Montpellier ;


Qui a-mours veut main te - nir, Et ser - vir, loiau-mentsansfaus-


rer. Hé! a - mou - ret - tes m'oc - ci - res - vous * Thus in the MS.

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END OF VOL. 1.


[^0]:    : 'Why is symphonous singing (antiphony) more agreeable than Homophony ? Is it not because antiphony is the consonance of the octave? For antiphony is born of the voices of young boys and men whose tones are distant from each other as nete from hypate' (the highest and lowest notes of the octave scale). Aristotelian Problems, xix. 39.

[^1]:    ${ }^{1}$ 'The consonance of the octave is often magadized.' Arist. Prob. xix. 39.
    ${ }^{2}$ Mr. Ellis (Helmholtz, Sensations of Tone, ed. 1895, p. 237) says that the strings of this instrument were divided by a bridge at one-third of their length. And in the later theorists the little bridges which were used for the division of the monochord were often called magades.
    ${ }^{3}$ 'Pindar, in his scolion to Hiero, describes the sound of the magadis as responsive, because it gives a concord, at the octave, of two kinds of tone, namely those of men and hoys.'-Athenaeus, xiv. 36. From this passage we also gather that the recognition of the concord of the octave was as old as Pindar, i.e. circ. 522 в. .

[^2]:    ${ }^{1}$ 'Why is the consonance of the octave the only one which is sung? for in fact this consonance is magadized, but not the others. Is it not because this consonance alone is antiphonous? For in the antiphones, when one of the two notes is sung the same effect is produced as in the case of the other, so that a single sound of this consonance being sung the entire consonance is sung; and when the two sounds are sung, or if one is taken by the voice and the other by the flute, the same effect is prodnced as if one were given alone. This is why this consonance is the only one which is sung, becanse the antiphones have the sound of a single note.' Arist. Prob. xix. 18.

[^3]:    ${ }^{1}$ The Greek names of notes were the names of the strings of the lyre, and are descriptive not of their pitch but of their relative position in the instrument; the lowest string of the lyre therefore sounded the highest note of the scale.

[^4]:    1 The Modes of Ancient Greek Music. Oxford, 1894.

[^5]:    ${ }^{1}$ We owe the demonstration of these important facts to M. F. A. Gevaert, in whose Mélopée Antique dans le chant de l'Eglise Latine (1895) the whole subject is for the first time put in a proper light and exhaustively treated.

[^6]:    1 'Sur près de 1200 antiemeres cantenues dants-le tonarius de Réginon, le dorien et l'hypolydien n'en réunissent guère que $\mathbf{1} 60$.-L'éolien et l'iastien relâché s'emploient, à l'exćlusion de toutes les autres formes modales, dans les monodies de la messe dites Tractus.' Gevaert, Melopee Antique, \&c., p. 98 (note).

    It is important to remember that the Iastian is the nearest approach to our modern major scale made by the ancients in serious music, and that the Aeolian is actually our modern minor scale descending.

[^7]:    ${ }^{1}$ Cassiodorus, who wrote his Institutiones Musicae about the year 500, had evidently a competent knowledge of the old theory, and moreover, in a letter to Boetius, he even explains carefully his own view of the ethos of the principal modes in use, which he calls hy their Graeco-Roman names, Aeolian, Iastian, \&c.; bnt St. Isidore, writing one handred years later in the time of St. Gregory, clearly reveals the complete ignorance of his time. His dicta upon music (collected from his Originum sive etymologiarum libri $X X$, and printed by Gerbert in the great collection Scriptores ecclesiastici de musica sacra potissimum) are chiefly crude and misleading paraphrases of passages from Cassiodorus and others, from which it is evident that the signification of the terms employed had completely escaped him. Modes are not mentioned by him, and keys and genera are confounded together.

[^8]:    ${ }^{1}$ Thus in the earliest treatises. The correct form, Tetartus, was apparently never known to the mediaeval theorists. Pseudo-Aristotle, writing early in the thirteenth century, gives Tetrardus; Hieronymus de Moravia, in the middle of the same century, advances as far as Tetardus; Walter Odington, whose treatise dates probably from 1300 , or rather later, returns to Tetrardus.

[^9]:    ${ }^{1}$ Gerbert, Scriptores, vol. i.
    D 2

[^10]:    ${ }^{1}$ See Gevaert, Mélopée Antique, dic.

[^11]:    ${ }^{1}$ 'Nunc id quo proprie symphoniae dicuntor et sunt, id est qualiter eaedem voces sese invicem canendo habeant, prosequamur. Haec namque est quam Diaphoniam cantilenam, vel assuete Organum, vocamus.'-Musica Enchiriadis, cap xiii. ' Diaphonia vocum disiunctio sonat, quam nos Organum vocamus, enm disiunctae ab invicem voces et concorditer dissonant, et dissonantes concordant.' Guido Aretinus, Micrologus, cap. xviii. 'Est ergo Diaphonia congrua vocum dissonantia, quae ad minus per duos cantantes agitur: ita scilicet, ut altero rectam modulationem tenente, alter per alienos sonos apte circueat, et in singulis respirationibus ambo in eadem voce, vel per diapason conveniant. Qui canendi modus vulgariter Organum dicitur, eo quod vox humana apte dissonans similitudinem exprimat instrumenti quod Organum vocatur. Interpretatur autem Diaphonia dualis vox vel dissouantia.'-Iohannes Cotto, Musica, cap. xxiii. Dissonans, it should be mentioned, in these writers signifies nothing more than dissimilar in sound.

[^12]:    ${ }^{1}$ 'Hisque rationibus hae duae symphonias (the doubled diaphonies of the composite form) varias miscent dulcesque cantilenas.' Mus. Enchiriadis, cap. xiv.
    ${ }^{2}$ ' Igitnr absolutissime in diapason symphonia maiore prae caeteris perfectione diversae ad invicem voces resonant. Seconda ab hac est symphonia diapente.' Ibid., cap. xvii.
    s 'Senties huiusmodi proportionum voces suaviter ad invicem resonare.' Ibid., cap. xiv.

    4 At in diatessaron, quoniam non per omnem sonorum seriem quartis locis suaviter sibi phthongi concordant, ideo nee absolute ut in caeteris symphoniaca editur cantilena. Ergo in hoc genere cantionis sua quadam lege vocibus voces divinitns accommodantur.' Ibid., cap. xvii.

[^13]:    1 'Per omnem enim sonorum seriem tritus subquartus (the third sound of the lower tetrachord) deutero (the second sound of the tetrachord next above) solus a symphonia deficit, et inconsonus ei efficitur, eo quod solus diatessaron symphoniae mensuram excedens, tribus integris tonis a praefato sono elongatur, cui extat subquartus.' Mus. Enchiriadis, cap. xvii.
    ${ }^{2}$ It will be remembered that in the lowest tetrachord of the Graeco-Syrian scale, apparently still in nse at this time, the $B$ was flat; in the Greek scale it was natural.
    ${ }^{3}$ 'Quapropter et vox, quae organalis dicitur, vocem alteram, quae vocatur principalis, eo modo comitari solet, ut in quolibet tetrachordo, in qualibet

[^14]:    'Discipulus. Discerno plane, tonum autentam protum in autentum deuterum hanc transpositione transire.' Scholia Enchiriadis.

[^15]:    * These four notes are $\mathbf{B} b$ in Gerbert, but it seems more probable that $\mathbf{C}$ was intended, as in the other examples. The printing of these specimens in Gerbert is often far from correct.

[^16]:    ${ }^{1}$ Organicum melos ex diversis qualitatibus et quantitatibus conficitur dum viritim separatimque sentiuntur voces longe a se discrepantibus intensionis et remissionis proportionibus segregatae dum vero sibi invicem coaptantur secundum certas rationabilesque artis mosicae regulas per singulos tropos naturalem quandam dulcedinem reddentibus.
    ${ }^{2}$ See Hucbald’s Echte und unechte Schriften, \&ec., by Hans Müller, 1884.
    ${ }^{3}$ Cousse. Script. ii. 74.

[^17]:    1 ' Potes et cantum cum organo et organum cum cantu, quantum libuerit, duplicare per diapason; ubicumque enim eius concordia fuerit, dicta symphoniaram aptatio non cessabit.' Micrologus, cap. xviii.
    ${ }^{2}$ 'Superior nempe diaphoniae modus durus est, noster vero mollis.' Ibid.

[^18]:    1 'Cum itaque iam satis vocum patefacta sit duplicatio, gravem a canente succentum, more quo nos utimur, explicemus.' Micrologus, cap. xviii. The expression 'more quo nos utimar,' and also another already quoted, 'noster vero mollis,' may refer either to the modern as opposed to the ancient practice, or to the Italian as distinguished from the Northern or Frankish methods of organizing.
    ${ }^{2}$ 'Cum plus diatessaron seiungi non liceat, opus est, cum plus se cantor intenderit, subsecutor ascendat, nt videlicet $C$ sequatur $F$, et $D$ sequatar $G$, et $E$ sequatur $a$, et religua.' Micrologus, cap. xviii.

[^19]:    1 'Semitonium et diapente non admittimus; tonum vero et ditonum (the major third) et semiditonum (the minor third) recipimus; sed semiditonum in his infimatum, diatessaron vero obtinet principatum.' Micrologus, cap. xviii.
    .$^{2}$ In Guido's time masicians had returned to the Greek scale, in which the low $B$ is natural.

[^20]:    1 'A trito enim infimo aut infimis proxime substituto deponi organum nunquam licet.' Micrologus, cap. xviii.

[^21]:    ${ }^{1}$ 'Cum occursus fit tono, diutinus fit tenor finis, ut ei partim subsequatur, et partim concinatur.' Micrologus, cap. xviii.
    ${ }^{2}$ 'Ecce distinctio in deutero E, in qua ditoni occursus, vel simplex vel intermissus, placet.' lbid.

[^22]:    ${ }^{1}$ ' Ecce finis distinctionis in trito C, a quo non deponimus organum, quia non habet sub se tonum vel ditonum, quibus fit occursus, sed habet semiditonum, per quem non fit occursus.' Micrologus, cap. xviii.
    ' Occursus tono melius fit, ditono non adeo, semiditonoque nunquam.' Ibid.

[^23]:    1 'Saepe autem cum inferiores trito voces cantor admiserit, organum suspensum tenemus in trito; tunc vero opus est nt in inferioribus distinctionem cantor non faciat, sed discurrentibus cum celeritate vocibus praestolanti trito redeundo subveniat, et suum et illius facta in superioribus distinctione repellat.' Micrologus, cap. xviii.

[^24]:    1 - Organum per consonantias fiat, ipsarum autem constitutiones per motus vocnm varientur.' Cottonis Musica, cap. xxiii.

    2 ' Ea (diaphonia) diversi diverse utuntur. Caeterum hic facillimus eius usus est, si motuum varietas diligenter consideretur; ut ubi in recta modulatione est elevatio, ibi in organica fiat depositio, et e converso.' Ibid.

[^25]:    1'Providendum quoque est organizanti, ut si recta modulatio in gravibus moram fecerit, ipse in acutis canendo per diapason occurrat; sin vero in acutis, ipse in gravibus per diapason concordiam faciat: cantui autem in mese vel circa mese pausationes facienti in eadem voce respondeat.' Cottonis Musica, cap. xxiii.
    ${ }^{2}$ 'Animadvertere etiam debes, quod quamvis ego in simplicibus motibus simplex organum posuerim, cuilibet tamen organizanti simplices motus duplicare vel triplicare, vel quovis modo competenter conglobare si voluerit licet.' Ibid.

[^26]:    ${ }^{1}$ The closing words of this treatise, which are in verse, may be compared with those of Cotto's chapter on Diaphony just given above in the text:-

    - Organum acquirit totum sursum et inferius.
    Currit valde delectando, ut miles fortissimus.
    Frangit voces velut princeps, senior et dominus.
    Qua de causa applicando sonat multum dulcius.

    Cantus manet ut snbiectus, praecedenti gratia;
    Quia quod praecedit tantum minns quam sequentia,
    Ut Boetius praedixit sic in dialectica.
    Ergo organum excedit maiori potentia.'

    Coussemaker, Histoire de l'Harmonie au Moyen Age, p. 243.
    2 'Primus modus organizandi est quando prima vox copulatur cum praecedenti.' Ibid., p. 232. Praccedens in this MS. signifies the voice which sings the melody.
    ${ }^{3}$ 'Secundus fit per disiunctionem ipsius vocis; nam differentia est coniunctio respectu disiunctionis.' Ibid., p. 233.

[^27]:    1 'Sed Gregorio non placet Patri haec lascivia;
    Et moderni sapientes hane neque commemorant.

    > Quamvis ergo apud quosdam ipsa fiat vocula, Apud multos tamen iure dicitur superflua.'
    > Coussemaker, Histoire de l'Harmonie, \&c., p. 238.

[^28]:    given in this work, we may conclude that he preferred a kind in which care was taken to avoid the $\mathbf{B} \boldsymbol{b}$ in the organal voice also. Only once does this note appear in his illustrations; nor is the formula in which it then occurs put forward as his own, or even commended by him ; invenies usurpatum is all that he says,-you will find it much used.

[^29]:    ${ }^{1}$ The original of this little work is in the Bibliothèque Nationale at Paris where it exists in the shape of a marginal addition to a thirteenth century treatise-(fonds S. Victor, 813)-of which mention will he made presently in the text. It covers the margins of about two pages, and is written in a hand which, though not the same as that of the rest of the MS., is apparently of the same date. Its doctrine, however, shows it to he a copy of something much older, and in fact a statement of the practice of the period which we are now considering.
    ${ }^{2}$ The change of word here, however, involves no change of idea; Discant is only Diaphony latinized, and Diaphony was of course synonymous with Organum.

[^30]:    ${ }^{1}$ The date (tenth century) given for this little piece at its first appearance in the Plainsong and Mediaevgl Music Society's publication The Musical Notation of the Middle Ages, 1890, and continued in their subsequent volume Early English Harmony, 1897 , under the editorship of the writer of the present work, has now to be corrected. It was formerly corsidered that the whole of the M.S. Bodley $\mathbf{5 7 2}$ was of the same period; experts however are at present of opinion that, while the body of the MS. is of the tenth century, this piece was inserted after iroo. Yet, considering both its technical character, and the method of its notation, the music itself would seem to be of the eleventh century.

[^31]:    1 'Ultra mensuram sunt quae minas quam uno tempore et amplius quam duobus mensurantur, ut semibreves . . . . et longa quando longa sequitur; habet enim tria tempora.' Cousse. Script. i. 94.
    ${ }^{2}$ 'Longa antem apnd priores organistas duo tantum habuerit tempora, sic in metris. ... Brevis vero apud priores resoluta est in duas semibreves; apud modernos, aliquando in tres, aliquando in duas.' Ibid. i. 235 .

[^32]:    ${ }^{1}$ This formula in its belated nse expresses generally two notes of the tribrach, or foot of three short beats, a metre akin to the trochaic and iambic; formerly it would have served equally well to denote either these or the two short notes of the dactyl or anapaest.
    ${ }^{2}$ In the rules given in the Discantus Positio Vulgaris for equivalence, we find that four breves may be the equivalent of the triple long, or normal long and hreve:-'Super quamlibet notam firmi cantus ad minus dne note, longa scilicet et brevis, vel aliquid his equipollens, ut quatuor breves, vel tres cum plica brevi, proferri debent.'
    ${ }^{3}$ 'Omnes autem note discantus sunt mensurabiles per directam brevem et directam longam.' Ibid. Cousse. Script. i. 95.

[^33]:    ${ }^{1}$ Pseudo-Aristotle, writing in the thirteenth century, in his account of the triple long, 'prima super omnes, fons et origo ipsins scientie atque finis,' says: ' Non immerito ad summam refertur trinitatem, quia res quelibet naturalis ad similitudinem divine nature ex tribus constat invenitur.' - Cousse. Script. i. 270 .
    ${ }^{2}$ Ibid. i. 291.

[^34]:    1 'Et ideo oritur questio ex hoc quod videlicet que fuit necessitas in musica considerari de falsa musica, sive de falsa mntatione, crm nullum regulare debeat accipere falsum, sed potius verum. At quod dicendum est quod mutatio falsa, sive falsa musica, non est inutilis, imo est necessaria propter bonam consonantiam inveniendam et malam vitandam. Nam sic dictum est: si velimus habere diapente, de necessitate oportet quod habeamus tres tonos cum semitonio; ita quod si aliqua figura sit in $b f a$, $m i$ (B), et alia in $f a u t$ (F) acuto per naturam, tunc non est ibi consonantia, sed dissonantia cum semitonio duplici. Verumtamen potest fieri ibidem per falsam musicam quam appellamus, scilicet quando facimus de semitonio tonum, vel e converso; non tamen falsa musica, sed inusitata.' Anonymus of the Library of S. Dié (Cousse. Seript. i. $3^{1} 4$ ).

[^35]:    ${ }^{1}$ 'Qui autem triplum voluerit operari, respiciendum est tenorem et discantnm, ita quod si discordat cum tenore, non discordat cum discantu, vel converso; et procedat ulterius per concordantias, nunc ascendendo cum tenore vel descendendo, nunc cum discantu, ita quod non semper cum altero tantum.' Ars Cantus Mensurabilic (Cousse. Script. i. 132).

[^36]:    1 ' In antiquis libris habebant puncta equivoca nimis, quia simplicia materialia fuerunt equalia, sed solo intellectu operabantur dicendo : intelligo istam longam, intelligo illam brevem.' Anon. Brit. Mus. Royal MSS. (Cousse. Script. i. 344).

    It would appear that the same method was pursued with respect to the definition of the intervals employed: 'Maxima pars cognitionis antiquorum fuit in predictis sine materiali significatione, quod ipsi habebant notitiam concordantiarum melodie complete, sicut de diapason, diapente, et diatessaron . . . prout habebant respectum superioris ad cantnm inferiorem, et docebant alios dicendo: Audiatis vos vel retineatis hoc canendo. Sed materialem significationem parvam habebant, et dicebant: Punctas ille snperior sic concordat cum puncto inferiori et sufficiebat eis.' Ibid.
    ${ }^{2}$ 'Et nimio tempore laborabant antequam scirent bene aliquid, quod nunc ex levi ab omnibus laborantibus circa talia percipitur mediantibus predictorum, ita quod quilibet plus proficerit in una hora quam in septem ante quoad longum ire.' Ibid.

[^37]:    ${ }^{1}$ The demonstrations of value, for the music of this period, will be rednced, according to custom and for the sake of convenience, to one-fourth of the original.

    2 'Longa autem apud priores organistas duo tantum habuerit tempora, sic in metris; sed postea ad perfectionem dicitur, ut sit trinm temporum ad similitudincm beatissime trinitatis quod est summa perfectio, diciturque longa hniusmodi perfecta.' Walter Odington, Cousse. Script. i. 235.
    ' Longa perfecta prima dicitur et principalis; nam in ea omnes alie includuntur. Perfecta dicitur eo quod tribus temporibus mensuratur. Est enim ternarius numerus inter numeros perfectissimus pro eo quod a summa trinitate, que vera est et pura perfectio, nomen assumpsit. . . . Longa vero imperfecta sub figuratione perfecte est, duo tantum tempora significat. Imperfecta quidem pro tanto

[^38]:    ${ }^{1}$ The only particulars respecting this writer which we possess are to be found in one of the existing copies of his work, a MS. of the fourteenth century in the library of S . Dié, which concludes with the following words: 'Explicit magna ars mensurahilis musice Reverendi Viri cuiusdam Domini Franconis, Capellani Domini Pape, necnon Preceptoris Domus Coloniensium hospitalis Sancti

[^39]:    ${ }^{1}$ These remarks refer to the settled or so-called Franconian system of notation. There was however an earlier doctrine, that of the Discantus Positio Vulgaris, and of Jean de Garlande, according to which these ligatures of three notes might be valued as long, breve, long, thus representing the first or Trochaic mode of rhythm ; but this doctrine had been given up by theorists before the time of Franco.

[^40]:    1 'Opposita proprietas est que habet a primo puncto tractum ascendentem, sive ligatura ascendat, sive descendat.' Walter Odington, Cousse. Script. i. 243.

[^41]:    1 'Opposita proprietas dnas facit semibreves, quia una non ligatur, nec plures quam due. Unde si plures evenerint usque ad divisionem, sic fiunt; omnis perfectio longa; imperfectio autem brevis; omnis vero media brevis, excepta ea que per oppositam proprietatem semihreviatur.' Walter Odington, Cousse. Script. i. 24.3.

    In the older notation, traces of which sometimes appear in the works of the theorists, the 'opposite propriety' was applied to the ligature, not of semibreves, but of breves. The Anonymus of the British Museum records the fact, and the rule itself is given by Jean de Garlande. The Anonymus says :-' Iterato fuerunt quidam respicientes quod regule supradicte non erant sufficientes, et posuerunt signum proprietatis opposite, ut supradictum est, et dixerunt quod omnis figura, cum opposita proprietate et perfectione, ultima longa et precedentes pro brevi.' Cousse. Script. i. 343. De Garlande's rule is as follows:-‘ Omnis ligatura cum proprietate opposita et perfecta, ultima est longa, et omnes precedentes ponuntur pro brevi, si sint ibi plares, sed si sint due tantum non valent nisi brevem.' Ihid. i. Ioo.

[^42]:    ${ }^{1}$ The contents of the figure are shown by the upper bracket in this example, the lower marks the rhythm of the mode. The shifting of the accent is thus made clearly apparent.

[^43]:    * This is an old form, afterwards disallowed, used to express the ligature of two notes of the same sound.

[^44]:    1 (Vehementer errant qui tres longas aliqua occasione cum tenoribus invicem ligant. Franco, Ars Cantus Mensurabilis, c. x.' (Cousse. Seript. i. 128.)
    ${ }^{2}$ 'Hoc fit causa brevitatis. Et non proprietate sumitur ita, sed usus est, ut ita in tenoribus accipiatur.' Ibid. i. IOI.

[^45]:    ${ }^{1}$ M. de Coussemaker's L'Art Harmonique aux XII ${ }^{e}$ et $X I I I^{e}$ Siècles is mainly an exposition of the contents of this valuable MS.

[^46]:    ${ }^{1}$ 'Et nota pausationes mirabilem habere potestatem: nam per ipsas modi ad invicem transmatantur. . . . Unde si modus primus, qui procedit ex longa, et brevi, et longa, pausam post brevem longam habeat imperfectam, variatur modus in secundum. Si vero secundus pro longa nota pausam brevem assumat, variatur in primum.' Ars Cantus Mensurabilis, c. ix. 'De pausis, et quomodo per ipsas modi ap invicem variantur.' Cousse. Script. i. 126.
    ${ }^{2}$ De Garlande, in his chapter De pausationibus, divides pauses into perfect and imperfect, and defines them thus:-'Perfecta dicitur illa quando non transmotat modum propter sui adventum, sed equalem precedenti, quando advenit, representat. . . . Imperfecta dicitur illa que transmutat modum propter sui adventum.' Ibid. I81.
    ${ }^{3}$ 'Et hic modus (the second) sepe mutatur in primum imperfectum, cum longa pausa aufertur, et primus [in secundum] imperfectum pausa brevi ablata.' Ibid. 239, 240.

[^47]:    ${ }^{1}$ These examples are from the compositions given by M. de Coussemaker from the Montpellier MS. in L'Art Harmonique, \&c.

[^48]:    - Having given the general rule, which holds good for fifty of the fifty-one pieces taken from the Montpellier MS., we are bound to mention the single exception, No. 24 in M. de Coussemaker's excerpts. This is a comhination of two French songs supported by a ground or recurring phrase, all the voices beginning together upon the weak beat, proceeding by alternate long and breve, and changing the mode in the manner referred to by the theorists; the accent of words and notes, however, agreeing perfectly. It is clear therefore that music corresponding, as regards the rhythm, to that supposed in Franco's second example, did exist, and may even perhaps have existed in considerable quantity in popular and Troubadour music, for the rhythm is of course very old. But since its scarcity in compositions in parts is evident, we can hardly accept it as the second mode referred to by the theorists which would seem to be a regular and prevailing one; at the most we should be disposed to regard it as an irregular form, suitable only for melody or for employment in parts unmixed with any other rhythm.

[^49]:    ${ }^{1}$ ' Cognita modulatione melorum, secundum viam octo troporum, et secundum usum et consuetudinem fidei catholice, nunc habendum est de mensuris eorumdem, secundnm longitudinem et brevitatem, pront antiqui tractaverunt, ut magister Leo et alii plurimi plenius iuxta ordines et colores eorundem ordinaverunt. . . . Ista regula ntuntar in pluribus libris antiquorum, et hoc a parte et in suo tempore Perotini Magni; sed nesciebant narrare ipsas cum quibusdam aliis postpositis, et semper a tempore Leonis pro parte, quoniam due ligate tunc

[^50]:    ${ }^{1}$ The view of this anthor is singularly unsystematic, and in this respect differs equally from that of his predecessors and of his successors. He says: ' Inter concordantias autem tres sunt cetexis meliores, scilicet unisonus, diapente, et diapason. Ceteri vero modi magis sunt dissonantie quam consonantie; tamen secondum magis et minus, unde maior videtur dissonantia in tono, quam in aliquo alio modo.' Cousse. Script. i. 98.
    ${ }^{2}$ 'Notandum est, quod unisonus et diapason sunt consonantie perfecte; ditonus et semiditonus sunt imperfecte; diatessaron et diapente dicnntur medie.' Ibid. 382.

[^51]:    1 'Concordantiarum triplex est modus, quia quedam sunt perfecte, quedanf imperfecte, quedam vero medie. Perfecta dicitur, quando due voces iunguntur in eodem tempore, ita quod una, secundum anditum, non percipitur ab alia propter concordantiam, et dicitur equisonantia, ut in unisono et diapason. Imperfecte autem dicuntur, quando due voces iunguntur ita, quod una ex toto percipitur ab alia secundum auditum et concordantiam; et sunt due species, scilicet ditonus et semiditonus. Medie autem dicuntur, quando due voces iunguntur in eoden tempore, que neque dicuntur perfecte neque imperfecte; sed partim conveniunt cum perfectis et partim cum imperfectis; et sunt due species, scilicet diapente et diatessaron. Sic apparet quod sex sunt species concordantie, scilicet, unisonus, diapason, diapente, diatessaron, semiditonns, ditonus. Et dicuntur genera generalissima omnium concordantiarum.' Cousse. Script. i. 104.

    2 'Concordantiarum quedam perfecte, ut unisonus qui fit una littera, et diapason; quedam imperfecte, ut semiditonus et ditonus; quedam vero medie ut

[^52]:    diapente vel diatessaron. Harum omnium concordantiarum, prima concordat melius quam secunda, ut unisonns melius quam diapason, et semiditonus quam ditonus, et diapente quam diatessaron. Item perfecta concordantia melius concordat quam imperfecta; media melins concordat quam imperfecta concordantia.' Cousse. Script. i. 136.
    ${ }^{1}$ ' Discordantiarum quedam dicnntur perfecte, quedam imperfecte, quedam vero medie. Perfecte dicuntur, quando due voces non iunguntur aliquo modo secundum compassionem vocum, ita quod, secundum auditum una non possit compati cum alia. Et iste sunt tres species, scilicet semitonium, tritonus, ditonus cum diapente. Imperfecte dicuntur, quando due voces innguntur ita, quod secundum auditum vel possunt aliquo modo compati, tamen non concordant. Et sunt due species, scilicet tonus cum diapente et semiditonus cum diapente. . . . Medie dicuntur, quando due voces iunguntur ita, quod partim conveniunt cum perfectis, partim cum imperfectis. Et iste sunt due species, scilicet tonus et semitonium cum diapente.' lbid. IO5.
    ${ }^{2}$ The author, after his description of the concords, continues: 'Omnes alie consonantie dicuntur discordantie; quarum discordantiarum alie sunt perfecte, alie imperfecte. Perfecte vero discordantie non possunt sumi in aliquo discantu; et sunt quatuor; semitonium, tritonus, ditonus cum diapente, semitonium cum diapente. Imperfecte vero possunt sumi in aliquo discantu, et boc est ante perfectam concordantiam immediate subsequentem; et sunt tres (sic), scilicet tonus com diapente, semiditonus cum diapente.' Ibid. 136 .

[^53]:    1 ' Imperfecte sunt ditonus et semiditonus, que sunt bone veniendo a diapente in diapente, vel a diapente ad unisonum, et e converso, et tonus cum diapente, que est bona ante diapason.' Cousse. Script. i. 312.
    ${ }^{2}$ 'Et ne doilt on point faire ne dire ii quintes ne deulx doubles, l'une après l'antre, ne monter ne descendre avec sa teneur, car ils sont parfais; mais par accors imparfais, tierces et sixtes, pent on bien monter on descendre ii ou iii notes ou plus ce besoing est, mais que ce soit sur notes appendans,' \&c. Ibid. iii. 497. The progression of consecutive sixths in conjunct movement (appendans) of course proves that both the major and minor intervals are now included in the author's ' accors imparfais.'
    ${ }^{3}$ Ibid. i. 358.

[^54]:    ${ }^{1}$ Geschichte der Musiktheorie im IX.-XIX. Jahrhundert, Leipzig, 1898.

[^55]:    1 ' In masico modulamine non uniformiter ut alibi, sed multipliciter multisque modis et modulis cantilenas emittunt, adeo ut in turba canentium, sicut huic genti mos est, quot videas capita tot audias carmina, discriminaque vocum varia, in unam denique sub $\mathbf{B}$ mollis dulcedine blanda consonantiam et organicam convenientia melodiam.' Cambriae Descriptio, cap. xiii.
    ${ }^{2}$ 'In borealibus quoque maioris Britanniae partibus trans Humbrum, Eboracique finibus Anglorum populi qui partes illas inhabitant simili canendo symphonica utuntur harmonia; binis tamen solummodo tonorum differentiis et vocum modulando varietatibus, una inferius submurmurante altera vero superne demulcente pariter et delectante.' Ibid.

[^56]:    1 ' Ditonns et semiditonus apud aliquos non sic (i. e. pro concordantiis imperfectis) reputantur. Tamen apud organistas optimos, et prout in quibusdam terris, sicut in Anglia, in patria que dicitur Westcuntre, optime concordantie dicuntur, quoniam apud tales magis sunt in usu.' Cousse. Script. i. 358.

[^57]:    ${ }^{1}$ Cousse. Script. iii. 497.

[^58]:    1 'Item intelligendum est quod in omnibus modis utendum est semper concordantiis in principio perfectionis, licet sit longa, brevis, vel semibrevis.' ars Cantus Mensurabilis (Cousse. Script. i. I32).
    ${ }^{2}$ ' Omnia puncta imparia primi modi (first note, third, fifth, \&c.) sunt longa et cum tenore concordare debent. Reliquia vero paria indifferenter ponuntur.' Anon., B. M. (Royal MSS.), Cousse. Script. i. 356.
    It should however be mentioned that, from the compositions themselves, we find that the obligation of consonance was only enforced, in the dactylic and anapaestic rhythms, at the begioning of alternate perfections, that is to say at the beginning of each foot of metre.

[^59]:    ${ }^{1}$ The dissonance of the second upon the strong beat, to which attention

[^60]:    1 'Discantus autem fit cam littera, aut sine et cum littera, hoc est dupliciter: cum eadem vel cum diversis. Cum eadem littera fit discantus in cantilenis, rondellis, et cantu aliquo ecclesiastico. Cum diversis litteris fit discantus, ut in motetis qui habent triplum vel tenorem, quia tenor cuidam littere equipollet. Cum littera et sine fit discantus in conductis et discantu aliquo ecclesiastico qui proprie (improprie is wrongly given in the text) organum appellatur.' Ars Cantus Mensurabilis, cap. xi; Cousse. Script. i. I 30.

[^61]:    1 'Pure Organum est quando cuilibet note de plano cantu, ultra mensuram existenti, correspondent de discantu due note, louga scilicet et brevis, vel his aliquid equipollens.' Cousse. Script. i. 96. From this it appears that the plainsong was uttered in notes of equal length (notae ultra mensuram are here perfect longs), and the organum chiefly in the first mode of rhythm, long and breve.

    2 'Duplex organum est idem in pausis, non autem in notis, eo quod ducte longe sunt in tenore. In discantu vero duplex, et a primo diversus consonans cantus.' Ibid.

[^62]:    1 'Organum per se dicitur id esse quidquid profertur secundum aliquem modum rectum, aut non rectum. Rectus modus sumitur hic ille per quem discantus profertur. Non rectus dicitur ad differentiam alicuius recte; que longe et breves recte sumuntur debito modo primo, et principaliter. In non recto vero sumitur longa et brevis in primo modo, sed ex contingenti. Organum antem non rectum dicitur quidquid profertur per non rectam mensuram.' Cousse. Script. i. 114.
    ${ }^{2}$ 'Duplex longa, $f e$ coniunctim, $f d$ coniunctim, $e c, d f, g f$ cum plica, $d$ c cum plica, $a$ duplex longa cum $c$ coniunctim; et iste modus dicitur primus irregularis, et bene competit organo puro.' Cousse. Script. i. 361. The illustration is quoted by Anonymus as from the triple Organum Alleluia Posui Adiutorium, and will be found there in the middle voice part, near the end of the Alleluic. The composition has been printed by M. de Conssemaker in $L^{\prime}$ Art Harmonique, dec., 1865.

[^63]:    1 ' Dividitur autem mensurabilis musica in mensurabilem simpliciter et partim. Mensurabilis simpliciter est discantus, eo quod in omni parte sua mensuratur. Partim mensurabilis dicitur organum, pro tanto quod non in qualibet parte sua mensuratur. Et sciendum quod organum dupliciter sumitur, proprie et communiter. Est enim organum proprie sumptum organum duplum, quod purum organum appellatur. Communiter vero dicitur organum quilibet cantus ecclesiasticus tempore mensuratus.' Cousse. Script. i. ir 8.

    2 'Est autem unum genus cantus organici in quo tantum attenditur coherentia vocum immensurabilium, et Organum purum appellatur; et hoc genus antiquissimum est, et duorum tantum.' Ibid. i. 245.

[^64]:    1 • Fit igitur organum purum hoc modo: accepto uno puncto, vel duobus aut tribus de plano cantu (the text of the MS. is not quite the same here, but the sense does not differ), certo modo disponitur tenor, et superius proceditur per concordias et concordes discordias quantumlibet. Incipit autem superior cantus in diapason supra tenore, vel diapente vel diatessaron, et desinit in diapason vel diapente vel unisono.' Cousse. Script. i. 216.

[^65]:    ${ }^{1}$ Jean de Garlande, after describing the nature of the organal part from the

[^66]:    1 ' Quidquid notatur in longa simplici nota longum est, et in brevi breve, et in semibrevi semibreve.' Cousse. Script. i. 135.
    ${ }^{2}$ 'In puro autem organo multiplici via et modo longe et breves cognoscuntur; uno modo sic : Omnis punctus primus, sive fuerit concordans in aliqua concordantia predictorum, sive non, ante erit longa parva, vel longa tarda, vel media; et hoc in

[^67]:    ${ }^{1}$ Six of the irregular modes of the Anonymus of the British Museum may easily be seen as identical in origin with the regular modes whose numbers they bear, and as differing in respect of their augmentation and diminution of the value of individual notes.

[^68]:    ${ }^{1}$ The ornament implied by the sign above the two long notes is the flos, corresponding roughly to the modern shake; it is frequent in Organum, and occurred upon long notes or when consecutive notes were uttered upon the same sound. It consisted of a kind of oscillation broken by rapid beats; the oscillation might be at almost any interval, but either tone or semitone were generally employed. De Garlande represents the method of execution (Cousse. Script. i. I I7) thus :-

[^69]:    1 'Sciendum quod organum verbum equivocum est; quandoque dicitur organum purum, velnt in Iudea et Ierusalem, in duplo, velut Descendit de celis, vel Gaude Maria, \&c. . . . Quandoque dicitur alio modo, ut in organo triplo, quamvis improprie, velut in Posui Adiutorium.' Cousse. Script. i. 354.

[^70]:    * Thus in the original.

[^71]:    ${ }^{1}$ That Pérotin cannot have belonged to the archaic period seems clear if we consider that not only does the Anonymus of the British Museum, a writer of the Franconian period, commend the 'great book' most highly-' Et si quis haberet servitium divinum sub tali forma haberet optimum volumen istius artis,'-hut he also tells us that it was still in his own day in use in the choir of Notre Dame; and from this circumstance we may gather that Perotin's system of notation must have heen agreeable in its elementary features to that of the settled period. On the other hand, it is evident, from the whole character of the theorist's allusions to him, that he lived hefore the period of general and final agreement.
    ${ }^{2}$ The author of Ars Cantus Mensurabilis, of earlier date than Odington, says nothing respecting the final character of copula; and a certain passage of the

[^72]:    1 It would appear from de Garlande's account (Cousse. Script. i. II4) that the copula of his day resembled the later form in respect of its regular modal character, but he leaves us in ignorance with regard to the method of its notation. The Anonymus heads his fifth chapter De triplicibus de quadruplicibus et de Copula, but the description of copula has apparently been omitted in the MS. from which M. de Coussemaker printed his edition. A passage writtel in the Franconian form of copula non ligata occurs in the treatise De Musica Libellus (probably late twelfth century), as part of the illustration of the interval of the seventh; but if we are to assume that it formed in this shape a part of Organum before the year r200, as well as in the later period of Franco and Odington, its apparent absence from the Florence MS. becomes exceedingly difficult to explain.

[^73]:    ${ }^{1}$ See p. I16 of the present work.
    ${ }^{2}$ Ibid., p. 140.

[^74]:    ${ }^{1}$ 'Est septimus modus nobilissimns et dignissimus, magis voluntarius et placens; et iste modus est modus permixtus et communis, et est de omnibus duobus supradictis et de omnibus tribus et de omnibus quatuor, \&c.; et proprie loquendo denominatur organum purum et nobile,' \&c. Cousse. Script. i. 362.

    2 'Pausationes vero valde voluntarie procedunt, secundum quod melius videbitur cantori vel operatori, et hoc in minimis maioribus et mediocribus (semibreves, longs, and breves); duplices (rests of the double long) vero iu organo puro raro inveniuntur.' Ibid.

[^75]:    ${ }^{1}$ (Nota quod ad cognitionem puri organi predicti modi irregulares sufficiunt cum quibusdam aliis postpositis. Iterato nota quod sufficit de modo figurandi iuxta descriptionem corumdem, ut superius plenins patet. Et est figuratio consimilis sicut in aliis regularibus, quamvis in aliquibus sit differentia,' \&c, Cousse. Script. i. 362.
    ${ }^{2}$ After his classification of the forms of composition, given at p. 176 of this work, the author continues :-' Et nota quod his omnibus est idem modus operandi, excepto in conductis. Quia in omnibus aliis primo accipitur cantus aliquis prius

[^76]:    1 'Ista truncatio fit snper excogitatum tenorem vel super cantum, ut semper unus taceat dum alius cantat; vel si triplex, sic: duo cantent et tertius taceat.' Walter Odington, Cousse. Script. i. $24^{8}$.

    - Truncatio est cantus rectis obmissisque vocibus truncate prolatus, et sciendum quod truncatio tot modis potest fieri, quot longam, brevem, vel semibrevem

[^77]:    contingit partiri. Longa partibilis est multipliciter; primo in longam et brevem, et brevem et longam; et ex hoc fit truncatio, vel oketus, quod idem est, ita quod in uno brevis obmittatur, in alio vero longa.' Ars Cantus Mensurabilis, cap. xiii.
    ${ }^{1}$ 'Sic etiano potest (longa) dividi in tres breves, vel duas, et in plures semibreves. Et ex his omnibus cantatur truncatio per voces rectas et obmissas, ita quod, quando unus pausat, alius non pauset, vel e converso. Brevis vero partibilis est in tres semibreves vel duas; et ex hoc cantatur cantus oketus, unam semibrevem obmittendo in una, et aliam proferendo.' Ibid.

[^78]:    ${ }^{1}$ See p. 246 of this work.

[^79]:    ${ }^{1}$ (Moderni nonne quasi solis utuntur motetis et cantilenis, nisi quod in motetis suis hoketos interferunt? Sed cantus alios multos dimiserunt quibus in propria forma non utuntur sicut fecerunt antiqui, ut cantus organicos mensuratos vel non ubique mensuratos, ut est organum purum vel duplum de quo forsan pauci sciunt modernorum. Item conductos cantus ita pulchros, in quibus tanta delectatio est, qui sunt ita artificiales et delectabiles, duplices, triplices, et quadruplices. Item

[^80]:    hoketos similiter duplices, contra duplices, triplices, quadruplices. In his antiqui cantores alternatim cantibns vacabant, in his exercebantur, in his delectabantur, non in solis motetis ant in cantilenis. Debentne illi dici rudes, idiote et ignorantes in arte cantandi, qui illos faciebant vel sciunt cantus et qui utebantur vel utuntur illis ?' Speculum Musice, Lib. vii. cap. 44.
    ${ }^{1}$ By M. de Coussemaker; see L'Art Harmonique, \&c., pp. 187-8.

[^81]:    1 'Rondelli sic sunt componendi: excogitetur cantus pulchrior qui possit, et disponatur secundum aliquem modorum predictorum, cum littera vel sine, et ille cantus a singulis recitetur; tamen aptentur alii cantus in duplici ant triplici procedendo per consonantias, ut dum unus ascendit, alius descendit, vel tertius ita ut non simul descendat vel ascendat, nisi forte tamen maioris pulchritudinis, et a singalis singulorum cantus recitentur.' Cousse. Script. i. 247.

[^82]:    1 'Notandum quod duplex (? triplex) est modus faciendi discantum secundum veros discantores. Primus modus est propinquis proportionibus, hoc est infra diatessaron vel diapente. Alius modus est ex remotioribus, que continentur sub diapason cum predictis. Tertius modus est ex remotissimis infra diapente cum diapason, vel duplex diapason, vel nltra,' \&c. Cousse. Script. i. 357.
    ${ }^{2}$ ' Ulteriori quidem processu, quidem raro, procedunt usque ad triplex diapason, quamvis in communi usu se habeat in instrumento organorum, et ulterius aliorum

[^83]:    instrumentorum ; et hoc numero cordarum vel fistularum ; vel prout in cimbalis bene sonantibus, apud bonos musicos plenius habetur.' Cousse. Script. i. 362.
    ${ }^{1}$ See 'Euvres completes du Trouvere Adam de la Halle,' by M. de Coussemaker, Paris, 1872.

[^84]:    ${ }^{1}$ The sharps are given from another version of this rondeau priuted by M. de Coussemaker in his complete edition of the works of this composer.
    ${ }^{2}$ It is difficult to see how these lines, which are irregular, were intended to be applied to the regular forms of the music. The difficulty does not seem to exist in the case of the more extended form.

[^85]:    ${ }^{1}$ The reformer of the notation, having altered those lozenges which represented the long note of rhythm, allowed the remaining ones to stand for breves; lozenges were then used also in the same sense in the alterations of the melody, apparently to avoid confusion.

    * Notes afterwards erased and replaced hy others.

[^86]:    1 It should, however, he mentioned that the suggestion that the rota may have been actually composed in Reading derives a certain measure of support from a consideration of the words, which Professor J. Wright pronounces to be 'thirteenth century Wessex ; Berkshire, or Wiltshire.'

[^87]:    ${ }^{1}$ See p. 176 of the present work. ${ }^{2}$ Ibid. $180 . \quad{ }^{3}$ Ibid. 178-9. ${ }^{4}$ Ibid. 178.
    ${ }^{5}$ 'Motetus vero est super determinatas notas firmi cantus mensuratas,' \&c. Cousse. Script. i. 96.

[^88]:    1 ( Moteti fiunt cum littera in aliquo modorum. Sumatur aliquis cantas notus pro tenore, aptus melo, et in certo modo disponatur.' Cousse. Script. i. 248.

[^89]:    ${ }^{1}$ 'Ordo modorum est numerus punctorum ante pausationem; iste ordo dividitur in primum, secundum et tertium, \&c. Ordo autem procedit ab uno principio; principium a radice. Radix est quilibet cantus primo datus.' Cousse. Script. i. 98.

[^90]:    ${ }^{1}$ Much of the purely technical instruction given by the Anonymus is little more than a full and clear exposition of the teaching of Jean de Garlande. Yet, strangely enough, the Anonymus, who has recorded the names of so many of the musicians of this period, and is in fact the only anthor of the time who seems to have possessed any historical knowledge worth speaking of; is apparently ignorant of the name of the man upon whose doctrine his own is founded. He knows de Garlande only as ' the anthor of the treatise which begins Habito de ipsa plana musica que immensurabilis respective dicitur.'

[^91]:    wOOLDRIDGE
    A. a

[^92]:    ${ }^{1}$ Much interesting information respecting the words of motetts and of conducti will be found in the work by Professor Meyer, Der Ursprung des Motetts, already mentioned in the preface to the present work.

