AUTHORSHIP AND OWNERSHIP OF USHAKA KASENZANGAKHONA

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Thesis presented in partial fulfilment of the requirements for the degree of Master of Music (Composition)

in the Faculty of Art and Social Sciences at Stellenbosch University

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Declaration

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Samevatting

"AUTHORSHIP AND OWNERSHIP OF USHAKA KASENZANGAKHONA"

deur Philip Antoni Schonken Studieleier: Professor Stephanus Jacobus van Zyl Muller

UShaka KaSenzangakhona is 'n komposisie van sowat sestig minute geskryf deur Mzilikazi Khumalo vir koor, soliste en orkes. Die werk is in 1994 georkestreer deur Christopher James en in 1996 hersien deur Robert Maxym. Die skrywer van die werk se teks is Themba Msimang. Die rasse- en kultuurverskille wat Ushaka se outeurs kenmerk bring binêre binne spel wat sekere eienskappe van die werk se bestaan definieer. Die komposisie se hoof ontwikkelingstrajek (1982-1996) plaas dit binne 'n ongestadige politieke ruimte in Suid-Afrika se onlangse geskiedenis. Ushaka sukkel om binne hierdie diverse faktore 'n stem van sy eie te ontdek. Die tesis vestig aandag op hierdie faktore deur 'n kritiese verkenning te onderneem van twee aspekte van Ushaka se bestaan, naamlik outeurskap en eienaarskap. Dit word behartig met deeglike kwantitatiewe analise van die bladmusiek van die oorspronklike komposisie asook beide orkestrasies. Resultate wat verkry word vanuit die analise word gebruik om gevolgtrekkings te maak gaande die bydraes van elke outeur tot die uiteindelike komposisie. By implikasie kan die bevindinge gebruik word om op nuwe en betekenisvolle wyses aan breër onderwerpe te raak binne die Suid-Afrikaanse veld musikologie.

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Abstract

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UShaka KaSenzangakhona is a work of about sixty minutes for choir, soloists and orchestra, composed by Mzilikazi Khumalo, orchestrated in 1994 by Christopher James and revised in 1996 by Robert Maxym. The composition is a setting of a Zulu text by Themba Msimang. The racial and cultural differences between UShaka's three authors bring binaries into play that define certain aspects of the composition. UShaka's main developmental trajectory (1982-1996) places it within a volatile political space and time in South Africa's recent history. Somewhere, hanging in an unstable balance between these diverse factors, exists a musical work that is struggling to find a voice. This thesis highlights these factors by critically evaluating two aspects of UShaka's existence, namely its authorship and ownership under Khumalo, James and Maxym. This is achieved through thorough quantitative score analyses of the original composition and its two orchestrations. Results of the analyses are used to draw conclusions about the contributions of each of its three authors to the final musical product. By implication of the findings produced by the analyses, broader themes within South African musicology are touched on and highlighted in new and meaningful ways.

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Introduction

"Although we are alert to Victorian ideologies of 'ancient and modern' or 'savage and civilised'...the

traditional-modern and African-Western dichotomies persist in current thinking about music in South

Africa."1

"Choral music in tonic sol-fa notation became automatically considered inferior to instrumental

Western music composed in staff notation, so through general attitudes by white musicians to

composers of choral music was the sense of inferiority preserved."2

"This way of thinking might be seen to perpetuate a kind of binary thinking - them and us, black and

white - but I believe the opposite is in fact true. As soon as we realise that the contingencies for an

existentialist voice vis-à-vis ideology and politics can inhere in one kind of musical expression and not in

another occupying the same synchronic space, it is lack of differentiation that perpetuates ethnic

divides."3

"In the early twentieth century, conceptions of the 'African' in African Music referenced Black Africa in

contrast to the 'European' from Britain and Europe, and it was defined as such by those born outside

the continent, or recently arrived from Europe. In post-apartheid South Africa, 'African' is defined as a

more unified vision in which all people born on the continent, regardless of racial or ethnic heritage, are

identified as African."4

"The demise of apartheid and the rise of democracy resulted in an institutional and aesthetic crisis for

the field of composition, embodied in musical terms by a shift away from a Eurocentric paradigm to a

cross-cultural one that embraced the various African elements."5

"In this kind of narration, the entire history of orchestras, symphony concerts, recitals, music festivals,

competitions, arts councils, censored state radio and television, and the unimaginable damage of

¹ Lucia, 2005, p. xxv.

² Lucia, 2007, p. 165.

³ Muller S., 2008, p. 285.

⁴ Muller C., 2008, p. 8.

⁵ Pooley, 2008.

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unequal education and cultural opportunities that drove this Western hegemonic order along under grand Apartheid, are here erased – with the stroke of a pen – as if they had never existed."

It is a secret grudge I bear against postmodern musicology, that in its endeavours to discover, problematise, extrapolate and contextualise the physical and social spaces within which music echoes, it has often disenfranchised the music itself. The symbolic representation of that music is demoted to the position of a footnote without meaning if removed from the various contexts within which it exists. It has become increasingly rare in recent years to find a meaningful scholarly contribution in South Africa based primarily on thorough analysis of musical text. I am a stalwart believer in the idea that a musical score can exist as an autonomous entity from which musical data can be extracted and analysed free of social contexts, if the goal is only to gain knowledge about matters related directly to its symbolic representation. Nonetheless, postmodernism has provided musicologists with valuable tools for understanding music with greater holism and reflexivity.

This reflexivity has made scholars aware of a dichotomous relationship between the self and the other. Edward Said, through his seminal *Orientalism* (1978) and later his *Culture and Imperialism* (1993), has developed the study of the Orient by the Occident into a feasible and wide spanning debate on the West's construction of cultural otherness within the greater context of postcolonial studies. Gayatri Spivak (1988) has taken Said as a conceptual point of departure to further develop ideas surrounding agency in her writing about the *Subaltern*.⁷ Although postcolonialism has enjoyed a position of centrality within studies in the social sciences for a number of decades, it has only been through more recent work by scholars such as Kofi Agawu (2003) and Martin Scherzinger (2004) that agency and the representation of African music has become a greater concern for musicologists.

This thesis is a study of *UShaka KaSenzangakhona*, a work of about sixty minutes for choir, soloists and orchestra, composed by a black African man and orchestrated on three separate occasions by white African men (and one American). The composition is a setting of a Zulu text (also written by a black man). The racial and cultural binaries brought into play by the material quoted on page one define the very core of the work's genesis and later also its performance. Imbalanced positions of control and unequal access to knowledge have placed the collaborators in a precarious relationship of power. The composition's main developmental trajectory (1982-1996) places it within a volatile

⁶ Lucia, 2005, p. xxii.

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⁷ Timothy Taylor (2007) puts forth a more recent discourse on agency in his book, *Beyond Exoticism: Western music and the World.*

political space and time. Somewhere, hanging in an unstable balance between the diverse and somewhat extreme opinions quoted on the previous pages, exists a musical work that is struggling to find a voice.

The quotations given on page two represent the voices of some pivotal figures in recent South African musicological thinking, voices that have shaped, in a local context, our awareness of binary thinking, of agency and of the dangers of supressing the injustices of our past in our visions of shaping a better future. Lucia (2005) points out in *The World of South African Music* how easily a reshaping of our current musical endeavours can seem like an attempt to erase injustices of South Africa's recent history. In doing so, her writing highlights the important impact on our thinking about music not so much of Apartheid as a whole, but specifically of those crucial years leading up to 1994, when everything changed. Stephanus Muller (2008), in *Composing Apartheid*, advocates for a reasoning that is more aware, specific, honest and accepting of the flaws in our thinking about our past and present situations, so as to make those flaws explicit in our understanding of music and its production in South Africa and open it for others to engage with critically.

UShaka, by its scope and by the fact that it seems to engage so many of the ideas developed by the above mentioned authors, could be a seminal composition in bringing all these ideas and contexts into conversation with one another. It could become a unique and determining tool to further problematise and develop a growing South African scholarship of Postcolonialism within the new musicology. And yet, this work also subsists within personal contexts and a sense of individual involvement where its existence, development and broadcast happened in unique and interesting ways by its direct and personal association with its composers. Within these personal musical spaces, valuable clues can still be discovered about the state of composition in South Africa, about the perpetuation of colonial binaries by its authors, and about the misrepresentation of authorship to further political ideals. Therefore, it is a conscious decision in this thesis to focus mainly on UShaka's written musical texts (original and orchestrated) as primary sources of information about its structure, development and authors, in order to gain insight about the work from within the work itself. As a study of a composition, it will aim to hold the music at the centre of all arguments surrounding its existence and aim to extrapolate these arguments in musical and not necessarily socio-theoretic terms.

Notwithstanding the primary aim of this thesis, thus, which is not to engage directly and critically with the theoretical concepts described earlier, the thesis does and will acknowledge the existence of

these ideas within the sphere of music research in South Africa, does and will accept the role these ideas play in the engendering of musical meaning within *UShaka*, and will in no way deny them the import of their contribution to its full understanding. The thesis will also not be a hermeneutic analysis of the musical text and will not aim to provide the reader with an interpretation of the text, the importance of which will merit a study of its own. What it sets out to do, however, is to place its three most important authors, Mzilikazi Khumalo, Christopher James and Robert Maxym in a critical engagement with the work and with each other by analysing each one's contribution to *UShaka*, mostly in the years 1992 to 1996. The aim is to use a specific kind of score analysis to make definitive and quantitative judgments about authorship and ownership of the music – both identifiers of the composition's existence which have proven to be contentious issues and which have become central to describing and defining *UShaka*.

Authorship and ownership are differentiated in this thesis by the determining of the former through intellectual contributions of each composer and the determining of the latter by the division of performance shares between said authors, as settled upon through personal agreements and predetermined categories set in place by the Southern African Music Rights Organisation (SAMRO). In order to make quantitative assessments of either aspect, an analysis of the music had to be devised which would produce quantitative findings. Music, being predominantly a qualitative source of data, is resistant to methods of analysis that aim to deliver quantitative results. This thesis sets out to overcome this challenge and produce valuable and useful sources of data through quantitative analysis of *UShaka*. In the thesis the methodology is explicated and explained in detail before each section embarking on such an analysis. Analyses in this thesis are not based on pre-existing designs, but are formulated and structured according to the requirements of their proposed outcomes and the data types they aim to examine.

Analyses in themselves will not be the only sources of data in this thesis, although they will form an important component of the study as a whole. It should be noted that no published or substantial unpublished research exists that deals critically with *UShaka* or any of its contributing authors. In this regard, this thesis represents a first step of engagement with material that will no doubt reveal more research opportunities to other researchers to engage with various aspects of the work and its creators. A varied range of performances in South Africa, Europe and the United States of America has left behind a number of archived advertisements, interviews and reviews that are mostly available online and provide interesting contextual information about the work's broadcast and reception.

An important body of information about *UShaka* is housed as part of the Christopher James collection at the DOMUS archives in Stellenbosch. Christopher James passed away in 2008 and his papers were subsequently donated to DOMUS. This collection contains many sources of primary information pertaining to *UShaka* – correspondence, notices, hand-written notes and other documents that discuss or deal with the composition and are not only linked to James, but also to the composition in general. James kept fastidious records of his compositional activities. That being said, already at this point in the thesis it is acknowledged that such a large and one-sided source of information is predisposed to engender a bias in a research process concerned with interactions between three composers of a composition to which they contributed. In this thesis, however, research was conducted with an explicit awareness and acceptance of that possibility, because the James archive made it possible for the questions that drive this study to be asked. I hope that the effects of this possible skewed perspective are also mitigated somewhat by the fact that my primary interest in this research has been to generate data from the score, rather than the context of the archive.

Robert Maxym, David Smith, Carl van Wyk, Richard Cock and Noelene Kotze are the other main voices that have directly contributed, through correspondence and other documents, to the body of information out of which this thesis is constructed. Mzilikazi Khumalo, who has become a recluse in the last years, is not an active voice in this thesis, but is represented through the numerous interviews conducted with him in the last 18 years. Together with the James collection, they provide a wide-angle view of *UShaka* through personal accounts, institutional association or direct involvement in its genesis and development as South Africa's first and largest Zulu composition for voices and orchestra.

The thesis consists of four main chapters that broadly describe and explore *UShaka*, discussing in a general sense the history of each of its contributor's involvement in the work and looking at specific aspects of their contribution to its final state. First, *UShaka* will be viewed in its own right, detailing the most important facts about its composition, orchestration and performance. Khumalo, James and Maxym, *UShaka*'s main authors, will be introduced and the issues which characterise the work and their involvement in it will be presented. Second, *UShaka* will be described in terms of James's involvement in its orchestration, detailing certain aspects of his orchestration and then applying the first thorough analysis of the music to determine his authorship in the work. Third, Maxym's introduction to the project and subsequent involvement in *UShaka* leading to his revision of the orchestration will be presented. The relationship between his and James's authorship within that

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revision will be tested in a second quantitative analysis, this time dealing with the two orchestrations. Finally, Khumalo's role as composer of the work will be explored, looking at various aspects of his *UShaka* and describing his position critically within the collaboration.

UShaka KaSenzangakhona

AN OVERVIEW

UShaka KaSenzangakhona is a musical work that was first composed for mixed choir and soloists by Mzilikazi Khumalo and completed in 1985. The work is based on a poem by Themba Msimang. It is generally unknown that some time between 1985 and 1987, Carl Van Wyk was the first person to be approached as orchestrator of the work, although it was Chistopher James who produced the first complete and published orchestration of *UShaka* during the years of 1993 and 1994. Robert Maxym coordinated and managed its revision between 1994 and 1996, which he published as an "enrichment & enhancement", the "final version of the work for orchestra". Final proof-reading and correction of Maxym's revision was completed on 7 October 1999 and the scores sent to the Southern African Music Rights Organisation (SAMRO) in 2000.

The composition consists of four main parts with prologue and epilogue, detailing the life of Shaka Zulu. Part one opens with a salute to king Shaka, after which the story of his birth subsequent to the meeting between Nandi, his mother, and Senzangakhona, his father, is told. It ends with the unexpected birth of Shaka and the rejection of him by his father's family. Part two tells of the rising of Shaka through difficult years of wandering with his mother in search of a safe place to live. Eventually, Shaka trains as a fighter under Dingiswayo of the Mthethwas, goes back to Zululand, defeats his enemies and becomes the King of the Zulus. Part three details Shaka's leadership of the Zulus and his role as war-strategist, the victories of his quests, and the bloodletting that occurred under his reign. It ends with a lengthy and dramatic chorus praising King Shaka, "Izibongo ZikaShaka". Part four tells the story of Shaka's assassination at Nyakamubi, born of the jealousy his prominent leadership aroused in his brothers and aunt. A bass soloist tells of the nation's sorrow

⁸ Khumalo completed the first song, "Izibongo zikaShaka," on 15 August 1981 and the second, "Siyashweleza" in 1982. The whole of *UShaka* was only completed on 12 March 1985 (Khumalo, 2008).

⁹ According to Robert Maxym (Maxym R., 2012, Personal correspondence, October 03), Van Wyk did in fact complete the orchestration, of which the whole, or a part thereof, was performed in 1987. Although various attempts were made to verify this claim, it remains unsubstantiated. Van Wyk himself could not confirm or deny the possibility of a performance, but could however recall orchestrating Khumalo's sketches while *UShaka* was "busy taking shape" (Van Wyk C., 2012, Personal correspondence, October 12).

¹⁰ Maxym, 2000.

¹¹ Maxym, 2009.

caused by Shaka's demise. The Epilogue bemoans the death of Shaka and the consequent death of his nation.¹²

Part IV of *UShaka*, as James orchestrated it, was premièred in the Johannesburg City Hall on 4 June 1993 and was conducted by Richard Cock. The James-orchestration in its entirety, however, was first performed on 25 November 1994 in the Johannesburg City Hall by the Transvaal Philharmonic and the following day in the Vista University Arena, Soweto. Although Richard Cock would have been an obvious choice for conducting the performance (having conducted Part IV previously), he was not asked. Instead, Khabi Mngoma was approached to take part in the première. Various factors, however, caused Mngoma to hand over the baton to Maxym who conducted the opening performance.¹³

Thereafter, Maxym's revision of the orchestration was first performed in the Johannesburg City Hall on 24 September 1996.¹⁴ Subsequent performances took place in Durban (1996, 1998, 2002), Cape Town (1997, 2001), Pretoria (1999, 2004) and Johannesburg (2003) between the years of 1996 and 2003. The work was also performed in Italy, Austria, Hungary, Spain, Switzerland and Belgium as part of the 2004 "10 Years of Democracy" European tour. In 2006, the work received its American première during the Ravinia Festival on 8 and 9 June. After that, few performances have taken place, but most notably one in Durban (2008), when James was omitted from the programme as a contributor to the work. The last publicised full performance of *UShaka* took place in 2010 in Durban's Playhouse Company Opera Theatre under the baton of Leslie Dunnor.

Authorship and Ownership, which might seem like synonymous concepts, are used in this thesis to refer to two distinct, central issues in this study of *UShaka*. Authorship pertains to the amount and type of material contributed by each composer to the work and the function of said material in the music. Ownership refers firstly to the labelling of its contributors as Composer, Author or Arranger by the South Africa Music Rights Organisation, and secondly to the royalties generated from the work and the division of shares between its contributors. In *UShaka*, both authorship and ownership

¹² The full poetic text and its translation into English can be found in the concert program of its first performance in the Johannesburg City Hall on 25 November 1994.

¹³ In correspondence with Maxym (October 10, 2012), he describes how "Khabi Mngoma, the magnanimous, wise friend," had ceded conductorship to him, saying "publically at a parley of about nine persons" to Khumalo: "Mfowethu [my brother], the ancestral spirits have sent this young man to us in order to do justice to your UShaka". According to Maxym, this happened with only two rehearsals left before the première performance of the music.

¹⁴ 24 September, now Heritage Day, was formerly known as Shaka Day in Kwazulu-Natal, making it a fitting date for a performance.

are particularly revealing, because the work was composed and orchestrated during a time of political transition, highlighting in new ways a dichotomy between what was then perceived as African and European.¹⁵ At times, a subtext of class, race or colonialism surfaces in reviews, discussions about the work and interviews with its authors.¹⁶

One such example is an interview with Marc Geelhoed, after the American première of *UShaka* (Maxym revision), where Khumalo stated that "South African musicians learnt Western music from missionaries, but [that] the more advanced and costly side of music education remained out of reach". ¹⁷ For this reason, he said, he "had to find white orchestrators to help". ¹⁸ This was in reaction to Geelhoed's statement that in Maxym's revised orchestration, "there's almost nothing that sounds particularly African in the score; African percussion is absent, as is the freely florid singing style of African music". ¹⁹ By implication, Khumalo is placed in the same category as the white orchestrators, because (according to Geelhoed) his vocal writing is too Western and not African enough.

In light of Geelhoed's comments, it seems ironic that the original orchestration of *UShaka*, done by James, does feature an elaborate percussion line using, what Geelhoed refers to as 'African rhythms'. This contribution by James makes a concerted effort to recreate the aesthetics of African percussion with orchestral instruments. Throughout his orchestration, James "adheres to the text as the primary feature", which would make Geelhoed's critique on the lack of an "African" sound more applicable to Khumalo than to him. James also communicated to David Smith his disappointment with Maxym's revision, writing that "a great deal of the African elements were altered and the consequent result was that the music became too westernised".²¹

¹⁵ This thesis acknowledges that a discourse of music in terms of its perception and representation as African or Western (or, in this case, specifically European) is well-developed, but remains problematic. It is not the aim of this thesis, however, to delineate or problematise the polemic surrounding what is perceived as African and Western, but refers the reader to (Agawu, 2003) and (Scherzinger, 2004) for thorough expositions on the discourse.

¹⁶ Please refer to the Introduction of Maxym's UShaka for further background to this matter.

¹⁷ (Geelhoed, 2006, p. 45). Geelhoed is an American music critic and journalist who regularly contributes to seven newspapers and journals through the US and specifically the Midwest. He is also director of the Chicago Symphony Orchestra's record label, Resound.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Smith D., 2012, Personal correspondence, October 05.

²¹ James, 1996.

Although, in the Maxym revision, instruments are sometimes changed to produce what Geelhoed refers to as "a workaday Hollywood film score", 22 most of the original percussion lines are intact. It is possible that in his revision, the lines are obscured by the greater orchestral forces and denser textures, leading Geelhoed to believe that they are absent altogether. A comparison between the instrumental combinations used in the James orchestration and Maxym revision looks as follows.

James orchestration	Maxym revision
2 Flutes, 2 Oboes, 2 Clarinets in Bb, 2 Bassoons	Piccolo, 2 Flutes, 2 Oboes, Cor Anglais, 2
	Clarinets in Bb, 2 Bassoons
2 Trumpets in Bb, 2 Horns in F, 2 Trombones,	3 Trumpets in Bb, 4 Horns in F, 3 Trombones,
Tuba	Tuba
	Vibraphone, Marimba, Xylophone, 2 Congas, 4
Vibraphone, Marimba, Xylophone, 2 Congas, 4	Bongos, 2 Tom-toms, African Bass Drum, 2
Bongos, 2 Tom-toms, Bass Drum, Wood Blocks,	pairs of Wood Blocks, 2 Suspended Cymbals,
2 Suspended Cymbals, Empty Bottle,	Cymbals (pair, small, large), Triangle,
Tambourine, Glockenspiel, Timpani, Gong	Tambourine, Gong, Whip, Empty Bottle,
	Glockenspiel, Timpani
Harp and Strings	Harp and Strings

Table 1: Orchestral forces in the James orchestration and Maxym revision

As can be expected, the significant difference in instrumental forces utilised by James and Maxym means that the two versions of *UShaka* portray vastly different soundscapes. James's orchestration, with its lack of auxiliary instruments (excepting the percussion section) and coloristic effects, sounds characteristically sombre. Especially, the absence of piccolo and its piercing upper register means that his orchestra has a deeper, serious sound that is rarely mitigated, even in passages utilising the xylophone. James also rarely makes use of stereotypical orchestral colour effects like harp glissandi, continuous runs in the woodwinds or fanfares in the brass section. In contrast, Maxym in his revision utilises a very colourful, thickly textured orchestral palate of sounds that masks much of the clarity of lines in James's music in favour of a more dramatic orchestration. Maxym utilises the full spectrum of colour-effects possible to produce in an orchestra as the following example illustrates:

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²² James, 1996.



Figure 1: UShaka Part I, "Ilembe Labikezelwa Zinyandezulu", mm 5-6 Maxym revision (left), mm 3-4 James orchestration (right) to display and campare the differences in orchestral writing.

The example above is a short one, but it is highly evident here, as it is throughout the work, that Maxym's re-orchestration is still based on the fundamental structures provided through the efforts of James. In this figure, it is evident in the strings, marimba and woodwinds. This raises an important issue in the use of terminology in the ensuing discussion of *UShaka*: a re-orchestration should not be a reframing of an existing orchestration, but a new conceptualisation of the original composition for

orchestra. An orchestration based on an existing orchestration is just a revision thereof. For that reason, this thesis refers to James's work as the orchestration, and that of Maxym as the revision.²³

The designation of composer, orchestrator and reviser is challenging in the case of *UShaka*. When James first registered his orchestration of Part IV with SAMRO on 24 September 1993, the "Notification of Works" only allowed him to describe himself as Composer, Author or Arranger. Not being the composer, he chose Arranger. Yet, it is evident from studying the scores that his contributions far exceeded the role of orchestrator. Amazym's revision, whilst being highly dependent on the James-orchestration, did add to the composition certain qualities that would frame him as more than reviser and yet would not describe him as re-orchestrator or co-composer. In the end, Maxym secured a 4.80% income from royalties as composer by the addition of a 107-measure long overture to *UShaka*, above and beyond his 11.05% income as arranger. In contrast, James, who in his orchestration composed 217 measures of additional music throughout the work, expanding *UShaka* by 17.1% or nearly one fifth, received no recognition for his compositional contribution.

Since Maxym's completion of the orchestration's revision in 1999, he has also produced numerous arrangements of the music, which are described in detail in Addendum A. These are mostly aimed at widening the performance possibilities of the work, and include versions for smaller ensembles and concert bands without choir or soloists. These arrangements have not necessarily pleased all the parties involved. James, for example, wrote to John Simon in 2008, saying that "he [Maxym] is so besotted by *UShaka*, I simply cannot believe it. He continues to flog a dead horse!" Maxym clearly perceived an opportunity to produce income through performances of *UShaka* that James could not, because by that time James described *UShaka* as a work past its performance life: "a dead duck". 28

²³ In various documented discussions concerning UShaka, like (Geelhoed, 2006), (Khumalo, 2008) and (Maxym, 2009), Maxym's revision is referred to as the "final orchestration". Such a term creates and furthers the idea that the final orchestral version is more a result of Maxym's efforts than those of James. This thesis will challenge that idea.

²⁴ Dr David Smith, a colleague of James and close bystander to the development of Ushaka throughout its existence, punctuated this idea numerous times in correspondence and interviews. He describes James's efforts as "adding a great deal of original musical thought" (Personal correspondence, October 05, 2012).

²⁵ These figures are taken from a letter of the organiser of serious music at SAMRO to James (Levy, 1996). According to Levi, the royalty-distribution is based on information provided to him by Khumalo and Maxym, but not by James.

²⁶ These figures are discussed in greater detail in the chapters, "James's Ushaka" and "Maxym's Ushaka".

²⁷ James, 2008.

²⁸ Ibid.

James's UShaka

It is so difficult orchestrating someone else's music and at present I feel a little disillusioned with the project. I seem to spend most of my weekends these days trying to figure out the best implied harmonies, contrapuntal lines, apt rhythms and instruments to use.²⁹

INTRODUCTION

Christopher James spent the years 1993 and 1994 orchestrating *UShaka* from the vocal score composed by Khumalo a decade before. James is known to have had a self-proclaimed affinity for the music of Africa, utilising features of African melodies and rhythms and applying them in his own music within the context of a European musical tradition. Midnight of the Soul (1989), Images from Africa (1992), An African Safari (1990) and Missa Sancti Bernardi (1992, utilising Tswana texts) are examples of works that demonstrate these ideas. His style is best summarised in his own words, which refer to his own melodic, harmonic and rhythmic understanding and application of ideas taken from the music of Africa:³¹

I try to remain as true to the original as possible, especially when it comes to the melody. However I do also "improvise" variations on the melody so as to keep it fresh. I also often use my own harmonisations. I have used many African rhythmic features in works composed since this piece [Midnight of the Soul]. In several of my works composed in the past few years, both African melodic and rhythmic complexities are to be found.

During any orchestration process, James would often work from tape recordings of African music to better understand the music and, in some cases, notate ideas that would aid his writing.³² Khumalo had produced simple tape recordings of *UShaka*'s vocal parts before the orchestration process had

²⁹ James, 1994.

³⁰ Perry, 1993. As is stated in a previous footnote, this thesis acknowledges the fact that a discussion of music in terms of its perception and representation as African or Western touches on a problematic discourse that is over-simplified in its use within this thesis. Here, the terms "African" and "Western" are used with reference to James's (and Perry's) own use of the terms, and only to refer to styles of writing in James's music to which he himself refers in those terms. Again, the reader is referred to Agawu (2003) and Scherzinger (2004) for thorough expositions on the discourse.

³¹ James, 2007

³² Ibid.

even started, because there were elements of the music that he could not notate effectively using tonic sol-fa.³³ James used these recordings to familiarise himself with Khumalo's interpretation of the vocal parts and to find the best orchestral possibility to complement the text and lines. Unfortunately, these tapes could not be found and consulted for this study and it is not certain that they still exist. It follows that it was not possible to determine if these recordings could have influenced James's orchestration of the work.

For James, one of the most challenging aspects of the orchestration was creating a suitable rhythmic accompaniment for the vocal lines,³⁴ where the rhythmic construction of some vocal sections was so free that it was almost impossible to notate in musical terms, "for a western orchestra to understand or count it".³⁵ In this regard, James collaborated with Khumalo, to "sort out these complexities" in the choral score with Khumalo's aid.³⁶ Another challenge was the engendering of an environment of tempered tuning in the orchestra that would be sensitive to the tonality utilised by Khumalo in his composition. Part of his agreement with Khumalo was that James would himself provide a "suitable harmonic and contrapuntal framework" for *UShaka*.³⁷

Bearing these facts in mind, a few initial observations presented themselves when I initially compared the James orchestration of *UShaka KaSenzangakhona* to the original vocal score by Khumalo. First, there was a considerable amount of musical data visible in the orchestration that was non-existent in the original. Second, James's orchestration did not appear to be very creative, specifically from a coloristic point of view. Third, it seemed to me that, although James tried to remain as true to the original score as possible, he had to compose and recompose many elements to make his orchestration a feasible one. Last, I wondered why the orchestration took more than twenty months to complete, for although the full work is eighty minutes long, it did not appear that the vocal material was complex enough to justify James taking that long to orchestrate it.³⁸

Using these initial observations as guidelines, I shall now explore the James orchestration in various ways. It will highlight some features of his orchestration, after which it will attempt to quantify

³³ Composer's notes from Khumalo (1982)

³⁴ James uses the term "additive rhythm" to describe the complex rhythmic structures in African music which result from the combination of multiple groups of two or three beats strung in different combinations (Perry, 1993).

³⁵ James in Perry (1993).

³⁶ Ibid.

³⁷ Khumalo, 1993.

³⁸ It is perhaps important to note that, at that time, James was holding down a full-time teaching position. This fact could have been an important factor in the amount of time it took James to complete the orchestration.

James's authorial contribution to the work as composer, above and beyond his role as orchestrator. Lastly the findings of this analysis will be examined, interpreted and presented for further discussion.

OBSERVATIONS

In the beginning of this chapter's introduction, four key areas of James's compositional approach are quoted from a questionnaire he answered in 2007, namely 1) remaining as true to the original as possible, but 2) improvising on the melody, 3) using his own harmonisations and 4) creating his own African rhythms.³⁹ As I also mentioned earlier, one of the striking features of James's *UShaka*, when comparing it to Khumalo's original, is the abundance of material present in the former, but not found in the latter. In other words, there is a certain level of compositional authorship to be found in the orchestration that cannot be traced back to the original and that falls outside the arena of orchestration. James's *UShaka* is thus unique from an orchestrator's point of view in that it describes not only an orchestrational process, but also one of composition.

The following excerpt, Figure 2, is taken from part four of James's orchestration. It is part of the introduction to "Ukungena Kwempethu". Although there are other parts of the orchestration that are richer in texture and layering, this serves as a good example of an instance where James had to "invent" material from scratch to link two passages. It is known that Khumalo and James had an agreement by which he was to compose these links, although there is no evidence that the former (Khumalo) provided James with any idea of their length, structure or content. Even in rehearsals for the first concert of 1994, the choristers had very little idea of the orchestral role in the work, especially regarding these links.⁴⁰

Figure 2 contains three important original contributions by James that are unaccounted for in Khumalo's score. The first contribution lies in the harmonic progression: in a local g minor environment, James utilises a VI6-i oscillation in the strings (mm 7-9 and 11-13). Khumalo himself never utilises the submediant chord in *UShaka* when writing in minor. On top of this is layered a

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³⁹ James, Personal correspondence with Lisa Engelbrecht, 2007

⁴⁰ (Maxym R., Personal correspondence, September 04, 2012). According to Maxym, the choristers had nothing more than a vague idea of the number of bars they were to wait before entering between movements. They had not rehearsed with any orchestral cues and none were written in their scores.

tuba melody which, through its application of the raised sixth and leading tones (E\(\frac{1}{4}\) and F\(\frac{1}{4}\)), creates harmonic cadential impetus by implying a movement from dominant to tonic in mm 9-11.

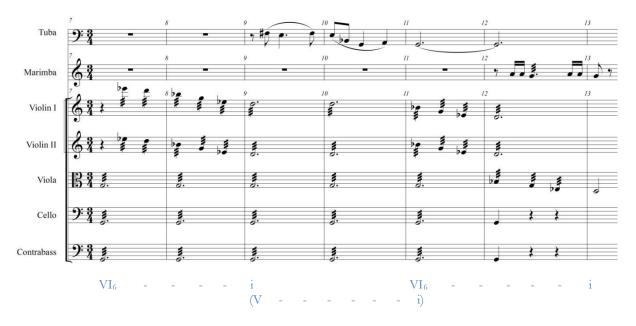


Figure 2: UShaka part IV, "Introduction to Ukungena Kwempethu", mm 7-13 (James orchestration).

The second of James's contributions is the tuba melody itself which, although it consists of similar intervallic construction as some vocal lines found later in the movement, is nonetheless a unique contribution. It is found in other places in the fourth part of *UShaka* and represents an important instrumental counter-melody to the main vocal line.

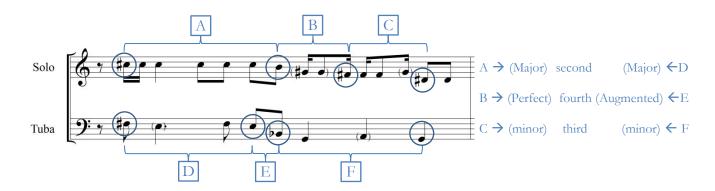


Figure 3: UShaka Part IV, "Ukuena Kwemphetu", m.25 (solo) | m.9 (tuba) (James orchestration) intervallic construction of melodies.

⁴¹ Khumalo uses mainly two scale formations throughout UShaka, essentially resulting in the use of Aeolian and Ionian modes (natural minor and major). His use of modality is discussed in the chapter *Khumalo's UShaka*.

The third is the marimba motif in measure 12, which is a simple but prominent leitmotiv throughout part four of *UShaka*. James does not restrict his use of the motif only to marimba, but also uses it in bongos, tom-toms and other percussion instruments. The motif is transformed in the second movement, "Esibayeni Kwanyakamubi", to create a strong resemblance with percussive textures found in the second and third part of *UShaka*. There is, however, no evidence that James attempted to established narrative links with those sections in this way, although a thorough analysis of structure and content might indicate otherwise.

Arguably, James's most important contributions to *UShaka* are his reframing of what he refers to as African percussion within a traditional orchestral context and composing a suitable rhythmic counterpart for Khumalo's vocal lines. As in his earlier works like *Images from Africa* and *Midnight of the Soul*, James blends and juxtaposes his African elements and standard Western orchestral practices. ⁴² Throughout *UShaka*, percussion with James's African approach underscores the dances and dance-like structures of Khumalo's music, while traditional orchestral percussive effects enhance the narrative elements of *UShaka*. Purely instrumental sections are more prone to embody a Western percussion idiom, presumably to enhance the flow of phrase and articulate points of cadence, but in addition, such passages are presumably more representative of James's own musical training, which follows a European tradition. The following figures (Figure 4, Figure 5, Figure 6 and Figure 7) will aid in clarifying these ideas.

⁴² James propagates this idea frequently in discourse with friends and colleagues. In a letter to Lisa Engelbrecht (2007), his use of African music within a Western context forms a central component of his description of his compositional practice. Refer to footnotes 15 and 30 for more information regarding James's use of the term and its application in this thesis.



- ← Vocal material by Khumalo quoted in clarinets.
- ← James's African percussion style accompanies vocal material.
- ← James's Western percussion style accompanies instrumental material.
- ← Instrumental material newly composed by James.

Figure 4: UShaka, Part I, "Introduction to Ilembe Labikezelwa Zinyandezulu", mm 1-2 (James orchestration) showing the juxtaposition of different percussion idioms in James's writing.

In the figure above, from the second song of part I ("Ilembe Labikezelwa Zinyandezulu"), James juxtaposes vocal material found later in the movement with melodic material of his own invention. His use of percussion shifts between his African and Western idioms, even in this relatively small span of two measures. The function of each style differs, with the former providing impetus and the latter providing ambience. The marimba motif is, in this example, embryonic of a denser rhythmic African texture found later in the section.

In the dance movements, James constructs some attractive rhythmic sections. These are mostly built up of simple patterns that combine groups of two or three beats or half-beats and overlay each other strategically in compound sets. In the following figure, groups of three are shown below the notes and groups of two above. In all cases, sets are aligned to the same position in a measure in all three instruments, although discrepancies can be identified in the internal subdivision of groups.



Figure 5: UShaka Part I, "Ikloba Lothando", mm 69-70 (James orchestration) showing James's construction of rhythmic textures.

In the figure above (Figure 5), all three percussion lines essentially represent five sets of rhythms, each set constructed out of a number of cells. The first set is divided into four cells, the second into two cells and so forth. In the third set, the Marimba divides into three cells of two while the other two instruments divide into two cells of three. This anomaly is carefully devised to accentuate certain moments in vocal passages. The type of rhythmic construction seen in Figure 5 is sometimes repeated exactly for many measures (30-50), whilst occurring in other places for fewer than 8 measures before being altered. Another approach to rhythmic construction is displayed below:



Figure 6: UShaka Part I, "Ikloba Lothando", mm 92-95 (James orchestration).

In Figure 6 above, the main rhythmic structure is of a simpler construction, mainly just a subdivision of the measure into (8)3+3+2 or (8)3+2+3 beats by the timpani. Isorhythms of a more complex nature are engendered by layering the other two instruments with repetitive patterns on top of this base layer, with intelligent use of accentuation to create the sense that *color* and *talea* are of incongruent lengths. The figure above portrays a two measure fragment and the first repetition thereof. Note how James introduces subtle differences in the pitch and articulation of each instrument. The fourth line represents the emergent isorhythms by the use of accents in and on top of the timpani foundation.

Other passages represent yet another approach to percussion, where James combines elements of his African and Western percussion to form a kind of hybrid material. In the example below (Figure 7), James uses the bongos in much the same way as in Figure 6 above, but the marimba plays a more relaxed line. The timpani fulfil a typical orchestral role of providing rolled crescendos towards the first beat of the next bar. James's use of tuplets and triplets means that there is a focus on the subdivision of a constant pulse which is in contrast with his African sections, where pulse is

engendered through additive procedures. It should be noted that the constituent elements of the example are actually independent percussion fragments taken from earlier in the movement. I believe, therefore, that the combination thereof is representative of a formalistic procedure and not an attempt to produce a musical dialogue between the materials.



Figure 7: UShaka Part I, "Ikloba Lothando", mm 113-114 (James orchestration) shows a mixture of African and Western ideas in James's percussion lines.

In view of the examples above, it becomes possible to imagine that James applied a great deal of intellectual effort in the task of orchestrating *UShaka*. There is a demonstrable matrix of ideas in the orchestration that communicate with each other on various levels and also with the prime material upon which the orchestration is based. The choices that James involved himself with in the process of orchestrating *UShaka* go beyond concerns for instrumental colours and other technical matters to comprise the threading together of a musical foundation which forms a central component of the composition itself. Most definitely, *UShaka* would not be able to function as a presentable stage production without James's contributions.

These contributions place James at the centre of a potential polemic surrounding the authorship of *UShaka* and the boundaries between what should be considered orchestration and composition. It brings us back to the Southern African Music Rights Organisation's oversimplified classification of authorial contribution as either composer or arranger (or in this case orchestrator), which determines many facets of how a work is presented to performing musicians and audiences. It cannot be denied that James's efforts within the context of bringing an indigenous South African body of music to a Western stage within an orchestral arena are invaluable and, in the case of his *UShaka*, far transcends the limits of orchestration. Thus, the following section of this thesis will attempt to determine and quantify James's authorial contribution, as composer, to the orchestration of *UShaka*.

THE ANALYSIS

The Southern African Music Rights Organisation considers authorial contribution to a work in very broad, hierarchical categories of author, composer and arranger. Arrangement, in this case, is an umbrella term which includes orchestration and revision. In all cases, division of royalties takes place according to a set formula in which composer and author share royalty income in a 50:50 ratio. In an arrangement (or orchestration or revision) of a work, however, the arranger earns only 16.67% of income from performances thereof. By implication, composition and arrangement are placed in a hierarchical relationship, which places composer above arranger where intellectual rights are concerned. It denies orchestration the possibility to contribute in the arena of composition and composition to be a form of arranging.

The previous section touches on and highlights certain features of James's orchestration of *UShaka* that represent, define and demarcate his authorial contribution to *UShaka* in terms of the type of material he created. His use of percussion was found to be an especially important component in his orchestration. The question of how much that contribution really was and how to discern compositional contributions from orchestrated material is of central concern in this section of the thesis.

To discern compositional contribution from orchestrated contribution does not imply that the two are mutually exclusive or that orchestration cannot also be composition. Actually, in the case of *UShaka*, the opposite is true, i.e. that orchestration can indeed be composition. For the sake of bringing an analysis of the music into closer proximity with SAMRO's broad division of authorial contribution into categories of composer and arranger, though, it must view the work in terms of its separate contributions to composition and orchestration.

⁴³ Kotze N., 2012, Personal correspondence, October 16.

⁴⁴ Ibid.

⁴⁵ Ibid.

NOTES ON THE ANALYSIS

The greatest criticism against quantifying a musical work into sets of numbers might be the loss of data regarding aesthetics and the value of the resulting numeric data in further analysis. Yet, the idea of quantitatively analysing music dates back to as far as 1957,⁴⁶ and finds its roots largely in information theory. Although the statistical analysis of music, using theorems and algorithms derived from information theory, has mostly struggled with quantifying the ineffable qualities of the aesthetic experience,⁴⁷ the current analysis aims to isolate, identify and describe only one aspect of the music, namely that of authorial origin. Arguments not directly pertaining to authorial origin, like the quality of James's orchestration or the narrative relationship between his material and that of Khumalo, are omitted from the analysis.

It should also be noted at this point that the analysis treats the scores of *UShaka* as artefacts, viewing them in isolation from the experience of their creation or performance. This is an important consideration for the reason that the true authorship of *UShaka* might be quite different from the way authorship is perceived by audience members or even the composers involved in the work themselves. Therefore, the analysis limits itself to the realm of the scores in defining and assigning authorship to either of its contributors. There are two other important reasons for this, namely that Khumalo could have omitted data from his tonic-solfa score which he could have considered as self-evident. An analyst has no means of determining the exact nature of such data, should it exist, and cannot include it in the analysis. Also, it is known that Khumalo recorded his vocal material on tapes for James to use in his orchestration of the work. These tapes have become lost in the interim, but could have contained musical information realised by Khumalo and his choir's performance of the music, which is also not recorded on the score.

⁴⁶ Meyer L. B.,1957, Meaning in Music and Information Theory, Journal of Aesthetics and art Criticism, 15.

⁴⁷ Sanger, 1984, p. 59

METHODOLOGY

The method of analysing the James orchestration aimed to transfigure certain aspects of the symbolic representation of the music into a set of numeric tables (see Addendum B). Each table describes, through those figures, a set number of units per measure of each composer's real or implied authorial contribution to that measure of music. The results would enable the investigator to determine to within a small percentage of deviation, the level of authorship contributed by each composer.

By "real contribution" is meant the actual notes written by one of the composers, whereas implied contribution refers to one composer's underlying contributions that are cast within the material of the other composer. Thereby, a melodic fragment could appear to originate from Khumalo, but might contain harmonic or rhythmic elements that signify a unique contribution by James. An example of such an occurrence was discussed in Figure 2 on page 12.

The analysis was conducted twice (referred to as Count A and Count B), each time in three stages and each stage taking place in one or various phases. Count A utilised all pitch data in the score to arrive at a gross tally (silence and salient musical indications were ignored), while Count B utilised more specific exclusion and inclusion criteria to eliminate redundant material and arrive at a net tally. Therefore, whereas Count A took into consideration every note written on the score, Count B attempted to differentiate only the most fundamental musical material in the orchestration.

In Count A, the first stage involved studying, identifying and coding all material on the score into appropriate categories, while the second involved sectioning the music into appropriately sized data-enabling divisions according to a predetermined sampling rate. The sectioning of material into these data-generating units was an entirely pragmatic action with no influence on the actual data or outcome of the analysis. The last stage consisted of reading data structured by these divisions and documenting them in tables. The three stages are described in detail below.

The first stage, namely identifying and coding of material, took place in three phases. In the first phase, the material in James's orchestration was compared to that of Khumalo's score and all vocal material in the latter matched and catalogued in the former. All instrumental material matching or strongly resembling material from Khumalo's score was added to this catalogue. In the second phase, all material clearly not originating with Khumalo, and thus being a unique addition by James, was

marked and catalogued as such. Thirdly, material which could be traced to Khumalo, but which was altered in such a way as to represent a unique intellectual input by James, was marked and catalogued in a third set as Khumalo[James]. These findings were documented in Table 6, Table 8, Table 10 and Table 12 in Addendum B.

In the second stage, main beats and their first primary subdivision were fixed as the basic quantitative units of analysis. For a note to be counted, it had to occur at such a point, or be displaced by syncopation to a sounding point adjacent to the main beat or its subdivision (provided that the sounding note sustained through one or other of these points). This mode of division was chosen in relation to the main beats and their subdivision, because it would be sympathetic to changes between regular and irregular time-signatures caused by the manner in which Khumalo set the text to music. Following is an example to illustrate this method:

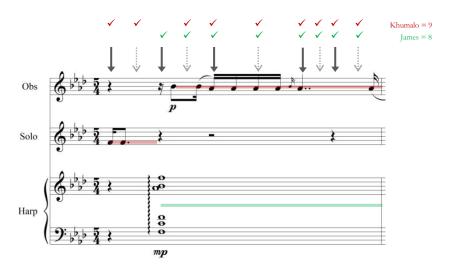


Figure 8: UShaka Part I, "Ikondlo Kanandi", m.19 (James orchestration).

Although the music is, in places, subdivided into note-values smaller than half a beat, it had a negligible impact on the data extracted from the music and was disregarded in the analysis.⁴⁸ If, on

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⁴⁸ An equivalent of 301.75 beats of music was excluded from the count by the application of this method. They were spaced as 1205 different notes in the score. They could have measured up to as much as 1060 units in the analysis if the first occurrence was moved to the nearest point of measurement and the spatial relationship between the notes remained constant. Of these 1060 units, 554 would be assigned to Khumalo and 506 to James. This signifies a 1.31% mean discrepancy in Count A, with 1.5% for Khumalo, 1.43% for James and 0% for Khumalo[James]. In compensation, though, an amount equal to 112.5 beats of rests was included in the count due to their location within the space in which a note was counted. They were documented as 463 rest marks in the score and would have reduced the total count by 463 units if the first rest was moved to a point of measurement and the spatial relationship between the rests remained

the other hand, the unit of analysis was decreased in size to accommodate smaller note-values, it would lead to a high level of redundancy in the count which could also have a negative impact on the accuracy of the analysis. The current mode proved to be the best trade-off between accuracy and redundancy, making it the best choice in this analysis.

In the third stage, data was read from these units in the music. At each unit, pitch data was read, counted and grouped according to the composer to which it had been assigned previously. The findings were documented in tables, grouped together as number of units per measure, per composer.

Count B used the same material and process as in Count A, but made use of more specific inclusion and exclusion criteria during the last stage to read and document data more selectively. The goal was to include in the analysis material of a fundamentally important nature to the musical product, and exclude any other material that could be considered extraneous. These criteria are described in the next section.

Material which was previously assigned to Khumalo[James] was of special concern in Count B – in this study, the possibility of true multi-authorship (in the sense that material originated from the combined and equal efforts of more than one person) is disregarded.⁴⁹ Therefore, hybrid material had to be closely studied in order to identify underlying constituent elements and ascertain the composer to which they could then be assigned. See Table 7, Table 9, Table 11 and Table 13 in Addendum B.

constant. This reduces the overall discrepancy in Count A to 0.74%, 0.84% for Khumalo and 0.8 for James, which renders it negligible.

⁴⁹ There is no evidence to suggest that Khumalo had any influence on the content of material which James provided for his orchestration, other than on a consultation basis. There was also no change to Khumalo's vocal score brought on when James was introduced to the project. The contributions of each composer are largely confined to the separate intellectual efforts of each composer who was working in his respective field of specialisation.

INCLUSION AND EXCLUSION CRITERIA

Two sets of inclusion and exclusion criteria were utilised in this analysis. The first set was applied to Count A, while both sets were applied cumulatively to Count B.

In the first set, the aim was to identify and isolate, on a base level, any data on the score that would be suitable for analysis, and separate it from data that would be unsuitable or unusable for quantitative comparison.

It was found that material structured around pitch, especially melody, was unaltered in its application in the James orchestration, except in rare and easily identifiable cases. Harmonic sequences, where they were already present in Khumalo's *UShaka*, were also applied without major alteration, at least in a localised environment. Melody would therefore form the basis for comparison in the analysis. Harmonic sequences could, on a secondary level, inform the investigator of underlying structural information contained in a musical fragment that could influence authorial origin thereof.

Khumalo's use of rhythm is not individualistic or characteristic enough that it could be used as a criterion by which to identify and classify material in the James orchestration, except in a highly localised context and in direct proximity to material already identified as belonging to Khumalo. Therefore, analysis and comparison of data could not take place effectively based solely on the rhythmic structure thereof. There were some very obvious cases in which rhythmic structure aided me in correctly assigning material to a composer, but the final decision was never based solely on rhythm.

Other salient data types in the Khumalo score, such as dynamic indications, tempo markings, articulation, phrasing or other interpretative markings were too insignificant in terms of effect and frequency of use and applied too elementarily to provide a viable blueprint for analysis or comparison and were completely disregarded from this aspect of the study.

The second set of criteria took data already parsed through the first set and refined it to a point where a distinction could be made between core material and inessential musical data. The process followed primarily a vertical instead of a horizontal approach and focused on ideas stemming from the principles of orchestration to identify redundant and extraneous musical data. There was,

however, no premise that Khumalo's writing would contain no redundancy. Therefore his contributions, already identified by that point, were also subjected to scrutiny.

The aim was, however, not to deconstruct the music, to fragment it or to strip it down to a primordial level, but to chip away at "unnecessary" material present in the work that could distort an accurate reading of intellectual contribution in *UShaka*.

To that aim, any instrumental doubling of vocal material was excluded from the tally. Even within the vocal material, doubling of melody between voice parts at the unison or octave was excluded. Within the vocal material, all transpositions of melodic material at intervals necessary to create harmony were reduced to one instance of "harmonic contribution", whether by Khumalo or James. Any instrumental doubling of such material was disregarded.

Any material, like harp glissandos or lengthy timpani rolls that could be labelled as orchestral effects, were also disregarded as contributing to colour, but not composition. On the other hand, newly constructed counter-melodies, harmonic frameworks or rhythmic motifs were included in the count, as well as instrumental motifs or leitmotivs that contributed toward engendering a musical narrative. The elaborate percussion part is an especially prominent feature in James's orchestration and was counted as well due to its contribution to the fundamental structure of *UShaka* as an African work.

The following example (Figure 9, p. 30) illustrates the use of the abovementioned methodology and inclusion/exclusion criteria to quantify and categorise intellectual input in James's orchestration. In it, contributions by Khumalo are marked in red and contributions by James in green. Data is extracted at every quaver, or half a beat, in two tallies (Count A and B) using the selection criteria described above. Khumalo's vocal parts are used as the point of departure and are marked first. All other material is analysed in relation to that material.

Resultantly, the bassoon melody (mm 124-126) and percussion parts count as unique intellectual contributions by James in both Count A and Count B, because they contribute to the fundamental make up of the work in a way that is non-existent in Khumalo's vocal parts. The other woodwind

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⁵⁰ These aspects are further explored in other sections of the project.

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parts (flutes, oboes and clarinets) in this extract do not make valuable contributions to either the harmonic, rhythmic or melodic structures in the work, but function more as an orchestral effect. Therefore, they are omitted from Count B according to the exclusion criteria. In accordance with the exclusion criteria, the soprano, alto and tenor lines of measure 126 are reduced to one line for Count B, and the string parts are omitted from Count B, because they are doublings of the vocal lines. The doubling of woodwinds is not counted either, because both instruments of each group play the same notes and act, from an orchestrator's point of view, as one instrumental voice.

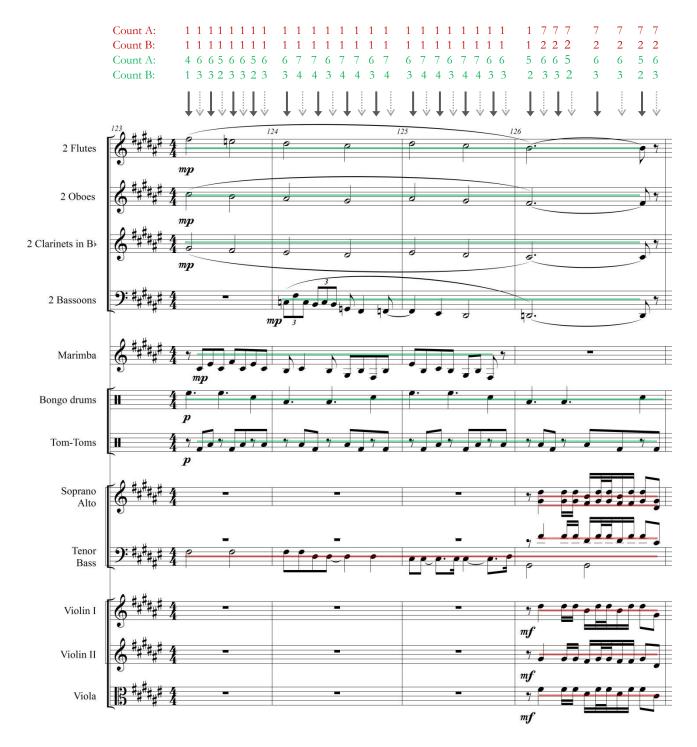


Figure 9: UShaka Part IV, "Siyashweleza Nodumelhezi", mm 123-126 (James orchestration).

A special case presents itself in the figure above, where the bassoon performs two triplets. Only two points of data extraction exist in the space of the triplet, so out of three notes, technically only two are counted. In this case it makes no difference to the count, though, because the count does not document the actual pitch but only the fact that pitch occurs at a certain point, so the three notes count for the same length as two notes would have. There are other cases where a rest within a triplet causes deviancies in the analysis.

FINDINGS

In total, data taken from 1 269 measures of analysed musical data was recorded in tables under Addendum B, including pickup measures. In total, 9 690 points of data extraction existed within these measures, with an average of 7.83 points of extraction per measure. Out of these points, 79 740 (Count A) and 24 717 (Count B) units of data were extracted for a total of 104 457 units of data; 79 740 is in actuality the gross total, as the 24 717 units from Count B coincide with count A. The following table gives an exposition of the findings (units counted):

	Count A	Count B	Total
Khumalo	36 267	10 411	46 678
James	34 806	14 306	49 112
Khumalo/James	8 667	0	8 667
Total	79 740	24 717	104 457

Table 2: Number of units counted in Count A and Count B, per source, in UShaka (James orchestration)

From the table, various simple observations can be made. Firstly, in Count A, 1 461 or 1.83% units more material was assigned to Khumalo than to James. 10.87% of data could not definitively be assigned to either one of the composers. However, after following the stricter method of data selection in Count B, it was found that James contributed 57.88% of material in a net tally, 15.76% more than Khumalo.

The notion that James contributed more than 50% of material in Count B contradicts the hierarchical categorisation of composer and arranger by the Southern African Music Rights Organisation.⁵¹ Clearly, in this case, differentiating between orchestration and composition is more complicated than is suggested by this arrangement.

In both counts, the addition of so much new and indispensable material contradicts the very act of orchestration, which involves the preservation of the essential structure and aesthetic nature of the prime text. Orchestration is distinguished from composition by the notion that the latter creates what

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⁵¹ This is discussed in the introduction to this section of the chapter under "The Analysis".

the former utilises. If the original composition is complete in its rendering of the composer's musical ideas, then an orchestrator should not compose, or feel compelled to compose, an orchestration.

By implication, there is a lack of sufficient material in the original with which to build an effective orchestration, requiring so much compositional intervention as to elevate James from the position of orchestrator to a position of composer next to that of Khumalo. This notion is enforced by the fact that an equivalent of 217 measures of music was newly added by James in his orchestration to link phrases, movements or parts of the music – that is 17.1% of the total length of the work or slightly less than a fifth.

Khumalo's original vocal score contains 17 524 units of data (not shown in table), which, compared to the 36 267 units in the orchestration, implies an 18 743 gross increase in the James orchestration. This near to 107% increase in Khumalo's material indicates sound orchestration practice with sufficient focus on giving the composer's voice a strong presence in the final product. By comparison, a real authorial contribution of 10 411 units in Count B implies an estimated 25 856 units or 71.2% redundancy in the orchestration.

For James, it was not easy to produce the material necessary to realise *UShaka* in the twenty months he had to work on the project, even with a postponement of the world première from 24 September 1994 (Shaka Day) to 24 November of the same year. James himself described *UShaka* as "a tragic and sad epic [which] has burnt me out". ⁵² I do not believe that this would have been the case if James did not hold a sincere personal investment in the composition. He wrote to David Smith, saying that "whilst working on *UShaka* I was under tremendous pressure to finish the project according to a deadline. Thereafter I suffered a major nervous breakdown and have still not recovered fully after *UShaka*". ⁵³ The date he wrote that letter was in 1996, two years after the completion of his orchestration.

⁵² James, Personal correspondence with Jennifer Ann, 1995.

⁵³ James, Personal correspondence with David Smith, 1996.

Maxym's UShaka

Every note was placed where it could do the most to provide its part of an elaborate instrumental 'carpet' upon which the original choral work could lie, and proceed from one section to the next in seamless transition. Every note was placed with the greatest respect for and service to that original work.⁵⁴

INTRODUCTION

An aspect of *UShaka* which has not been dealt with yet concerns the rehearsals leading up to the performance of the James orchestration. Robert Maxym was centrally involved in the process and spoke about his experience to great length in correspondence.⁵⁵ This section will describe, from Maxym's perspective, his involvement with the work from the 1993 performance of Part IV of the James orchestration to his decision to revise the orchestration in 1994.

According to Maxym, he had already known Khumalo in his capacity as an orchestral conductor since 1991 and was invited by him to attend what he refers to as "a trial performance" of Part IV of James's *UShaka* in 1993, to see "how the orchestration was proceeding", and to "take stock of where it was going". ⁵⁶ Considering the amount of media exposure behind the event, with the full support of the then Transvaal Philharmonic and four full-sized choirs, it seems unlikely that it was merely a test performance. The orchestration process went ahead without hindrance, so it must be understood that Khumalo was pleased with James's work on Part IV. Then already, however, Maxym felt that there was a potential in the orchestration that was underutilised and needed "a little filling out".

Maxym only became involved with *UShaka* again when rehearsals started for the 25/26 November performances of the James orchestration in 1994. According to Maxym, the first read-through of the score in mid October had reportedly not been successful due to the complicated interaction between

⁵⁴ Maxym R., 2012, Personal correspondence, October 10.

⁵⁵ Correspondence pertaining to UShaka with Maxym took place on 10 August 2012, 08 September 2012, 11 September 2012, 18 September 2012, 23 September 2012, 05 October 2012 and 10 October 2012. Most of the information used in this section originates in the final letter of 10 October, although the earlier writings provide interesting background to the history of UShaka as well. Apart from the James collection, these letters probably represent the most encompassing source of information about UShaka's history used in this thesis. Their tendency to denote Maxym as a strong protagonist in its development is ascribed to his authorship of the letters.

⁵⁶ Maxym, R., 2012, Personal correspondence, October 10.

instrumental and vocal forces utilised in the work. The vocal rhythms composed by Khumalo were difficult to conduct and the orchestra struggled to follow. It is unlikely that the orchestra had ever engaged with Zulu music in a performance context before, and it would have been just as unlikely that the choristers had ever sung with an orchestra in such a context before. Maxym was contacted by Khumalo to provide expertise upon commencement of final rehearsals on 21 November 1994. He received a copy of the conductor's score and was instated by the Transvaal Philharmonic as Orchestral Director on a consultation basis. According to Maxym, he was asked to oversee the rehearsals and provide assistance in whichever way he could, relying on his experience as a conductor of over twenty-five world premières to guide the artists where possible.

In the *Introduction* of the chapter titled *UShaka KaSenzangakhona*, under *An Overview*, the dichotomous relationship between Africa and the West is briefly mentioned and discussed in footnotes 15 and 30. It was shown how undercurrents of race or class could surface in discussions regarding *UShaka*, and how an interview between Khumalo and Geelhoed⁵⁷ regarding Khumalo's musical collaboration with James and Maxym was cast in terms of a collaboration between Black and White, Africa and the West. Not surprisingly then, Maxym noted how, in the rehearsals, the choirs and orchestra were distinguished from each other by their race, the choirs being all black and singing from tonic sol-fa scores, and the orchestra being all white with no understanding of the Zulu vocal text that they were providing accompaniment to. He described the rehearsal situation as something "which could only occur in South Africa".⁵⁸

According to Maxym (see footnote 57), with the first rehearsal on Monday 21 November 1994, two hundred choristers and an orchestra of approximately eighty musicians filed into the M1 studio of the South African Broadcasting Corporation (SABC). The choirs, having had to travel from the outskirts of Pretoria and Johannesburg, were between thirty minutes and an hour late, which led to unrest in the orchestra and an atmosphere of disquiet in the rehearsal. Typesetting of the James orchestration, managed by Elkmar Publishing, was not of a high standard, so that there were missing bar lines and time-signature changes, and misprinted notes and incorrect rhythms. Resultantly, the rehearsal was compromised considerably and much time was spent between James, Khumalo and the conductor, Khabi, consulting on various issues surrounding the synchronisation of orchestral and vocal forces, and Maxym providing advice where possible and necessary.

⁵⁷ Geelhoed, 2006.

⁵⁸ Maxym R., 2012, Personal correspondence, October 10.

At the end of Tuesday's rehearsal, Mngoma ceded conductorship to Maxym, who had already handled Part I of *UShaka* with the musicians that evening. They had, at the end of Monday's rehearsal, agreed to split the four sections of *UShaka* between them (the reason for this is unknown) and one can assume that it had gone better with Maxym than with Khabi during rehearsal if Khabi thought that Maxym should take over. According to Maxym, Khabi had spoken at a meeting of nine persons in the conductor's room backstage saying to Khumalo, "Mfowethu [my brother], the ancestral spirits have sent this young man to us in order to do justice to your *UShaka*". Wednesday's and Thursday's rehearsals continued, but with so much time spent in rehearsals rectifying mistakes on the score and finding compromises between orchestra and choirs, the end product was not well polished. Both performances took place successfully for appreciative audiences under Maxym's baton.

Maxym was still not happy with the James orchestration, stating that the work as it was presented at the concert would fall into disuse due to its lacklustre visual appearance and technical errors caused by faulty typesetting. He considered the passive role of the orchestra in James's orchestration to be a major flaw and felt that, in the première, the orchestra had "worked as an overall detriment to the power and expressivity of the original choral piece". ⁶⁰ He felt "honour-bound to communicate these reservations to Mzilikazi, especially since [he] thought his work deserved better treatment". ⁶¹

Following this, Maxym organised a series of meetings in which he aimed to communicate the idea that the orchestra should be more involved with the music and create "a dialogue and a symbiotic relationship with the choir and soloists",⁶² but where he allegedly had no intention of performing the task himself of bringing these ideas to fruition.⁶³ According to Maxym, Khumalo simply asked "out of the blue", "Robert, could you write this type of orchestration?"⁶⁴ To this Maxym answered, "Why yes, I could".⁶⁵ So, by his account, Maxym became involved with revising the orchestration of *USbaka*.

⁵⁹ Maxym R., 2012, Personal correspondence, October 10.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid.

OBSERVATIONS

In the same way that James expanded Khumalo's vocal score by 217 measures with the addition of material between movements, Maxym's revision of the orchestration, including his overture, realises a 216 measure expansion of the James orchestration. Table 3 on page 46 gives a detailed account of the number of measures added per movement. Although I am of the opinion that the work done by James and Maxym represent fundamentally different artistic approaches to the music that result in two distinctly different outcomes, it is impossible to deny obvious similarities in their use of material. This material requires analysis in order to determine the level of original contribution and derivative material used by Maxym in his revision. There is no implication that original and derived contributions exist in some hierarchical or unequal artistic relationship, but that the allocation of shares earned by performances of the music is impacted by the quantity and quality (as "composer" and "arranger" of the music) of each person's authorial contribution.

An analysis of the scores is important for another reason, in that there have been performance occasions in the past during which James was omitted as contributing author of the orchestration of *UShaka*. On 13 November 2008, for example, *UShaka* was performed in the Durban City Hall by the KwaZulu-Natal Philharmonic Orchestra, but James's name was omitted from the programme as well as all advertising leading up to the performance. In an announcement posted online on Artzone, for example, the work was described as follows:

Composed by respected South African composer, arranger and choral director Professor Emeritus of African Languages, Prof J.S. Mzilikazi Khumalo, the concert is conducted by US born and SA-based conductor, Robert Maxym, who did the orchestration of this majestic piece.⁶⁷

In a text that Maxym prepared for the ICMF (MIAGI) European tour of *UShaka*, entitled "The significance of *UShaka* as an African Epic", James was completely omitted as contributing author of the work. Maxym writes about the orchestration:

On another plane, Khumalo's quest for equal treatment as a creative artist must be appreciated in the context of South Africa's recent past, both culturally and politically: his own epic search for an

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⁶⁶ Use of the categories "composer" and "arranger" is borrowed from the South African Music Rights Organisation, as has been discussed previously.

⁶⁷ Artzone, 2008.

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appropriate orchestral version to *UShaka* began in 1979 and culminated, several experimental orchestrations and seventeen years later, in the 1996 collaboration with Maestro Robert Maxym.⁶⁸

In communication with Maxym regarding the orchestration of *UShaka*, he emphatically asserted the originality of his contribution to the work, stating that he had used only between five and ten percent of material from the James orchestration. ⁶⁹ On the other hand, though, David Smith has said the very opposite. He stated that, during the November 2008 performance in Durban of the Maxym revision, he followed the music with James's original orchestration in front of him and found that "it shone through Maxym's expansion very obviously". ⁷⁰ Therefore, I would like to test Maxym's assertion by looking closely at the relationship between Maxym's orchestration and the fundamental structures already set in place by James, in numerous examples throughout Part IV of *UShaka*. It might be true that, on the surface, James's contributions are sometimes difficult to identify on the sheet music because they are obscured by the thicker textures of Maxym's orchestral writing; closer inspection and careful listening to audio recordings, however, reveal remarkable similarities in their ideas that go far beyond the circumstantial.

⁶⁸ Maxym, 2004.

⁶⁹ Maxym R., 2012, Personal correspondence, October 10.

⁷⁰ Smith D., 2012, Personal correspondence, October 05.

THE ANALYSIS

In the following illustrations (Figure 10 & Figure 11), a woodwind fanfare taken from the same measures in both the James orchestration and Maxym revision is used to demonstrate the similarities in the use of material by James and Maxym in their orchestral realisations of *UShaka*.⁷¹ Viewed in isolation, the resemblance between Figure 10 and Figure 11 is undeniable: both lines are characterised by an ascending, arpeggio-like figure in B-major with an added C#, ending in a long note decorated by a trill. Maxym's version is noticeably more elaborate and divides the line between clarinets, oboes and flutes, but considering the use thereof in the same measure space as James, is without doubt derived from the James orchestration.



Figure 10: UShaka Part IV, "Siyashweleza Nodumehlezi", mm 162-163 (James orchestration) displaying an arpeggio-like run in the flutes.



Figure 11: UShaka Part IV, "Siyashweleza Nodumehlezi", mm 162-163 (Maxym revision) reduction of upper woodwinds to expose the same underlying structure as in Figure 10.

A more obvious reuse of material is displayed in the following example. The top line of Figure 12 displays James's use of the violins to double a vocal melody and render his own harmonisation of the melody. The bottom line shows Maxym's revision, which, although filling out the chord to produce a richer sound and employing rests to create breaks between the chords, still follows a harmonic structure put in place by James and within the same instrument group.

⁷¹ There is no evidence to suggest that James took the figure from Khumalo's material, so it is logical to assume that James composed it himself.



Figure 12: UShaka Part IV, "Siyashweleza Nodumehlezi", m 164 (James orchestration: top | Maxym revision: bottom) displaying similarities in the use of material in terms of instrumentation and harmonic application.

The following example (Figure 13) takes a longer extract of four measures to illustrate the same principles in a broader instrumental context. The fragment is from the Maxym revision and displays his use of material from the James orchestration shaded in blue. Harp and viola parts which derive their material directly from the marimba part in the James orchestration are placed inside rectangles. One can argue that Maxym's choice of instrumentation, i.e. the exclusion of winds and brass, is another aspect of the James orchestration that was reused by Maxym in his revision.

The only material Maxym appears to provide to the passage is found in violins and double bass, the basses providing some rhythmic accentuation of the cello line with their pizzicato notes, and the violins filling in the implied harmonic sequence of $i - iii \frac{6}{4} - VI - iii_6$ (as an implied dominant with F# in the basses) in mm 15-16 and 17-18. Therefore, although Maxym makes a valid and meaningful contribution to the orchestral sound in terms of dimension and colour, it is still based wholly on James's creative efforts. An interesting aspect of Maxym's style of orchestration comes to light in his division of the high B between second and first violins, which seems to indicate a very strong focus firstly on the idea that no instrument group should engage in the production of a single music idea for too long, and secondly that changing and developing sound colour is paramount to his orchestral writing. The doubling of marimba in violas and harp breaks the primary sound colour of the marimba and produces a more complex timbre which endorses these ideas.

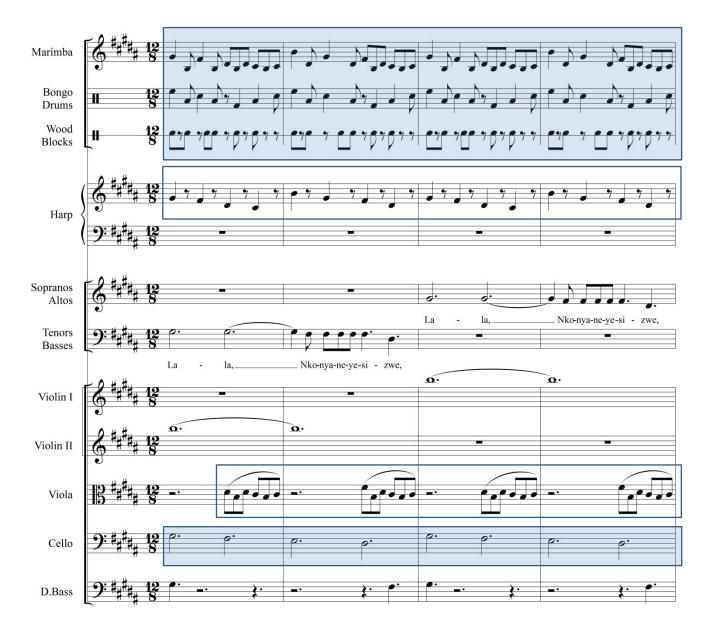


Figure 13: UShaka Part IV, "Isililo Esesabekayo", mm 15-18 (Maxym revision) showing similarities with James orchestration.

In the last example (Figure 14 on page 41), a two measure passage is displayed both in its use by James and by Maxym. It appears that Maxym attempted in his revision of the orchestration to portray more accurately "the confusion, panic and sorrow that followed the King's assassination", ⁷² by creating a densely moving texture in the upper registers of the strings and woodwinds. This extract takes only the string parts, which utilise the same motifs as the woodwinds and where the main focus of material lies. It displays the James orchestration on the left hand side next to the Maxym revision on the right. As with previous examples, exact reuse of material is marked by a shaded rectangle, while derivative material is displayed inside an unshaded rectangle.

⁷² Note from the composer (Maxym, 2000).

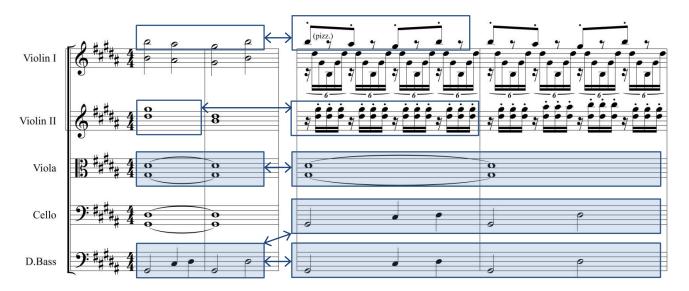


Figure 14: UShaka Part IV, "Isililo Esesabekayo", mm 1-2 (James orchestration left | Maxym revision right) displaying similarities in string parts.

Undeniably, Maxym still bases his version on that of James, utilising the same harmonic framework and, to a large extent, exactly the same instrumental colours and sonorities. However, whereas James's orchestral version is more subdued or discreet, Maxym brings the orchestra to the foreground of the sound body. He achieves this by altering the density of the instrumental textures by creating many more points of articulation in the lines. These points of articulation serve to alter the perceived levels of energy in a performance of the work. Maxym's revision sounds markedly more agitated and would be considered by some as a more accurate portrayal of the idea that Khumalo had for the sound colour at that moment.

METHODOLOGY

When taking into consideration the fact that all the figures shown above are core examples of a trend that spans across the entire composition, 5-10% does not appear to be an accurate estimate of James's material presence in the score. There is a large number of instances throughout Maxym's version of *UShaka* where his use of material from the James orchestration is especially conspicuous, whether used overtly or as building blocks for more elaborate textures and sounds. Table 3 on page 46 details the number of measures in each movement of each part of the James orchestration and Maxym revision, showing how many measures per movement in the Maxym revision are based mostly on material originating in the James orchestration or based mostly on material newly crafted by Maxym.

"Material", in this case, refers to evidence of direct or implied authorial intervention in the Maxym revision. In the orchestration or the revision, the presence or absence of musical lines within a certain instrumental space implies a level of decision-making by either James or Maxym at that point in time; therefore their choices engender material within the music that is suitable for analysis and comparison. These lines, or their absence, give the analyst a strong idea of the coloristic or structural choices underlying the construction of the orchestrations, which may provide useful clues for comparison. Material may also include rhythmic and harmonic properties of a given line or chord that could be transferred from the orchestration to the revision across instrument groups, independent of melodic contour. Likewise, contours and rhythms that engender coloristic properties within a given motif or line also comprise a type of material that can be identified regardless of instrumental group.

Rather than was the case in the previous chapter dealing with James's authorial contribution to UShaka, this analysis is unable productively to quantify the exact relationship between James's and Maxym's contributions to the revised orchestration. First, no area of the Maxym revision is completely unrelated, in some way, to the James orchestration, and it would be very difficult if not impossible to assign exact authorial origin to every note in the Maxym revision on a note by note count. Evidence of Maxym's reuse of material from the James orchestration lies on various levels of abstraction at different points in his revision. Note-by-note analysis would therefore not be as productive as in the previous chapter, because it would miss longer spanning links between groups of notes that would not be visible on a micro scale. As was discussed on page 23, analysts have struggled with quantifying the ephemeral qualities of music for over half a century, and still struggle with the idea today. Whereas careful listening to recordings and scrutinous study of the two

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orchestral scores can provide the analyst with enough evidence to determine whether a passage of music is mostly an original contribution by Maxym or mostly derived from James, it seems improbable that one could ever pinpoint those contributions to within a statistical margin of less than 20% on either side.

The following example (Figure 15) illustrates all of the kinds of material that the analyst could scrutinise to make an authoritative decision about origin of material in the Maxym revision. In the example, Maxym's use of instrumentation is unmistakably similar to that of James. Double Basses and Cellos carry the bass line, while strings double and harmonise the melody. Harp is used to provide flow and texture to the sound. Xylophone and bongos provide rhythmic accompaniment. Brass is completely absent – an important observation, because the use or disuse of an instrument group has a characteristic impact on the sound colour of said passage.

The only area in which Maxym deviates from the James orchestration is in the use of woodwind instruments to double the harp and decorate vocal material, although Maxym has, in this case, opted to reuse James's harmonisation of the vocal material exactly and without alteration. Lastly, although Maxym has written a more complex line for the harp, utilising a second voice and perpetuating the line to fill the whole of the measure, it is still strongly based on material which is present in the James orchestration, applied within a pre-existing harmonic framework. It does not constitute new material, because although a myriad of figures of divergent construction could have been exploited to create an original sound, Maxym chose to reuse the basic construction already provided in the James orchestration.

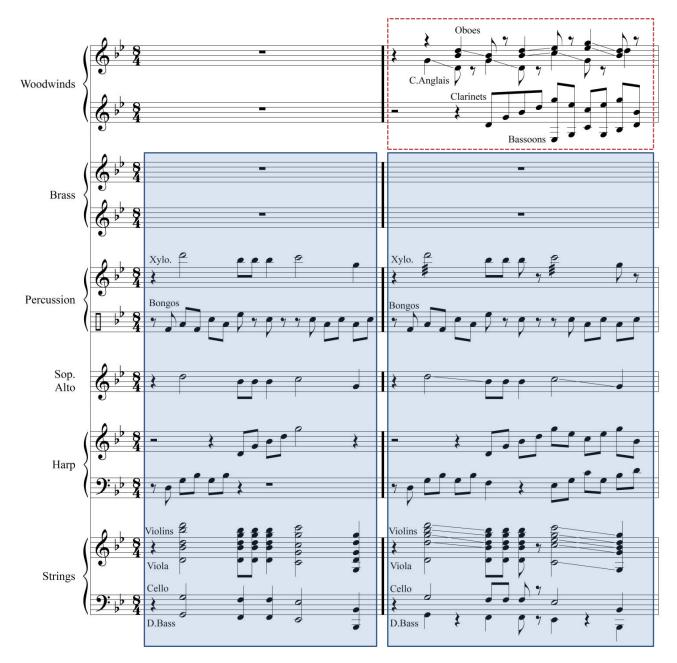


Figure 15: *UShaka* Part I, "Ikloba Lothando", m 92 (James orchestration on the left and and Maxym revision on the right) displaying similarities and dissimilarities in their choice of instrument groups and use of material. In strings, harp, percussion and brass, Maxym uses the same material as in the James orchestration. His use of woodwinds, though, constitutes a timbral addition to the score, although he still makes use of ideas or material existing in or based on the James orchestration. As with previous example, material found to coincide with the James orchestration is placed inside a blue shaded rectangle. New material is shown by means of a red rectangle.

Table 3 on page 46, the measure of music demonstrated in Figure 15 would count as originating mostly out of James's contribution rather than Maxym's, because the majority of material identified in the measure was found to coincide directly with the James orchestration. In other areas of the Maxym revision where the same level of correlation cannot be identified and it is found that Maxym added or rewrote enough of the material to differentiate it adequately from the James orchestration,

those measures count as originating mostly from Maxym's unique contributions. Almost all material from bridges and links was assigned to Maxym, except in cases where he very obviously reused material from the James orchestration. The overture was regarded as a unique contribution and thus counted only for Maxym and not for James.

For a measure of music to count, definitively, as a James contribution, it would have to be found that more than two thirds (66.67 per cent or more) of the structures and material of that measure (discussed above) would have to originate from the efforts of his orchestration. In other words, there would have to be substantial evidence of James's intellectual work to make the assertion that Maxym reused material from his orchestration. Using that figure as a standard, a statistical estimate can then be compiled to determine with greater accuracy the ratio between James's and Maxym's original contributions to the revised orchestration of *UShaka*.

FINDINGS

The analysis found that in 855 measures of Maxym's 1482-measure revision, 66.67% or more of the material and structures employed were strongly related to or taken without alteration from the James orchestration. This implies that, in contrast, Maxym made a substantial enough contribution to the other 627 measures of music that, although it might contain material found in the James orchestration, it constituted an original approach to *UShaka*'s orchestration. Table 4, on page 47, went further to detail not only the number of measures per movement, but also the number of beats. The logic behind this action was that, because of time signature changes throughout the music, all measures would not be the same length and carry the same material weight in the work as whole or when comparing different movements utilising different time signatures. Finally, in Table 4, James's contribution (counted in measures thus far) to each movement was first converted to a percentage value of his contribution (per movement), and then reworked to express an estimated number of beats per movement that can be said to originate mostly from the James orchestration.

Length of movement (in measures) including transitions

Origin of material

			James	Maxym	Mostly based on	Mostly based on
			orchestration	revision	James	a new approach
Preamble	1.	Ndabezitha	18	19	6	13
Overture			n/a	107	n/a	107
	1.	Ilembe Labikezelwa Zinyandezulu	20	24	17	7
	2.	Ikloba Lothando	130	134	72	62
	3.	Imbizo Yezinyandezulu	46	58	27	31
Part	4.	Imbizo Yajubumjokwane	25	38	17	21
ଧ	5.	Inkondlo KaNandi	112	116	48	68
	6.	Langa Lami LaseLangeni	38	41	27	14
	7.	Laqhibuk'ikhow'eLangeni	46	46	35	11
Part II	1.	Beba Kumane Sigoduke	85	116	75	41
	2.	Nans'Indaba Yempi!	15	20	16	4
	3.	Ihubo Likamvelinqangi	40	46	38	8
	4.	Yith'omanqoba yith'ushikishi	91	92	85	7
Part III	1.	UShaka KaSenzangakhona	98	118	76	42
	2.	IzibongoZikashaka	144	145	110	35
Part IV	1.	Ukungena Kwempethu	46	47	17	30
	2.	Esibayeni Kwanyakamubi	17	18	14	4
	3.	Isiphethu Sezinyembezi	43	45	25	20
	4.	Isililo Esesabekayo	60	60	55	5
	5.	Uthi Mangithini (Epilogue)	27	27	15	12
	6.	Siyashweleza Nodumehlezi	165	165	80	85
Total		Excluding Overture	1266	1375	*855	520
1 Otal		Including Overture	n/a	1482	n/a	*627

Table 3: A list of all the parts and movements of *UShaka*, detailing the number of measures in each movement of the James orchestration and the Maxym revision (for comparison) and showing how many measures of each movement was found to be based mostly on material from the James orchestration, and how many can be said to constitute a new approach by Maxym to the orchestration of *UShaka*.

		Length in measures	Approximate number of beats	Number of measures	% of total measures	Approximate number of beats
Preamble	2. Ndabezitha	19	76	6	31.58	24
Overture		107	441	n/a	n/a	n/a
Part I	8. Ilembe Labikezelwa Zinyandezulu	24	96	17	70	67
	9. Ikloba Lothando	134	539	72	53,75	290
	10. Imbizo Yezinyandezulu	58	193	27	46,55	95
	11. Imbizo Yajubumjokwane	38	141	17	44,74	63
	12. Inkondlo KaNandi	116	503	48	41,38	208
	13. Langa Lami LaseLangeni	41	170	27	65,84	212
	14. Laqhibuk'ikhow'eLangeni	46	184	35	76,09	145
Part II	5. Beba Kumane Sigoduke	116	426	75	64,66	275
	6. Nans'Indaba Yempi!	20	80	16	80	64
	7. Ihubo Likamvelinqangi	46	166	38	82	137
	8. Yith'omanqoba yith'ushikishi	92	326	85	92,39	301
Part III	3. UShaka KaSenzangakhona	118	520	76	64,41	319
	4. IzibongoZikashaka	145	598	110	75,86	453
Part IV	7. Ukungena Kwempethu	47	168	17	36,17	61
	8. Esibayeni Kwanyakamubi	18	53	14	77,78	41
	9. Isiphethu Sezinyembezi	45	151	25	55,56	84
	10. Isililo Esesabekayo	60	214	55	91,67	196
	11. Uthi Mangithini (Epilogue)	27	108	15	55,55	60
	12. Siyashweleza Nodumehlezi	165	691	80	48,48	335
Total	Excluding Overture	1375	5403	855	n/a	n/a
	Including Overture	1482	5844	n/a	n/a	3430

Table 4: A list of all the parts and movements of the Maxym revision of *UShaka*, detailing from Table 3 not only the number of measures per movement based mostly on material from the James orchestration, but also providing a description of the number of beats per movement and the estimated percentage value of James's contribution to those movements. The percentage values can be used to determine the estimated number of beats per movement based mostly on material by James, resulting in a more accurate expression of his authorial presence in Maxym's revision.

The analysis then attempted to determine the percentage value of material utilised by Maxym in his revision that could assertively be said to originate from the James orchestration, using both the number of measures and estimated number of beats to provide the reader with two possible readings. As with Maxym's original estimate of 5-10%, these possibilities describe the amount of material as a range expressing minimum and maximum percentage values.

James's minimum contribution to Maxym's revision, taking into consideration the 66.67% threshold mentioned earlier, can be calculated using the following formula:

$$Contribution_{minimum} = \frac{Material_{James}}{Material_{Total}} \times 66.67$$

This formula can be applied using the number of measure or number of beats to substitute $Material_{James}$ and $Material_{Total}$ and expresses an estimate of James's minimum contribution as a percentage of the entire work by converting the sum of 66.67% of $Material_{James}$ and 0.00% of the rest to a percentage of all the material. The next formula expresses James's maximum contribution to the Maxym revision as an estimated percentage of the whole, taking the sum of 100% of $Material_{James}$ and 66.66% of $Material_{Maxym}$ and rescaling it to a percentage of the whole movement. It can also be solved by using either the number of measures or number of beats:

$$Contribution_{maximum} = \frac{\left(100 \cdot Material_{James}\right) + \left(66.66 \cdot Material_{Maxym}\right)}{Material_{Total}}$$

When using the number of measures as the standard, James's contribution can be estimated at 38-86 percent, and when using the number of beats as the standard, it can be estimated at 39-86 percent. These numbers are nearly eight times what Maxym had expressed previously and supports Smith's notion that James's efforts are noticeably audible in his revision. It proves that, at the very least, James has a substantial authorial presence in Maxym's revision.⁷³ It provides plausibility to James's mother's protests about the omission of his name from the programme of a 2008 performance in

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⁷³ Statements made by Maxym, claiming that his orchestration is "the culmination of several experimental orchestrations" (Maxym, 2003), imply that James's work is without authority, presence or meaning in the "final authorised version of the work" (*ibid.*). A calculated estimate of 39-86% reliance on James's material in his revision gives one grounds to challenge those statements.

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Durban.⁷⁴ Lastly, it leads one to wonder why James settled for only a third of the arranger's portion of the distributed shares, when it is clear that his presence in the Maxym revision is strong enough to justify greater demands.⁷⁵

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⁷⁴ As was briefly discussed earlier in the thesis, there was a performance of UShaka on 13 November 2008 in the Durban City Hall where James was completely omitted as contributing author of the work or its orchestration in programmes or advertisements. The incident led to an unpleasant confrontation between James's sister and Maxym backstage, which was rectified with an announcement by the CEO of KZNPO, Bongani Tembe (Smith D., 2012, Personal correspondence, September 23).

⁷⁵ In April of 1995, Maxym made the agreement with James to share royalties in a 2:1 ratio, i.e. Maxym would receive 66.67% and James would receive 33.33% of the arranger's portion of the royalty income produced through performances of UShaka (Maxym, 1995) and (James, Personal correspondence with Robert Maxym, 1995). It is unusual that Maxym proposed such a division before the completion of his revision and that James accepted it without viewing the revision in its entirety.

OTHER OBSERVATIONS

Even after an analysis of the music found that Maxym's orchestration was much more alike to James's than he had previously acknowledged, and in spite of the ideas and findings discussed above, the Maxym revision of *UShaka* still represents a distinctly different artistic outlook on the musical language and artistic aims of the work than the James orchestration. Although it was found that Maxym based a substantial portion of his orchestration on the efforts of James and that representation of authorship has at times neglected to acknowledge James's presence in the Maxym revision, there are, nonetheless, important contributions made to the structure and functioning of the work by Maxym.

The first of these contributions is the overture. *UShaka* is a lengthy musical work spanning around eighty minutes in the case of Maxym's revision – an aspect which would cause substantial difficulties in any composer's quest to engender a coherent narrative over the entire length of such a long composition. This is an especially applicable consideration, keeping in mind Khumalo's history of composing in the choral sphere which is defined almost exclusively by its use of smaller forms. The overture, then, serves an important function in *UShaka*, because it provides the listener with an idea of overall structure in the work by presenting some of the most important musical aspects of the work in chronological order. Maxym's realisation of the overture falls neatly into a traditional schematic of a modern overture in that it precedes a dramatic work, consists of one part and ends with a fast and brilliant section.⁷⁶ The overture, from a listening perspective, contributes to *UShaka* by setting the stage, as it were, for the musical event that follows. It also serves to enhance *UShaka*'s image as a work that "blends Zulu and European elements".⁷⁷

It is known that Maxym receives a portion of the shares of *UShaka* as a composer, beyond his hold as arranger, for his authorship of the overture, which is not shared with James (Levy, 1996). It is surprising then that the overture utilises, in at least the last nine bars thereof, material based on the compositional efforts by James, if not quoting him directly. The material referred to was already shown to originate with James in Figure 10 and Figure 11 on page 38. According to Levy (1996), in his letter to Khumalo and other rights holders of *UShaka*, where he details the breakdown of the performing-royalty shares for *UShaka*, information about the contributions of each composer was provided to the Southern African Music Rights Organisation by Khumalo and Maxym, but not by

⁷⁶ Temperley, 2012.

⁷⁷ Zick, 2011.

James. It is not clear whether James was adequately consulted about the possible use of his material or material derived from his efforts in a way for which he would not receive royalties or recognition. It is difficult to conceive a situation where a composer would, for all intents and purposes, relinquish his claim over material which originated by his intellectual efforts.

Maxym also contributed to *UShaka* by the addition of another one hundred and ten measures of inter-movement material which, in the form of links, expanded play-outs and prologues, aid in binding the separate movements of the work together as a more coherent whole. James had in most movements already fashioned instrumental material to introduce or end the movement, but he had not attempted to bind the movements together in his orchestration. Maxym mostly expanded these pre-existing instrumental sections to bring more consistency and flow to the composition than James attempted in his orchestration. Maxym defines his role in the creation of the links in compositional terms, although (excepting the harp solo between "Imbizo Yajubu'Mjohwane" and "Inkondlo KaNandi" in Part I) they mostly perpetuate already existing material within *UShaka*. In terms of originality, they represent less compositional contribution than James's instrumental material. However, whereas Maxym earns composer-royalties for his contributions as author of these links, James never received any recognition as composer for his instrumental contributions to the movements.

It is perhaps on a technical side, looking at orchestration itself, that Maxym's style deserves attention in this thesis. Whereas it was said in the previous chapter that James's orchestration lacked colour in some places, there is an overabundance of colouristic variation in Maxym's orchestration. It seems very likely that Maxym's professional career as an orchestral conductor was an advantage to him when he orchestrated *UShaka*, owing to a working knowledge of instrumental performance techniques that surpasses academic approaches to orchestration. Although his orchestral scoring in *UShaka* is often so thick that choral forces would have to be substantial to rise above it, limiting performance opportunities of the work to very large ensembles, it is nonetheless effective with a suitably sized performance force. Perhaps wide-ranging criticism against the orchestration sounding too Western or like an average Hollywood film score stems from Maxym's superlative use of colour effects throughout the revision.

The following 5 measure extract (Figure 16, page 53) is from Maxym's overture to *UShaka* and aims to display his almost exaggerated focus on a highly colourful orchestral sound. Within the first three measures, three distinctive textural ideas are visually noticeable in the score; first in the upper strings,

then in the lower strings, then in woodwinds, trumpets, harp and violas. In measure 45, the violins move upward in a divisi, arpeggio-like figure that is typical in orchestral transcriptions of popular music, adding the seventh and raised second. Lower strings are reduced to quaver accents, resulting in a more transparent sound through which horns and flutes can sound with the melody. In measure 46, bassoons and viola carry forth the accompaniment initially handled by the strings in measure 45, while lower strings in tremolo with congas, tom toms, bass drum and timpani immediately alter the orchestral texture. The measure thereafter again employs a different texture, blending a semiquaver motif in the woodwinds and wood blocks with a sextuplet semiquaver motif in the brass and violas to create a heterophonic texture which dominates the foreground of the sound for that moment. These three textural ideas are bound together firstly by sustained brass chords, which make intelligent use of dynamics to create the necessary impetus for the music to move forward into each new measure. Furthermore, instrumentation does not change completely with each new texture, but makes use of certain core instrumental sounds to bind the ideas together. Viola, for instance, first doubles the accompanying motif of the lower strings, which it then sustains after bassoons have entered.

Maxym also readily makes use of timbre modulation in his orchestration, a process whereby the instrumental sound of a given passage is gradually altered as the melodic material progresses. The transition from measure 49 to 50 is a prime example in the woodwinds. In order to carry the sound from the high register of the various instruments at the beginning of measure 49 to the low registers of measure 50, Maxym writes the beginning of the bridging motif for flutes, piccolo and clarinets, first dropping the piercing piccolo whilst picking up the oboes, then dropping the flutes and picking up the English horn. Finally, in measure 50, bassoons are added, completing the change from a high-pitched sinus-wave (flute) sound to a lower square-waved (reed) sound. This method is a modern occurrence first originating with Mahler, but later extensively employed by Bartók, Ravel and Ligeti, especially in orchestral works which make use of diverse tone-colours.

Three aspects of Maxym's style of orchestration are to the detriment of the work as a whole. Firstly, the dramatic changes in orchestral sound and texture do harm to the consistency and flow of the work. In some places, they create the sense of a counter narrative to the vocal lines that is moving much faster than the actual composition. In colloquial terms, it sounds as if Maxym was trying too hard to create an impressive orchestral piece. Secondly, Maxym has opted to drop almost all of the "African" elements that James engendered in his orchestration, still using the same instruments but in a manner which is less exciting to the ear and void of the ambience instilled in the original

orchestration. An element which made James's orchestration a pleasurable listening experience was the use of additive procedures to create a flowing rhythmic drive but with accents often falling on the point of syncopation. This has become lost in most of the Maxym revision, as can be seen in this example.



Figure 16: UShaka "Overture", mm 45-49 (Maxym revision) displaying various advanced techniques of orchestration.

Thirdly, an analysis of the Maxym revision gives one the idea that he was unable to conceptually grasp Khumalo's modal thinking and the implications thereof on the harmonic language. Although it can be respected that Maxym would want to broaden the harmonic content of the composition by extending the chord progressions beyond the basic tonal framework, it has in many cases, as in the example above, transported some of the music to a European tonal language reminiscent of the late nineteenth century while leaving the modal framework intact in other places. The effect is unattractive to an informed audience member such as the current author, who by perceiving the constancy of modality in the vocal material, would expect the same type of treatment in the orchestra. In this regard, James's orchestration is superior because it embraces Khumalo's modal approach rather than attempting to mitigate it with the use of a late romantic harmonic vocabulary.

In the majority of this chapter, a discussion of Maxym's revision of *UShaka* was also to some degree a comparison with the James orchestration. It is an inevitable consequence of discussing a revision of someone's work, it can be argued, although it must also be said that in many cases, the kinds of changes that Maxym implemented in his orchestral interpretation of *UShaka* were of such a nature that, cumulatively, they render a completely different experience of the music that should perhaps rather be seen in its own light than be compared to James's orchestration. Nevertheless, by the fact that Maxym makes various claims about his use of material from the James orchestration, about the status of his revision as the "final, authorised version", ⁷⁸ and makes judgements about the quality of James orchestration compared to his, he possibly places himself in a position of criticism, because it has been revealed through score analysis and careful observation that important (even integral) aspects of his efforts were found to be strongly derivative from the James orchestration. It seems unlikely that this would be the case if Maxym was in strong artistic opposition with James.

⁷⁸ Maxym. 2009.

Khumalo's UShaka

Maybe the greatest injustice has been to the composer. I recall listening to an interview with Khumalo around the time Princess Magogo was produced, and heard him say how much he regretted not being able to orchestrate his music himself. How can a collaborator possibly know what the composer imagined as the musical result?⁷⁹

INTRODUCTION

For Khumalo, the inspiration to compose *UShaka KaSenzangakhona* came primarily from two personal sources. Firstly, he had composed a song titled *Izibongo zikaShaka*, which he completed on August 15, 1981. It found favour with audiences throughout South Africa. Second, he happened upon a book authored by Themba Msimang (later to become the librettist of *UShaka*), titled *iZul' eladum' eSandlwana*, which he read and whose style of writing he could relate to strongly. He made contact with Msimang and recalls saying, "Look my friend, I think we must work together. If you write the words for me. I will put them to music". There was no mention of a collaboration relating to *UShaka* specifically at that time. Khumalo started to compose another song about Shaka, *Siyashweleza Nodum'ehlezi*, which was inspired by Msimang's book. He had decided to use the first words from that book as a basis for his song, but decided to contact Msimang and ask him to write a full text instead. These two songs ("The praise songs of King Shaka" and "We beg your pardon") were completed in 1982 and formed the core around which the rest of *UShaka KaSenzangakhona* developed.

The completion of these two movements before Khumalo undertook the rest of the composition is important for the reason that both are in a tonal style completely unlike the rest of the work, which employs frameworks of modality. Yet, in an interview between Khumalo and George Mugovhani in 2008, Khumalo explained his use of pentatonic and heptatonic scales to compose in a traditional style, stating that, because they are the commonly used scales in Zulu music, he prefers to use them

⁷⁹ Smith D., 2012, Personal correspondence, 10 October.

⁸⁰ Much of the background information about Khumalo's composition of UShaka is taken from (Khumalo, 2008). Strangely enough, where concert programmes of the 1993, 1994, 1996 and 2008 performances provide ample information about and personal insights of Msimang, James and Maxym, they contain very little about Khumalo.
⁸¹ Ibid.

especially in arrangements of traditional songs. "You don't take a traditional piece and move away from it, you take it and you broaden it. That is what is called development".⁸²

OBSERVATIONS

In *UShaka*, the majority of movements are entirely modal in their approach to the formation of melody, making use mostly of pentatonic scales that occasionally develop into heptatonic scales towards the end of a movement. The following figure illustrates Khumalo's use of modes in the first five movements of *UShaka*: hollow notes indicate the final tone, while notes in brackets indicate tones that are added to the movement towards its conclusion (mostly for the emphasis of cadential structures). Solid bows indicate the main ambitus of the mode and dotted-line bows indicate secondary ambituses. Some notes are doubled in the octave in order to provide a more accurate illustration of the main melodic intervals within the modes. Modes one and two are very similar, while three and five are exactly alike albeit transposed a perfect fifth apart. Although there does not seem to be a system in *UShaka* dictating a specific development of the modes or determining which mode is used when, there is still a sense of unity inscribed onto the total work by the consistent use of modality (excepting the two movements mentioned previously).

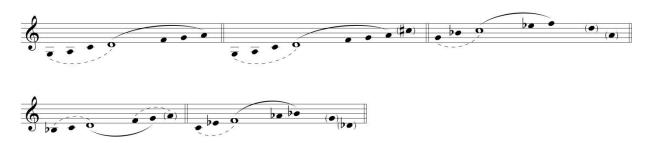


Figure 17: UShaka Part I, "Ndabezitha", "Ilembe Labikezelwa Zinyandezulu", "Ikloba Lothando", "Imbizo Yezinyandezulu", "Ikondlo Kanandi", displaying the pitch content and modal construction of the composition, and showing a strong tendency towards the use of pentatonic scales throughout UShaka.

Other movements use, as Khumalo stated in his interview with Mugovhani, heptatonic scales on which to build modalities. The next example (Figure 18) demonstrates Khumalo's use, essentially, of Aeolian and Phrygian modes in two of the work's movements. Aeolian mode (or natural minor) is the most used heptatonic mode in *UShaka*, and some movements that start out by utilising

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⁸² Khumalo, 2008.

pentatonic modes develop into natural minor modes (as in modes 3 and 5 shown in Figure 17) towards their conclusion.



Figure 18: UShaka Part I, "Langa Lami Laselangeni and Liqhibuk' Ikhow'elangeni", displaying Khumalo's use of modes based on heptatonic scales. The left shows (in classical European terms) an Aeolian mode and the right, Phrygian.

The use of pentatonic, heptatonic and, on occasion, sextatonic scales, specifically in this modal context, works in favour of *UShaka* as a composition, for several reasons. Firstly, the avoidance of a harmonic language that carries a noticeably Western flavour, in a colloquial sense, gives the work a unique ambience that, to the lay listener, can be reminiscent of Africa, purely because it does not sound European. Secondly and more importantly, a modal approach is friendlier towards a composer of vocal music, because the cadential flow of the text itself can be engraved into the musical structure. Without the harmonic bounds and structures inherent in employing tonality (as opposed to modality) as a compositional framework, the composer is in a far better position to focus on the best way by which to set the text to music. It can be deduced from Khumalo's interview with Mugovhani (2008) that his studies in linguistics are seminal in his compositional style.

Khumalo dealt with many aspects regarding the pronunciation of words in his studies into African languages.⁸³ Morphology, phonology and tonology formed the core of his studies, of which pitch placement and inflection to create and change the meaning of words are especially noteworthy, because they so closely relate to music. Indeed, Khumalo attempted in UShaka to notate specific aspects of the text's prosody and tonology in tonic sol-fa, which he struggled with greatly. 84 The same is true for rhythm, which Khumalo could often "not conceptualise [...] in bars of even time". 85 His contribution to the field of notating Zulu choral music in terms of rhythm and intonation could well form a study on its own, but here is mentioned some of the core aspects of that notation.

The following extract shows the first two measures of UShaka Part IV, "Siyashweleza Nodumehlezi", first as an exact stave-notation realisation of the original sol-fa score, then with the same extract from the James orchestration and lastly from the Maxym revision under it, to illustrate

⁸³ Khumalo, 2008.

⁸⁴ Ibid.

⁸⁵ Khumalo, 1982.

the difficulties Khumalo experienced in notating the correct rhythms in the piece. In the top line of the example, it is possible to see how Khumalo grouped sets of musical ideas and demarcated them by placing them in separate measures. The rest of the movement, in its free passages, uses the same structuring of phrases. In each version below that, the rhythms, note length, notation of certain ideas and grouping of notes develops, presumably as the composer develops a better conceptualisation of the passage after rehearsals and performances. It is also possible that the versions by James and Maxym are representative of their own interpretation of the original rhythms, implemented in this way in order to orchestrate the vocal lines with greater ease. "Siyashweleza Nodumehlezi" is chosen for this example, because it is the first movement of *UShaka* in which Khumalo struggled with aspects of notation – these difficulties are expressed in a document that is attached as an addendum to the original composition, and in which Khumalo explains some of the notational problems he experienced in writing the music, as well as methods through which he overcame those challenges.

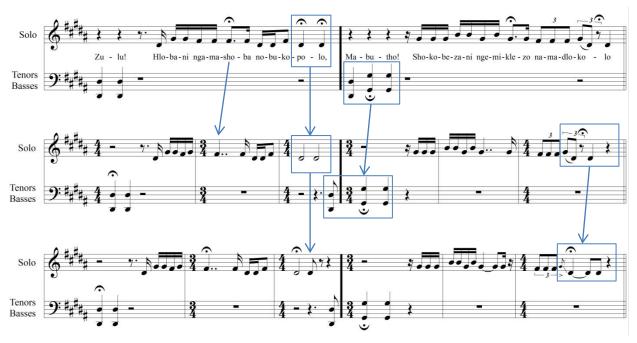


Figure 19: *UShaka* Part IV, "Siyashweleza Nodumehlezi" Top staves: mm 1-2 (Khumalo original vocal score). Middle line: mm 4-9 (James orchestration). Bottom line: mm 4-9 (Maxym revision).

In terms of tonology, Khumalo's contribution lies in the creation of a symbolic representation in the score to indicate the occurrence of a syllable which, according to common practice in spoken Zulu, should slide in pitch to the syllable thereafter. Essentially, it means the same as *portamento*, except that, in Khumalo's composition, it is not a method of interpreting the music, but an essential aspect of its

performance. The following example shows its use in the original sol-fa score next to a suitable staffnotation equivalent. The addition of an apostrophe after a sol-fa letter indicates the occurrence of Khumalo's vocal slide.

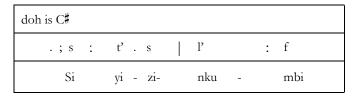




Figure 20: *UShaka* Part IV, "Siyashweleza Nodumehlezi" Left: m 52 (Khumalo original vocal score). Right: m 61 (Maxym Revision).

A WORK IN CRISIS

As my study progressed I gradually came to realize that *UShaka* is a badly understood work which, by its very association with a volatile political and social environment, has become a victim of its own historic significance. The fact that Khumalo composed the work in tonic sol-fa in an African language, meant that he placed himself in the crossfire of conflicting disciplinary perspectives where, in a colonial sense, choral sol-fa music (taught to natives by missionaries) is considered inferior to western staff-notated music.⁸⁶ This perceived inferiority, mitigated by its inception into the Western music world through its orchestration, has prevented the work from laying a proper claim to either cultural-geographic space.

With *UShaka* standing with one foot in Africa, so to speak, and another in Europe, it becomes a difficult composition to label in any manner, even in something as trivial as its genre classification. The sheer size of the work, with soloists, a large orchestra, very large choir and narrator, has placed the composition in a peculiar artistic position, where American audiences have, in particular, struggled with labelling the work effectively. Opera is a popular label for *UShaka*, perhaps because of the drama inherent in its narrative content. The following quotes illustrate this ambiguity:

⁸⁶ Lucia, 2007, p. 165.

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The brilliant, colourful opera of UShaka.87

Prof. Khumalo is the composer of the opera UShaka KaSenzangakhona.⁸⁸

The semi-staged oratorio will be sung in Zulu with English supertitles.⁸⁹

This opera [uShaka] is the creation of composer Mzilikazi Khumalo.90

A similar situation holds true with Mzilikazi Khumalo's opera, UShaka.91

UShaka has also been labelled a "Musical Epic in Song and Dance," an "African Spectacular" and a "Dramatic Cantata," although South African sources have mainly followed Khumalo's example in simply calling it a "Musical Epic." When asked why Khumalo calls it a musical epic, he simply stated that "it tells the story of a very brave man". The work's disparitous genre classification may also be a result of the numerous attempts at orchestrating the work. These revisions and resultant changes in style have neutralised the key defining elements of the work, making it difficult to recognize the work and style Khumalo might have had in mind. After three orchestrations, Khumalo seems both happy and unhappy with the work. He seems happy with it, because he allows and endorses performances thereof; unhappy because, as Smith puts it at the beginning of the chapter, he could never realise his own orchestrational vision of his music.

It is difficult to judge Khumalo's position fairly within the developmental trajectory of *UShaka*. On one hand Khumalo can be considered extremely vulnerable as a black composer of sol-fa music dealing with white knowledge bearers of Western notation to realise his orchestration of *UShaka*. This vulnerability is complicated by his sudden fame and success as South Africa's foremost black composer after 1994, which could lead to suspicions of political and institutional intervention and ultimately the deservedness of his considerable reputation as a composer. Further complicating matters was Khumalo's instatement as board member of the Southern African Music Rights Organisation, which placed him in a position of not inconsiderable power during the period when he was most visible as a composer. In this study, it has been difficult to do justice to his point of view, an irony not lost on this writer. Khumalo's white collaborators have a textual presence in this work that all but eclipses the voice of Khumalo. This study has to an extent replicated that injustice.

⁸⁷ Goldstar Events, 2006.

⁸⁸ Zick, 2011.

⁸⁹ Goldstar Events, 2006.

⁹⁰ Choi, 2006.

⁹¹ Geelhoed, 2006.

⁹² Goldstar Events, 2006.

⁹³ Ketterson, 2006.

⁹⁴ Khumalo, 2008.

Within the context of all the disparities mentioned above, the work struggles to find a coherent voice and a convincing, consistent style. This is true for the orchestrations (which could be expected), as well as the vocal parts in isolation. It might be a result of the fact that *UShaka* was composed over a number of years and was initially conceived as separate songs before the idea of a grand and large-scale work came to Khumalo. One very conspicuous example of disparity in style occurs in the very last movement of the work, "Siyashweleza Nodumehlezi". Throughout *UShaka*, Khumalo employs a modal framework using pentatonic and heptatonic scales mostly in natural minor modes, as is discussed previously in this chapter. In the last movement though, he suddenly deploys a Romantic harmonic vocabulary largely out of kilter with what preceded it:



Figure 21: UShaka Part IV, "Siyashweleza Nodumehlezi", mm 16-26 (Khumalo: vocal score, reduction) displaying the use of a tonal idiom and chromatic auxiliary notes within a largely modal composition.

One can only wonder why a work that employs modal frameworks throughout, utilises rhythms and call-answer techniques of Zulu vocal music and displays a concerted effort to create an authentic, large-scale Zulu musical experience would suddenly regress into a nineteenth-century harmonic idiom to pay homage to King Shaka. "Siyashweleza Nodumehlezi is a plea to the Zulu nation to bow at the King's grave and ask forgiveness and reprieve from his curse. This moment of tonality is perhaps not so striking in Maxym's version of the orchestration which introduces many tonal elements during the course of the work, but in the James version where the modality of the vocal composition is adhered to throughout in the orchestration, it is a striking and jarring moment.

Khumalo's claim to *UShaka* in terms of authorship was weakened when the orchestration by James was first performed. The fact that he could not provide James with enough harmonic or motivic material to orchestrate the work in the true sense of the word, but made it James's responsibility to harmonise the material himself and compose counter melodies and inter-movement material, meant a real signing over of some of *UShaka's* authorship to him. It is unclear whether Khumalo was ever

really aware of the level of authorship which James has in the work (as was discovered in the analysis undertaken in the chapter James's UShaka) and how much of the music is actually the intellectual property not of himself but of James. It is also hard to imagine that a man could conceptualise, compose and document sixty minutes of music for choir and four soloists, but be unable to notate, in any form possible, ideas for its orchestral realisation. Khumalo clearly had no lack of creativity in composing UShaka or shaping his thoughts in musical terms. His claim to authorship was further weakened when Maxym revised the work and added the Overture, losing more of his brain-child to the intellectual efforts of another person.

Lastly, it should not be forgotten what exposure Khumalo earned for *UShaka* with the aid of his two final orchestrators and with very little exposure gained by them, especially James. Possible contributions to the development of the work made by Carl van Wyk and his orchestration, though long forgotten now, should not be dismissed either. With their help, the composition was elevated to a level where it could engage with an international audience, go on tours to other continents, and become a shining beacon for composition in a new South Africa. Unfortunately, James, having done the hardest work in orchestrally conceptualising the music but effectively losing his title as orchestrator after Maxym entered the project, has been grossly underappreciated in the presentation of *UShaka* to the public during concerts. Khumalo has always been sure to thank his collaborators in interviews, but concert programmes and public events have never given full credit to the work done by the "white orchestrators" that were called in to help twenty years ago when the work was not yet famous.⁹⁵

⁹⁵ Geelhoed, 2006.

Conclusion

In the Introduction to this thesis I stated my occasional impatience with postmodern musicology because of what I called its "disenfranchisement" of the musical score. In this thesis, thus, I have tried to put the music centre-stage to an argument exploring the notions of authorship and ownership in an iconic work of post-Apartheid South Africa. In doing so, I believe I have provided solid analytical and empirical conclusions to questions that are politically and ideologically potentially very contentious. Through extensive analysis of *UShaka KaSenzangakhona* in its original, orchestrated and revised forms, it was found that Christopher James contributed significantly to the final performance product. In James's orchestration of the work, his contribution measured at 57.88% of the total fundamental musical material, significantly more than can normally be expected of an orchestrator (see page 31). Even in the subsequent revision, where Maxym estimated his contribution at less than 10%, it was found that James's authorial presence measured at 39-86% (see page 48).

UShaka KaSenzangakhona, as these findings show and as I write in the Introduction, speaks to power imbalances and the political complexity of musical collaboration in a particularly volatile political space and time in South Africa. It highlights an imbalance in the method of copyright division and distribution by the Southern African Music Rights Organisation. It also shows how such a flawed system can possibly be manipulated to the advantage of certain collaborators in a project such as UShaka.

Although this thesis addresses these issues only by inference, it does so intentionally. To what extent, for instance, were Western associations of inferiority regarding sol-fa notation mitigated or preserved in the collaborative process of *UShaka*? (I think now of Lucia's second quote in the Introduction.) Did the creation of a dual-notated piano vocal edition of *UShaka* in 2000 signify a bridging of knowledge paradigms previously separated by cultural divides? Were the rehearsals described in the chapter *Maxym's UShaka* (defined by the separateness of white orchestra and black choirs) a first step in transcending these associations or an affirmation of its ideological authority?

Moving on to Carol Muller's quote, also from my Introduction, what does James's simplistic use of the terms "African" and 'European" signify in the stabilisation of a duality of thinking that has led to much acrimony in South African aesthetic debates? Did Robert Maxym's revision "Westernize" UShaka? Did James's orchestration really respect "Africa"? To what extent do we recognize in this

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discourse Lucia's "Victorian ideologies of 'ancient and modern' or 'savage and civilised"? Are these relevant questions to ask of this work?

When SAMRO declared *UShaka* "a work whose universal acceptance and celebration, among audiences of all creeds, cultures and nationalities, heralded a new dawn for Black music", 6 were they responding to the work or were they attempting to frame it? To what extent did *UShaka* become a politically expedient work for composition in crisis (Thomas Pooley's phrase) and a country desirous of symbolic acts of reconciliation (which seems to be Stephanus Muller's concern)? Was Khumalo an agent in this process, or a pawn?

My concern in this thesis is with all of these questions, but in a way that turns our attention to the scores first as a productive way of addressing them. Thus my lack of direct engagement with these questions is in no way indicative of an attempt to erase the past as a context for the present (Lucia again), but to see how these questions are also interesting musical questions that can be answered in musically technical discourse rather than political or social discourses. I write in my Introduction that *Ushaka* could be a seminal composition in bringing all these ideas and contexts into conversation with one other. This I hope to have achieved at least implicitly and with a degree of objectivity that will enable future researchers to draw what I believe are potentially serious and important political, ideological and cultural conclusions.

⁹⁶ SouthAfrica.info, 2004.

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Addendum A: Manifestations of UShaka 1982-2009

Year	Title	Details:	Instrumentation
1982	UShaka KaSenzangakhona: an epic in words by	Original setting of text to music, in solfa notation	Soloists: SATB
	Themba Msimang and music by Mzilikazi	and in 17 movements.	Choir: SATB
	Khumalo (revision complete: 1985)	(Duration: 60 minutes)	
1994	UShaka: orchestration by Chris James	Full orchestration of original composition in 19	2 Flutes (piccolo), 2 Oboes,
		movements	2 Clarinets, 2 Bassoons, 2
		(Duration: 68 minutes)	Trumpets, 4 Horns, 2
			Trombones, Tuba,
			Percussion, Timpani, Harp,
			Strings, Choir SATB,
			Soloists SATB
1996	UShaka, KaSenzangakhona: revised orchestration,	Based on the original orchestration by Chris James	Piccolo, 2 flutes, 2 oboes,
	enrichment & enhancement	in 21 movements, with a newly-composed Overture	Cor Anglais, 2 Clarinets, 2
		(Duration: 76 minutes)	Bassoons, 4 Horns, 3
			Trumpets, 3 Trombones,
			Tuba, Percussion, Timpani,
			Harp, Strings, Choir SATB,
			Soloists SATB, Praise Poet
1999	Chamber Version of UShaka	Arrangement of seven movements from the Maxym	Soloists: AB
		revision:	String quartet
		Part I, Nr. 2: Ilembe Labikezelwa Zinyandezulu	Flute
		Part I, Nr. 4: Imbizo Yezinyandezulu	Percussion
		Part II, Nr. 1: Beba Kumame Sigoduke	Piano
		Part II, Nr. 4: Yith'omanqoba, Yith'ushikishi!	
		Part IV, Nr. 1: Ukungena Kwempethu	
		Part IV, Nr. 3: Isiphethu Sezinyembezi	

		Part IV, Nr. 4: Isililo Esesabekayo	
		(Duration: 22 minutes)	
2000	UShaka: Complete Vocal Piano score	Reduction of music for piano, with all vocal parts	Choir: SATB
			Soloists: SATB
			Piano
(2009)	UShaka: the Suite (for concert band) – Status	Arrangement of six movements from the Maxym	concert band
	unknown	revision:	
		Preamble: Ndabezitha!	
		Part I, Nr. 3: Ikloba Lothando	
		Part I, Nr. 6: Inkondlo Kanandi	
		Part II, Nr. 3: Ihubo Lika Mvelinqangi	
		Part III, Nr. 2: Izibongo ZikaShaka	
		Part IV: Nr. 5: Siyashweleza, Nodumehlezi	
(2009)	UShaka: the Suite (for military band) – Status	Arrangement of six movements from the Maxym	military band
	unkown	revision:	
		Preamble: Ndabezitha!	
		Part I, Nr. 3: Ikloba Lothando	
		Part I, Nr. 6: Inkondlo Kanandi	
		Part II, Nr. 3: Ihubo Lika Mvelinqangi	
		Part III, Nr. 2: Izibongo ZikaShaka	
		Part IV: Nr. 5: Siyashweleza, Nodumehlezi	

Table 5: Different editions and arrangements of UShaka

Addendum B: Results of Quantitative Analysis of UShaka, James orchestration

PART ONE

Table 6: Count A: Gross sum of intellectual input as units per measure per composer

	Prea	mble:	Ndab	ezith	a!													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	1	16	1	24	27	32	17	16	18	16	34	32	32	32	78	80	80	136
K/James:	3	32	3	24	0	0	17	16	18	16	0	0	0	0	0	0	0	0
James:	25	6	26	6	62	63	64	63	64	65	64	64	69	69	40	25	39	9
	1.2 II	lembe	Labil	kezelv	va Zin	yand	ezulu											
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	16	42	16	38	4	53	50	46	16	16	16	20	48	48	48	46
K/James:	2	30	4	16	2	14	0	0	0	0	0	0	0	0	0	0	0	0
James:	25	18	30	16	30	18	26	21	18	9	37	37	37	36	28	22	26	32
	19	20						•	•		•	•			•	•	•	
Khumalo:	1	16																
K/James:	3	32																
James:	25	6																
	1.3 II	kloba	Lotha	ndo														
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	4	4	4	8	18	16	9	4	4	4	0	18	24	2	4	4	4
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	6	8	0	0	0	0
James:	28	24	12	0	2	27	27	17	2	0	1	7	3	3	8	8	0	0
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	10	24	19	4	4	4	7	16	16	4	4	4	8	17	16	9	4	4
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	8	9	0	0	0	0	20	20	4	0	0	2	27	27	17	0	0
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	4	4	4	4	20	20	4	4	4	4	20	20	4	1	12	20	20	20
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	0	0	0	34	30	0	0	0	0	34	30	0	8	8	22	23	17
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	4	4	1	12	28	28	36	4	4	4	0	0	0	0	64	56	46	52
K/James:	0	0	0	0	8	8	0	0	0	0	0	0	0	0	64	72	72	72
James:	0	0	0	0	19	17	2	0	0	1	15	15	17	3	8	7	7	7

	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	64	54	50	56	56	56	54	52	56	44	58	49	8	4	4	8	1	0
K/James:	64	64	64	72	0	72	72	72	72	72	72	72	0	0	0	0	0	0
James:	7	7	7	7	7	7	7	7	7	7	7	7	3	8	4	22	17	34
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	0	35	40	35	40	35	40	35	35	111	120	111	138	129	138	129	139	8
K/James:	0	42	48	42	48	49	48	42	42	0	0	0	0	0	0	0	0	0
James:	36	20	21	22	22	22	22	22	22	22	22	22	21	49	49	49	42	3
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Khumalo:	4	4	8	2	0	0	35	40	35	40	35	40	35	35	111	120	111	138
K/James:	0	0	0	0	0	0	42	48	42	48	49	48	42	42	0	0	0	0
James:	8	4	22	17	32	36	20	21	72	22	22	22	22	22	22	22	22	21
	127	128	129	130					ı					ı	ı	ı	ı	
Khumalo:	129	138	129	138														
K/James:	0	0	0	0														
James:	49	49	49	42														
	1.4 Iı	mbizo	Yeziı	nyand	ezulu													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	1	10	10	5	10	11	14	14	9	6	14	6	10	2	8	13	15	19
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	18	10	11	10	0	10	1	5	3	11	6	4	5	4	4	22	38
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	16	7	12	4	11	18	4	11	20	4	5	10	4	5	22	19	4	6
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	29	34	12	0	0	12	2	0	6	4	0	6	2	0	6	6	0	0
	37	38	39	40	41	42	43	44	45	46								
Khumalo:	8	6	8	6	8	6	7	4	16	8								
K/James:	0	0	0	0	0	0	0	0	0	0								
James:	0	0	0	0	0	0	0	3	8	4								
	1.5 In	mbizo	Yajul	bumjo	kwan	e												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	2	12	10	16	2	2	12	12	0	4	12	6	3	10	6	2	12
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	170	168	0	0	0	40	40	0	0	48	24	0	16	52	0	16	100	0
	19	20	21	22	23	24	25											
Khumalo:	12	8	12	8	8	0	0											
K/James:	0	0	0	0	0	0	0											
James:	0	0	0	0	0	108	54											

	1.6 In	nkond	llo Ka	nandi														
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	8	8	2	8	8	9	6	6	6	6	6	4	6	4	6	4	8
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	72	72	34	8	0	8	0	0	0	54	54	0	0	0	0	0	0
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	9	9	6	6	6	4	8	8	8	7	8	4	8	8	8	0	0	2
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	4
James:	8	16	0	12	0	0	0	8	17	12	0	0	0	0	0	58	64	41
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	6	6	6	6	6	5	12	9	6	6	6	6	7	14	7	8	7	6
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	6	0	0	0	0	2	4	4	0	0	0	12	15	6	0	21	16	0
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	6	8	8	8	8	4	8	5	6	7	6	7	6	8	7	6	2	6
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0
James:	0	0	0	0	0	2	26	16	0	0	21	23	0	0	0	2	9	0
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	8	6	2	8	8	8	6	0	0	8	8	2	6	4	2	8	4	0
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	3	27	0	0	0	1	95	83	0	0	2	6	2	4	0	4	16
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	0	0	42	48	42	48	208	224	208	224	221	200	206	200	208	224	208	224
K/James:	0	0	98	112	98	112	0	0	0	0	0	0	0	0	0	0	0	0
James:	13	6	41	44	41	114	44	44	44	44	104	112	115	112	44	44	44	44
171 1	109	110	111	112														
Khumalo:	221	200	206	200														
K/James:	0	0	0	0														
James:	104	112	115	112		_												
			Lami															
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	6	8	8	8	40	32	6	6	8	32	32	6	26	24	6	26	24	14
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	56	56	63	86	79	81	63	48	79	82	82	69	70	70	70	70	70	70
Vla	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	20	27	27	20	20	48	56	36	40	54	56	40	40	54	56	67	80	29
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	70	70	70	70	70	86	86	86	86	86	86	86	86	86	86	86	86	86

	37	38
Khumalo:	8	86
K/James:	0	0
James:	86	8

	1.8 L	aqmi	Buk'i	khow														
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	4	28	28	32	96	98	77	96	77	84	85	96	104	104	66	104	64	28
K/James:	6	49	49	56	7	6	0	8	0	7	6	7	0	0	0	0	12	49
James:	15	15	21	15	21	15	21	15	21	15	21	15	21	15	21	15	21	15
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	28	32	96	98	77	96	77	84	85	96	104	104	66	104	64	104	104	120
K/James:	48	55	7	6	0	8	0	7	6	7	0	0	0	0	12	10	12	16
James:	21	15	21	15	21	15	21	15	21	15	21	15	21	15	21	16	16	16
	37	38	39	40	41	42	43	44	45	46								
Khumalo:	122	48	69	48	24	126	144	144	108	17								
K/James:	0	72	42	72	24	16	0	0	6	1								
James:	16	16	16	16	1	11	11	6	10	2								

Table 7: Count B: Net sum of intellectual input as units per measure per composer

	Prea	mble:	Ndal	ezith	a!													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	1	8	1	8	9	8	9	8	9	8	12	12	12	12	17	16	17	16
James:	9	14	10	14	14	15	16	15	16	17	12	12	17	17	8	1	7	9
	1.2 I	lembe	Labil	kezelv	va Zin	yand	ezulu											
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	1	8	10 16 2 16 10 18 13 18 9 24 25 21 24 16 14 26 32															15
James:	11	10	16	2	16	10	18	13	18	9	24	25	21	24	16	14	26	32
	19	20		•		•	•		•	•		•	•		•	•	•	
Khumalo:	8	8																
James:	27	22																
	1.3 I	kloba	Lotha	ındo														
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	4	4	4	5	6	4	3	4	4	4	0	3	6	2	4	4	4
James:	8	4	64	0	2	4	7	5	2	0	1	7	6	5	4	4	0	0
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	5	4	4	4	4	4	4	4	4	4	4	4	5	6	4	3	4	4
James:	0	4	6	0	0	0	0	8	8	4	0	0	2	4	7	5	0	0

Khumalo:		37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
No	Khumalo:																		
Khumalo	James:	0	0	0	0	16	6	0	0	0	0	10	6	0	4	4	8	7	5
Minimalo Minimalo		55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
No	Khumalo:	4	4	1	6	4		4	4		4			0	0		8	8	
Khumalo 12	James:	0	0	0	0	11	9	2	0	0	1	15	15	17	3	16	15	15	15
James:		73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Note	Khumalo:	12	11	12	8	8	8	8	11	12	11	12	9	8	4	4	8	1	0
Khumalo:	James:	15	15	15	15	15	15	15	15	15	15	15	15	3	4	4	22	17	34
James: 23		91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
No	Khumalo:	0	7	8	7	8	7	8	7	7	19	16	19	12	18	18	18	17	8
Khumalo: 4	James:	23	22	20	21	21	21	21	21	21	16	13	16	9	17	17	17	16	3
Manual M		109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
127 128 129 130	Khumalo:	4	4	8	2	0	0	7	8	7	8	7	8	7	7	19	16	19	12
Khumalo:	James:	4	4	22	13	15	16	22	20	21	21	21	21	21	21	16	13	16	9
James: 17		127	128	129	130				I				1						
1.4 Imbizo Yezinyandezulu	Khumalo:	18	18	18	17														
Marcoline Marc	James:	17	17	7	16														
Khumalo: 1		1.4 I	mbizo	Yezi	nyand	ezulu													
Names:	mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	Khumalo:	1	10	10	5	10	11	14	10	3	4	7	3	4	6	4	5	15	1
Khumalo: 19 19 16 7 12 4 11 18 4 11 20 4 5 10 4 5 22 19 James: 28 4 21 14 12 0 0 12 2 0 6 4 0 6 2 0 6 6 37 38 39 40 41 42 43 44 45 46 Khumalo: 8 6 8 6 8 6 7 2 8 4 James: 0 0 0 0 0 0 0 3 8 4 I.5 Imbizo Yajubumjokwane mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 2 12 10 16 2 2 12 12 0 4 12 6 3 10 6 2 12 James: 20 20 0 0 0 10 10 0 0 12 8 Khumalo: 12 8 12 8 8 0 0 James: 0 0 0 0 0 12 8 I.6 Inkondlo Kanandi mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 6 4 6 4 6 4 8 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 6 6 4 6 4 6 4 8 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 6 6 6 4 6 4 6 4 8 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 6 6 6 6	James:	0	18	10	11	10	0	10	1	5	3	7	4	4	3	4	0	22	0
James: 28 4 21 14 12 0 0 12 2 0 6 4 0 6 2 0 6 6 37 38 39 40 41 42 43 44 45 46 Khumalo: 8 6 8 6 8 6 7 2 8 4 James: 0 </td <td></td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> <td>32</td> <td>33</td> <td>34</td> <td>35</td> <td>36</td>		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
37 38 39 40 41 42 43 44 45 46	Khumalo:	19	19	16	7	12	4	11	18	4	11	20	4	5	10	4	5	22	19
Khumalo: 8 6 8 6 7 2 8 4 James: 0 0 0 0 0 0 0 0 0 1 1 1 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 2 12 10 16 2 2 12 12 0 4 12 6 3 10 6 2 12 James: 20 20 0 0 0 10 10 0 0 12 8 0 4 16 0 4 18 0 Khumalo: 12 8 12 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0	James:	28	4	21	14	12	0	0	12	2	0	6	4	0	6	2	0	6	6
James: 0 0 0 0 0 0 0 3 8 4		37	38	39	40	41	42	43	44	45	46		ı			ı	ı	ı	
1.5 Imbizo Yajubumjokwane mm.	Khumalo:	8	6	8	6	8	6	7	2	8	4								
mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 2 12 10 16 2 2 12 12 0 4 12 6 3 10 6 2 12 James: 20 20 0 0 0 10 10 0 0 12 8 0 4 16 0 4 18 0 Khumalo: 12 8 12 8 8 0 0 0 12 8 0 <td< td=""><td>James:</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>3</td><td>8</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	James:	0	0	0	0	0	0	0	3	8	4								
Khumalo: 0 2 12 10 16 2 2 12 12 0 4 12 6 3 10 6 2 12 James: 20 20 0 0 0 10 10 0 0 12 8 0 4 16 0 4 18 0 Khumalo: 12 8 12 8 8 0 0 0 12 8 0 0 0 0 12 8 0		1.5 I	mbizo	Yaju	bumjo	kwan	e												
James: 20 20 0 0 10 10 0 0 12 8 0 4 16 0 4 18 0 19 20 21 22 23 24 25 Khumalo: 12 8 12 8 8 0 0 James: 0 0 0 0 12 8 **This is a substitute of the control	mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19 20 21 22 23 24 25	Khumalo:	0	2	12	10	16	2	2	12	12	0	4	12	6	3	10	6	2	12
Khumalo: 12 8 12 8 8 0 0 James: 0 0 0 0 12 8 1.6 Inkondlo Kanandi mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 4 6 4 6 4 8	James:	20	20	0	0	0	10	10	0	0	12	8	0	4	16	0	4	18	0
James: 0 0 0 0 12 8 1.6 Inkondlo Kanandi mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 4 6 4 6 4 8		19	20	21	22	23	24	25					ı						
1.6 Inkondlo Kanandi mm.	Khumalo:	12	8	12	8	8	0	0											
mm. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 6 4 6 4 6 4 8	James:	0	0	0	0	0	12	8											
Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 4 6 4 6 4 8		1.6 I	nkond	llo Ka	nandi														
Khumalo: 0 8 8 2 8 8 9 6 6 6 6 6 4 6 4 6 4 8	mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
James: 0 8 8 6 8 0 8 0 0 0 6 6 0 0 0 0 0	Khumalo:	0	8	8	2	8	8	9	6	6	6	6	6	4	6	4	6	4	8
	James:	0	8	8	6	8	0	8	0	0	0	6	6	0	0	0	0	0	0

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	11	9	6	6	6	4	8	8	8	7	8	4	8	8	8	6	6	6
James:	8	8	0	6	0	0	0	4	9	8	0	0	0	0	0	10	16	9
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	6	6	6	6	6	5	12	9	6	6	6	6	7	14	7	8	7	6
James:	6	0	0	0	0	2	4	4	0	0	0	12	15	6	0	15	10	0
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	6	8	8	8	8	4	8	5	6	7	6	7	6	8	7	7	10	6
James:	0	0	0	0	0	2	20	12	0	0	21	17	0	0	0	2	9	0
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	8	6	2	8	8	8	6	0	0	8	8	2	6	4	2	8	4	0
James:	0	3	27	0	0	0	1	15	13	0	0	2	6	2	4	0	4	16
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	0	0	14	16	14	16	30	32	3	32	43	40	43	40	30	32	30	32
James:	13	6	44	45	44	45	12	12	12	12	28	44	44	44	12	12	12	12
	109	110	111	112														
Khumalo:	43	40	43	40														
James:	28	44	44	44														
	1.7 L	anga	Lami	Lasela	angen	i												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	6	8	8	8	10	8	6	6	8	8	8	6	8	6	6	8	6	7
James:	8	8	15	24	19	21	13	12	17	20	20	21	22	22	22	22	22	22
	19		21	22	23	24	25	26	27	28	29	30	31	32				
TZ1 1		20	21				23						31	32	33	34	35	36
Khumalo:	10	20 17	17	10	10	17	18	10	10	17	17	10	10	17	33 18	34 15	35 16	36 3
James:	10				10				10									
James:	22 37	17 22 38	17	10		17	18	10		17	17	10	10	17	18	15	16	3
James: Khumalo:	22 37 8	17 22 38 8	17	10		17	18	10		17	17	10	10	17	18	15	16	3
James:	22 37	17 22 38	17	10		17	18	10		17	17	10	10	17	18	15	16	3
James: Khumalo:	22 37 8 22	17 22 38 8 22	17 22	10		17	18	10		17	17	10	10	17	18	15	16	3
James: Khumalo:	22 37 8 22	17 22 38 8 22	17 22	10 22		17	18	10		17	17	10	10	17	18	15	16	3
James: Khumalo: James:	22 37 8 22 1.8 L	17 22 38 8 22 aqmi	17 22 Buk'i	10 22 khow	22	17 22	18 22	10 22	22	17 22	17 22	10 22	10 28	17 22	18 22	15 22	16 22	3 22
James: Khumalo: James: mm.	22 37 8 22 1.8 L	17 22 38 8 22 aqmi	17 22 Buk'i	10 22 khow	22	17 22 6	18 22 7	10 22 8	22	17 22 10	17 22 11	10 22 12	10 28	17 22 14	18 22 15	15 22 16	16 22 17	3 22 18
James: Khumalo: James: mm. Khumalo:	22 37 8 22 1.8 L 1 1 7	17 22 38 8 22 aqmi 2 7	17 22 Buk'i 3 8	10 22 khow 4 8	5 32	17 22 6 32	18 22 7 22	10 22 8 32	9 22	17 22 10 28	17 22 11 28	10 22 12 32	10 28 13 32	17 22 14 32	18 22 15 18	15 22 16 32	16 22 17 20	3 22 18 7
James: Khumalo: James: mm. Khumalo:	22 37 8 22 1.8 L 1 1	17 22 38 8 22 aqmi 2 7 23	17 22 Buk'i 3 8 29	10 22 khow 4 8 23	5 32 21	17 22 6 32 15	18 22 7 22 21	10 22 8 32 15	9 22 21	17 22 10 28 15	17 22 11 28 21	10 22 12 32 15	10 28 13 32 21	17 22 14 32 15	18 22 15 18 21	15 22 16 32 15	16 22 17 20 24	3 22 18 7 22
James: Khumalo: James: mm. Khumalo: James:	22 37 8 22 1.8 L 1 1 7	17 22 38 8 22 aqmi 2 7 23	17 22 Buk'i 3 8 29	10 22 khow 4 8 23	5 32 21 23	17 22 6 32 15 24	7 22 21 25	10 22 8 32 15 26	9 22 21 27	10 28 15 28	17 22 11 28 21 29	10 22 12 32 15 30	10 28 13 32 21 31	17 22 14 32 15 32	18 22 15 18 21 33	15 22 16 32 15 34	16 22 17 20 24 35	3 22 18 7 22 36
James: Khumalo: James: mm. Khumalo: James:	22 37 8 22 1.8 L 1 1 7 19	17 22 38 8 22 aqmi 2 7 23 20 8	17 22 Buk'i 3 8 29 21 32	10 22 khow 4 8 23 22 32	5 32 21 23 22	17 22 6 32 15 24 32	18 22 7 22 21 25 22	10 22 8 32 15 26 28	9 22 21 27 28	17 22 10 28 15 28 32	17 22 21 28 21 29 32	10 22 12 32 15 30 32	10 28 13 32 21 31 18	17 22 14 32 15 32 32	18 22 15 18 21 33 20	15 22 16 32 15 34 28	16 22 17 20 24 35 28	3 22 18 7 22 36 32
James: Khumalo: James: mm. Khumalo: James:	22 37 8 22 1.8 L 1 1 7 19 7 29	17 22 38 8 22 aqmi 2 7 23 20 8 22	17 22 Buk'i 3 8 29 21 32	10 22 khow 4 8 23 22 32 15	22 5 32 21 23 22 21	17 22 6 32 15 24 32 15	18 22 7 22 21 25 22 21	10 22 8 32 15 26 28 15	9 22 21 27 28 21	17 22 10 28 15 28 32 15	17 22 21 28 21 29 32	10 22 12 32 15 30 32	10 28 13 32 21 31 18	17 22 14 32 15 32 32	18 22 15 18 21 33 20	15 22 16 32 15 34 28	16 22 17 20 24 35 28	3 22 18 7 22 36 32

PART TWO

Table 8: Count A: Gross sum of intellectual input as units per measure per composer

	2.1 B	Seba K	Kuman	e Sigo	oduke													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	12	12	12	12	12	12	12	12	16	16	16	16	12	14
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	30	31	31	30	35	35	35	35	35	35	35	35	35	35	35	35	35	38
3	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	14	13	15	16	15	16	6	12	14	12	0	0	32	32	0	0	66	66
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22
James:	38	35	35	35	35	35	35	38	39	32	0	8	0	0	0	18	22	22
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	0	16	16	0	15	24	24	12	12	24	24	12	12	0	0	36	36	0
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	0	50	50	0	0	1	4	0	0	1	4	0	0	0	11	4	0	0
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	1	8	5	4	6	0	0	6	5	0	5	5	0	12	10	0	10	10
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	48	0	0	0	0	0	72	0	0	72	0	0	72	0	0	72	0	0
	73	74	75	76	77	78	79	80	81	82	83	84	85					
Khumalo:	0	12	10	0	20	20	0	6	18	12	18	6	0					
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0					
James:	72	0	0	72	0	0	0	42	42	28	42	14	0					
	2.2 N	Vans I	ndaba	ı Yem	pi													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Khumalo:	0	0	32	32	32	32	49	52	49	52	32	32	32	40	0			
K/James:	112	112	80	80	80	80	80	80	80	80	80	80	80	72	0			
James:	21	21	21	21	21	21	21	21	21	21	21	21	15	22	0			
	2.3 I	hubo	Likan	nvelin	gqang	ŗi		ı			ı	ı			ı			
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	8	8	8	6	16	16	16	16	16	16	16	16	26	32	26	32	18	30
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	10	14	10	14	14	19	18	23	14	18	18	18	12	15	20	17	19	13
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	26	32	8	16	16	16	18	26	34	32	30	38	60	50	64	64	60	64
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	20	19	17	30	22	23	30	27	26	30	36	29	36	34	30	36	34	34

	37	38	39	40														
Khumalo:	64	0	0	0														
K/James:	0	48	64	64														
James:	22	82	82	83														
	2.4 Y	ith'oı	manqo	ba Yi	th'usl	nikish	i											
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	6	3	0	6	4	6	1	0	5	2	5	0	6	6	0	0	6	2
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
James:	42	43	48	0	0	0	1	9	2	4	1	6	0	0	6	6	0	16
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	2	6	32	32	32	32	0	1	7	5	2	4	7	0	2	7	2	0
K/James:	2	0	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0
James:	12	0	41	46	50	50	53	28	0	0	42	19	0	58	35	0	49	50
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	0	2	4	6	32	32	32	32	0	3	6	6	6	8	0	3	4	4
K/James:	0	0	0	0	32	32	32	32	0	0	0	0	0	0	0	0	0	0
James:	37	20	0	0	41	46	50	50	53	28	0	0	0	0	48	24	0	0
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	0	1	4	6	2	3	8	2	0	20	4	6	0	0	0	0	0	0
K/James:	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	12	6	0	0	24	16	0	1	56	28	0	0	0	12	12	6	0	12
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	0	0	0	0	0	0	0	0	0	0	0	64	64	64	64	64	64	64
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	12	6	0	0	49	46	0	0	49	46	0	84	73	84	73	100	95	100
	91		1	I	I		<u> </u>	1	I	1	1	I	1	1	I	1	I	1
Khumalo:	48																	

Table 9: Count B: Net sum of intellectual input as units per measure per composer

K/James:

James:

0 95

	2.1 B	eba K	Kuman	e Sigo	oduke													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	8	8	8	8	8	8	8	8	12	12	12	12	8	12
James:	7	8	8	6	12	12	12	12	13	12	12	12	12	12	12	12	12	15
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	12	10	11	12	11	12	6	10	6	6	0	0	12	12	0	0	44	44
James:	15	12	12	12	12	12	12	15	11	11	0	2	0	0	0	6	11	11

	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	0	12	12	0	3	12	12	4	4	12	12	4	4	0	0	16	16	0
James:	0	10	16	0	0	1	4	0	0	1	4	0	0	0	3	4	0	0
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	1	8	5	4	6	0	0	6	5	0	5	5	0	6	5	0	5	5
James:	3	0	0	0	0	0	4	0	0	4	0	0	4	0	0	4	0	0
	73	74	75	76	77	78	79	80	81	82	83	84	85					
Khumalo:	0	6	5	0	5	5	0	2	12	8	12	4	0					
James:	4	0	0	4	0	0	0	6	6	4	6	2	0					
	2.2 N	Vans I	ndaba	a Yem	pi	I.		I.		I.			I.	I.				
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Khumalo:	8	8	8	8	8	8	11	12	11	12	8	8	8	8	0			
James:	29	29	29	29	29	29	25	25	25	25	29	29	23	30	0			
	2.3 I	hubo	Likan	nvelin	gqang	gi												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	8	7	8	6	8	8	8	8	8	8	8	8	13	16	13	16	9	16
James:	7	8	7	8	7	8	12	14	8	8	8	8	7	8	8	8	8	8
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	13	16	4	8	8	8	9	13	17	16	15	11	15	13	16	16	16	16
James:	8	8	8	8	8	6	8	10	14	14	17	11	15	13	12	13	13	12
	37	38	39	40														
Khumalo:	12	8	8	8														
James:	10	10	12	12														
	2.4 \	ith'oı	manqo	oba Yi	th'usl	nikish	i											
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	6	3	0	6	4	6	1	0	5	2	5	0	6	6	0	0	6	6
James:	6	7	6	0	0	0	1	9	2	4	1	6	0	0	6	6	0	4
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	4	6	8	8	8	8	0	1	7	5	2	4	7	0	2	7	2	0
James:	3	0	9	14	16	16	8	4	0	0	6	3	0	13	11	0	7	8
7.71	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	0	2	4	6	8	8	8	8	0	3	6	6	6	8	0	3	4	4
James:	5	2	0	0	9	14	16	16	8	4	0	0	0	0	8	5	0	0
IZI 1	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	4	3	4	6	2	3	8	2	0	1	4	6	0	0	0	0	0	0
James:	4	2	0	0	6	4	0	1	8	4	0	0	0	12	12	6	0	12
Vlance 1-	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:		0	0	0	0	0	0	0	0	0	0	16	16	16	16	16	16	16
James:	12	6	0	0	25	24	0	0	25	24	0	20	15	20	15	20	15	20

	91
Khumalo:	16
James:	20

PART THREE

Table 10: Count A: Gross sum of intellectual input as units per measure per composer

	3.1 U	Shak	a KaSo	enzan	gakho	na												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	4	8	8	8	8	8	8	8	4	8	8	8	8	8
K/James:	0	0	0	0	4	8	8	8	8	8	8	8	4	8	8	8	8	8
James:	36	36	36	16	20	16	16	16	16	16	16	13	20	16	16	16	16	16
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	8	8	10	20	20	20	20	20	20	20	10	24	24	24	25	22	24	25
K/James:	8	8	6	12	12	12	12	12	12	12	6	12	12	12	12	12	12	12
James:	16	13	25	24	24	24	24	24	24	21	25	24	24	24	24	24	24	24
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	16	32	32	32	32	32	32	32	16	34	34	34	35	32	34	35	0	0
K/James:	8	16	16	16	16	16	16	16	8	16	16	16	16	16	16	16	0	0
James:	24	27	27	27	27	27	27	23	24	27	27	27	27	27	25	21	35	35
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	0	0	0	6	12	6	12	0	6	12	6	12	0	6	12	6	12	0
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	35	19	0	44	29	44	29	0	44	29	44	29	0	44	29	44	29	0
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	6	12	6	12	0	12	24	24	24	0	12	24	24	24	0	6	12	0
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	44	29	44	29	0	44	29	44	29	0	44	29	44	29	0	44	29	0
	91	92	93	94	95	96	97	98					•			•		
Khumalo:	6	12	6	12	0	6	12	0										
K/James:	0	0	0	0	0	0	0	0										
James:	44	29	44	29	0	44	29	0										
	3.2 I	zibon	go Sik	a Sha	ka													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	24	24	24	24	24	24	24	24	16	48	48	48	48	40	40	40	16	32
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	40	40	40	40	40	40	40	40	48	40	40	40	40	48	48	48	48	74
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	20	32	20	32	32	32	104	104	104	104	104	104	104	104	72	72	72	72
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	6
James:	8	74	88	74	88	78	18	10	10	10	18	10	10	10	38	32	38	29

	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	72	72	72	72	72	72	72	72	120	98	112	108	36	48	48	48	36	48
K/James:	0	4	4	4	4	4	4	0	0	24	32	0	0	0	0	0	0	0
James:	38	32	36	30	36	30	38	28	38	38	38	16	24	29	24	29	24	32
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	48	48	64	64	64	50	24	44	44	72	32	34	46	46	56	56	56	50
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	24	28	24	39	24	35	21	23	16	23	13	29	23	16	24	15	24	20
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	8	10	16	14	16	16	16	17	32	32	32	32	64	60	64	48	48	50
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	72	72	72	68	66	64	68	53	66	64	68	53	72	71	75	74	71	70
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	56	50	56	52	56	50	56	56	56	50	56	56	56	42	64	48	64	48
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	72	64	63	70	72	64	63	70	72	64	63	70	72	56	1	11	1	11
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Khumalo:	64	64	128	128	96	96	96	80	12	32	28	32	34	112	112	112	112	78
K/James:	0	0	0	0	0	0	0	16	32	0	0	0	0	0	0	0	0	0
James:	0	0	5	7	0	0	0	0	0	15	7	15	7	62	62	62	62	62
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Khumalo:	54	82	84	18	112	112	112	96	53	51	82	84	0	0	0	0	0	0
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	37	56	56	56	28	6
James:	62	54	40	22	54	54	54	46	54	54	54	31	47	61	61	61	70	26

Table 11: Count B: Net sum of intellectual input as units per measure per composer

	3.1 U	Shak	a KaS	enzan	gakho	na												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	2	4	4	4	4	4	4	4	2	4	4	4	4	4
James:	4	4	4	4	8	8	8	8	8	8	8	7	8	0	8	8	8	8
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	4	4	2	4	4	4	4	4	4	4	2	6	6	4	7	4	6	7
James:	8	7	6	8	8	8	8	8	8	7	6	8	8	8	8	8	8	8
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	2	4	4	4	4	4	4	4	2	6	4	6	7	4	6	7	0	0
James:	6	8	8	8	8	8	8	7	6	8	8	8	8	8	8	7	4	4

	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	0	0	0	2	4	2	4	0	2	4	2	4	0	2	4	2	4	0
James:	4	4	0	4	3	4	3	0	4	3	4	3	0	4	3	4	3	0
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	2	4	2	4	0	2	4	4	4	0	2	4	4	4	0	2	4	0
James:	4	3	4	3	0	4	3	4	3	0	4	3	4	3	0	4	3	0
	91	92	93	94	95	96	97	98		I				I	I	I	I	
Khumalo:	2	4	2	4	0	2	4	0										
James:	4	3	4	3	0	4	3	0										
	3.2 I	zibon	go Sik	a Sha	ka													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	8	8	8	8	8	8	8	8	8	16	16	8	8	8	10	10	8	16
James:	8	8	8	8	8	8	8	8	8	8	8	16	16	16	14	8	12	8
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	10	16	10	16	8	8	8	8	8	8	8	8	8	8	16	16	8	11
James:	8	8	8	12	16	16	8	8	8	8	8	8	8	8	8	8	8	8
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	12	16	8	12	12	12	12	15	16	14	16	12	13	16	16	16	13	16
James:	8	8	8	8	8	8	8	8	8	8	8	8	8	13	8	13	8	16
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Khumalo:	16	16	16	16	16	14	8	12	12	16	8	10	12	12	16	12	12	6
James:	8	16	8	23	8	23	23	19	12	19	11	19	19	10	20	13	12	10
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	8	10	8	8	8	8	8	8	8	8	8	8	8	8	8	6	16	16
James:	16	16	16	16	18	16	20	17	18	16	20	17	23	22	26	25	22	22
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	16	14	10	16	16	14	10	16	16	14	10	16	16	12	8	6	8	6
James:	20	20	15	14	20	20	15	22	20	20	15	14	16	20	1	11	1	11
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Khumalo:	8	8	8	8	8	8	8	8	7	8	7	8	7	16	16	16	16	8
James:	0	0	5	7	0	0	0	0	0	13	7	13	7	22	22	22	22	22
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Khumalo:	8	11	6	3	16	19	16	13	8	8	11	6	11	16	16	16	9	2
James:	22	22	16	22	22	22	22	22	22	22	22	7	15	15	15	15	15	2

PART FOUR

Table 12: Count A: Gross sum of intellectual input as units per measure per composer

	4.1 U	_	ena K	wemp														
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	0	0	0	0	0	0	0	0	24	24	24	21	6	6
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	18	29	40	38	40	33	32	30	35	36	36	33	22	17	8	15	20	17
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	11	8	12	7	10	8	10	9	8	7	10	10	6	6	6	6	6	6
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	23	18	19	13	10	2	6	2	6	0	6	0	6	6	0	0	0	0
	37	38	39	40	41	42	43	44	45	46	47			l .				
Khumalo:	6	9	10	10	4	9	9	9	8	4	4							
K/James:	0	0	0	0	0	0	0	0	0	0	0							
James:	0	6	6	6	0	0	0	0	0	0	0							
	4.2 E	Esibay	eni K	wakar	nubi													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	60	60	60	51	6	6	14	9	6	12	24	6	22	24	47	48	45	0
K/James:	0	0	0	0	0	0	6	8	0	8	16	0	0	0	0	0	0	0
James:	12	12	12	12	54	54	54	44	48	36	12	48	40	36	70	70	70	30
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	0	0	0	0	0	0	0	2	6	10	14	4	16	66	62	6	12	30
K/James:	2	6	6	0	2	6	6	0	0	0	0	0	0	0	0	0	0	0
James:	30	30	30	30	30	30	30	30	30	30	30	20	24	0	0	30	25	17
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	23	56	42	4	24	28	46	6	8	4	14	36	6	4	14	21	8	14
K/James:	0	0	0	12	18	0	0	18	24	12	8	0	0	0	8	12	0	8
James:	8	21	15	11	16	10	21	16	21	10	28	11	33	23	28	10	45	28
	55	56	57	58	59	60		1			1	1		1	1	<u> </u>	1	
Khumalo:	21	8	14	21	6	4												
K/James:	12	0	8	12	0	0												
James:	10	45	28	11	33	21												
	4.3 I	sililo]	Esesal	bekay	o													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	2	16	16	14	14	14	12	10	12	22	88	66	8	32	8	8
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	80	80	78	80	80	80	80	80	58	60	60	40	8	0	32	8	32	32
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	8	8	8	8	16	16	8	8	8	8	8	8	8	8	16	34	52	80
	l		l		l						l	l			l		1	

K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	40	24
James:	32	32	32	32	48	48	32	32	32	32	32	32	32	32	32	33	12	16
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	72	68	52	80	80	34	0	0	8	8	8	8	8	8	8	8	16	16
K/James:	32	32	40	23	24	32	0	0	0	0	0	0	0	0	0	0	0	0
James:	16	16	16	16	16	16	64	36	32	32	32	32	32	32	32	32	56	56
	55	56	57	58	59	60			I									
Khumalo:	16	16	16	16	0	0												
K/James:	0	0	0	0	0	0												
James:	56	56	56	56	56	56												
	4.4 E	Epilog	ue: U	thi Ma	ngith	ini												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	0	0	0	10	22	6	16	20	4	8	14	20	8	4
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	1	12	12	12	13	13	14	18	3	0	0	0	0	0	0	0	0	0
	19	20	21	22	23	24	25	26	27									
Khumalo:	14	20	8	4	14	20	8	8	4									
K/James:	0	0	0	0	0	0	0	0	0									
James:	0	0	0	0	0	0	0	0	0									
	4.5 S	iyash	weleza	a Nod	umeh	lezi												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	10	6	10	9	6	7	16	12	10	8	6	40	64	64	64
K/James:	1	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	46	48	48	50	0	0	0	0	0	0	0	0	0	0	0	19	19	19
	19	20	21	22	23	24	25	26	27			30	31	32	33	34	35	2.
Khumalo:	64	56								28	29							36
K/James:			64	56	64	64	64	56	32	32	32	32	120	120	136	128	112	136
	0	0	0	0	64	64	64	56	32	32	32	32	120	120	136	128	112	136
James:	19	0 19	0 19	0 19	64 0 19	64 0 19	64 0 19	56 0 19	32 0 19	32 0 19	32 0 19	32 0 19	120 0 19	120 0 19	136 0 19	128 0 19	112 0 19	136 0 19
	19 37	0 19 38	0 19 39	0 19 40	64 0 19 41	64 0 19 42	64 0 19 43	56 0 19 44	32 0 19 45	32 0 19 46	32 0 19 47	32 0 19 48	120 0 19 49	120 0 19 50	136 0 19 51	128 0 19 52	112 0 19 53	136 0 19 54
Khumalo:	19 37 136	0 19 38 120	0 19 39 72	0 19 40 32	64 0 19 41 0	64 0 19 42 0	64 0 19 43 16	56 0 19 44 16	32 0 19 45 16	32 0 19 46 16	32 0 19 47 16	32 0 19 48 16	120 0 19 49 16	120 0 19 50 16	136 0 19 51 16	128 0 19 52 16	112 0 19 53 16	136 0 19 54 16
Khumalo: K/James:	19 37 136 0	0 19 38 120 8	0 19 39 72 0	0 19 40 32 0	64 0 19 41 0	64 0 19 42 0 8	64 0 19 43 16 40	56 0 19 44 16 40	32 0 19 45 16 0	32 0 19 46 16	32 0 19 47 16 0	32 0 19 48 16 0	120 0 19 49 16 0	120 0 19 50 16	136 0 19 51 16	128 0 19 52 16	112 0 19 53 16 0	136 0 19 54 16 0
Khumalo:	19 37 136 0 19	0 19 38 120 8	0 19 39 72 0	0 19 40 32 0 64	64 0 19 41 0 8 32	64 0 19 42 0 8 32	64 0 19 43 16 40 21	56 0 19 44 16 40 21	32 0 19 45 16 0	32 0 19 46 16 0	32 0 19 47 16 0	32 0 19 48 16 0 62	120 0 19 49 16 0	120 0 19 50 16 0 64	136 0 19 51 16 0 68	128 0 19 52 16 0 68	112 0 19 53 16 0 71	136 0 19 54 16 0 64
Khumalo: K/James: James:	19 37 136 0 19	0 19 38 120 8 19	0 19 39 72 0 83	0 19 40 32 0 64 58	64 0 19 41 0 8 32	64 0 19 42 0 8 32	64 0 19 43 16 40 21	56 0 19 44 16 40 21	32 0 19 45 16 0 67	32 0 19 46 16 0 67	32 0 19 47 16 0 70	32 0 19 48 16 0 62	120 0 19 49 16 0 67	120 0 19 50 16 0 64 68	136 0 19 51 16 0 68 69	128 0 19 52 16 0 68 70	112 0 19 53 16 0 71	136 0 19 54 16 0 64 72
Khumalo: K/James: James: Khumalo:	19 37 136 0 19 55 16	0 19 38 120 8 19 56	0 19 39 72 0 83 57	0 19 40 32 0 64 58	64 0 19 41 0 8 32 59 16	64 0 19 42 0 8 32 60 16	64 0 19 43 16 40 21 61 12	56 0 19 44 16 40 21 62 12	32 0 19 45 16 0 67 63 16	32 0 19 46 16 0 67 64 16	32 0 19 47 16 0 70 65	32 0 19 48 16 0 62 66 12	120 0 19 49 16 0 67 67	120 0 19 50 16 0 64 68 16	136 0 19 51 16 0 68 69 12	128 0 19 52 16 0 68 70 12	112 0 19 53 16 0 71 71 16	136 0 19 54 16 0 64 72 16
Khumalo: K/James: James: Khumalo: K/James:	19 37 136 0 19 55 16	0 19 38 120 8 19 56 16	0 19 39 72 0 83 57 16	0 19 40 32 0 64 58 16	64 0 19 41 0 8 32 59 16 0	64 0 19 42 0 8 32 60 16	64 0 19 43 16 40 21 61 12	56 0 19 44 16 40 21 62 12	32 0 19 45 16 0 67 63 16 0	32 0 19 46 16 0 67 64 16	32 0 19 47 16 0 70 65 12 0	32 0 19 48 16 0 62 66 12	120 0 19 49 16 0 67 67 16 0	120 0 19 50 16 0 64 68 16 0	136 0 19 51 16 0 68 69 12	128 0 19 52 16 0 68 70 12	112 0 19 53 16 0 71 71 16 0	136 0 19 54 16 0 64 72 16 0
Khumalo: K/James: James: Khumalo:	19 37 136 0 19 55 16 0	0 19 38 120 8 19 56 16 0	0 19 39 72 0 83 57 16 0	0 19 40 32 0 64 58 16 0	64 0 19 41 0 8 32 59 16 0 67	64 0 19 42 0 8 32 60 16 0 68	64 0 19 43 16 40 21 61 12 0 72	56 0 19 44 16 40 21 62 12 0 68	32 0 19 45 16 0 67 63 16 0 69	32 0 19 46 16 0 67 64 16 0	32 0 19 47 16 0 70 65 12 0 63	32 0 19 48 16 0 62 66 12 0 59	120 0 19 49 16 0 67 67 16 0 68	120 0 19 50 16 0 64 68 16 0 63	136 0 19 51 16 0 68 69 12 0 67	128 0 19 52 16 0 68 70 12 0 67	112 0 19 53 16 0 71 71 16 0 68	136 0 19 54 16 0 64 72 16 0 69
Khumalo: K/James: James: Khumalo: K/James: James:	19 37 136 0 19 55 16 0 68	0 19 38 120 8 19 56 16 0 66	0 19 39 72 0 83 57 16 0 71	0 19 40 32 0 64 58 16 0 64	64 0 19 41 0 8 32 59 16 0 67	64 0 19 42 0 8 32 60 16 0 68 78	64 0 19 43 16 40 21 61 12 0 72	56 0 19 44 16 40 21 62 12 0 68 80	32 0 19 45 16 0 67 63 16 0 69 81	32 0 19 46 16 0 67 64 16 0 66 82	32 0 19 47 16 0 70 65 12 0 63 83	32 0 19 48 16 0 62 66 12 0 59	120 0 19 49 16 0 67 67 16 0 68 85	120 0 19 50 16 0 64 68 16 0 63 86	136 0 19 51 16 0 68 69 12 0 67 87	128 0 19 52 16 0 68 70 12 0 67 88	112 0 19 53 16 0 71 71 16 0 68 89	136 0 19 54 16 0 64 72 16 0 69 90
Khumalo: K/James: James: Khumalo: K/James: James:	19 37 136 0 19 55 16 0 68 73	0 19 38 120 8 19 56 16 0 66 74	0 19 39 72 0 83 57 16 0 71 75	0 19 40 32 0 64 58 16 0 64 76	64 0 19 41 0 8 32 59 16 0 67 77 64	64 0 19 42 0 8 32 60 16 0 68 78 64	64 0 19 43 16 40 21 61 12 0 72 79 64	56 0 19 44 16 40 21 62 12 0 68 80 64	32 0 19 45 16 0 67 63 16 0 69 81 64	32 0 19 46 16 0 67 64 16 0 66 82 64	32 0 19 47 16 0 70 65 12 0 63 83 32	32 0 19 48 16 0 62 66 12 0 59 84 32	120 0 19 49 16 0 67 67 16 0 68 85 16	120 0 19 50 16 0 64 68 16 0 63 86 16	136 0 19 51 16 0 68 69 12 0 67 87 16	128 0 19 52 16 0 68 70 12 0 67 88 16	112 0 19 53 16 0 71 71 16 0 68 89 16	136 0 19 54 16 0 64 72 16 0 69 90 16
Khumalo: K/James: James: Khumalo: K/James: James:	19 37 136 0 19 55 16 0 68	0 19 38 120 8 19 56 16 0 66	0 19 39 72 0 83 57 16 0 71	0 19 40 32 0 64 58 16 0 64	64 0 19 41 0 8 32 59 16 0 67	64 0 19 42 0 8 32 60 16 0 68 78	64 0 19 43 16 40 21 61 12 0 72	56 0 19 44 16 40 21 62 12 0 68 80	32 0 19 45 16 0 67 63 16 0 69 81	32 0 19 46 16 0 67 64 16 0 66 82	32 0 19 47 16 0 70 65 12 0 63 83	32 0 19 48 16 0 62 66 12 0 59	120 0 19 49 16 0 67 67 16 0 68 85	120 0 19 50 16 0 64 68 16 0 63 86	136 0 19 51 16 0 68 69 12 0 67 87	128 0 19 52 16 0 68 70 12 0 67 88	112 0 19 53 16 0 71 71 16 0 68 89	136 0 19 54 16 0 64 72 16 0 69 90

	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	8	8	8	8	8	8	8	50	8	8	8	50	8	8	8	8	8	8
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	42	51	45	50	50	52	42	11	42	51	50	39	42	50	50	52	51	51
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Khumalo:	8	8	8	8	8	8	8	8	8	8	8	8	8	50	8	8	8	50
K/James:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James:	51	59	43	43	43	43	42	50	45	48	42	51	43	11	42	51	50	39
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Khumalo:	8	8	8	8	61	104	64	88	48	80	48	96	29	84	31	116	32	32
K/James:	0	0	0	0	16	0	0	8	16	16	32	0	120	24	120	15	112	112
James:	42	50	50	52	11	18	32	18	32	11	11	11	0	11	12	10	0	0
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
Khumalo:	32	32	25	32	32	32	17	28	32	32	24	84	0	72	152	0	72	152
K/James:	112	104	120	112	112	104	112	112	112	104	112	24	0	48	0	0	48	0
James:	0	9	12	0	0	0	0	0	0	0	0	40	72	48	28	40	32	28
James:	0	9 164	12 165	0	0	0	0	0	0	0	0	40	72	48	28	40	32	28
James: Khumalo:	Ť			0	0	0	0	0	0	0	0	40	72	48	28	40	32	28
	163	164	165	0	0	0	0	0	0	0	0	40	72	48	28	40	32	28

Table 13: Count B: Net sum of intellectual input as units per measure per composer

	4.1 U	kung	ena K	wemp	ethu													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	0	0	0	0	0	0	0	0	6	6	6	6	6	6
James:	6	11	12	10	12	9	16	12	11	12	12	13	10	7	8	7	8	7
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	5	6	6	5	10	8	10	9	8	7	10	10	6	6	6	6	6	6
James:	9	6	9	7	10	2	6	2	6	0	6	0	6	6	0	0	0	0
	37	38	39	40	41	42	43	44	45	46	47			I	I	I]
Khumalo:	6	9	10	10	4	9	9	9	8	4	4							
James:	0	6	6	6	0	0	0	0	0	0	0							
	4.2 E	Esibay	eni K	wakan	nubi					•	•							
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	6	6	6	6	6	6	6	5	6	6	6	6	6	6	8	8	8	0
James:	12	12	12	12	18	18	18	18	18	18	18	18	6	6	8	8	8	6
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	2	6	6	0	2	6	6	2	6	6	6	4	7	12	8	6	8	6
James:	6	6	6	6	6	6	6	6	6	4	2	4	5	0	0	17	14	11

	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	7	8	6	4	12	8	12	6	8	4	6	4	6	4	6	5	8	6
James:	4	21	15	15	16	10	21	22	29	14	20	11	21	15	22	14	29	22
	55	56	57	58	59	60									<u> </u>			
Khumalo:	5	8	6	5	6	4												
James:	14	29	22	15	21	13												
	4.3 I	sililo]	Esesal	bekay	0													
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	1	8	8	7	7	7	6	5	6	6	16	6	8	8	8	8
James:	8	8	8	8	8	8	8	8	6	6	6	4	0	0	24	24	24	24
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10	16
James:	24	24	24	24	8	8	24	24	24	24	24	24	24	24	8	9	12	16
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Khumalo:	16	9	10	16	16	7	0	0	8	8	8	8	8	8	8	8	8	8
James:	16	16	16	16	16	16	8	6	24	24	24	24	24	24	24	24	8	8
	55	56	57	58	59	60			I			l		I		I		
Khumalo:	8	8	8	8	0	0												
James:	8	8	8	8	8	8												
	4.4 E	Epilog	ue: U	thi Ma	angith	ini												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	0	0	0	0	0	0	0	2	6	6	8	4	4	8	6	4	8	4
James:	1	12	12	12	13	13	14	6	1	0	0	0	0	0	0	0	0	0
	19	20	21	22	23	24	25	26	27					•		•		
Khumalo:	6	4	8	4	6	4	8	8	4									
James:	0	0	0	0	0	0	0	0	0									
	4.5 S	iyash	weleza	a Nod	umeh	lezi												
mm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Khumalo:	1	8	6	6	6	9	5	6	6	12	10	8	8	6	14	16	16	16
James:	10	12	12	6	0	0	0	0	0	0	0	0	0	0	0	19	19	19
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Khumalo:	16	16	16	16	16	8	16	16	8	8	8	8	16	16	16	24	12	16
James:	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
	37						_	0	0	0	8	8	8	8	8	0		_
Khumalo:	16	16	8	16	8	8	8	8	8	8	0	0	0	0	0	8	8	8
Khumalo: James:			8 19	16	8	8	28	28	35	35	38	30	35	32	36	36	39	32
	16	16																
	16 19	16 19	19	8	8	8	28	28	35	35	38	30	35	32	36	36	39	32

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	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Khumalo:	6	6	8	8	16	16	16	16	16	16	8	8	8	8	8	8	8	8
James:	39	39	15	0	0	1	8	0	0	1	14	8	9	18	8	8	9	22
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Khumalo:	8	8	8	8	8	8	8	15	8	8	8	15	8	8	8	8	8	8
James:	26	35	29	34	34	36	28	11	26	35	34	11	26	32	32	32	19	19
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Khumalo:	8	8	8	8	8	8	8	8	8	8	8	8	8	16	8	8	8	16
James:	19	19	19	19	19	19	26	34	29	32	26	35	29	11	26	34	34	18
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Khumalo:	8	8	8	8	8	16	8	8	8	16	8	16	16	8	16	16	6	16
James:	26	34	32	32	13	18	24	18	20	11	19	11	8	8	14	5	0	0
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
Khumalo:	16	16	16	16	16	12	9	16	12	12	8	8	0	32	8	0	16	16
James:	8	13	12	0	0	4	8	0	14	4	8	16	16	18	10	16	18	16
	163	164	165		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Khumalo:	0	32	24															
James:	16	18	6															