The new String Quartet: The evolution of the Hyperquartet

Rachael Dease
Edith Cowan University

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The New String Quartet:

The Evolution of the Hyperquartet

Rachael Dease

Bachelor of Performing Arts (Honours)
Western Australian Academy of Performing Arts

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Edith Cowan University

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ABSTRACT

This article explores the phenomenon of the rejuvenation of the string quartet in contemporary musical culture through the use of electronics. I will discuss how recent works; including my own works Spiral (1999) and Seven Ballads til Dawn (2007) have adopted some features of popular music and new technology, while still maintaining the integrity and flavour of their classical heritage. I will use several different examples to show the ways in which a quartet can become a “hyperquartet” through the use of amplification, effects processors and playback.
DECLARATION

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Many thanks to Cat Hope and the Honours’ Lecturers at the Academy for their generosity with time and support.

Rachael Dease
12 November 2008
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INTRODUCTION

I have developed the term hyperquartet only to string quartets because of the importance of the ensemble in western classical music. It has one of the most extensive bodies of work written for it, and there are ensembles all over the world dedicated to performing string quartet works exclusively. Essentially – it is a very popular ensemble.

For the past 400 years the string quartet has been, along with the symphony, essential in any composer's repertoire. It is one of those ensembles that define who the composer is at their core. Unlike the symphony, which is often written with bombastic, grandiose and majestic statements of sound and energy, the string quartet is a personal statement. The simple act of choosing to write a quartet is often the mark of a composer's maturity. Ludwig Van Beethoven, Dmitri Shostakovich and Bela Bartok all articulated important phases of their compositional style with the string quartet genre. It has none of the extensive sonic flair and tonal colour of larger ensembles and poor skill is not easily disguised.

Another distinguishing feature of the string quartet is that the ensemble itself is very often made up of long-serving and skilled performers, especially in the case of world renowned and popular quartets such as the Brodsky and Kronos Quartets. This gives the ensemble a rare chance to intimately know each others playing, their strengths and weaknesses and their combined sound is usually familiar to many a classical music aficionado.

The incorporation of various types of music technology within the string quartet forum has grown exponentially during the past 60 years, and
slowly but surely, the more traditional classical fold of composers and performers is embracing what technology can do to enhance their music and excite their listeners. The string quartet has been at the forefront of this school of thought, most probably due to its intimate and intense persona. Music technology can be embraced through the addition of amplification, electronic effects and playback.

The string quartet has until quite recently been the definitive example of the "classical" music ideal of music for musicians, far removed from the distractions of everyday life. It is remarkable and exciting that this genre has not only been rejuvenated, but it has become a symbol of an exciting new direction in "art music".

I will show several key examples of how recording technology has enhanced the organic acoustic sounds of the string quartet. From the "electrifying" of the ensemble, to processing and layering natural and unnatural sounds in the recording studio. I have developed the term "hyperquartet" for the result of the outcome of these processes that elevates the music a beyond what is considered the traditional quartet.

NEW SOUNDS

Music technology can be embraced through the addition of electronic effects, playback or amplification. The main aspect of the hyperquartet is the use of technology to explore new sounds and timbres.

"The striving for new timbres has in the past marked the difference between classical music, which has tended to be pitch and rhythm-based,"
and popular music – particularly rock- which has tended to be timbre and rhythm based”

The traditional quartet has a uniform range of timbres within each instrument, but with a variety of sounds available by bowing and fingerling effects. The latter were explored in music from the early 20th century, but in the 1950’s and 60’s the possibilities of string sounds combines were extended in pieces like Krzysztof Penderecki’s Threnody for the Victims of Hiroshima (1960) and Steve Reich’s Violin Phase (1967), with another step forward coming in George Crumb’s Black Angels: Thirteen Images from the Dark Land (1970).

WHY USE STRINGS?

Composers use technology in many ways with many different kinds of ensembles, but many of these groups are made up of unusual combinations of instruments specifically formed for that particular piece. String quartets are often established groups of highly skilled players dedicated to playing the music written for them over hundreds of years. They are also arguably the most common classical ensemble in the western world, which make them desirable to composers due to their availability to perform new works all over the world.

The others reasons for composers choosing to use electronic devices are the physical nature of the instruments. Overall, the most impressive results with electronic amplification have been achieved with string instruments. This is mainly due to their physical qualities of bodily

resonance and sensitive vibratory response that allows for some
extensive interference with the fundamental source of the sound.
Therefore a wide range of auditory options is available to the composer
and the performer. By treating the strings in such a manner it is
possible to produce sounds from the instrument that otherwise would
never be heard – such as sympathetic vibrations, usually inaudible
harmonics and partials. The player is also able to produce sounds that
would never be heard by the naked ear – a whole range of seemingly
never ending new effects including rubbing the body of the instrument
or whispering into the f holes.

THE AMPLIFIED HYPERQUARTET

Amplification without tonal manipulation is the most straightforward way
of turning a string quartet into a hyperquartet. The most difficult
obstacle with basic amplification would be to maintain the instruments
natural tonal colour without distorting it through sheer magnification.

Black Angels can be classified as a hyperquartet because of its use of
amplification with the live ensemble. The amplification allows Crumb to
produce a sound that could not be produced by an acoustic instrument
alone, but amplifies the sound they can produce. Black Angels is a
highly dramatic piece and uses amplification only as a means to an end
– to reinforce the often grotesque and highly dramatic nature of the
music. The amplified sounds are part of the entire conception of the
work, and is an indispensable element to an authentic presentation of
the piece.
The use of amplification magnifies only what is already present in the music, and he uses it much like the Surrealists might have distorted an everyday object through visual art.

"For [Crumb] amplification is a logical choice, since the material of his music is often based on a traditional grammar and syntax and varied in surprising ways that recall the surrealists"²

It affords the music a dream-like quality and like Dali's clocks, takes the ordinary and charges it with something unearthly.

*Black Angels* was one of the first pieces to incorporate a live electric manipulation on the traditional quartet. Composed in 1970, *Black Angels* explores the acoustical possibilities of a string instrument imitating electronic effects. By this stage of his career, Crumb had become famous for his use of theatrical techniques with traditional instruments (even winning the 1968 Pulitzer Prize), including unconventional use of instruments and spoken or vocalised contributions from the players. Crumb made extensive use of these "quasi-electronic" effects including *col legno battuto* and *tratto* (striking or drawing the bow with the wooden part), *sul tasto* (bowing over the fingerboard), *sul ponticello* (bowing near the bridge), *glissando* (a portamento slide), *tremelo*, *wide vibrato*, *snap* or "Bartok" pizzicato, and various other traditional string techniques.

Some non-traditional techniques that have resulted from composers trying to imitate electronic effects (the previous effects obviously existed before the advent of electronic sounds) are: grinding bow sounds

(created by exaggerated bow pressure, also used in Penderecki’s *Threnody to the Victims of Hiroshima*), circular bow sounds (creating the illusion of changing timbres or “filtering” the sound, bowing the tailpiece or side of the bridge or other instrument parts, harmonic glissando (natural and artificial, which imitates the sound of a high-Q low pass filter), and pizzicato tremelo.

Crumb started thinking of new sounds to extend the quartet after he wrote *Songs, Drones and Refrains of Death* (1968). He has stated that is was a natural progression for him to take:

“The original stimulus for [Black Angels] was a commission from the Stanley Quartet, then in residence at the University of Michigan. I was unsure what direction to take, but I didn’t see myself writing a typical quartet. I decided right away to rethink the concept of what a string quartet really is. I was already into exploring sound in a big way, going back to my piano music from the early 60’s.”

*Black Angels* is not only a powerful aural experience; it has an unbelievably dramatic effect in live performance. This is largely due to the addition to the string instruments, there is a small percussion battery and a glass harmonica, which is bowed rather than rubbed with the fingers. Below is a list of the extra instruments added to the quartet:

<table>
<thead>
<tr>
<th>Violin 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• maraca</td>
<td></td>
</tr>
<tr>
<td>• 7 crystal glasses</td>
<td></td>
</tr>
<tr>
<td>• 6&quot; glass rod</td>
<td></td>
</tr>
<tr>
<td>• 2 metal thimbles</td>
<td></td>
</tr>
</tbody>
</table>

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3 Peter Burwasser, “Symphony of Destruction”, *Philadelphia City Newspaper*, March 18 2004
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Items</th>
</tr>
</thead>
</table>
| Violin 2   | • metal pick  
            • 15" suspended tam-tam and mallet  
            • contrabass bow (for use on tam-tam)  
            • 7 crystal glasses  
            • 6" glass rod  
            • 2 metal thimbles  
            • metal pick |
| Viola      | • 6 crystal glasses  
            • 6" glass rod  
            • 2 metal thimbles  
            • metal pick |
| Cello      | • maraca  
            • 24" suspended tam-tam, soft and hard mallets  
            • contrabass bow |

The use of electronic amplification with its distortion is significant to Crumb's notion of reaching out to the world beyond acoustics. In most instances, used mostly in the first movement *Threnody 1: Night of the Insects*, the electrified sections of *Black Angels* represents evil, through the imitation of insects – incessant, eerie and torturous. Without this amplification, an acoustic instrument could not produce these sonorities. The simple fact that something unseen, such as a tiny effects processor, can help produce such a violent noise, makes the sounds incredibly unnerving. Crumb admits:
"The Kronos [String Quartet] does a very theatrical version, with back lighting and things suspended from ropes. I was prepared not to like it, but it was actually pretty affective"4

Crumb highlights something very important about his hyperquartet – that the visual element is in fact secondary. The sound is the most important element of the work, and while it is important to present a work in the least distracting manner for a live audience, the hyperquartet is not about bells and whistles, not about adding frivolous effects to charm a new audience. It is about highlighting and supporting the sounds that already exist in the quartet, and marrying them to the images the composer wishes to portray.

"The work portrays a voyage of the soul. The three stages of this voyage are Departure (fall from grace), Absence (spiritual annihilation) and Return (redemption). The amplification of the stringed instruments in Black Angels is intended to produce a highly surrealistic effect. This surrealism is heightened by the use of certain unusual string effects, e.g., pedal tones (the intensely obscene sounds of the Devil-Music); bowing on the "wrong" side of the strings (to produce the viol-consort effect); trilling on the strings with thimble-capped fingers".5

The choice of the string quartet by Crumb is recognition of its dramatic and political potential, as well as the intense core sound and intimate nature. That such dramatic and terrifying sounds can be produced by such a small (and traditionally "polite") ensemble, only in turn amplifies the theme.

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4 Peter Burwasser, "Symphony of Destruction", Philidelphia City Newspaper, March 18 2004
5 Liner notes taken from Black Angels ,Kronos Quartet, Nonesuch, United States (1990)
THE AMPLIFIED AND MANIPULATED HYPERQUARTET

The addition of electronic manipulation, as opposed to solely amplification presents a few obstacles for the composer and the performer. Much depends on the design and availability of the necessary equipment and the proper amount of time experimenting by composer and performer. It is therefore much harder to produce in a convincing and seamless manner. Performers are also often tempted to add sounds outside of what the composer specified with the intention of making the performance "better". An example of this can be seen on the DVD Kronos on Stage during the performance of Black Angels⁶. Crumb specifies the use of only pure amplification, yet Kronos adds distortion, which does make the insect sounds more disturbing, but that's not necessarily what the composer wanted.

My work Spiral for Electric String Quartet and Countertenor qualifies as a hyperquartet due to its use of live amplification and electronic manipulation on the strings. The countertenor part is amplified but not sonically altered. This is due to wanting to keep the raw quality and unusual tonal colour of the countertenor, while needing to keep the volume instruments balanced from the sound desk. The work is scored for a regular string quartet with markings on the score for the type of effect to use, and the approximate volume at which it should sit in the overall mix. It is very specifically a hyperquartet because the idea is the make the technology second to the music. Acting much like a score in a film – a good score doesn’t make itself obviously known to the audience – it is there to support the visual material and to heighten the experience of the film to the viewer. The effects are added because

⁶ Kronos Quartet - Kronos on Stage (Black Angels / Ghost Opera), United States (1998)
they allowed me to create sounds with the quartet they could not achieve as an acoustic ensemble.

Some of the results of the effects include
1) bars 14 – 27 the pitch shift on violin 2 adds an 11th on top of E  
2) bars 62 – 104 an EQ effect over the Cello gives added weight to bottom C string  
3) bars 111 – 152 all strings have the mid and bottom ranges pulled out through the EQ and the top range is almost doubled in volume – even with the acoustic instruments still audible this makes for a fairly harrowing sound.

All string instruments (including the voice) have microphones and/or pickups. An added "performer" is in the sound desk manipulating the effects according to very specific markings in the score. The work doesn't rely on the composer to be there – as long as the right effects processors are available – anyone familiar with both score reading and the effects processors can effectively be the sixth unseen performer.

**LIVE PLAYBACK AND THE HYPERQUARTET**

John Oswald (1953 -) is a Canadian composer, saxophonist, photographer, and dancer. His best-known projects are his electronic manipulations of the Grateful Dead and his (self coined) practice of *Plunderphonics* - making new music out of previously existing recordings. In his piece *Spectre* (1990) The Kronos String Quartet recorded raw material for Oswald, who manipulated the recordings digitally in a studio. He created different versions of the material that produced a recording that is to be to be played along with the group on the recording and in concert. In *Spectre*, Oswald interweaves Kronos playing in concert with multiple overdubs of his recordings of Kronos. In
this sense, *Spectre* is written for a thousand-member string orchestra with all instruments played by Kronos. It was the composer's first composition for live musicians in 15 years. About *Spectre*, Oswald writes:

"The camera's shutter blinks and a moment of the visual world is frozen on film. Still, there is no audible equivalent to the snapshot in the time it takes to sound. Sound takes time. Recordings of Kronos fill Spectre. Successive moments happen often at once. In concert the musicians add a final overdub to a string orchestra of a thousand and one reflections. This wall of sound of veils of vibration of ghosts of events of past and future continuously present is a virtually extended moment. An occasional freeze marks a moment's gesture."

The inclusion of this piece into the string quartet repertoire points to an important aspect of Kronos's use of technology. David Harrington (founder and violinist of Kronos) has acknowledged their openness to embrace altered sounds, but has noted that their decision is first and foremost a musical decision over a need to be at the cutting edge of new musical technology: "It depends what we're looking for and what's in the music... it's a way of taking the listener somewhere"

In my work *Seven Ballads til Dawn* (2007), I have used many different types of techniques that make the piece a hyperquartet. Scored for live string quartet, recorded string quartet, recorded voice and electronics I used the same ensemble to record and perform live (although this is

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obviously not a prerequisite as the recording can be sent anywhere for other ensembles to perform with).

The work is divided into seven, approx five minute sections and is centred around the idea of songs broadcast on radio. In the first movement, the recorded quartet is heard coming through the speakers, crackling much like radio static. The live quartet enters almost inaudibly underneath with a bullhorn effect over them so they blend, and then emerge from the recorded quartet. The third movement begins with both the quartets playing the same music in the same register at the same tempo. The live quartet stays at the same tempo (all performers are fitted with in ear click tracks), while the recorded quartet speeds up very slowly, and both quartets gradually become drenched in digital reverberation and delay. Approximately two thirds of the way through the movement, the effects are slowly pulled out and the recorded quartet slows in tempo, leaving the two quartets finishing the movement just as they began – in total unison.

One might ask – why not simply use two quartets? I used one pre-recorded so I could control and add sounds that could only be produced in the controlled environment of the studio. It allowed me to be able to produce a soundscape and manipulate the quartet in a way that could not be done live.

THE HYPERQUARTET IN THE STUDIO

Written as the score for *Requiem for a Dream* (directed by Darren Aronofsky, USA, 2000) pop musician Clint Mansell marries the virtuosic talent of the Kronos Quartet with his own electronic skill behind the producer’s desk. The soundtrack is labelled by three different distinctive
sections, summer, fall, and winter – with the whole work separated into 33 short “movements”. Each section fuses the acoustic sounds of the string quartet with Mansell’s recording and manipulation of the same group. The recording of the quartet and Mansell’s samples (from both the quartet and other sources such as drum loops) fuse together to form an intriguing mixture of familiar and unfamiliar soundscapes.

The work begins with Summer Overture, which introduces the first and main theme. The strings open the work devoid of effect with the G, A B flat theme in parallel unison before Mansell mixes in his electronic slow gloaming beats with the violins of the quartet.

![Theme 1](image_url)

[Fig. 1]

Halfway though the track, the piano duplicates the violin theme, before the multitracked quartet brings in Theme 2. Essentially the quavers added are more like a theme and variation, as the first theme is played underneath, yet the strength of the melody and the way it functions in the film gives it a very different quality. Like the amplified insect sounds in *Black Angels*, these quavers often signify an evil occurrence in the film. The string quartet become a hyperquartet in this score because...
Mansell uses playback and effects to exaggerate the higher frequencies already available to him through the acoustic quartet.

![Image](image.png)

**[Fig. 2]**

Mansell has recorded the quartet playing string pads and manipulated the overall sound until it is barely recognisable. He has then placed the more organic sounding moving string parts over the top. One would think that this is just a case of multitracking, and although he does at times sample individual instruments, he mostly uses the quartet’s combined sonorities. It’s this unity of sound that allows Mansell to place highly manipulated sounds and textures in and around the quartet while maintaining a solid melodic and harmonic centre.

The scoring in *Requiem for A Dream* is amazingly simple. Almost entirely based around the themes shown in figures 1 and 2, the interest lies less in harmonic and melodic changes than it does texturally and emotionally. In movement 11 *Ghosts*, Mansell has taken a tremelo sample and affected it in a way that makes it sound more like a machine. It is recognisably still a string sample, yet it has been treated in such a manner that it feels almost void of life, almost menacing.
THE USE OF PLAYBACK AND SAMPLING

John Zorn's (1953-) *Forbidden Fruit* (1986) wedded the Kronos Quartet and turntable artist Christian Marcley (1955-) into a disquieting and frequently cacophonous web of scrapes, plucks, ghostly whirrs and snippets of the graceful cooing of vocalist Ohta Hiromi. *Forbidden Fruit* is an example of a hyperquartet that uses string sounds from outside of the ensemble to create the illusion of multiple players. The main feature of the work is Marcley’s control over tempo and pace – he can speed up and slow down the records to create the illusion of strings playing at impossible speeds – and he does so with such skill that one has trouble separating the acoustic from the pre-recorded. Zorn says of *Forbidden Fruit*:

"Composed of sixty sections in all, four sets of twelve variations each, and twelve themes, all squeezed into ten minutes, this is perhaps my most compact and fast-moving piece to date."\(^9\)

The idea for this piece came to life when Zorn heard of the death of a Japanese film star, Ishihara Yujiro, in July 1987, and he felt the urge to write a tribute piece for him. (Zorn has been fascinated with Japan since he was a child and he lived there for several months each year). He wrote *Forbidden Fruit* as a set of variations inspired by a photo of Yujiro with his wife, Kitahara Mie and another actor, Tsugawa Masahiko taken from Yujiro’s debut film in 1957. What Zorn did was to create a:

"set of 12 sound blocks… which...are spread out over the entire duration of the piece. Composed of 60 sections in all, four sets of 12 variations each and the 12 themes, all squeezed into 10 minutes."\(^{10}\)

There is an occasional female voice of Ohta Hiromi, speaking in Japanese, which is the narrator in this piece. The violins shift from squeaking screeching sounds to peaceful and harmonic ones. The soundscapes he creates bring to mind images of a tortured person and there is a contradictory effect caused by the beautiful voice of Hiromi. It is a dense track and for instance from about seven minutes into the piece until the end you get a nonstop violin madness and constant shift from this frantic playing to a relaxed but always eerie violin sound.

It is exceedingly difficult to source the exact works that Marclay uses in this work. The common notion is that the original quartet was recorded, pressed to vinyl and then performed by Marclay, yet when asked Zorn will only state that Marclay uses "sourced string material". Regardless, it is an amazing work that makes it exceptionally hard for the listener to differentiate between the sounds that the quartet produces and the sounds that are being so cleverly manipulated by Marclay on the turntables. They seem to flow into each other, and it is only when the mind starts thinking about what is physically possible as a performer that one can start to separate the organic from the prerecorded.

This illustrates another facet of the hyperquartet – that the written string parts and the electronics or amplification cannot be separated from each other and work as stand alone pieces. The vinyl manipulation brings a frenetic energy to a solid base of already busy strings. Apart – they sound messy and without basis, but together they work in wonderfully structured harmony. When asked about performing Zorn’s hyperquartets, Harrington stated:
"Within each piece I'm not sure I would call it development in a traditional sense. But you do really sense differing approaches to sound, to life, to bringing aspects into his world. There definitely are patterns and it might take three or four different pieces to have a sense of that. "I think it's very emotional. I think the quartets are highly structured." [1]

The style of *Forbidden Fruit*, which stems from the various paths of electronic music and the tradition of combining live and taped instruments, is also strongly indebted to the popular music world, especially pieces like the Beatles "Revolution No.9" (The Beatles "White Album", 1968) and in its use of turntables hip hop music. Both *Forbidden Fruit* and *Black Angels* share the use of direct musical quotation, which although is often cited as a postmodern stamp on music is actually a historical practice in both classical and popular music extending through recorded history. In *Black Angels* the appearance of the theme from Franz Schubert's sixth string quartet "Death and the Maiden" (1824) and the "Dies Irae" are chosen to fit in with the overall structure, whereas in *Forbidden Fruit*, the quotes are seemingly random "found" sound objects from history, with seemingly no specific meaning within an established context.

**RETURNING TO PURE ACOUSTIC SOUND**

While adding such devices as amplification, effects units, technical effects and layering can heighten or at the very least change how music is heard by a listener, taking away those devices, and stripping the ensemble back to its raw state of acoustic arco, gives it a new significance. It functions like a silence – it is not a vacuum, it doesn’t

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lack anything – in fact it gains meaning by the very act of stripping something away musically. By removing the veil of electronics, the quartet is laid bare – and the sound is incredibly moving. It invites the listener to appreciate the origins of its history and reminds us of what is truly at the core of the work – a string quartet. In the sixth movement of Crumb's *Black Angels 'Pavana Lachrymae'*, a short trio for violin 2, viola and cello, all amplified sound (and any additional percussion) is discarded. The sound is now raw, stripped and surprisingly unnerving for a particularly tonal movement. This movement returns to the ethereal colour of the second movement as Crumb begins to quote from Schubert’s *Death and the Maiden*.

To quote the score, this movement is to be played “grave, solemn; like a consort of viols a fragile echo of ancient music”, and it is traditionally tonal, based on open fifths throughout. The players are entrusted to hold their instruments vertically and to bow above the fingering hand. If this section were placed in any other regular quartet, it wouldn’t have the same gravity and sparse ethereal quality that it has in *Black Angels*. By placing a tonal, perfect fifth based pavanne between the grotesque *Danse Macabre* and the electrically amplified trills of the movement *Threnody II Black Angels*, Crumb has made the sixth movement almost a caricature of itself. The natural reverberation that occurs with amplification, and the high frequencies that are exaggerated turns the violin into a violently impending swarm of insects.

THE HYPERQUARTET PERSONIFIED – THE KRONOS QUARTET

It is awfully difficult to write an article of this nature and not discuss the presence of the Kronos Quartet. Although the notion of the hyperquartet
is a musical one, if one ensemble deserved to wear that title it would be Kronos. Without them, many recent great string works wouldn't be written, let alone played. The Kronos Quartet – the name is from the Greek god of time, Chronos – was formed in 1973 in Seattle by violinist David Harrington. They take it upon themselves to discover new ways of performing contemporary music, they commission new works, often as part of collaborations with composers and often perform new works chosen from the many unsolicited manuscripts they receive (and encourage).

Kronos made a conscious decision to update the image of their genre to seek out new markets. When asked about the initial idea behind the quartet, Harrington noted the traditional images they strove to change:

[In my early experiences] it was pretty clear that the world of quartets was pretty much dying.... I remember in high school, where I first started a quartet when I was 12, and I remember when I used to go to some of the concerts.... It was so bizarre to be the youngest person there, to be hearing all this fantastic music and just have this idea that it was not part of the lime or our culture. I think it was a real appendage, a distant appendage at that; that always seemed strange to me... still does. It just seemed like it was something that only old people liked. I never liked the way that quartets were portrayed in the media; it was generally these old guys who looked like they were tired out and overweight, like those New Yorker cartoons kind of bullshit -- I hated it, I hated it. I still do; that's not what this music is about. it's not the Sunday-afternoon, white-gloved-crowd approach."\(^{12}\)

When classical ensembles the world over are scrambling for funding in a world pushing arts as to behave as a business and marketing

classical music to the MTV generation leads to so much anxiety that the safe route seems to be to please the baby boomers with quaint renditions of Mozart and Beethoven Symphonies, Kronos's success is in part due to its daring programming. The "old" pieces on any Kronos concert program might include works by Bela Bartok, Dmitri Shostakovich, Aaron Copland, Alban Berg, or Anton Webern. Works by minimalist composers Terry Riley and Philip Glass and such jazz artists as Max Roach and Ornette Coleman are well represented in the group's repertoire. The quartet has had more than 450 pieces written or arranged for it, has premiered more than 300 new pieces, and each year receives hundreds of unsolicited scores of new pieces from around the world. Kronos maintains 400 pieces in its active repertoire at any one time.

"We look for music that excites us," declared Harrington in an interview with the Star-Ledger, "that has a point of view, that's real. We see ourselves as involved in extending, developing and enriching a great tradition. We are seeking consciously and with perseverance to move the focus of this tradition out of the nineteenth century, out of Central Europe. We want to bring the vitality of the world's music into this tradition. We're examining the radical nature of the art form and continuing it. Some of the music being written for us is the best there is today.... If we didn't believe that, we wouldn't play it. I run into exciting music every day that's not in our repertoire. There's no end to the possibilities."  

CONCLUSION

Regardless of the way the quartet is manipulated or sonically altered, it is important that the string quartet maintains its own sense of identity. Without it becomes just another group of instruments and it is the string

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quartets rich history that allows it to be at the forefront of new music. No longer needing to prove itself, it has the ability to be pulled, prodded and stretched while maintaining a sense of dignity and it’s core sound – a personal sound.

"People are turning to this medium [string quartet] because of the palette of colours that has been developed and world of references that can be made. For me the string quartet sound is the most personal sound there is"\(^1^4\)

Most performers have to make a choice at some point in their career – to be “authentic” interpreters of music from bygone eras, or to champion the new.

For the sake of survival, the string quartet has had to embrace new technology in order for its repertoire to grow, and quartets such as Kronos have demonstrated the success of such an approach. While it will always have the familiar sounds of two violins, viola and cello at its heart, if written with skill and played with a high level of musicianship, a work can utilise all manners of new sounds and technology without damaging its integrity and sincerity. As Harrington declares in a recent interview:

"It's amazing how the sound [of the String Quartet] has begun to appear in various settings and different places, musicians are thinking about the quartet as a vital active medium of music; there’s very few composers that I've met in the last ten years that don't want to write a quartet piece. I think the personal aspect to this music and to the way it's prepared is something that is really appealing to people right now... Music is something musicians share with each other. I feel the need to explore and expand what I'm hearing. For me it's a searching for definitions of what it is to be a musician

every day. It changes; things are very different from 1973. There's so many ways our work can go…15

The hyperquartet has countless possibilities for the future. The combination of a tried and true combination of instruments with constantly evolving technology means that composers will always have a solid canvas with a limitless spectrum of colours to choose from. Already the use of amplification, sound manipulation and playback has breathed new life into the string quartet – and this is only the beginning.

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