

# REVIEW OF THE ORGAN OF THE TORENKERK, GAPINGE, HOLLAND

produced for Hauptwerk Virtual Pipe Organ by Voxus Organs

by Adam J.R. Herrick

## THE ORGAN:

The Torenkerk organ was probably constructed by Ludovicus de Backer or one of his pupils around the year 1755 as a house organ for a wealthy client who would have bought it not only for musical performance but as a demonstration of his / her great wealth, as was the custom in Dutch high society at the time. The organ originated in the province of Zeeland and was owned by several private individuals before passing into the hands of various congregations of the Dutch Reformed Church, being finally acquired by the congregation of the Torenkerk, Gapinge in 1903.

The instrument, of seven stops (of which three are half-compass), would not, at its creation, have been intended for the performance of sacred music and likely found its primary employment both in solo improvisation and performance of secular music and in the accompaniment of larger ensembles in a continuo role. That the main (notated) repertoire for organ of the period was the (usually) sacred music of Sweelinck and his pupils in the Dutch-North German school cannot be denied however and the performance of these composers' *manualiter* works will usually prove pleasing on the instrument. One form with which the author has had particular success is the chorale partita (used, for instance, by Bach, Böhm), which can often be performed very successfully using the simple registrational changes of which the instrument is capable.

In the secular sphere, the author has also been directed toward a collection of (mainly shorter) works known as the "Cocquiel Manuscript", many of which seem to be written with an instrument possessing half-stops in mind: many of the works in the collection have a definite "split-point" between middle B and C, where in solo-accompanimental pieces, the solo and accompanimental lines never cross this point from their respective halves of the keyboard. Some of the pieces are titled with obviously religious names, but many are simply sets of variations or free works which can be performed very appropriately on the Torenkerk instrument.

Though perhaps not immediately obviously, the Torenkerk instrument lends itself well to the performance of English keyboard music of the (sixteenth,) seventeenth and early eighteenth centuries. Its specification is essentially that of a small English "Single" organ and is quite sufficient to do justice to the works of Byrd, Tallis, Clarke, Purcell and – to some extent – the works of later composers such as Boyce and Stanley. Though many English instruments were larger and more technologically sophisticated by the time the Torenkerk instrument was built, smaller, poorer churches would often only have possessed small instruments of a disposition similar to that of the De Backer instrument – a fact of which the aforementioned composers would have been well aware. Though the lack of a reed stop might make the performance of the English "trumpet" voluntaries of the Baroque and early Classical more difficult to achieve, there is much to recommend the Torenkerk organ for the performance of this repertoire. Indeed, the rejuvenation in English organ building which occurred after the Restoration in 1660 was to an extent driven by the arrival of Dutch organ builders (Renatus Harris, Bernhard Schmidt etc.) who brought a continental (and mainly Dutch) influence to bear on the English tradition, which confirms this instrument's appropriateness for that repertoire.

It is doubtless the case that an organ devoid of a pedal board and possessed of (essentially) only two tone colours will find the Romantic and Modern repertoire difficult to achieve. Though Hauptwerk's functionality will allow the use of the pedal board through the duplication of MIDI inputs (by connecting the physical pedal keys *and* the manual keys to the same virtual input key), which in turn allows the use of the instrument as though it had a permanent manual to pedal coupler – a feature entirely realistic and helpful in the performance of much of Sweelinck and suchlike – this approach will be insufficient for the performance of the vast majority of Bach, Buxtehude and the North German Baroque school whose music invites or requires a distinct *pedaliter*

registration. Some of the well-known *manualiter* repertoire (e.g. the Bach / Böhm chorale partitas or a handful of the Buxtehude free works) can be performed adequately; much of the remainder will disappoint. The same will be true of the other European Baroque schools to a greater or lesser extent, where either the lack of independent pedal stops or the lack of a broader tonal palette will frequently prove disabling.

### **SPECIFICATION:**

The specification of the Torenkerk organ is as follows:

#### **MANUAL:**

Prestant	8'	[Treble Only]
Hohlpijp	8'	
Prestant	4'	
Fluit	4'	
Octaaf	2'	
Quint	1 1/3'	[Bass Only]
Cornet	III	[12.15.17; Treble Only]

### **THE SAMPLE SET:**

The organ of the Torenkerk, Gapinge, Voxus Organs' first public offering is an impressive first foray into the world of sample set production and a daring challenge to the well-established producers to "raise their game" (or perhaps lower their prices). The author, being relatively poor and already in possession of a substantial Dutch Baroque instrument, had no intention of acquiring a second such instrument (of any size), on the grounds that such "duplication" would not be a sensible use of the very limited financial resources he is able to devote to Hauptwerk. Nonetheless, he was enough moved by the impressive demo recordings and even more impressive price tag to purchase the instrument within a week of its release, in spite of these otherwise powerful considerations. Though there is perhaps less potential for disappointment when the sums involved are small, the purchase of any instrument which cannot be thoroughly tested in advance represents a risk to the consumer; an instrument from a "new" producer perhaps represents a greater risk than one purchased from a producer whose reputation is established. In this instance, no such worries should ever have been entertained!

At the time of writing, the Torenkerk sample set is one of a handful of sample sets recently released whose quality is as high as any available, but whose price level represents a new (and welcome) degree of affordability in the range of virtual instruments available for use with Hauptwerk. Currently on sale for €19 (or approximately €2.71 to €3.45 per stop – dependent on the method of stop counting – which is equivalent to \$3.55 to \$4.52 per stop at current rates) the set represents a greater degree of affordability (and generosity on the part of the gentlemen at Voxus) than even the Pusztaszabolcs instrument offered by Inspired Acoustics, which the author has long considered to set the standard for value for money on a "quality and quantity" versus price basis. Though the author can comprehend the commercial advantages which Voxus have doubtless gained by offering their first sample set at such an affordable price, he does not feel that a price tag two or even three times larger would be unreasonable, given the high quality of the work which has produced this sample set.

The experience of playing this set is as though one were seated at the organ bench: the pipe speech is immediate, detailed and contains the "imperfections" such as edge-tone and wind leakage that are most detectable when one is close to the pipework of any particular instrument. After a note-by-note examination of the instrument's resources, the author is unaware of any bad loops or unwanted artefacts in the samples, though the judgement as to whether any particular tonal effect is desirable or realistic must remain necessarily subjective. The attack and release transients have been preserved very well through the sample preparation process and the character of the individual stops appears to have been well retained with the Hohlpijp 8' being particularly attractive. The velocity sensitivity of the attacks and releases has been well-calibrated. The extra console noises – keys, blower and stops – are realistic and well sampled (the author disagrees with one appraisal he has seen which suggests that they are too loud, given the "at-the-console" sampling technique),

such that when performing with headphones, it is not difficult to imagine that one is seated in front of the actual instrument.

The user interface of the sample set essentially comprises a single screen (if the "credits" page is discounted) of compact size, which will cause no difficulty to any but the very oldest monitors. The stop and keyboard controls are displayed on a photo-realistic, two-dimensional console screen, with the stops being attractively and clearly labelled. Though one could argue that the provision of a three-dimensional, animated console (marginally) increases the realism of any given set, there is nothing to fault in the user interface of the Torenkerk organ, which is entirely sufficient for the operation of the instrument, given its small size. Two organ definition files are provided with the sample set, one labelled for use with Hauptwerk version 3, the other for use with version 4. The author, using version 4, assumes that the differences between the two versions of the instrument are cosmetic rather than aural, but given that he no longer has access to a version 3 system and that no information explaining the difference has been published, he is unable to verify this assertion.

The Torenkerk instrument has a native pitch basis of A420 – almost (but not quite!) a semitone flat of modern A440 pitch – which may prove uncomfortable to those sensitive to pitch. It is the author's experience that it is much harder to acclimatise to an unrecognised transposition down than a transposition up, which encourages him to retune the instrument to modern concert pitch more often than is the case with those of his other instruments which have a pitch basis higher than A440. Nonetheless, Hauptwerk's functionality will cater to both those who are sensitive to such things and those who are not, rendering the issue somewhat non-existent. The temperament of the Torenkerk organ is reported to be Werckmeister III, though again, this can be customised (or "corrected") through Hauptwerk's native functionality.

The Torenkerk sample set does not appear to possess any features that the real instrument does not possess, which seems, subjectively, to be the best approach to production with an instrument of this type. The sample set is suitable both for practice and performance, but, given the dry acoustic in which it was recorded, may find more utility as a practice instrument. There is no reason for avoiding its use as a performance instrument, but the small size of the instrument will make maintaining an audience's interest a harder task – registrationally-speaking – whilst the dry acoustic will punish sloppy playing, any mistakes often being obviously and embarrassingly audible.

The sample set is small enough that it can be used with speakers as a house organ without sacrificing much in the way of volume but the author has preferred using the instrument with a pair of high quality headphones, through which the various "imperfections" of the instrument can be best enjoyed. The sample set is supplied as a downloadable package without the option of media or manual (not necessarily a problem in itself). The website which hosts the web-shop through which the set can be purchased has reasonably extensive information pertaining to the history of the instrument, though less information is provided regarding its operation and use. An explicit statement indicating that the instrument was originally conceived for use in a secular environment might prove useful to those who consider purchasing the set, as might some registrational advice aimed at those unaware of the possibilities of an instrument with half-stops, along with some general registrational advice surrounding the use of small (chamber) instruments.

### **PLAYING THE INSTRUMENT:**

The author loads the Torenkerk instrument using maximum settings, loading all sample loops, attack and release samples including key, tracker and other console noises. The sample rate is 48kHz; memory compression is enabled. The memory requirement for these settings shows Hauptwerk utilising 1.2Gb of memory, with the total system requirement (see below for specification) amounting to 1.8Gb. The sample set was evaluated primarily using headphones, but has also been tested with studio quality monitors.

As described elsewhere, the performance of Dutch and English repertoire will suit the instrument best, but it will be capable of rendering most manualiter works which remain within its four-octave C-C compass

adequately well. The acoustic in which the instrument has been recorded is relatively dry, offering little in the way of reverberation to blend the tone or cover mistakes which makes this an exacting instrument well suited for practice or for use in a small or medium-sized living room. Indeed, the author continues to consider the possibility of building a "standalone" virtual instrument – in effect, a Hauptwerk cabinet organ – based upon this sample set.

Registrational practice on the Torenkerk instrument will be unavoidably limited by the instrument's size, but it is by no means impossible to achieve a degree of variety which will be sufficient to maintain the interest of an audience in public performance. Perhaps the most notable feature of the instrument is its basis on a 4' principal. Whilst the modern organist will find the construction of combinations based upon the Hohlpijp 8' – the only full-compass 8' stop – most comfortable, the instrument's disposition and tonal character both invite and permit the use of 4' registrations where the music performed will allow it. The combination of both 4' stops is quite pleasing and constitutes an historically valid practice for both the Dutch and the English repertoire to which the instrument is best suited.

It will be in improvisatory performance that the instrument demonstrates its greatest versatility, though some thought will be required as to the manipulation of the stops to achieve pleasing results: in spite of its limited resources, this is not an instrument which will reward a lax attitude to registration. The employment of each of the four full-compass stops will be straightforward in so far as greater or lesser strength of tone is required. The three half-stops add extra registrational versatility, most significantly in the performance of treble solos. The Prestant 8' can be used to strengthen the treble in quieter registrations, whilst the Cornet III will be appropriate for demarcating the melody against accompaniments of all strengths.

The bass-compass half-stop, the Quint I 1/3', presents something of a conundrum to the modern organist and even after extensive experimentation, the author cannot quite feel certain of having comprehended the utility intended for it by the builder. Certainly, if one draws all of the stops and plays on the full organ registration, the Quint serves the purpose of imparting a nasal quality to the bass half of the keyboard which increases its tonal homogeneity with the treble half, allowing the use of the whole compass of the instrument with a quasi-reed registration. Though the value of this effect can be determined empirically, it remains curious, since the Cornet III [12.15.17] provides tonal reinforcement of the 8' pitch, whilst the Quint I 1/3' [19] does not match any of the Cornet's ranks and rather suggests a reinforcement of the 4' tone: it is reasonably certain, that the use of the Quint with a registration of 8' basis – perhaps in an attempt to perform a bass solo against a softer treble accompaniment – cannot be particularly successful, with all but the strongest registrations suffering from the tonal disintegration common to mutation registrations played in the lower half of the keyboard. Perhaps a clue to the stop's utility outside of full organ registrations can be found in the 4' pitch basis of the instrument, which might imply its use in a combination such as that formed from the Prestant 4', Fluit 4' and Quint I 1/3'. Here, the useable range of the mutation combination is extended by the higher pitch basis of the registration, resulting in a Nasard-like combination which is useable in the bass half of the keyboard (and upon which can be performed a bass solo line) and a less assertive treble registration suitable for accompanimental playing. Beyond these two potential uses, the author is unable to suggest a convincing reason for the stop's inclusion.

Perhaps the most pleasing registration of which the instrument is capable will be the combination of the Hohlpijp 8' and Fluit 4' both of which are clear, pleasant stops of reasonably consistent and gentle tone. The selective addition of the Cornet III to the treble half of the compass provides for a useful "sectional" registrational regime when improvising and the employment of the Tremulant with both of these registrations can prove pleasing. Another attractive registration employs the Hohlpijp 8' and the (treble-only) Prestant 8', which will allow the performance of a solo melody demarcated with the Prestant against the soft accompaniment of the flute stop in the bass. It would be fair to assert that none of the instrument's resources are unpleasant or excessively inconsistent in tone, though those with sensitive ears may find the Cornet III a little overbearing, particularly where use of the full organ registration is prolonged. The author has not found it necessary to re-voice or rebalance the strength of any of the stops, but has been tempted to reduce the volume of the Cornet on several occasions.

It will not be difficult for the organist who plays the Torenkerk virtual instrument to immediately suggest five or six stops for which he / she might wish, which were not included in the instrument's disposition. The author suggests that there are two modifications which could be made to the instrument without altering its character significantly, which would be both historically valid and which would increase its utility substantially (though the producers, should they read this, should not interpret this as a request for such alterations, but rather as an illustration of the instrument's limitations). Firstly, a divided reed stop would vastly increase the instrument's utility as it would probably allow the adequate performance of most of the English repertoire to 1800 (and possibly beyond), as well as greatly facilitating the performance of bass clef solos, which are difficult to "highlight" with the instrument as it stands. Secondly, though the real instrument does not have pedals, the use of Hauptwerk's functionality to allow the use of the pedal board as a "pull-down" pedal through the duplication of MIDI inputs tends to be extremely useful and vastly (and perhaps, to the purist, unacceptably) broadens the repertoire for which the instrument can be employed. A separate "programmed" pedal board which could be assigned more easily to the pedal would enable this approach more easily, though it would certainly detract from the authenticity of the set.

### **CONCLUSIONS:**

It is unlikely that the organist whose primary motivation is in the production of large quantities of (quasi-harmonic) noise would consider the Torenkerk instrument a candidate for purchase. The organ is, in its way, a delicate instrument which will better reward carefully considered and subtle registrational practice than the use of all of its stops continuously. Indeed, the instrument is capable of a very insistent, assertive tone but the "immediacy" of the sampling and minimal acoustic may make anything but the occasional use of the full organ registration fatiguing, especially where the sample set is used with headphones. The limitations of the instrument's size, its compass and the lack of a pedal division will frustrate those whose desire is simply for a new instrument on which to play their "standard" repertoire.

This is not to say that either the Torenkerk organ or its sample set are at all undeserving of praise, however. Voxus Organs have created a virtual instrument which attains the highest standards of sampling and which (it appears) is a faithful representation of a delightful organ with all its imperfections and unique character rendered intact. To those organists willing to take the time to understand the instrument's features and accept its limitations, it will provide a satisfying playing experience with the repertoire to which it is most appropriate and a challenging experience in the adaption of repertoire less suited to its abilities. Furthermore, it will be a pleasing instrument on which to improvise and one which may have educational value to the novice organist in demonstrating the function of half-stops, in its dry acoustic (which requires excellent articulation for a satisfactory result) and in its dispositional simplicity (which will help maintain focus on the development of keyboard technique rather than on the infinite regressions of registrational practice).

Overall, this unquestionably excellent instrument will probably be of most interest to the beginner organist and to those whose knowledge of the instrument is quite advanced; those of intermediate ability will likely find greater satisfaction elsewhere. That said, the very affordable price at which the set is offered at the time of writing must be acknowledged as a strong inducement for all "Hauptwerkians" to include this "gem" in their instrument libraries.

**SUMMARY:**

**PROS:**

- Practically unbeatable value for money.
- Useable with any conceivable Hauptwerk / hardware configuration.
- Small enough and "dry" enough that it can be used in a medium-sized lounge at a realistic (or near-realistic) volume as a dedicated chamber instrument.
- Though the tonal palette is limited, the very small size of the instrument may be of benefit to the novice organist unready to manage the resources of a larger instrument.
- Will encourage excellent articulation.

**CONS:**

- Tonal palette is limited by the size of the instrument – registration often requires effort and careful consideration to be successful.
- Much standard repertoire is essentially unavailable to the instrument.

**RATINGS:**

<b>Value for Money:</b>	★★★★★
<b>Versatility / Accessibility:</b>	★★½
<b>Sample Production / Quality:</b>	★★★★★
<b>User Interface:</b>	★★★★
<b>Overall:</b>	★★★★

**ADAM J.R. HERRICK, 9<sup>th</sup> APRIL 2012**

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**TESTING SYSTEM SPECIFICATION**

<b>Computer Type:</b>	Windows Vista x64
<b>Hauptwerk Version:</b>	4.00
<b>Memory:</b>	8Gb DDR2 ECC (1333MHz)
<b>Processor:</b>	AMD Opteron 2354 Quad-Core
<b>Audio / MIDI:</b>	M-Audio Delta I010-LT
<b>Console:</b>	Self-built incorporating four CMK-2's and a second-hand, "MIDI-fied" pedal board.
<b>MIDI Sequencer:</b>	Ableton Live 7