

## Creating the illusion of improvisation: a composer's perspective

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I've always had the impression of improvisation of the most rewarding kind when good performers take the trouble to play music that is carefully written out as if they were 'thinking it up' themselves while they played it<sup>1</sup>

Elliott Carter

What Carter is describing here is what I've referred to in my title as the illusion of improvisation: the effect whereby a listener can come to believe, even if he knows or suspects otherwise, that the musicians in front of him are making it up as they go along.

This concept is sufficiently familiar for it to be quite common to hear a performance being praised in the kinds of terms used by Carter, or to read of a composition being described as 'improvisatory' in style or character. It also, of course, has much in common with the illusion that we all buy into on some level when we go to the theatre: the willingness temporarily to set to one side our awareness that the people on stage before us are actors following a set of pre-scripted instructions, and instead to believe that they are the characters they portray, and that the events in which they are involved are taking place live, before our very eyes.

In a musicological context, the existence of this sort of effect has been widely acknowledged, and has tended to be linked with certain periods, instruments, genres and composers in particular. Rob C. Wegman, for example, who believes that improvisation and composition can be considered, 'over and above the strictly technical distinction between them, as musical styles distinguished by the degree to which they give the appearance of performative spontaneity or authorial planning', insists that such a distinction is 'essential...to any understanding of the history of piano music in the early nineteenth century'<sup>2</sup>. John Rink (1992), Richard Kramer (1994) and Edward T. Cone (1974) are even more specific: they all discuss the improvisatory character of works by Beethoven, with Rink focussing in particular on the *Fantasy* op.77 as an example of a genre fundamentally characterised by its quasi-improvisatory qualities.

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<sup>1</sup> Quoted in Edwards 1971, 78.

<sup>2</sup> Nettle et al.

If there is a certain degree of consensus, however, around the fact that an illusion of improvisation is indeed created by certain pieces, rather less attention has been directed towards examining what exactly it is about this music that causes such an effect to come about, or, for that matter, the reasons for which the composer might have wanted it to do so – how and why, in other words, the illusion of improvisation might be created. The purpose of this paper is to offer a personal contribution to this debate by discussing the answers suggested to these questions by a recent composition of mine entitled *Con Spirito*.

*Con Spirito* is essentially a duet between a conventional, acoustic piano, played by a conventional, human pianist, and a Yamaha disklavier, a computer-controllable, contemporary equivalent of the player piano, which throughout the piece appears, to all intents and purposes, to play itself.

How, then, does *Con Spirito* create the illusion of improvisation? To return for a moment to the existing literature on this subject, Rink identifies the manner in which Beethoven's op.77 raises 'doubts as to what will follow' (p.313) as a typical, defining feature of the fantasy genre - 'raising false expectations' (p.308), he states, was very much a standard practice in the kind of literal, unwritten improvisation that the piece sought to emulate. Although the raising and manipulating of listener expectations also plays a key role not just in *Con Spirito* but in all of my recent compositional work – and there will be more to say about this when we come to consider the 'why' element of my question a little later on – there is however another, particularly important aspect of the piece which I believe contributes more than any other towards the creation of an illusion of improvisation. This is the sense in which it takes the form of a dialogue between the two instrumental protagonists – one of them clearly visible, the other unseen, but somehow no less present. These should appear to the listener to test, cajole, respond to, compete with, antagonise and even ignore one another at various times in the course of the piece. The effect of this is not unlike that of a passage which Cone discusses (pp.130-1): the first entry of the baritone soloist in the finale of Beethoven's Ninth Symphony. Here, when the singer implores 'O Freunde, nicht diese Töne', he gives the impression not only that he has been listening to the music so far, and has used it to inform the decision he has now apparently made as to how to take the movement forward, but also, in addressing the orchestra directly, that it is not the composer but the musicians themselves (or, as Cone would have it, the 'orchestral persona') whom he holds responsible for what has been played up until this point.

At this moment, and each time in *Con Spirito* that one of the two protagonists seems to react to the other, or to take account of the response elicited by a previous contribution when apparently deciding upon what to play for the next, the suggestion is made that the performer or protagonist

in question did not know in advance what its counterparts were going to do: it could not have decided how to react until the musical event to which it was reacting had actually taken place.

To exemplify this in more precise detail, I'd like to consider the behaviour of each of the protagonists of *Con Spirito* in turn. For the sake of brevity, I'll be using the terms 'pianist' and 'disklavier' as a shorthand for what might more accurately be labelled as the piano-playing and disklavier-playing protagonists, since in the case of the piano part at least, this is a dramatic character that the performer is called upon to portray.

#### Pianist as initiator

To turn to the pianist first of all, the very beginning of the piece (Example 1) immediately reveals one way in which the impression might be created that he does not know how (or indeed in this case whether) his contributions will be answered by the disklavier. The extended silences which occur at the end of the first two phrases (bb.2&4), as well as the long, expectant notes with which each phrase begins create moments of inactivity in which the pianist appears to be waiting to find out how his counterpart will respond.

The opening of the piece also, I think, begins to establish a sense that the pianist is trying out various musical gestures as a means of exploring the technical set-up, or if you like the dramatic environment, of which he finds himself to be a part. Here, as we've just seen, he takes a single note as a logical starting point for this exploration; later, he apparently decides to try introducing new material only once he has satisfied himself that the musical ideas he has been working with so far have told him all that they are going to about the disklavier's behaviour. This is what happens in Example 2, where in b.95 an upward arpeggiation which the pianist has just been using as a means of underlining the apex of a series of rising and falling melodic fragments (the last of them is visible in bb.92-4) is redefined as a lighter, less dynamically directed gesture which itself then becomes the subject of some development.

Something similar takes place in Example 3. Here, the pianist abandons the exploratory character and relatively short phrase lengths of much of what has gone before in favour of a more assertive and extended passage which makes the fullest use yet of his instrument's capabilities. This marks the start of a lengthy alternation of increasingly virtuosic contributions from both protagonists which could be seen, amongst other things, as a rigorous testing on the part of the pianist of the disklavier's technical capacities.

### Pianist as respondent

Of course, each new phrase the pianist plays in *Con Spirito* can be considered not just a question to which the disklavier is invited to respond, but also as a response in itself to the disklavier's most recent response. This cycle of reaction and counter-reaction is crucial in providing the dialogue which takes place between the two protagonists with the immediacy required for the listener to suspend his disbelief that it can be unfolding spontaneously before his very eyes and ears.

Again, there is a sense of logical exploration underlying the way in which the pianist appears to take into account the disklavier's recent responses when developing the musical gestures he has already presented to it. Having (finally) elicited a reaction to his initial repetitions of a single note in Ex.1, he spends the next 30 seconds or so apparently testing to see if repeated diads (b.12), triads (b.19), and other, progressively denser chords (b.24 onwards) will be answered in a similar way.

Looking forward again to Ex.2, we see the repurposed ascending gesture of b.95, immediately imitated by the disklavier, being first repeated, as if to give the pianist another opportunity to hear and take in the response with which it was met the first time, then transposed (b.98), inverted (b.100), extended (b.101), and finally combined with its inversion (b.103), all apparently to explore and confirm the disklavier's willingness to continue to shadow its counterpart in the same way.

These passages suggest not only that the pianist notices and remembers how the disklavier responds to what he plays, but also that on the basis of this experience the pianist is capable of forming, and then testing, hypotheses as to what it will do next. Example 4 shows an even clearer instance of this. You can see here that in b.147 the disklavier plays a long sequence of gradually descending, thickening and decelerating chords. The pianist, appearing to consider that this has slowed to such an extent that it must have reached its conclusion, begins to play, only to find himself being interrupted by another descending burst from the disklavier.

In Ex. 3, the pianist can be seen to begin to respond to the disklavier in a different way. From this point their dialogue takes on a much more competitive quality: when the longer, more technically taxing passage with which the pianist launches this section is met immediately by a much faster and more intricate riposte, executed by the disklavier without apparent difficulty (bb.170-83), the pianist's answer is to increase the complexity of his own music (b.184 onwards).

This then leads to a correspondingly more virtuosic response, and so on and so forth. The escalation continues, essentially uninterrupted, for several minutes.

Turning back to the earlier parts of the piece that we've already looked at, we can find examples of some other ways in which the pianist appears to take into account the disklavier's behaviour. As Ex.2 continues, the pianist's ascents become shorter and closer together, as if to attempt to shake off the ever-present shadow of the disklavier, by giving it less and less time to react. Having apparently failed to do this, with the disklavier having all but caught up with him, the pianist seems in b.109 to react in frustration, or at least to attempt to throw the disklavier off the scent somewhat by suddenly abandoning the motivic material of the previous few bars, and throwing in something new.

There is a sense of frustration, too, in those passages where the pianist receives no response from the disklavier. When the long note with which the piece begins goes unanswered, the pianist reacts by repeating it over and over again, shortening its duration and increasing its volume each time, as if in impatience (see Ex.1).

#### Disklavier as (non-)respondent

The disklavier, for its part, also gives the impression that it is waiting for, then listening to, the pianist before apparently deciding how to respond. Very often it does so by imitating whatever the piano has just played, usually in an elaborated or extended form which takes advantage of its capacity to play music of a speed, complexity and precision which would put it beyond the reach of a human pianist.

In its first entry, a response to the pianist's single note crescendo-accelerandos of bb.1-5, this elaboration takes the form of a more precisely calibrated decrease in duration, culminating (in all probability) in a faster rate of repetition than that which the pianist will have been able to achieve (see Ex.1). Similarly, in Ex.2, the disklavier manages with its imitations of the pianist first to run through the same pitches in less time (and, what's more, to arpeggiate those notes which the pianist played as a chord), then to find space for additional notes which are inserted between those taken from the piano part (see Example 2a).

The emergence of this kind of relationship between the two parts also serves to ensure that even when there is not such an overt analytical correspondence between them, as in Example 5, the disklavier's contributions can still be heard as responses to the pianist. For if it has already been established that the disklavier is somehow able to hear, process and react to the music the pianist plays, it follows that at a moment such as b.138, where the disklavier appears to strike

Example 2a: comparison of piano and disklavier parts, bars 95-104

Musical score for bars 95-104. The top system shows the Disklavier (Dk.) part with three measures, each containing a circled melodic phrase labeled "1 beat". The bottom system shows the Piano (Pf.) part with three measures, each containing a circled chordal phrase labeled "1.25 beats". Arrows point from the Dk. phrases to the Pf. phrases. The score ends with "etc." on the right.

Musical score for bars 99-101. The top system shows the Disklavier (Dk.) part with three measures. The bottom system shows the Piano (Pf.) part with three measures. Annotations include "additional notes" pointing to notes in the Dk. part and "poco" markings in both parts.

Musical score for bars 102-104. The top system shows the Disklavier (Dk.) part with three measures. The bottom system shows the Piano (Pf.) part with three measures. Annotations include "poco" markings in both parts.

out on its own, embarking upon a passage which has very little in common with the piano part of the bars which precede it, it chooses not to.

The passage leading up to this moment, in fact, also creates an impression of the disklavier ignoring the pianist: in this case, it simply fails (or declines) to respond to any of his overtures. I believe the same could even be said of the interaction (or rather the lack of it) which characterises the opening bars, even though at this point in the piece, of course, no precedent has yet been set establishing the disklavier's capacity to listen and react as it were intelligently to the pianist. This, I think, is because of certain expectations that the listener is likely to have formulated before the piece has even begun. For the more expert listener, these might result from an awareness that in many other recent compositions involving the combination of a live performer with electronic or electro-mechanical sound sources, the norm has been for the latter to reflect back or transform in real time the material it receives via MIDI or audio signals from the former. For the less experienced listener, the expectation that once the pianist has begun to play, the disklavier's first entry must inevitably follow, sooner or later, arises more from the kind of reasoning described by Leonard B. Meyer in a discussion of the opening flute solo from Debussy's *Prélude à l'après-midi d'un faune*: the listener, writes Meyer, recognises the unlikelihood that the rest of the orchestra have been assembled on stage alongside the flautist for no purpose, thus the longer the solo goes on, 'the stronger is our presumption that the orchestra will enter'<sup>3</sup>. In *Con Spirito*, of course, it is the presumption that there must be a reason why another piano has been positioned with its lid up alongside the one the pianist plays that leads to the increasing expectation that it will start to play some part in the proceedings.

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All of this, then, has been concerned with what I think *Con Spirito* has to say about how the illusion of improvisation can be made to arise. What remains, of course, is to address the question of why I wanted it to do so. I should probably point out before doing this that in the same way that much of the preceding analysis represents an attempt to articulate the principles which guided my compositional decision-making in a way which might not have been possible with any great clarity while the piece was still in progress, what follows is less of a mission statement, conceived before a note had been written, and more of a reflection upon the reasons for which I think these principles might have presented themselves to me, in the course of the composition process, in a way I evidently found so convincing. In short, I'm attempting to examine with a little more critical distance things which, at the time of writing, simply 'felt right'.

In general terms, it seems that the most likely reason for which composers might be willing to forego, at least on some level, the creative credit to which they are entitled, and instead to allow the performers of their music to appear to be the ones making the compositional decisions, is

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<sup>3</sup> Meyer 1956, 78.

that the cultures in which they operate have long believed in the inherent value of spontaneous inspiration over planning and calculation. This kind of privileging of the mysterious and supposedly unquantifiable side of artistic creation is of course in the West a legacy of the Romantic era, the very same period from which the writers I mentioned earlier draw their examples. Kramer, borrowing a term from Georg Sulzer, writes of the performer of a number of Beethoven's piano sonatas being cast 'in the role of creator who must act out the *Begeisterung* [inspiration] behind the idea' (p.4). Jeff Titon, writing in an introduction to non-Western musical cultures, goes as far as to suggest that 'perhaps at some deep level we prize improvisation not just because of the skills involved but because we think it exemplifies human freedom'<sup>4</sup>.

There is a more specific benefit, however, of the illusion of improvisation created in *Con Spirito*, and this lies in the way in which it gives rise to an opportunity for the listener to experience a particularly strong sense of identification with the performer – in this case, to be more precise, the pianist. This is partly because the pianist appears to have no more advance knowledge than the listener of many of the musical events which take place (specifically, those involving the disklavier), but also because of how the dialogue between pianist and disklavier mirrors another in which the listener might perceive himself to be engaged.

In all of my most recent music, as I've already said, the creation and manipulation of listener expectations has been uppermost amongst my compositional aims, and this is above all because of the way in which I believe it allows a sense of dialogue, between listener and composer, to emerge and come to characterise and define the listener's experience of the music in performance. This sense of dialogue comes about because every time the listener forms an expectation of what he is about to hear, then registers whether the music which follows has either met or confounded it, he perceives this as a kind of response, on the part of the composer, to his earlier speculation. The listener can then revise, abandon or form new expectations on the basis of this response, to which the composer can then appear to respond further, and so on and so forth.

The listener's speculations, then, are likely to be experienced in terms not so much of what will happen next in the music, as of what will be 'done' next by the composer, who will appear once again to be making his decisions in real time, even if the listener suspects or knows on some level that all such decisions were actually taken months or years in advance of the performance. The listener speculates about the actions of this composer-figure in the same way as the pianist in *Con Spirito* appears to speculate about the responses of the disklavier. *Con Spirito*, therefore, presents the listener with a dramatic enactment of the relationship he might in general perceive

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<sup>4</sup> Titon 2001, 28.



himself to have with me, the composer, and, in the figure of the pianist, perhaps even an embodiment of his own part within this relationship. Thus the piece hopefully creates a particularly rich network of correspondences, parallels and overlaps between the traditional roles of concert performance, in which are to be found not only performers-as-composers but also performers-as-listeners.

## References

- Cone, Edward T. 1974. *The composer's voice*. Berkeley: University of California Press
- Edwards, Allen. 1971. *Flawed words and stubborn sounds: A conversation with Elliott Carter*. New York: Norton
- Kramer, Richard A. 1991. The sketch itself. In *Beethoven's compositional process*, ed. William Kinderman. Lincoln: University of Nebraska Press
- Meyer, Leonard B. 1956. *Emotion and meaning in music*. Chicago: University of Chicago Press
- Nettl, Bruno et al. Improvisation. In *Grove Music Online, Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/13738> (accessed July 1, 2011)
- Rink, John S. 1992. The rhetoric of improvisation: Beethoven's Fantasy op. 77. In *Secondo convegno Europeo di analisi musicale*, ed. Rossana Dalmonte and Mario Baroni. Trento: Università degli Studi Trento
- Titon, Jeff T. (ed.) 2001. *Worlds of music: An introduction to the music of the world's people* (4<sup>th</sup> edn). Belmont: Schirmer/Thomson