

In every harmonic minor scale is embedded another minor chord: take, for example, D harmonic minor:

The 3 notes can be heard as the chord of i.e. Bb minor.

Similarly, if we take the scale of Bb harmonic minor:

the 3 notes can be heard as the chord of i.e. F# minor.

If we take the scale of F# harmonic minor:

the 3 notes can be heard as the chord of i.e. D minor. Thus we have "come full circle!"

This gives rise to other possibilities. For example, the diminished 7th can be used as a "pivot" chord — changing C# enharmonically to Db:

D minor $\xrightarrow{\text{dim. 7th}}$ Bb minor

TONAL AMBIGUITY
[This sense of tonal ambiguity was known to J.S. Bach]

See bars 20-21 of the Fantasia from the Fantasia and Fugue in G minor, BWV 542: the sudden change of key (via the diminished 7th) to Eb minor does not lose its powerful effect with repeated hearings (now after 270 years since it was written):

Starting in Bb minor:

Bb minor $\xrightarrow{\text{Diminished 7th}}$ F# minor
"all the same chord!"

Basic harmonic change:

Starting in F# minor:

F# minor $\xrightarrow{\text{Diminished 7th}}$ D minor

I was perhaps not consciously aware of the possibilities of this tonal ambiguity when the first melodic idea of the Study in D minor occurred to me in 1967 - watching the autumn storms sweeping in over Lough Erne from the Atlantic:*

(2)

Ex. 1

Ex. 6. (3)

Below this representation of force-9 south-westerly, a new idea emerges fragmentarily, in L.H. — the gaps are deliberately irregular:

Ex. 7

This is the conflict joined between R.H. (Dorian mode) & L.H. (D harmonic minor); then the (with a glint of D major)

two hands swap round, with L.H. having the Dorian & R.H. the harmonic minor, in fourths:

Ex. 7(a)
R.H.

One more idea, derived from Ex. 7 & 7(a):

— then we return to the conflict between Ex. 6 & 7 & 7(a).

Ex. 8.

After Ex. 8 re-appears, followed by the bitter-sweet Ex. 3, there is a hint of a new melodic idea amidst the wavy lines :-

Ex. 9.

— before the music seems to die away.

But it breaks out, with Ex. 6 expanding over nearly 3 octaves, like a great wave. Then the music moves to a

kind of F major, like a sudden burst of sunlight, and we hear Ex. 9 apparently in a clear F major (though there is a low E flat lurking some octaves below — threatening to fall to D flat (can we hear this as C sharp?))

D-C# bursts forth, and soon Ex. 1 thunders ⁵ out in the bass below Bb-C# in R.H. - then a Dorian whiff in R.H. above the C# Bb in L.H. We are back to D minor with a vengeance. There are five successive bars completely round the scale of D harmonic minor, before the bitter-sweet Ex. 3 strides up in L.H. The shrill climax (marked *fff* possibly *strepitoso*) is all about the discrepancy between D harmonic minor (Bb-C#) & the Dorian mode (C-B) - the Right hand soon descends to D-E, proving that ^{L.H.} harmonic minor has won. The double trill (D v. C#, E v. Bb) becomes an iron alternation, subsiding on the E-versus-Bb

Below a rocking figure in R.H. (*Molto più tranquillo*), we least Ex. 7 in L.H., now in more regular melodic form:

Ex. 12

etc.

Ex. 7 reappears in Bb minor (see my comments on tonal ambiguity; R.H. of Ex. 12 could be written [↑])

+ 8ths

Perhaps I have gone into this in too much detail (the piece lasts only 12 minutes - or maybe less!). What happens after this is largely a re-working of what has gone before: we hear the bitter-sweet Ex. 3 in F# minor

with F D at the top - this works itself into a melodic fragment expanding*:

Ex. 13

F E D E C D

We hear Ex. 4, or at least C#-D# & C#-G#, with Ex 1 starting on Bb

There are more Dorian whiffs in R.H. (all white notes) while a new figure (derived from Ex. 7) leaps up in L.H.; eventually this passes to R.H.:

Ex. 14

F - E - D - E - C - D

* Those who care to see a sub-conscious reference to the Dies Irae (F - E - [F] - D - E - C - D) are at liberty to do so. Rachmaninoff never made any secret of his references to it - why should I (!?)

