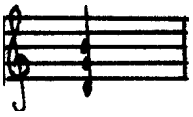
[252]

Appendix 2

The purpose of this appendix is to justify the statement made in Chapter 2, p. 62, that *Caniad y Gwyn Bibydd* is most likely to be in the major mode.

The piece is based on the measure *tytyr bach*, which has the harmonic pattern 0011.0011, or a repeated pattern of two *tyniadau* followed by two *cyweirdannau*. Since the tonal centre of the piece is C, we expect the note-groups associated with the *cyweirdant* and *tyniad* principles to be a-c-e-g, and g-b-d-f-(a) respectively. One aspect of these note-groups which is particularly relevant to the present discussion is the fact that in the absence of any chromatic alteration, the notes belonging to either group may be sounded together without producing any interval of greater dissonance that a major second or minor seventh.

The harmonic pattern in the lower part remains the same throughout the piece. It consists basically of the two chords



(*tyniad* = 0)

and

(*cyweirdant* = 1)

grouped into multiples of the pattern 0011.

Throughout this analysis it should be borne in mind that the re-iterative pedal c which follows each chord in the lower part is potentially of harmonic significance. At certain points, such as *cainc* 8, it may produce an expansion through subdivision of the basic measure 0011.0011 to 0101.1111. 0101.1111. Thus the underlying harmonic pattern of the piece has a strong implicit *cyweirdant* bias.

[253]

At various points in the present work we have remarked upon the static quality of the harmonic processes in this music. This effect is produced as follows: The *cyweirdant*/*tyniad* relationship is, in itself, dynamic. The *cyweirdant* harmonic form is based on the tonal centre of the piece, and in its common triadic form, such as we find in *Caniad y Gwyn Bibydd*, is a stable, consonant point of repose. The *tyniad* form contains notes which are complementary to

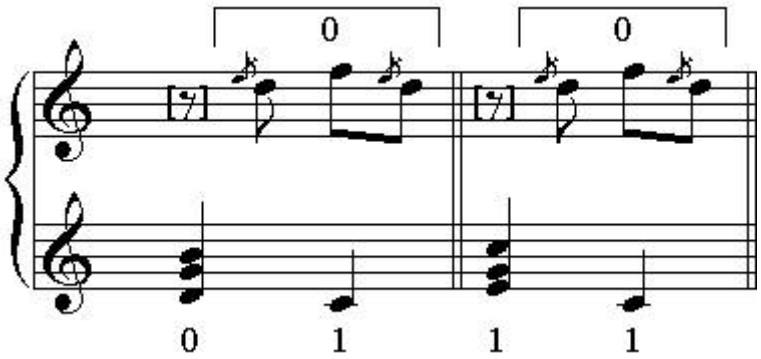
the basic *cyweirdant* notes, and is less stable, requiring movement towards the *cyweirdant* axis. Both forms are basically consonant.

The dynamism inherent in this relationship is frequently contradicted, firstly by the constant and exclusive alternation of the two harmonies, and secondly by the juxtaposition of a melodic line consisting mainly of *tyniad* notes against a *cyweirdant* chordal background.

This process is the main source of extreme vertical dissonance in *Caniad y Gwyn Bibydd*. It is remarkable that, as we observed in chapter 4, such dissonant harmonies act in opposition to any effect of dynamism, in total contrast to the role of dissonance as a source of tension leading to the relaxation of consonance in conventional Western European harmonic thought.

Thus in the first five *ceinciau* of *Caniad y Gwyn Bibydd*, ostinati consisting of predominantly *tyniad* notes in the upper part, against the *cyweirdant*-dominated harmonic background produce a static neutralisation of the basic *cyweirdant*/*tyniad* relationship through the creation of dissonance as described above:

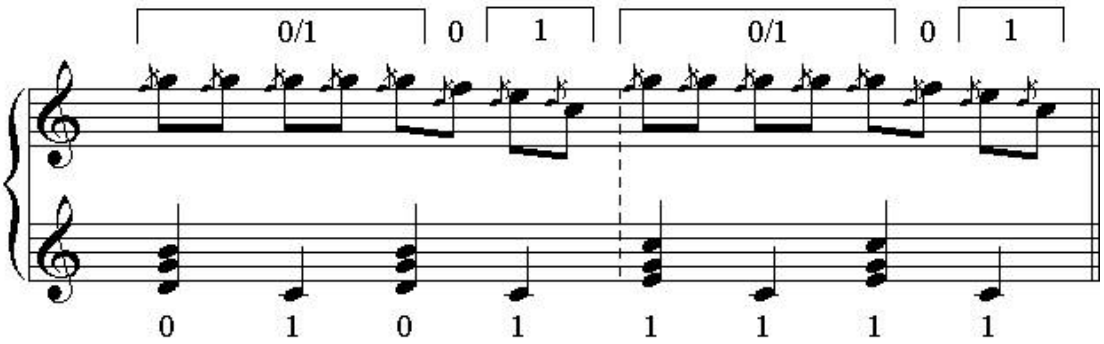
cainc 2



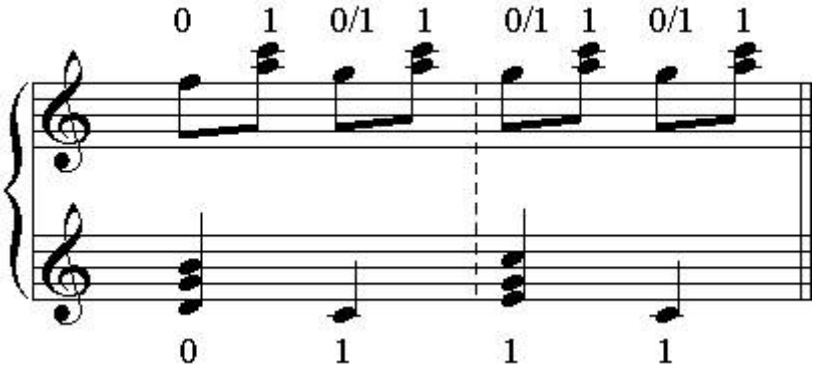
[254]

In *ceinciau* 5-7 there is an increasing tendency to use notes in the upper part which are common to both *cyweirdant* and *tyniad* note-groups, so that the harmonic movement of the lower part is no longer contradicted by 'foreign' notes in the upper part. In *cainc* 7, the upper part actually reinforces the harmonies of the lower part, with the exception of a *cyweirdant* note c which sounds against an underlying *tyniad* chord, and thus reverses the situation which prevailed in *ceinciau* 1-5.

cainc 6:



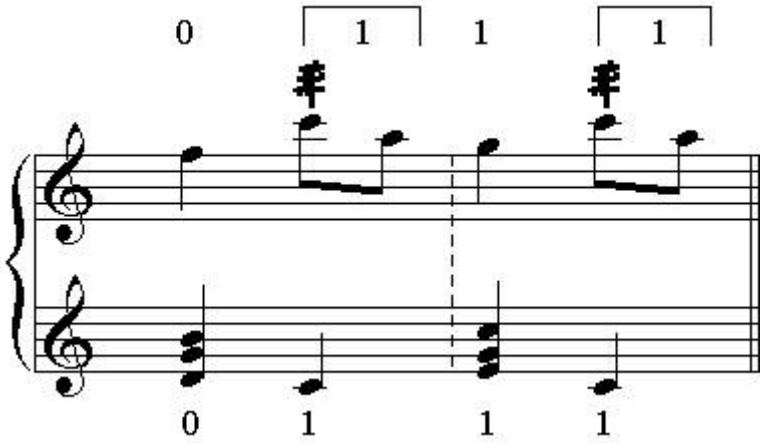
cainc 7:



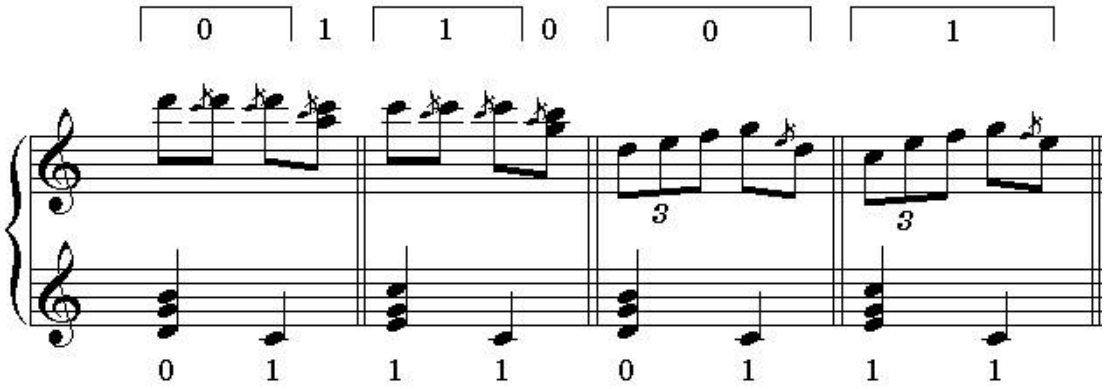
[255]

In *ceinciau* 9-12 there is a change in the form of the melodic line from the simple ostinato patterns of the previous *ceinciau* to more elaborate sequential repetitions. The sequences are arranged in such a way that each accented melody note belongs in general to the note-group associated with its underlying harmonic form. Thus there is a marked reduction in the number of accented dissonances. At the same time, the reiterated pedal c gradually ceases to maintain its harmonic function, so that the measure is stated in its unexpanded form 0011.0011.

cainc 9:

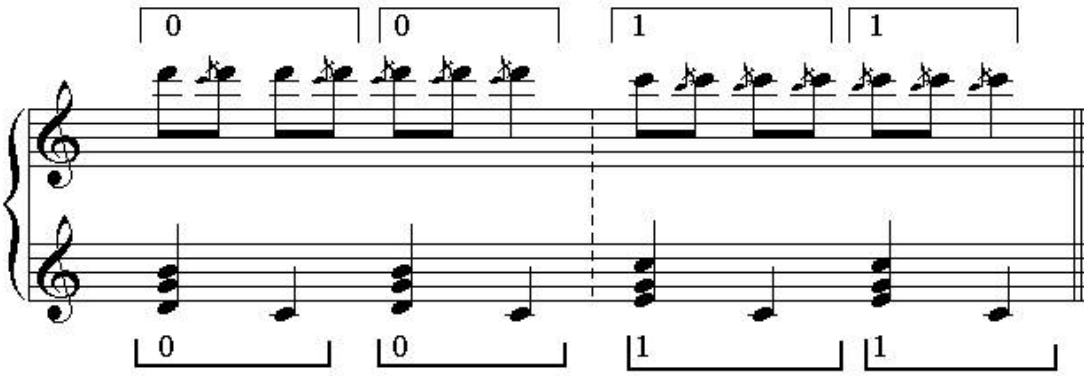


cainc 10:

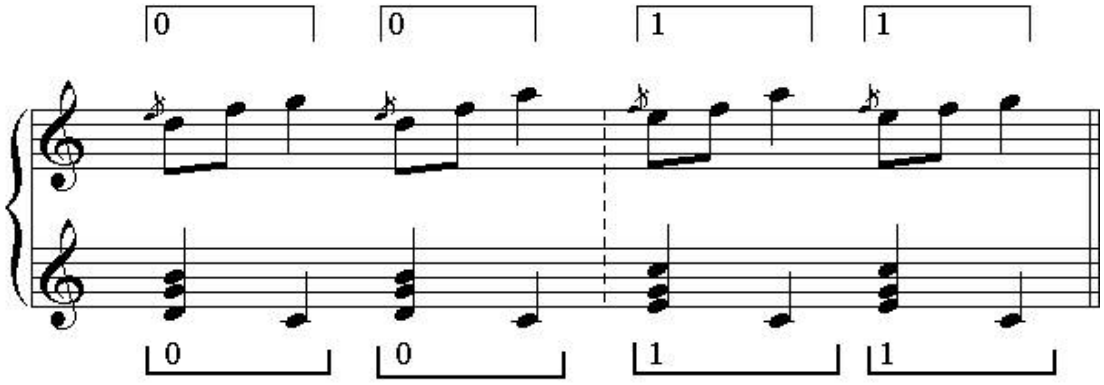


[256]

cainc 11:



cainc 13:

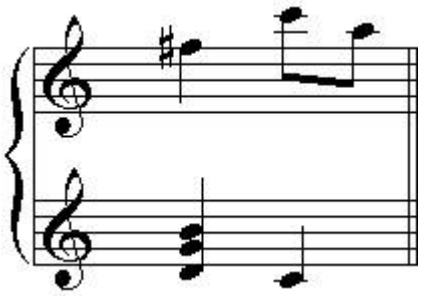


[257]

In general, then, the piece shows a progression from a high occurrence of vertical dissonance in the early *ceinciau*, caused by the frequent admixture of notes from the *cyweirdant* and *tyniad* note-groups, to a predominantly consonant texture in the later *ceinciau* owing to the consistency between the accented melody notes and their underlying harmonies.

This progression would not be possible if the notes belonging to the respective note-groups produced harsh dissonances when sounded together. As we suggested at the beginning of this appendix, such dissonances can only be avoided if no chromatic inflections are applied to any of the notes.

The introduction of f sharp, for example, would produce the *tyniad* note-group g-b-d-f sharp, and disturb the comparative consonance of the opening chord of *cainc* 9:

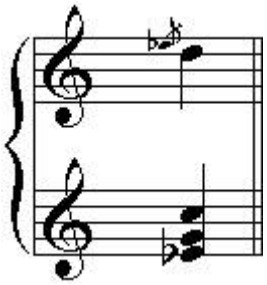


A b-flat would again increase the dissonance of the *tyniad* note-group: g-b flat-d-f, and disturb its relationship to the *cyweirdant* note-group, since the note b, in a *tyniad* context appears to function as a 'leading note' to the *cyweirdant* note c.

E flat appears to be an equally unlikely inflection, because it would create the modal pattern which we identified as the *go gywair* in chapter 2: c, d, e flat, f, g,a, b, c; and the evidence suggests that *Caniad y Gwyn Bibydd* was associated with the *bragod gywair*,

rather than the *go gywair*. Furthermore, an e flat would considerably increase the strength of the dissonance in the following harmony, which is found in *ceinciau* 3-5:

[258]



The addition of any further accidentals on either the sharp or the flat side would result in the occurrence of major sevenths, minor seconds and tritones, which would destroy the logical harmonic pattern which we have outlined in our analysis.

Since any chromatic alteration could only detract from the logicality and effectiveness of the musical processes in Caniad y Gwyn Bibydd, we are justified in supposing that the piece is to be played in the major mode with its tonal centre on c.