Some thoughts and ideas on modal nomenclature as applied to folk-song.

The earlier collectors in the U.K., possibly because they were in the main muscians with a classical background, for purposes of identifying the various modes to be found in British folk-song used the standard Gregorian mode names where applicable and nothing where not. This led to some curious deviations and must have been somewhat puzzling to the readers of the early Folk Song Society's Journals who thought of the Dorian mode as consisting of the "white notes" from D to D (transposable of course) meeting with tunes labelled Dorian containing F sharp as well as F natural, C sharp as well as C natural and both B flat and B natural! (See example no 27.) In later years with the acquiring of more experience and knowledge, this sort of thing would not have happened.

In these early days moreover, although pentatonic tunes were recognised as such, it seems that hexatonic tunes were not, for one finds tunes such as Geordie (example no 26) being classified as Aeolian when they could equally well be Dorian - the determining note, the 6th, being absent. Even Pentatonic tunes went frequently unlabelled. For instance in Vol II of the Folk Song Journal on page 31, Miss Doveton Brown's version of Lord Randal is one of the comparatively few examples of English folk-song melody that is completely pentatonic. (There are many examples showing strong pentatonic influence but pure pentatonic tunes are rare.) Yet this fact receives no mention.

Somewhat later, in connection with Journal No 16 which is devoted to the Frances Tomil collection of Gaelic songs, Anne Gilchrist produced a remarkable analysis of the entire modal system starting with the five usual pentatonic modes (her fifth mode is remarkably rare) and showing how, by filling in the larger intervals or gaps, the hexa- and heptatonic modes may have evolved. Out of this came her system of nomenclature: Modes 1, 2, 3, 4, and 5 for the straight pentatonics with the addition of the letters a and b to indicate the filling in of the tone-and-a-half gaps for the hexa- and heptatonics. This system with a little modification was used by Cecil Sharp and Dr Maud Karpeles in the case of their vast Appalachian collection. The system was thoroughly adequate for these two collections and has undergone still further modification in Bronson's ingenious "Mode Star" system which he uses in his four volume work on the music for the Child Ballads.

This works well enough on the more usual type of tune but not infrequently needs qualifying by some such phrase as "inflected III".

Although it must be admitted these systems, or rather variations of a system, work well enough on the whole for the folk music of the English and Celtic speaking nations, it cannot easily be adapted to that of some of the other European peoples, let alone Asian, African or American etc. Indeed there are quite a number of tunes from the British Isles which defy this type of classification, e.g. nos 1, 2, 3, 5, 7, 23, 27, 28 and 32 in the accompanying examples. It would obviously be ideal if a system of modal nomenclature could be devised capable of being applied to any folk or ethnic music anywhere in the world. This would facilitate comparison between modal systems used by different ethnic groups as well as possibly providing a more accurate system of codifying the various modes within one particular group. Such a system must necessarily have extreme flexibility and should if possible be pronounceable. In the past many editors have given at the end of each item the notes actually contained in it in staff notation. This is admirable from the visual point of view, but clumsy to talk about. The same objection applies to a numerical codification e.g. where the figures 1 - 12 (or 0 - 11) are used to represent the 12 semitones of the ordinary chromatic scale, with the possible use of diacritics, fractions or decimals to express micro and other intervals otherwise inexpressible. I feel quite strongly that one ought to be able to talk about the modes of folk-song as well as read and write about them. Using the letter names of the notes is awkward, not only as for comparative purposes transposition into a common key would be necessary, but also because there is divergence between one language and another, e.g. the note B in England and Germany. Also the usual scale sequence of notes (e.g. CDEFGAB) is scarcely pronounceable.

It does seem to me, however, that in the Tonic Sol-fa system there might be a basis on which one might build a modal nomenclature which though not perfect, might be applied to a considerable proportion of the world's folk music. Certainly it could accommodate any mode up to 7 notes and it could probably be adapted to cope with more as required. There will doubtless be many objections to the system that I am about to describe; many from people in countries where fa, for example, means the note that we in the U.K. call F, and not merely the fourth degree (perfect) of any scale, (this includes many of the "Latin" countries); but it has in other spheres been found that people brought up on the idea of a fixed doh, can quite easily adapt to the idea of a movable doh. Another source of objection may well be those who, brought up on Tonic Sol-fa as usually
taught in schools, use la for the tonic of the Aeolian and Minor modes. (I have found inconsistency among solfaists here. I have seen re (ray) used for the tonic of a Dorian tune, but doh, not sol, for the tonic of a Mixolydian.) There is considerable difference of opinion among educationists about the value of using la as the tonic in the minor mode; those in favour justifying their view by saying that it underlines the connection between major and relative minor scales or rather modes. I personally, if I may be allowed to express a personal viewpoint, feel that as far as the common modes of Western Europe are concerned, the tonic - dominant - subdominant relationship is identical whether the mode be major, minor, dorian or mixolydian and therefore the doh - sol - fa names ought to be kept for those degrees of the scale whatever the mode. I also think that the differences between one mode and another are far more sharply brought out by a change of vowel than by a change of tonic, by doh, re (ray) or (maw) as against doh, re, mi (me), than by la, ti (te) doh as against doh, re, mi. May I also say that if you give a welltrained solfaist a melody in a minor mode written still with doh as the tonic to sightread, he will do so with no difficulty whatsoever.

Of course there will be many other different objections from many other sources, but suffice it to say that I have found that this idea works well within the limited area in which I have tried it out over the past twelve months and if it does nothing better than trigger off some other much better system, I shall feel the thought and work that has gone into this amply rewarded. Now let us pass to the details of the system itself.

First of all some details of pronunciation. The only consonants used are d, r, m, f, s, l and t. These may be pronounced in the way native to most speakers of European languages and be intelligible. For instance it does not matter whether the r is pronounced trilled as in Italian, "squeaky as in English or "gargled" as in French, it will be comprehensible as an r to almost anyone. As regards the vowels, they should be pronounced normally short (leaving the use of long vowels for special circumstances) and if necessary) approximately as the short vowels in German or the nearest equivalent in the speaker's own language. (Note that modified vowels a, o, u etc., are not used though again they could be if need arises in the extension of the system). Care should be taken not to get the i and u too extreme and the e and о not too closed; the a should be "continental" or North Country in quality rather than the usual Southern English short a as in the word bat. For English speakers the vowels of the following words would be satisfactory; pat, pet, pit, pot, put, provided that the first

* Speakers from the Far East who have difficulty in pronouncing the letter "r" could pronounce it as an English "w" without effort.

has a good North Country sound to it. The only diphthongs likely to meet with, at any rate until the system has been very much more developed, are oi and ai, to be pronounced as in coin and aisle. So much for pronunciation.

Ideally pentatonic and hexatonic modes should be treated as entities in their own right and not as heptatonic with one or two notes missing. For practical purposes, however, since virtually all our musical training is seven-note based, and many tunes that are basically pentatonic do in fact include one or both of the "extra" notes we shall choose the most appropriate five (or six for hexatonic) consonants out of our seven.

Like the International Phonetic Alphabet the system can be used "broadly" or "narrowly." The seven consonants of the sol-fa system (those mentioned in the paragraph on pronunciation) are used to represent the seven degrees of the scale in the usual way, i.e. d, r, m, f, s, l, t. The amount of sharpness or flatness, i.e. the actual pitch of each degree is indicated by the vowel following the consonant, u being the flattest that a given degree can be, ranging through o, a and e to i which is the sharpest. The "Broad" use with just the five vowels given above is the approximate equivalent in accuracy of ordinary staff notation, slightly more accurate in fact as notes that are "in the cracks", degrees that are neither major nor minor can be expressed as will be shown later on. In the "Narrow" use of the system, great accuracy can be achieved provided the necessary instruments for the accurate measurement of pitch are available. For this the line round three sides of the "vowel quadrilateral" is equated with the pitch of the particular degree of the scale. For instance in the case of the sixth degree of a heptatonic scale, la, with the "cardinal u" sound would represent the flattest possible sixth degree you could have and li with the "cardinal i" sound would be the sharpest. In between these two extremes you have an infinite number, in theory at least, of notes with the frequency gradually getting higher which can be plotted against the theoretically infinite number of vowel sounds as they change from u via o, a and e (and the others whose written characters do not exist on this typewriter!) to i. This requires not only means for the accurate measurement of pitch, but a very sound knowledge of phonetics. In such a "narrow" notation not only would one have to make use of various symbols of the IPA alphabet, but for every transcription one would have to produce a diagram of the vowel quadrilateral showing the exact positions of all the vowels concerned in that transcription. I mention this only to show that the system is capable of great accuracy;

* Also occasionally ei as in the word "skim" or better like the Italian "lei."
I think in practice its "broad" use will be far more serviceable.

The "broad" system as outlined here is suggested for Western folk music; but I am convinced that with some modification it could be applied to that of other ethnic areas, and still be useful in showing similarities or the opposite between the music of one area and that of another. On the whole in Western music the degrees of the scale that seem most constant are the first, fifth and fourth; so these may be represented by the consonants only provided they are perfect; if the intervals are inflected at all and become augmented or diminished, then of course a vowel must be used with them. I would suggest di, fi, si for augmented intervals and du, fu and su for diminished. (If for any reason the word becomes unpronounceable without a vowel, the usual do, fa, so may be used if the intervals are perfect.)

It will be noticed in Sol-fa that the two notes that have the vowel i, mi and ti, are the two degrees of the scale that are normally the most sharp, the 3rd and the 7th. It is suggested that this vowel be kept for the major 3rd and 7th but be pronounced short and not too near cardinal i, so as to leave something in reserve for an exceptionally sharp major 3rd or 7th. (For English speakers the i of pit does nicely). For the minor 3rd and 7th sol-fa uses ma and ta which could become mo and to pronounced with the o as in pot. This leaves ma and ta for the interval that is nearer one nor the other. (Me and te with the e as in met are also possible for a slightly flattened major 3rd or 7th). This degree is common enough in folk-song though seldom noted as such in staff notation. Also if it were necessary we could have mu and tu for an ultra-flat minor 3rd or 7th. In tunes where these two degrees of the scale are inconsistent, sometimes major and sometimes minor (possibly sometimes in between as well) we can use moi and toi.

That leaves us with the 2nd and 6th degrees for which, when major, sol-fa uses ray and la. Ray can obviously become re with the e as in met, and for the minor 2nd, ro. We can use ra for a 2nd that is neither major nor minor but in between, ru for an ultra-flat or diminished 2nd and ri for an augmented one. After much thought and hesitation, I decided that it would be advisable to abandon la for the major 6th and use le instead so that one gets an exact parallel with the 2nd degree. So our major 6th is le, minor lo, "in between" la, diminished lu and augmented li. Our ordinary major mode thus becomes "dramfeleti". It will be noticed that the vowels of the first half are echoed by the vowels of the second; after all in the scale of C major GABC is an echo of GDEF a fifth higher.

We have already noticed the use of diphthongs to denote variable or inflected degrees and that the variable 3rd and 7th are represented by moi and toi. What about the other degrees of the scale? It would be logical for the 2nd and 6th degrees to write roe and loe pronouncing the oe as in the Welsh word Coed. In practice this diphthong is not so apparently different from oi, so for practical purposes for these two degrees we can say and write roi and loi. (The occasions on which one would want to distinguish between roe and roi would be very few and for those one could do so). It is possible one might find a tune in which the 2nd and/or 6th degrees varied between major and augmented, in which case one would write rei and lei and pronounce ray and lay, rather accenting the diphthong quality as the Italians do in their words rei and lei. With regard to the 1st, 4th and 5th degrees, the most likely variables would, I think, be do, fae with the e as in aisle, and soli. If other variable degrees come to light they could easily have the appropriate diphthongs assigned to them in a logical manner.

What about a case where different pitches of the same degree form an integral part of the mode? where it is not a case of either major or minor, for instance, but both major and minor being integral to the mode and probably appearing in juxtaposition. Here one would have to include both syllables e.g. moe or fasti, in the name. (See no 10 of the examples - and don't say it's not a folk tune! The system might possibly have wider uses than just folk music.) In this way modes with more than seven notes, octa-ennea- and dekaton modes for instance, could be accommodated.

One quite frequently comes across tunes in which one particular degree of the scale is consistently major at one end of the tessitura and minor at the other. Examples 2, 3 are cases in point. How can one indicate this? If we feel that in such a case both are integral notes of the mode we would write both adding a dot or a tick to indicate which comes at the upper end and which at the lower. For instance in the example quoted we could write "Dremsfeleti" (The use of an apostrophe for the higher and a full stop, or even a comma, for the lower is manageable on a typewriter. Alternatively one could use an acute accent for the higher and a grave for the lower, thus: Dremsfeleti, if this was thought preferable.) If, however, it is felt that this is really a variable 7th, one could write Dremsfeleti, or Dremsfeleti. In speech this would be difficult to indicate. Perhaps it is not necessary to do so. It could be done by pitching the syllable or element of the diphthong high or low as appropriate. This might take a little practice for Europeans, but cer-
certainly not to Africans or Chinese! (In typing these examples I realize I have crowded the apostrophe and the full stop too much on top of the vowel. I should have typed Dremifele'ti, or Dremifele'toi. From the look of the thing I prefer the use of accents but they don't exist on all typewriters. They are of course easily enough put in by hand.)

It will have been noticed already and a glance at the list of common modes given below will confirm it, that the resulting mode name in this system are pronounceable without much difficulty. Occasionally in a gapped space for instance, one will come across the juxtaposition of the consonants dm. (Pentatonic mode 2, for example in Dcifeto or perhaps D-mofa-to). If one thinks of the name Dmitri, one sees little difficulty here. If one comes up against an unpronounceable consonant cluster e.g. in a tetrasonic mode consisting of the 1st, 4th, 5th and 6th degrees only, one can easily insert an extra vowel for euphony, as has been said already; one would write and say in this case Dofale.

In addition to the actual mode, many will consider it desirable, if not necessary, to show the position of the tonic within the tetrachord, or briefly it is Authentic or Plagal. It would of course be possible to show all the notes used in a tune from bottom to top, but, particularly in the case of a tune with a big compass, this would be clumsy and would be awkward when trying to establish the facts and figures about modes in a given collection of songs. Professor Bronson uses the letters a, p, and m to denote Authentic, Plagal and Mixed. This for most purposes seems sufficient and I would suggest using a capital letter after the mode name standing apart from it, thus:- Dremifele'ti A would represent an Ionian or major tonic that was Authentic, not Plagal or Mixed. If it is thought necessary to give further detail, one could give the actual compass alongside the mode either in staff notation at actual pitch or in modified sol-fa; thus Example no 3 would be given as:- Dremifele'toi - (Mi - So') or (Mi, - So), the apostrophe and comma denoting that that particular note is in a different octave. On the whole I feel that for most practical purposes the use of the simple letters A, P and M put after the mode is all that is required, and it would be better to treat the compass of the tune as a separate issue and give it in staff notation.

There is always also the perplexing problem of circular tunes and bi-tonal tunes; tunes where the end is not really felt as an end, because it leads so inevitably back to the beginning and tunes which fluctuate between two keys, frequently changing back and forth every two bars. The main difficulty in these circumstances is not to decide on the mode, but to decide on which note is the tonic; once that decision has been made, the mode follows automatically. Examples 30 and 31 are both circular tunes if G is considered their tonic in modes Dremi-sle- and Dremifele'ti respectively, but if the final D is felt to be the tonic then they become Dremi-sle' and Dremifele'ti. (To put it in the old nomenclature with G as tonic they are Pentatonic Mode 3 and Ionian and with D as tonic they become Pentatonic Mode 1 and Mixolydian). Later on the question of deciding on the tonic will be briefly discussed; here we are still dealing with nomenclature. How do we indicate a circular tune? One way would be to start with the final note of the tune whatever degree on the scale it is. Examples 30 and 31 would then become (assuming them circular with G as tonic) Sle-dremi' and Sletidremif. Possibly this method has certain points in its favour, but Sletidremif is not immediately recognisable as being the same mode as Dremifele'ti when going through songs to find out the number that are in the Ionian mode for instance. I feel it would be simpler and clearer to use the usual mode name with a C (for Circular) against it along with the A, P or M. (Alternatively an O could be used as here the shape of the letter implies circularity independent of language). So for Example 31, I would write, again assuming G to be the tonic, Dremifele'ti FC (or PO).

Example 32 shows us a tune which is both circular and bi-tonal. It seems to alternate between C Ionian (Lydian in the second half) and D Ionian-Mixolydian. Such a tune will always present problems but we could record it as alternating between Dremi'sle'ti on C and Dremifele'ti on D. The problems of this tune will again be discussed later on; sufficient to note for the moment that the system can cope with it.

The usual pentatonic and hexatonic scales are easily dealt with. In these it might be worth writing them with a hyphen to show where the big gaps come, though this is not altogether necessary and would not affect the pronunciation. The so-called "minor pentatonic" found quite frequently in Japan presents no difficulty; it is simply Dremi-sle'-slo'. Even the pentatonic where the octave is divided into five equal steps of a tone and a fifth each can with a little ingenuity be catered for as can the whole tone scale or a complete chromatic scale.

Abandoning for a moment the question of modal nomenclature, I would like to consider very briefly one or two aspects of modal analysis. We must always remember that folk music and folk musicians do not obey rules. They may seem to be subservient to certain tendencies, but that is as far as they dare go. In the folk music of certain countries there are ten-
dencies towards certain modes, but there are always many exceptions. In some countries there is a tendency for a folk tune to remain in the same key, but we must beware of saying that the folk music of that country never changes key. I use the expression "change key" rather than modulate deliberately, because quite frequently a folk tune will plunge into a new tonality without any preparation. (See Examples nos 7 and 28.) Also as we have noticed already, a number of tunes seem to be bi-tonal, shifting constantly between two keys frequently, but not invariably, a tone apart.

Accordingly when trying to analyse the modality of a tune one must examine what is in fact there, not what one thinks ought to be there. That is where one or two of the earlier collectors went astray. When they write against a tune for instance "Mixolydian with 3rd occasionally flattened" it is almost as if they are trying to say that the singer had no business to flatten the 3rd in a Mixolydian tune.

Admittedly modal analysis is somewhat subjective when it comes to determining the tonic of some tunes, as we have seen in the case of circular and bi-tonal tunes. It has been suggested that the note upon which most time is spent (not necessarily the most frequently sounded note) is the tonic. Is this really so? The familiar tune to "John Peel" for instance, Nobody would deny that the final note of this is the tonic, yet the 4th degree (sub-dominant) occurs just as much or rather has an equal amount of time spent on it. Example 53 shows a still more convincing case, where both the 2nd and 5th degrees have more time spent on them than the tonic. It is of course possible to make use of a computer to decide in doubtful cases which is the tonic, but let us remember that computer results depend on what facts etc are fed into it by human beings; the human element is still there. Folk music is after all a human form of expression and until computers are in a very much more advanced state I see nothing wrong in applying a human form of analysis, even if it is often subjective. The efficient analyst will of course list more than one possibility in these doubtful cases and leave it to individuals to decide for themselves which they think correct. So far so good, but what happens when one wants to work out facts and figures? Which of the possibilities does one use? I suppose the answer is to put these doubtful cases, many of which are doubtful in the same way, into separate categories of their own and then, if necessary supply two sets of figures based on each of the possibilities.

There are other problems in the modal analysis of folk music. Does one include ornaments as an integral part of what is to be analysed or not? In many transcriptions of the "broad" type the question does not

really arise as editors and/or collectors have not given the details of ornamentation, but where they have (e.g. Percy Grainger in many instances), what then? If one excludes ornaments one might also exclude passing notes or indeed any note not on a strong beat, on the grounds that they are simply a form of ornamentation. If one did, one would get some rather different results; results which would represent the mode towards which the tune was tending rather than the mode in which it actually is. In many cases this might show the mode of earlier forms of the tune and be of considerable interest. All this, however, is rather far removed from the main purpose of this document which is to put forward a suggested form of modal nomenclature.

It seems to me that the system here outlined has certain definite advantages over what has hitherto been used. The mode names not only imply in their make-up the nature of the mode but can also be pronounced with comparative ease. The association of the name with the sound of the mode comes remarkably quickly. Starting from scratch it should not any longer to associate the word "D-mof-loto" with a particular modal flavour than the words "Pentatonic Mode 5" or "The Mi Penta-tonic Mode" of many music educationists to-day.

The system can be used on two levels, "narrow" which has absolute accuracy but needs mechanical methods of determining pitch accurately and a good deal of specialized knowledge, and "broad" for use with tunes noted in ordinary staff notation, sol-fa and possibly even other forms of notation and which is accurate enough for most practical purposes. It is applicable to a very large percentage of the world's folk music (and even perhaps other forms of music) and therefore facilitates comparison between folk music of different ethnic groups. It is easy to use to establish the facts and figures of the modes in use in a particular group of tunes or in a particular area. The system does not pretend to be anything other than a system of modal nomenclature which, I believe, would work. Much of the actual analysis would remain, as it always has been, to some extent subjective.

PAT SHULDHAM-SHAW
Appendix I
List of degrees of the scale and their appropriate syllables.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Perfect</th>
<th>Major</th>
<th>&quot;Doubtful&quot;</th>
<th>Minor</th>
<th>Augmented</th>
<th>Diminished</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>d (do)*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>di</td>
<td>du</td>
</tr>
<tr>
<td>2nd</td>
<td>-</td>
<td>re</td>
<td>ra</td>
<td>ro</td>
<td>ri</td>
<td>ru*</td>
</tr>
<tr>
<td>3rd</td>
<td>-</td>
<td>mi</td>
<td>ma</td>
<td>mo</td>
<td>mu*</td>
<td>-</td>
</tr>
<tr>
<td>4th</td>
<td>f (fa)*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>ti</td>
<td>fu*</td>
</tr>
<tr>
<td>5th</td>
<td>s (so)*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>si</td>
<td>su*</td>
</tr>
<tr>
<td>6th</td>
<td>-</td>
<td>la</td>
<td>lo</td>
<td>li</td>
<td>-</td>
<td>lu*</td>
</tr>
<tr>
<td>7th</td>
<td>-</td>
<td>ti</td>
<td>ta</td>
<td>to</td>
<td>ti*</td>
<td>tu</td>
</tr>
</tbody>
</table>

* used only where necessary to facilitate pronunciation.
* probably rare in Western folk music.

Appendix II
Names of some of the commoner modes

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ionian (= Major)</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Mixolydian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Dorian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Aeolian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Phrygian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Locrian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Lydian</td>
<td>Dremifeleti</td>
</tr>
<tr>
<td>Minor (harmonic)</td>
<td>Dremafeleti</td>
</tr>
<tr>
<td>Major (melodic)</td>
<td>Dremafeleti</td>
</tr>
<tr>
<td>Pentatonic Mode 1</td>
<td>Dremafeleti (D-re-fa-e-)</td>
</tr>
<tr>
<td>Pentatonic Mode 2</td>
<td>Dremafeleti (D-mofat-to)</td>
</tr>
<tr>
<td>Pentatonic Mode 3</td>
<td>Dremafeleti (D-re-mi-e-to)</td>
</tr>
<tr>
<td>Pentatonic Mode 4</td>
<td>Dremafeleti (D-re-fa-to)</td>
</tr>
<tr>
<td>Pentatonic Mode 5</td>
<td>Dremafeleti (D-mofat-to)</td>
</tr>
<tr>
<td>&quot;Minor Pentatonic&quot; (Japan)</td>
<td>Dremafeleti</td>
</tr>
<tr>
<td>&quot;Double Oriental&quot;</td>
<td>Dremafeleti (Dremifi-loto)*</td>
</tr>
<tr>
<td>&quot;Whole Tone&quot;</td>
<td>Dremafeleti (Dremifi-loto)*</td>
</tr>
<tr>
<td>Chromatic (a)</td>
<td>Droimofakelotoi or Droimofakelotoi*</td>
</tr>
<tr>
<td>Chromatic (b)</td>
<td>Droimofakelotoi*</td>
</tr>
</tbody>
</table>

* indicates that there are other possible ways of writing this.

Chromatic (a) represents a mode of 7 notes in which all except the tonic are variable; (b) a mode in which all 12 semitones are integral to it, i.e., a true dodekatomic mode.

Appendix III
Musical Examples with Notes.

1. The Cuckoo. From "Folk Songs from Sussex". Butterworth. (Augener). Here written out from memory. A typical example of a tune with a variable 3rd. Mode: Dremifeleti tending towards Dremafeleti A.  
   (Jornings, Green & Co) No 796 page 388. A typical Irish jig with a flat 7th at the top and a sharpened 7th at the lower end of the tetrachord. Mode: Dremafeleti M.

2. Humours of Curragheen. From "Old Irish Folk Music and Songs". Joyce, (Longmans, Green & Co) No 796 page 388. A typical Irish jig with a flat 7th at the top and a sharpened 7th at the lower end of the tetrachord. Mode: Dremafeleti M.

3. Tatter Jack Walsh. An Irish jig written out from memory. An example of a tune with a variable 7th. Mode: Dremafeleti tending towards Dremafeleti P.

4. Croatian Tune heard when in Jugoslavia and here written from memory. If C be taken as the tonic, then the mode is Dremofaleiti PO (or PC). If E be taken as tonic, then it becomes Dremofaleiti A0 (or AC). It is, I suppose, also possible to take F sharp as the tonic, in which case it would be Dromofaleiti. I personally feel the first suggestion is the proper one, but that is of course "subjective".

5. I Mab Agradawn (The Prodigal Son). A Welsh folk-song here written from memory. This is a real puzzle. Basically it seems to be in C major with a momentary plunge into E flat major or C Major/Modal or the whole of the tune.

6. The Greenland Man's Tune. Collected from Walter Shawan, Fetlar. I prefer to think of the whole tune as being Dremafeleti though I know people who feel that the last phrase is Droimofaleiti with A as the tonic.

7. The Hielandman. Noted from Gibble Gray, Unst. The last phrase is, with C as tonic, Dremi-seiti tending towards Dremi-sei. The 2nd phrase, with A as tonic, is Dremi-faleiti tending towards Deri-faleiti. Both phrases are circular. On the whole I think that the best analysis of the tune but of the two tonics, I feel C to be the real one and so one could possibly say it to be in the Deri-sei mode tending towards Dremi-sei PO.

8. A Welsh folk-song tune, name forgotten, written here from memory. No difficulty here. It is really the ascending form of the melodic minor and therefore Droimofaleiti P, with a tendency towards Dremi-seiti.

9. Totenlied. An Austrian song from Folk Songs of Europe - Karpeles, (New York) No 71, page 106. On the surface a plain Dremifaleiti tune with C as the tonic and finishing on the 3rd as so many German and Austrian songs do. On the other hand the actual tonic occurs only once and then very fleetingly. (If by chance it did not occur at all, we should have a 5 note mode in which the tonic, though implied in the mode, was never heard and we should have to write "-remifaleiti:" It is also possible to consider E, the final note, as the tonic in which case we have Droimofaleiti A tending towards Dromofaleiti A.

10. Johnson's Hornpipe (I think). From Kerr's Merry Melodies. Many would not consider this a folk tune; nevertheless it does provide an interesting problem for analysis. I would classify it as follows:-
18. Basque Song from "Anthologie des Chants Populaires Français" - Cante-loube, (Durand) Tome I page 274. This has variable 3rd, 6th and 7th and is accordingly Dremofisloiti M.

19. Sicilian Lullaby from same source as 16, No 125, page 180. The first line uses B natural which changes to a flat from bar 7 onwards. We could say quite simply that this is Dremofisloiti i.e. with a variable 2nd, but this does not really mean the same because the 2nd is not really variable. It is consistently major to begin with changing to minor at a given point in the tune and remaining consistently minor to the end. It would be more adequate to divide the tune into three parts: Bars 1 - 5, a pentachordal Dremof, bars 6 - 8, Dremofisloiti (Dremofisloiti 1) - 22 a three-note Droti (Dremofisloiti 2) preferred). Perhaps it is felt that in this instance both major and minor 2nds are integral to the tune, since it is not really a variable 2nd. In this case we could write Dremofisloiti for the whole thing, which is perhaps the most satisfactory solution.

20. Japanese song from "Folk Music Festival in Hawaii" - John Kelly, Jr, (Boston Music Company) page 37. This is an example of one of the hexatonic modes to be met with frequently in Japanese music, but not unknown in other parts of the world. If A is the tonic, it is Dremofisloiti F, but it could also take D as the tonic in which case it becomes Dremofisloiti PO (or MO).

21. Bedfordshire May Day Carol from "English Traditional Songs etc" - Lucy Broadwood, (Boosey and Hawkes). Here written from memory. An example of an English tune that has strong pentatonic tendencies. The 4th, which is the extraneous note, occurs only twice, both times as a passing note. I would describe this as Dremofisloiti A tending towards Dremofisloiti A.

22. The Maid on the Shore. From "Folk Songs from Newfoundland" - Karpeles, (OUP). Here written from memory. Another example of the same sort of thing. The major 3rd occurs only once and that on a passing note; the major 6th three times again only as passing notes. This could then be fairly be described as Dremofisloiti A tending towards Dremofisloiti A. As the 4th only occurs three times also and never on a strong beat, one might take the process a stage further and say it was tending towards Dremofisloiti A. (I don't feel the one note over the 4th is sufficient to make it a Mixed rather than an Authentic tune).

23. The False Bride, coll Sharp FSIJ (Folk Song Journal) Vol II, page 13. If one subscribes to the theory that British folk-songs never modulate, one would have to say this has a "variable 4th" and give the mode as Dremofisloiti F. If one feels that there is in fact a modulation, one may prefer to think of both major and augmented 4th as integral to the scale and write Dremofisloiti F.

24. Banks of the Clyde, coll Sharp, FSIJ Vol II, page 5. In the Journal this is given as Mixolydian with a note saying that Mixolydian tunes frequently contain a flattened 3rd. Why not say Dorian and Dorian tunes can contain a sharpened 3rd? It is just as logical. In the FSIJ, I gave it as Dremofisloiti A with a variable 3rd, minor at the top end and major at the lower end of the tetratonic, and a minor 7th. In fact Dremofisloiti M.

25. Lisbon, coll Sharp, FSIJ Vol II, page 22, where it is given as Dorian! It is nearer to a melodic minor than anything, but it is not even quite that. Both 6th and 7th are variable, so we have Dremofisloiti A.

26. Geordie, coll Sharp, FSIJ Vol II, page 27, where it is given as Aeolian. Why not Dorian? The one note of difference between the two is never heard so surely it could be either. It is a hexatonic, quite common in England where the absolutely pure pentatonic is rare, and is of course Dremofisloiti F.

27. A Man that is stout, coll Sharp, FSIJ Vol II, page 44, where it is given as Dorian. Maybe here and there it has a slight Dorian flavour, but the 7th is more often a minor and the 3rd vary from time to time. I would call it Dremofisloiti M. If one wanted to show that in the variable degrees one or other of the possibilities was more frequent than the other one could mark that element with a line underneath or one could mark the line frequent element with * above; or in this instance one could say Dremofisloiti M tending towards Dremofisloiti M.

28. Joan to Jan, coll Sharp, FSIJ Vol II, page 58, where it is not assigned to any mode. This is one of the most extraordinary tunes collected anywhere. I think the only way to deal with it is to break it up into
sections. First of all though, it is obviously a circular tune, with D as its main tonic. The first two sections are pentatonic Mode 3, i.e. Dremlisle-. The third section is pentachordal Dremlisile-. Then comes a sudden plunge into E major (perhaps C sharp minor?), in other words Dremlisile with E as tonic (or perhaps Dremlisile with C sharp as tonic?). Then the rest is B Aeolian or D according to how one feels it. The fifth section is really a pentachordal Dremlisile--, a repetition of the third section but with B as the tonic, and the final section brings us back to Dremlisile with D as the tonic, but ending on the dominant, ready to lead back to the next verse. Very complicated and mixed-up, but it is a complicated and mixed-up tune anyway. I suppose one could say Doiremifasileti PO or Dodiremifasileti PO for the whole thing.

29. Come all ye faithful Christians, call Vaughan Williams, FSJ Vol II, page 118, where it is given as Dorian. The real point of interest in this is the second note of bar nine which is really, I imagine, neither E natural nor E flat but somewhere between the two. Let us assume for a moment that this is what Vaughan Williams intended to convey in his question mark over the top of the note. In this case it is neither Dorian nor Aeolian but between the two. We can write this as Dremlisile M. But anyway it is tending towards a pentatonic, D-mo-to N.

30. Pretty Saro. From "English Folk Songs from the Southern Appalachians" - Cecil Sharp (OUP) Vol II, No 76, version B, page 11. Here is a good example of a tune with a doubtful tonic. If G is the tonic, as given in the book, then the mode is Dremlisle-PO. If we consider D as the tonic, then it becomes Dremlisle A. A number of tunes of this sort exist in the Appalachians and Scotland, particularly the Gaelic speaking areas.

31. Air Fali-ill-ill-o. Gaelic song, here written from memory of many a ceilidh. This is an example of the same phenomenon as 30 but in a heptatonic mode. It is most likely Dremlisileti PO, but could be Dremlisileti A, according to whether you take G or D as tonic.

32. Caber Feidh. An unusual fiddle version noted by Peter Grass of Hreanay, Shetland. Most versions have F natural throughout and hover between Dremlisileti on C and Dremlisileti on D, but this one is much more complex. Here in the parts of the tune that have C as a tonic it is Ionian (major) in the first half of the tune, but in the second half it has a Lydian feel about it and in the bits that seem to have D as a tonic though the Fes are consistently sharp, the C#s are sometimes sharp and sometimes natural. So we can say that the tune hovers between Dremlisileti on C and Dremlisileti on D. I feel this bitonality is inherent to this type of tune, otherwise one could say Doiremifasileti on C for the whole thing.

33. Bonny Green Garters. From "Morris Dance Tunes" - Sharp, (Novello), here written from memory. An ordinary Dremlisileti tune but an example of one in which two other degrees of the scale are given more weight (or do I mean what?) than the tonic.