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of the degree of

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**A Creative Exploration of Techniques Employed in Pop/Rock
Drum Patterns (1965–1992): A dissertation with supporting audio
and video recordings**

by

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Abstract

The exploration of creative rhythmic drum patterns – many of which borrow from divergent musical styles – continues to be a focus for those at the vanguard of contemporary drumming. This performance-based study, submitted for the degree of PhD at the Elder Conservatorium of Music, University of Adelaide, looks at six representative pop/rock drummers who remain revered for their signature drum patterns.

The drummers in question are Ginger Baker, Stewart Copeland, Sly Dunbar, Steve Gadd, Zigaboo Modeliste and Bernard Purdie, who reached arguably the high point of their creativity between 1965-1992, each of them being celebrated for their absorption of cross-stylistic influences and imaginative use of techniques in the creation of new rhythmic patterns. Ginger Baker's early recordings in the mid-1960s saw him combining African and jazz influences with rock/blues rhythms, establishing him as a pioneer in this field and creating a platform for other drummers to follow.

This investigation highlights the prolific output of the above-mentioned drummers during this period, subsiding noticeably by the early 1990s due to the advancement of the drum machine and programming in the recording studio. Each of these drummers has in their own way profoundly shaped the direction of pop/rock music, and each of them constitutes a rich resource for the contemporary pop/rock drummer.

The intention here is to expand the creative potential of these resources and recontextualise each drummer's signature drum patterns so that we can speculate what Bernard Purdie's patterns might be like if performed by Ginger Baker, Stewart Copeland, and so on. This kind of self-referentialism is pursued in the belief that not only does it give greater insight into each drummer's technical and rhythmic syntax, but it leads to outcomes greater than the sum of their parts.

The original source recordings have been analysed aurally and this process of aural analysis has led to the written explanations of techniques for each of the sixteen songs in tabular form. The analytical process has informed the synthesis of techniques in the author's own recorded performances. The submission consists of a portfolio of the author's own audio and video recordings supported by a dissertation.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide.

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Signature...

Date ...  3rd December 2021

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Glossary of Terminology

Backbeat(s): A rhythmic accent on the second and fourth beats of a bar in 4/4-time, characteristic of rock and popular music. Specifically pertaining to the second and fourth beats of a four-beat bar.

Beat: In this study, *beat* refers to a single quarter note within a 4/4 bar drum pattern. The *beat* itself may contain numerous sub-divisional notes that make up that *beat*. The phrasing of beats can define the characteristic of specific music genres and styles. (Not to be confused with a *drum beat* which in this study relates to a *drum pattern*)

Downbeat(s): Many pop/rock drum patterns are based around the bass (kick) drum playing the *downbeats* on beats 1 & 3, with the snare drum playing the *backbeat* on beats 2 & 4.

Drum kit: In this study, *drum kit* represents a collective of diverse drums, cymbals, and other percussion instruments, played in pop/rock and associated forms of music. The basic components are the foot-operated bass drum and hi-hat, a snare drum, suspended cymbals, and one or more tom-toms. Drum kit *components* such as *cowbell* or 2nd pair of hi-hats are also classified as being *Voices* and are included in the *nomenclature* as a *technique*.

Drum pattern: Is a rhythmic pattern, or repeated rhythm establishing the metre and *feel* through the pulse and subdivision, played on the drum kit and percussion instruments.

Feel/Groove: In drumming terms, *feel/groove* is the sense of an effect of a drum pattern in a propulsive rhythm or sense of *swing*. In popular western music (drumming) it can be felt as a quality of persistently repeated rhythmic units.

Innovative (Pattern): For the purposes of this study, I define *Innovative* as: introducing new ideas and methods; original and creative in their composition of rhythmic patterns; and a breaking from tradition.

Juxtaposed Rhythm: The placing of two rhythms side by side creating an interesting and contrasting effect.

Layered drumming: A style where multiple drums, cymbals or other drum components hit simultaneously.

Linear drumming: A style in which no drum, cymbal, or other drum component hit simultaneously.

New Pattern: A drum pattern which has been composed employing identified techniques, technical devices and stylistic influences as used by the author and using stepwise processes.

Original Pattern: A *drum pattern* as played in the original song recordings and from which the *rearranged patterns* or *new patterns* in this study are derived.

Performance-based study: In this project, defined as a study which investigates, and employs identified techniques in selected drum (rhythmic) patterns using newly developed methods for contemporary drumming performance-practice by the author and ultimately, by others.

Pop/Rock: In this study it refers to and includes stylistic variations inclusive of African, blues, funk, jazz, Latin, Motown, soul, and Latin, in popular commercialised music in the context of popular music's fragmentation along stylistic lines in the 1960s onwards.

Rearranged Pattern: A drum pattern which has been composed employing identified techniques, technical devices, and stylistic influences as used by selected drummers and using stepwise processes.

Recontextualisation: The process that extracts rhythms, techniques and technical devices from its original context and reuses it in another context creating related rhythms and producing a rearranged or new drum pattern.

Reimagining (reimagined): to reinterpret, recreate, redistribute, and imagine again or anew, employed techniques and stylistic influences of rhythmic (drum) patterns.

Self-referentialism: The process of self-referencing the transcriptions, processes and techniques which make up the rhythmic patterns in this study.

Signature Pattern: A drum pattern of significance closely or distinctively associated and identified with a drummer regarding their technical style and individual rhythmic approach.

Stepwise process: The process that I have developed for rehearsing multilayered patterns executed independently of each other and in various combinations collectively.

Stylistic Influences: Refers to the selected drummers within this study, the genres of music and related rhythms that originate from their nominated styles and related cultures, having been a great influence on the processes in creating their signature patterns. It also refers to the author's own stylistic influences.

Syncopation: In this study *syncopation* refers to techniques employed to create irregular drum patterns by playing accents on weak beats usually not accented and/or the omission and displacement of notes such as downbeats and upbeats in a 4/4 metre.

Technical Devices: In this study *technical devices* are listed in the nomenclature and are identified as being the differing and individual approaches inclusive of rudiments, stickings and drum components incorporated in performance-practice in the execution of and creating drum patterns on a drum kit.

Techniques: In this study *techniques* are listed in the nomenclature and are identified as being the differing and individual approaches inclusive of rudiments, stickings and drum components incorporated in performance-practice in the execution of and creating drum patterns on a drum kit.

Upbeat(s): The upbeat (also known as *off-beat*) is the anticipatory note or succession of notes occurring before the backbeat (2&4) and downbeat (1&3) in a 4/4 bar, usually on the + of each beat (2nd quaver of each crotchet beat).

Key to Drum Notation

Key to Drum Notation

Drum-Kit Components

Enrico Morena

1				
	Bass drum	Hi-Hat: foot	Hi-hat splash (actioned by foot)	Snare drum
2				
	Snare: diddle (double stroke)	Snare accent (or on other components)	Snare: buzz/press note	Snare: ghost note see below option
3				
	Snare: rim-shot	Hi-hat	Hi-hat: open	Hi-hat: half-open
4				
	Tambourine	Cowbell	Snare: X-stick (side-stick)	Hi-hat: extra set -specified in score
5				
	Ride cymbal -bell	Crash cymbal	Ride cymbal	Floor-tom
6				
	floor tom- option to play	snare drum- option to play	ride or LF hi-hat- option to play	hi-hat or bass drum- option to play
7				
	Medium-tom	Small-tom	2nd floor tom	Rim-clicks -specified in score

Introduction

This performance-based study, submitted for the degree of PhD at the Elder Conservatorium of Music, University of Adelaide, looks at six representative drummers who remain revered for their signature drum patterns.¹ The exploration of creative rhythmic (drum) patterns – many of which borrow from divergent musical styles – continues to be a focus for those at the vanguard of contemporary drumming. Following the methodological approach posited by Candy and Edmonds who have argued that ‘Practice and research together operate in such a way as to generate new knowledge that can be shared and scrutinized’,² this corpus of signature drum patterns (Table 1) and employed techniques (Table 4) has become the basis for analyses and applied investigations through the author’s own performance-practice.

Each of the investigated drummers are considered amongst the world’s most influential pop/rock drummers through their creation of new rhythmic patterns. The drummers in question are Steve Gadd, Bernard Purdie, Zigaboo Modeliste, Stewart Copeland, Ginger Baker, and Sly Dunbar, who reached arguably the high point of their creativity between 1965-1992, each of them being celebrated for their absorption of cross-stylistic influences and imaginative use of techniques in the creation of signature patterns.³ The investigated drummers have all been influenced by and borrowed from styles beyond the pop/rock idiom. Ginger Baker’s early recordings in the mid-1960s saw him combining *African* and jazz influences with rock/blues rhythms, establishing him as a pioneer in this field and creating a platform for other drummers to follow.⁴

Collectively, their rhythmic syntaxes form the technical criteria on which this study is based (see Tables 3 & 4). The original source recordings have been analysed aurally and this process of aural analysis has led to the written explanations of techniques for each of the sixteen patterns in tabular form (Tables 2 & 3). The analytical process has informed the synthesis of techniques in the author’s own recorded performances.

The investigation highlights the prolific output of the above-mentioned drummers during this period, subsiding noticeably by the early 1990s due to the advancement of the drum machine and

¹ *Performance-based study*: for the purposes of this project defined as the process of investigating and employing the identified techniques and methods developed within this study, to contemporary drumming performance-practice by the author and ultimately, by others.

² Linda Candy & Ernest Edmonds, “Practice-based research in the creative arts: Foundations and futures from the front line,” *Leonardo*, Vol. 51, No. 1 (2018): 63.

³ Expanded on in Part One: 1.1

⁴ *African influences*: comprising multiple rhythms and drums. Expanded upon and detailed in Part Two.

programming in the recording studio. Each of these drummers has in their own way profoundly shaped the direction of pop/rock music, and each of them constitutes a rich resource for the contemporary pop/rock drummer. My analyses of their work have examined and applied their fusions of stylistic influences and techniques. The aim is to incorporate these innovations into contemporary drumming performance-practices (Table 5).

The expanded study outlines the key concepts and approaches they employ to develop new frameworks for composing and applying *innovative* drum patterns.⁵ This study has developed frameworks for understanding their individual drumming styles, and for applying these styles in new musical settings and performance contexts. The aim has been to discover how these *seminal* styles can inform the author's own composition of new drum patterns and creative rearrangements, with a view to broader application by others.⁶ The newly composed patterns are artefacts of developing creativity.

The intention here is to expand the creative potential of these resources and recontextualise each drummer's *signature patterns* (Table 8) so that we can speculate what Bernard Purdie's patterns might be like if performed by Ginger Baker, Stewart Copeland, and so on.⁷ *Self-referentialism* of these patterns is pursued for the purpose of gaining greater insight into each drummer's technical and rhythmic syntax leading to innovative outcomes.⁸

Through a structured rehearsal method, this study explores the various technical challenges of performing each of these drummer's *signature* drum patterns. The findings are presented in six 60-minute recorded CDs, one 35-minute DVD and an 60,000-word dissertation.

Ultimately, this research addresses a notable lack of scholarly resources of practical relevance to contemporary drummers in the construction (composition) of signature patterns and reveals a new corpus of performance techniques and technical challenges that drummers can benefit from mastering. The following aims and objectives, and research questions, detail what has been addressed in this investigation.

⁵ *Innovative*: Introducing new ideas, original and creative in their composition, and a breaking from tradition.

⁶ For the purposes of this study, I define *seminal* as containing important new musical ideas and having great influence on later styles.

⁷ *Signature Pattern*: closely or distinctively associated and identified with a drummer regarding their technical style and individual rhythmic approach. See Glossary of Terminology.

⁸ *Self-referentialism*: For the purposes of this study, it is defined as the process of self-referencing the transcriptions, processes and techniques which make up the rhythmic patterns. See Glossary of Terminology.

Outlining the Concept

The research involves identifying and analyzing the styles and techniques employed and developed through the signature drum patterns of Steve Gadd, Bernard Purdie, Zigaboo Modeliste, Stewart Copeland, Ginger Baker, and Sly Dunbar between 1965 and 1992.

During the first stage of research, the study surveys audiovisual recordings of performances by these drummers from 1965–1992 to identify and select signature patterns for further investigation. Analysing these patterns has informed the technical understanding of how they were created.

The second stage has guided the development of frameworks through which it seeks to integrate these innovative drumming styles. These frameworks extend to the rearrangement and composition of new (rhythmic) patterns within the musical settings and contexts of performance-practice. Through this process, the study has compiled a nomenclature of techniques employed in drumming that informs and assists contemporary drummers in the development of one's own compositional approach.

The identification of styles and techniques in the selected sixteen patterns has been accomplished by examining in detail newly created transcriptions and analyses of them. This procedure has been broken down into a series of documented exercises, which can ultimately be followed by others, using a stepwise process. In addition, having identified the techniques used by these drummers, it has been demonstrated how they can be practised and integrated into one's own playing as presented in the artefacts of this study. The study therefore entails an integrated use of notational analysis and sonic diarisation to isolate compositional devices discovered and apply them in performance-practice.

The study utilises multiple media, as detailed in the list of sources, to investigate the selected drummers and their signature drum patterns.

The primary sources are the recorded performances of the songs in which the signature patterns appear. The recordings are core to this study constituting the nucleus upon which all procedures, processes and analyses have derived. Other primary sources include video recordings of each drummer's live performances (when available) which support the performance-based study.

Online transcriptions of some of the signature patterns were sourced for the study along with available corresponding drum scores. However, not all signature patterns and corresponding scores (with the

relevant detailed notation required for this study) were able to be sourced. The expanded investigation necessitated a complete (new) set of detailed transcriptions and song scores written by the author.

Other primary sources used included periodicals interviewing each of the selected drummers. The interviews sourced gave insights into the methods, processes and techniques employed and stylistic influences adopted. Further investigation accessed periodicals detailing commentary and analysis of the selected patterns and each drummer's technical syntax.

Recorded (backing) tracks were sourced online with eleven of the sixteen songs downloaded and used on the recordings. Backing tracks for the five remaining songs were recorded using locally based musicians at Mixmaster Studios in Adelaide (see acknowledgements). The forty-eight CD recordings comprise three versions of each of the sixteen signature-pattern songs. Each version was recorded by performing to the backing tracks (having no drums, allowing for the author's performances). The process of selecting appropriate backing tracks involved ensuring the tracks replicated original instrumental parts inclusive of and in addition to the correct song arrangements, tempos, and stylistic adaptations, as played on the original recordings. The outcomes of this study are premised on the replication of original recordings.

Articles and academic papers on performance-based and practice-led research were accessed to establish the ongoing validity and originality of the study.

Secondary sources included an extensive bibliography including books in addition to journal and magazine articles, dissertations, websites, performance-practice DVDs, and accompanying pedagogical literature.

Aims of the Study

The Aims of this performance-based study are:

1. To identify the individual styles and signature drum patterns created and recorded by Steve Gadd, Bernard Purdie, Zigaboo Modeliste, Stewart Copeland, Ginger Baker and Sly Dunbar between 1965 and 1992.
2. Seek to identify, analyse, and understand the stylistic and technical innovations developed through these drum patterns and to develop a framework for integrating these into the author's own performance-practice.
3. To discover how these stylistic and technical innovations can inform the author's own composition and performance of new patterns with a view to broader application by others.

4. To catalogue a nomenclature of techniques identified in the signature drum patterns within this study.
5. To contribute to an understanding of how the techniques can be applied in the construction of creative rhythmic patterns.
6. To allow for the development of new processes and methods in contemporary performance-practice.
7. To establish rhythmic construction as an element of stylistic and technical development in drumming pedagogy.

Research Questions

The above seven aims have been interrogated by the following seven research questions:

1. What stylistic and technical influences are implemented by the six drummers selected?
2. What stylistic and technical innovations can be identified in their drum patterns?
3. How can these styles and techniques be applied in new musical settings and performance contexts?
4. How can the study expand drumming pedagogy in the creation of a nomenclature of techniques?
5. How can a detailed understanding of these styles and techniques inform the author's own composition of new drum patterns with a view to a broader application by others?
6. How can a detailed understanding of these styles and techniques inform more precise ways of performance-practice in identifying and transmitting their stylistic and technical features for and by others?
7. How can a detailed understanding of these styles and techniques contribute to the composition of rhythmic patterns and rhythmic construction as an element of stylistic and technical development?

Method

The investigative method for this project can be defined in the following sequence of 10 steps.

Step 1: Identifying the drummers for this study.

The six representative drummers identified in this study are revered for their signature patterns and in their own way profoundly shaped the direction of pop/rock music (pre-digitization). Steve Gadd, Bernard Purdie, Zigaboo Modeliste, Stewart Copeland, Ginger Baker, and Sly Dunbar, constitute a rich resource for the contemporary pop/rock drummer (see Part One 1.1). Audiovisual recordings of performances by these drummers from 1965–1992 were surveyed in assessing their performance and recording legacies. Analysis of their work highlights and applies in a structured way their fusion of

stylistic and technical devices with the intention of positing a method for their incorporation into contemporary drum performance-practice and expanding rhythmic pattern composition.

Step 2. Choosing the signature patterns and performance songs by the selected drummers

Audiovisual recordings of performances by these drummers from 1965–1992 were surveyed to identify and select signature patterns for further investigation and inclusion in this study. The corpus of signature patterns (Table 1) has become the basis for further analyses and applied investigations through performance-practice. Distillation of the signature patterns using a stepwise process (Table 2) has assisted in establishing rhythmic and stylistic syntaxes for each drummer (Part One 1.3 & 1.4).

The primary source materials employed here are of course the patterns themselves, some of which exist in aural form only. Some however have been transcribed and analysed, among them in Jim Payne's publications, *The Great Drummers of RnB, Funk & Soul*⁹ and *100 Famous Funk Beats*.¹⁰ More recently Stanton Moore's *Groove Alchemy*¹¹ also examines applied techniques from famous drum patterns, primarily in the funk and New Orleans genre. The above publications proffer detailed and valuable data on the stylistic and technical aspects of performance.

Texts presenting an accumulation of transcribed patterns do exist, as in *Groove Alchemy*, as well as rationale for pattern creation as described in *100 Famous Beats*. However, based on this review of literature, it is evident that there is a gap within bodies of work studying the research topic. This process of stylistic synthesis and, more specifically, a method by which rhythmic patterns have and may be created in real time, has not been addressed. The selected patterns represent a broad cross-section of signature patterns employing divergent stylistic influences and creative application of technical devices, all of which retain relevance in contemporary performance-practice.

Step 3: Analysing transcriptions of the selected patterns

Identification of techniques and processes employed in the selected patterns has been accomplished by examining transcriptions and analysis of them. Using the created stepwise process, as outlined in Table 2, techniques employed in the selected signature patterns are identified along with an analysis of their implementation in Table 3. The performance-based research approach has also been informed by Buchler, who has stated that 'Knowledge can contribute in an explicit and/or theoretical way, a practical way that can pertain to skills, or an embodied and/or personal way as part of personal

⁹ Jim Payne, *The Great Drummers of R&B Funk & Soul*. MO: USA, Mel Bay Publications, 2016.

¹⁰ Jim Payne, *100 Famous Funk Beats*. MO: USA, Mel Bay Publications, 2006.

¹¹ Stanton Moore, *Groove Alchemy*. New York, NY: Hudson Music, 2010.

experience’,¹² and therefore entails an integrated use of notational analysis and sonic diarisation to isolate compositional devices discovered in the corpus and to apply in performance-practice.

Step 4: Analysing and identifying techniques employed in the selected patterns

There are several recent publications that aim to elucidate on creativity in composing signature patterns through the process of amalgamation. This study references Stanton Moore’s *Groove Alchemy* as a guide to the stylistic and rhythmic language of composing signature patterns. Stewart Copeland, one of the selected drummers of this research, is the subject of Michel Aukofer’s 2011 dissertation entitled, ‘Behind the Drumset with Stewart Copeland: Identifying the Value of Transcription and Modelling in the Study of a Rock Drumset Icon.’ Aukofer states: ‘The importance of a student, teacher, or professional studying a pop/rock drumming icon like Stewart Copeland comes down to the importance placed on diversity and creativity in the individual’s drumming and musicianship.’¹³ The diversity and creativity referred to by Aukofer can be scrutinized by the process, as described in Table 2 and Part One 1.3, which identifies the techniques employed by the selected drummers in their signature patterns (see Table 3).

Step 5: Creating a vocabulary of techniques (nomenclature)

Through the procedure outlined in Table 2, I have identified the techniques used by the selected drummers. The nomenclature as seen in Table 4, is not intended to be a complete listing of all known drum techniques but one constructed for the purposes of this study from those employed by the selected drummers in their signature patterns. In addition, other established techniques in drumming pedagogy or as employed by the selected drummers in corresponding rhythmic patterns, are included for the purposes of expanding the capacity of the research. The techniques listed in the nomenclature which are not employed in the signature patterns are the following: brushes, cowbell, extra pair of hi-hats, tambourine, crash cymbal substitution, hi-hat foot splashes, and snare drum-snares off.

Step 6: Creating a process for the integration of techniques

The stepwise process formulated in this study encompasses the integration of signature patterns with a view to broader implementation by others. This process entails a series of exercises incorporating

¹² Daniela Buchler, “Eight criteria for practice-based research in the creative and cultural industries”, *Art, Design & Communication in Higher Education* (Vol. 7 Issue 1, 2008): 8.

¹³ Michel Aukofer, “Behind the drumset with Stewart Copeland: Identifying the value of transcription and modelling in the study of a rock drumset icon.” DMA. Thesis. University of Kentucky, 2011, p. 107.

sequential steps that deconstruct and reintegrate all rhythmic layers within each pattern. This process has also assisted in the analysis of selected patterns as seen in Tables 3 & 5.

Several DVDs that go some way towards underpinning this study in the creative elements investigated, include, Benny Greb's *The Art & Science of Groove*¹⁴ and Steve Smith's *Drum Legacy: Standing on the Shoulders of Giants*.¹⁵ Both tutorials deal in the analysis of technical applications to the drum kit and draw upon established pedagogy as a resource drum performance-practice.

Step 7: Creating a rhythmic profile and rhythmic footprint

Current research into rhythm offers limited analysis into the technical structures of rhythmic patterns as performed on percussive instruments as Godfried Toussaint states in *The Geometry of Musical Rhythm* '...it is more accurate to characterise rhythm as a manifestation of a process that emerges from the amalgamation of a physical signal with perceptual and cognitive structures of the mind. Such a broad definition naturally leaves open the door to consideration for analysis in any of the multitude of *complex features* that make up rhythmic patterns.'¹⁶

The creating of rhythmic profiles and footprints, inspired by Jim Chapin's *Advanced Techniques for the Modern Drummer*, exposes the internal linear rhythm (subdivision) and dimensional structure of a drum pattern without indicating its timbral or sonic qualities.¹⁷ This method is employed in the construction of rearranged and new patterns when being contrasted with those of a designated (original) pattern, retaining the rhythmic integrity of each as can be seen in Tables 6 and 7.

Step 8: Creating a process for rearranging signature drum patterns

The study has developed a stepwise process for rearranging drum patterns as presented in Table 8. The stepwise process is applied to accomplish rearrangements and new patterns from signature patterns (see Tables 10-41). This process aims to assist contemporary drummers to implement the techniques identified through my research and allows for the application of these techniques in the rearrangement of selected patterns. This framework also facilitates recontextualising and reimagining patterns for the purpose of rendering new drum patterns (and transcriptions). The process seeks to demonstrate the validity of techniques identified within this research, and endeavors to establish new methods for the development of pop/rock rhythms.

¹⁴ Benny Greb, *The Art and Science of Groove*. Hamburg, Germany: QFilmproduktion. 2016, DVD

¹⁵ Steve Smith, *Drum Legacy: Standing on the Shoulders of Giants* (New York, NY: Hudson Music. 2008), DVD.

¹⁶ Godfried T Toussaint, *The Geometry of Good Rhythm: What Makes a Good Rhythm Good?* Boca Raton: CRC Press, 2016, p. 6.

¹⁷ Jim Chapin, *Advanced Techniques for the Modern Drummer*. New York, NY: Jim Chapin. 1948.

This study further establishes detailed processes to aid the drum performer in creating unique drum patterns for contemporary performance. The rearrangements illustrate the process of recontextualisation by implementing the specific techniques identified. This implementation is achieved by applying a drummer's individual processes to an identified pattern and creating a rearranged pattern. Rearrangement is achieved by the redistribution of existing rhythms within the chosen pattern and utilising the techniques specific to each drummer, for that purpose. The processes that are engaged involve the composing of transcriptions as a 'working model' whilst analysing the pattern being composed. The integrity of the pattern is retained through the evaluation and duplication of rhythms and is then applied to the new transcription. Various options, composed as functional and alternate patterns, are created, and practised in the next step in the process of performance.

The seven-step process implemented for rearrangement involves:

1. Selection of signature patterns entailing transcription and all relevant details.
2. Analysing the techniques and stylistic influences employed, creating a rhythmic profile of the source pattern.
3. Creating a rhythmic footprint of the source pattern identifying techniques and stylistic influences to be implemented in the new/rearranged pattern.
4. Creating a rhythmic profile of the new/rearranged pattern and implementing the techniques and stylistic influences identified. This step is repeated until a viable pattern is composed and rehearsed.
5. Transcribing the new/rearranged pattern creating a rhythmic footprint of the pattern.
6. Counting the notation of the new/rearranged pattern against the original pattern, identifying the potential challenges and workability of the new/rearranged pattern.
7. Completing a new/rearranged pattern entailing transcription and all relevant details.

This study explores connections between rhythmical elements in unprecedented ways to develop a new method for analysing and creatively deploying key features of the signature drum patterns. Findings generated through integration of analytical and performative methods are exemplified in Tables 2 and 5. These approaches are yielding new insights into the creative compositional processes that inform drumming performance-practice.

As Andrew McNamara posits in *Six Rules for Practice-based Research*, 'Good PLR [practice-led research] is a complicated affair necessitating a complex, back-and-forth interaction between the practice and its conceptual framework or articulation.'¹⁸

¹⁸ Andrew McNamara, "Six rules for practice-based research." *Beyond Practice-Led Research* (No. 14, 2012): 8.

Performance-based research within this study facilitates the development of stepwise procedures in the simplification and division of drum patterns and the establishment of new avenues for investigating and understanding rhythm. Rhythmic patterns, as performed by drummers, depends largely upon the elements within the pattern and the techniques used to achieve its effects. Rhythm can be created in several ways using linear or layered patterns, repetition, and emphasis (dynamics) as points of focus or interruption, in addition to the contrast embedded in symmetrical or asymmetrical patterns. This research establishes detailed processes to aid the drum performer in creating unique drum patterns for contemporary performance.

Step 9: Practising of rearranged and new patterns

Having identified and classified the various stylistic and technical devices utilised, a practise-based framework has been developed to aid their assimilation into one's own playing. This framework involves application of steps as described above, inclusive of notating results of the process and sonic diarisation of challenges encountered, as detailed in Part Two. The steps include the practice of isolated rhythms assigned to each limb, in addition to the complete drum pattern (see Tables 2 and 5). This framework assists in mastering technical elements applied and comprehension of compositional processes engaged. Further practise entails rehearsing with original recordings and backing tracks for the purpose of integration and preparation for recorded performance.

The viability of rearrangement is evidenced through application in the two settings relevant to this performance-based project. Having identified and classified the various stylistic and technical devices utilised, a practise-based framework has been developed to aid their assimilation into performance-practice. This framework has involved application of steps described above and include the practising of isolated rhythms assigned to each limb, in addition to the complete drum pattern.

Further analysis through drum performance practise entails the assessment of technical and stylistic influences applied, including musicality; rhythmic fluidity; difficulty level and validity of construction. Practising with original recordings, where applicable, is used to confirm relevance and the adaptability of the rearranged and new patterns. The viability of the processes developed in the study are confirmed by the rearranged and new patterns being able to function as stand-alone patterns within performance-practice and recordings (Part Four).

Step 10: Creating a process for composing innovative patterns

A six-step process for composing *innovative* patterns, as informed by those analysed through this research (see Table 9) has been formulated and is included in this study as an avenue for future research. In part, this responds to the challenge presented by Candy and Edmonds's statement that 'A full understanding of the significance and context of ... [practice-led] research can only be obtained by experience of the works created as distinguished from using them as illustrations.'¹⁹ As supported by the video recording, it is demonstrated how the stepwise process for composing innovative patterns can be applied to improve creativity in performance-practice using the drumming styles and techniques investigated. The newly composed patterns are presented as a creative process in achieving functional alternatives to the original pattern.

The significance of other core components within this performance-based research are identified by Florian Hoesl and Olivier Senn in their study of *Popular Music Drum Patterns*, commenting, 'In order to create a general model of syncopation in popular music drum patterns, further modelling work is necessary that involves a larger number and a wider variety of patterns.'²⁰ The frameworks within this study act as the modelling work to achieve the outcomes stated.

Significance

Before presenting the originality of the study, it is firstly necessary to clarify the discipline from which it emanates and functions. It is the discipline of performance-practice enacted by the contemporary drummer applying techniques and processes employed in the pop/rock idiom when creating drum patterns. The target audience for this study is the practising drummer who seeks to expand the discipline of composing innovative rhythmic patterns by applying identified techniques through live performance and the recording thereof.

The project contributes to the discipline in the following ways:

1. It comprehensively investigates and contrasts six renowned pop/rock drummers.
2. It significantly broadens the creative possibilities for pop/rock drummers and offers procedures for learning how pop/rock patterns are composed.

¹⁹ Linda Candy & Ernest Edmonds, "Practice-based research in the creative arts: Foundations and futures from the front line," *Leonardo*, Vol. 51, No. 1 (2018): 65.

²⁰ Florian Hoesl & Olivier Senn, "Modelling perceived syncopation in popular music drum patterns: A preliminary study." *Music and Science*, Vol. 1, (2018): 1.

3. It addresses a notable lack of research and scholarly resources with practical relevance to contemporary drummers and reveals a new corpus of performance techniques and technical challenges.
4. It investigates processes of stylistic synthesis and, more specifically, a method by which rhythmic patterns have and may be created in real time.

A method of learning the selected signature patterns has been developed with a view to broader implementation by others. This method entails a series of exercises incorporating sequential steps that deconstruct and reintegrate all rhythmic layers within each pattern. This process has assisted in analysing the selected patterns, identifying, and isolating all possible rhythmic permutations within it.

This study has developed a stepwise process for rearranging drum patterns until a viable rearranged pattern is achieved. The counting of notes across all four limbs is employed to assess techniques to be implemented when rearranging drum patterns this way. As supported by the audio and video recordings, the stepwise process is applied to accomplish such rearrangements and the creation of new patterns. This procedure aims to assist contemporary drummers employing the techniques and innovative processes identified within this study. The findings of the research have discovered that the rearrangement process is only viable when the integral rhythmic structure of the original pattern being recontextualised is duplicated or at its very least, implied.

Through this expanded research, it has been identified that creativity in devising new drum patterns can be informed by implementing techniques and stylistic influences found in one drummer's repertoire to transform the drum patterns of others. In other words, the compositional devices favoured by one drummer and ultimately one's own, can be isolated and then applied to transform another's original pattern. This kind of creative rearrangement of drumming devices builds competency towards composing entirely new drum patterns.

The significance of the research undertaken aligns with Bill Bruford's assertion that, 'If drumming is a creative action, then drummers, I argue, are not only agents of change but also make meaning from their participation in change'.²¹ Source materials, as cited above, are an invaluable part of this study and provide the foundation for its potential to expand the identified fields of research.

²¹ Bill Bruford, *Uncharted. Creativity and the Expert Drummer*. Michigan: University of Michigan Press, 2018. p. 215.

Literature and Repertoire Review

This review covers literature and repertoire sources not referenced in other parts of the dissertation. The sources referenced here highlight theses, journal articles and books in addition to magazine articles, published interviews and online music links on the drummers and patterns selected for this project.

As outlined below, focus is also thrust upon six alternate drummers not selected for this study. Their contribution to the research and outcomes is highlighted by referencing articles and online song links, inclusive of a summary of their technical syntaxes as applied in selected patterns.

Further sources referencing the drummers selected for this study can be found in Part One 1.1. A full repertoire review and additional sources are embedded within the commentary detailing each of the sixteen signature patterns as can be found in Part Two of the dissertation commencing on page 63.

The motivation for pursuing this performance-based research approach is aptly captured in two questions posed by Geoffrey Curran, ‘In today’s drumming world of specialists and purists, an observer may wonder, “where are the innovators?” Drummers are musical artists, so where are the creative people who defy or ignore categories and boundaries?’²² The drummers in the present study are recognized for their innovative patterns and application of techniques employed in those patterns. The study goes on to highlight their creativity as musical artists and how they defied existing categories in creating cross-stylistic drum patterns.

The study has also been influenced by George Schaefer’s research into *Drumset Performance Practices* which proposes that ‘Future studies should extend this research by examining rhythm and blues, pop, and possibly Country and Western music from the 1970s to the present. Such research should document the changes in performance practices and audience preferences. For example, syncopation should be the subject of extended research.’²³ In the present study, syncopation has been identified as a key technical component and included in the nomenclature of techniques with the processes developed for its application to pop/rock drum patterns.

²² Geoffrey M Curran, “From ‘swinging hard’ to ‘rocking out’. Classification of style and the creation of identity in the world of drumming.’ *Symbolic Interaction* (Vol. 19, No. 1, 1996): 54.

²³ George W Schaeffer, “Drumset performance practice on pop and rhythm and blues hit recordings: 1960–1969”, DMA. Thesis. Arizona State University (1994): 98.

Stefan Reid's essay, *Preparing for Performance* investigating efficiency and effectiveness in practice suggests 'Whether practice is intended to develop technique or formulate an interpretation, it will be most effective when the musician has clear, achievable goals and has decided on the means of realising them. The most common approach is to simplify the task through the division of the musical material into chunks of small enough size to endure a degree of progress.'²⁴ The method developed in the present study confirms Reid's writings by the efficacy of the stepwise processes engaged, providing the contemporary drummer with clear and achievable goals in applying the identified techniques.

In *A Manifesto for Performance Research*, Brad Haseman further argues that 'As well as modifying existing research methods to create new ways of looking, interpreting and representing knowledge claims, performative researchers are inventing their own methods to probe the phenomena of practice.'²⁵ The processes and frameworks developed in the present study have created new ways of looking at innovative patterns and contributing to performance-practice methodology.

Nicholas Katuszonek in his thesis titled *Jazz, Pop, Improvisation, National Identity and the Role of the Jazz Drummer* concludes 'The findings from my own work formed the basis of the teaching sessions that I conducted and I was able to transfer my research into exercises and methods for utilising various genres and approaches to improvisation within a contemporary jazz setting.'²⁶ The present study endorses this approach through its development of stepwise processes applied to the pop/rock genre in the rearrangement and composition of new drum patterns in pedagogy and performance-practice. The method developed formulates exercises utilising various genres for rhythmic composition in the contemporary pop/rock setting.

Former King Crimson drummer Bill Bruford, discussing implications for further research in his thesis *Making it Work: Creative music performance and the Western kit drummer* advises to '...use these findings to develop instruments for guiding quantitative work to investigate the more measurable attributes of popular music creative performance.'²⁷ The artefacts of the present study, inclusive of the

²⁴ Stefan Reid, "Preparing for Performance". Chapter 7. *Musical Performance: A Guide to Understanding*. Ed. John Rink. Cambridge: Cambridge University Press, 2002, p.110.

²⁵ Brad Haseman, "A manifesto for performative research", *Media International Australia* (Vol. 118, No. 1): 104.

²⁶ Nicholas Katuszonek, "Jazz, Pop, Improvisation, National Identity and the Role of the Jazz Drummer." Ph.D. Thesis. School of Arts & Media: University of Salford, May 2014, p. 98.

²⁷ Bill Bruford, "Making it Work: Creative music performance and the Western kit drummer." Ph.D. Thesis. School of Arts. Faculty of Arts and Sciences: University of Surrey, December 2012, p. 274.

method developed, act as a quantitative portfolio providing measurable attributes of compositional performance in the field of pop/rock rhythmic patterns aligning with Bruford's research.

Bill Bruford's book *Uncharted, Creativity and the Expert Drummer* presents research into how creativity can inform drumming performance practice in which he concludes 'The extent to which unpitched practitioners in popular music differ in perception from their pitched instrument classical brethren with regard to the topics of creativity and meaning is substantial but poorly understood; further work is needed because the degree of transference of research from the latter to the former, and within both traditions, is low.'²⁸ The present study, through its developed method, contributes to the topic of creativity by presenting a differing perception of unpitched practitioners in popular music (the author himself and as a conduit of the selected drummers). These are the areas identified by Bruford for further research and on which this study predicates itself.

Scholar, Gareth Dylan Smith, also gives some useful pointers to future research via his aptly-named thesis (referencing Rene Descartes), *I Drum, Therefore I Am. Being and Becoming a Drummer*, stating 'It would be worthwhile to focus on drummers in particular styles or settings — such as rock drummers, jazz drummers, or those working in musical theatre — to understand more about drummers in specific stylistic context.'²⁹ The drummers in the present study have been chosen for their creativity in the pop/rock stylistic setting contributing to the expansion of composition in that genre.

Referencing Gareth Dylan Smith in his book *I Drum, Therefore I Am. Being and Becoming a Drummer*, 'Other means of presenting possible future studies of kit drummers should include innovative, collaborative, immersive and experiential platforms that sit at the intersection of practice and research.'³⁰ The present study centres upon six innovative kit drummers, presented at the intersection of practice and research through its immersive and experiential platform investigating rhythmic structures within signature patterns (as created by the selected drummers).

Author and reader of popular music at the University of Glasgow, Matt Brennan, proposes in his 2020 book, *Kick It. A Social History of the Drumkit*, 'Drumscapes and the political ecology of instruments are areas for further scholarship, but also serve as a reminder that no history of the drum kit can yet be

²⁸ Bill Bruford, *Uncharted*: 215.

²⁹ Gareth Dylan Smith, "I Drum therefore I am: Being and Becoming A Drummer." Ph.D. Thesis. Institute of Education: University College of London, February 2011, p. 253.

³⁰ Gareth Dylan Smith, *I Drum therefore I am: Being and Becoming A Drummer*. Farnham: Ashgate Publishing Limited, 2013, p. 170.

definitive because the drum kit itself is unfinished business-it is a living instrument.³¹ As a professional drummer and emerging scholar, the exploration of techniques as applied to the drum kit in innovative drum patterns helped define the parameters of the present study, creating the drumscales Brennan refers to through its focus on the micro-detailing of rhythmic patterning.

*Exploring your Creativity on the Drumset*³² by jazz drummer Mark Giuliana, is a practical guide in which he presents a system called DROP (Dynamics, Rate, Orchestration and Phrasing). Giuliana draws upon his unique approach in expanding one's rhythmic palette, improvisational skills, and creative expansion (e.g., using subdivisional rates of 5 & 7's). Though technical commonalities exist with the study presented here, Giuliana does not examine established techniques and stylistic influences leaving his DROP methodology inaccessible to some drummers. Clear guidelines to an established pedagogy are a pre-requisite for the advancement of any methodology. The creation of a nomenclature and stepwise processes are key components in the method developed in the present study and help establish new forms of performance-practice which contemporary drummers can apply.

New Orleans drummer Stanton Moore, in his book *Groove Alchemy*³³ examines applied techniques from seminal drum patterns, primarily in the funk and New Orleans genre. Moore is a disciple of Zigaboo Modeliste (one of the selected drummers of this study) and presents ideas and suggestions for stylistic hybrids by bringing together rhythmic cells (phrases) from other drum patterns. Moore's methodology is not unique but is presented in an original manner with concrete examples. However, the book does not offer detailed frameworks of systematically applied procedures for the creation of new (pop/rock) drum patterns via pedagogical and performance-practice applications.

An early publication from 1963, pertinent to this research, is *Rhythmic Patterns*³⁴ by Joe Cusatis. Cusatis advocates orchestration around the drum kit when practising drum patterns transcribed on an extended staff to highlight the individual rhythms making up a pattern. The publication, though fifty years old, denotes *rhythmic patterns* as an emerging topic. Cusatis transcribes patterns with the snare drum as a focal point, common with jazz performance-practice at that time. Its conceptual development seems to not have advanced (in pedagogical terms) in the interim years. Creativity and

³¹ Matt Brennan, *Kick It. A Social History of the Drumkit*. New York, N.Y: Oxford University Press, 2020. p. 319.

³² Mark Giuliana, *Exploring Your Creativity on the Drumset*. New York: Hudson Music, 2016.

³³ Stanton Moore, *Groove Alchemy*: 2010.

³⁴ Joe Cusatis, *Rhythmic Patterns for the Modern Drummer*. Melville, N.Y: Belwin Mills Publishing Corp, 1963.

composition of rhythmic patterns are not covered in Cusatis's book. The present study pays particular attention to individual rhythms within drum patterns, employing multiple techniques and stylistic influences, expanding upon previous publications such as *Rhythmic patterns*.

The late Gary Chester is known for his seminal book, *The New Breed- Systems for the development of your own creativity*.³⁵ Published in 1985, it remains an important reference in drumming pedagogy for developing independence in performance-practice. The techniques highlighted in Chester's book focus on the micro-analysis of rhythmic patterns to develop creativity. Chester presents systems, ostinatos, and syncopated reading exercises as an effective method of technical development in independence and coordination. Chester utilizes double staffs to highlight individual rhythms within a pattern. The method developed in the present study presents processes for rearranging and practising drum patterns in all possible permutations establishing an alternative system in creative rhythmic composition.

Six alternate drummers were also investigated for possible inclusion in this study.³⁶ The drummers in question are John Bonham, Vinnie Colaiuta, Jim Keltner, Jeff Porcaro, Ringo Starr, and Charlie Watts. Each of these drummers are renowned for their individual styles and use of techniques in the pop/rock genre and are included in Modern Drummers' *The 50 Greatest Drummers of all Time*.³⁷ Listed below are sources investigated in assessing their innovative patterns and the techniques they employed. Investigations of and into these drummers contributed to the outcomes of this study informing the nomenclature of techniques and stepwise processes developed.

Led Zeppelin drummer John Bonham was described by James Morton as 'A pioneer in heavy metal rock drumming...' in his article *John Bonham in Retrospect*.³⁸ Bonham's innovative layered pattern in *Good Times Bad Times* from the 1969 debut album *Led Zeppelin*, employs open hi-hat accents, pedal hi-hat, orchestration, syncopation, four-way integration, displaced and snare and bass drum rhythms, subdivisional motifs (bass drum sextuplets) and cowbell. The song can be heard in the footnote link.³⁹ The techniques employed by Bonham have informed the nomenclature of techniques developed in this study through his use of cowbell, pedal hi-hat and linear snare and bass drum rhythms.

³⁵ Gary Chester, *The New Breed- systems for the development of your own creativity*. Cedar Grove, NJ: Modern Drummer Publications, 1985.

³⁶ Selecting a female drummer was greatly restricted pertaining to the time-period of this study (1965-1992).

³⁷ No authors given, "The 50 Greatest Drummers of all Time," *Modern Drummer*, March 2014, pp. 29-58.

³⁸ James Morton, "John Bonham in Retrospect," *Modern Drummer*, February-March 1981, p. 20.

³⁹ Led Zeppelin, *Good Times Bad Times*, YouTube video, 2:47, recorded 1968, posted by Led Zeppelin, July 10, 2020, accessed July 20, 2020. <https://www.youtube.com/watch?v=TA9Rec1qAFQ>

Vinnie Colaiuta is described by Robyn Flans in her 1982 article *Vinnie Colaiuta* as ‘Innovative, Colorful and Tasteful...’.⁴⁰ Colaiuta is known for his innovative odd-time patterns with artists such as Frank Zappa and Sting, highlighting his creative use of techniques. Of note is Colaiuta’s 5/8 pattern in *Seven Days* from Sting’s *Ten Summoner’s Tales* album released in 1993. This iconic and juxtaposed pattern employs layered rhythms, displacement, syncopation, x-stick and an accented hi-hat polyrhythm (resolving every 2 bars to create a 5/4 pattern) as can be heard in the footnote link.⁴¹ The techniques employed by Colaiuta inclusive of polyrhythms, x-stick, four-way integration and displacement have informed the nomenclature developed in this study though odd-time signatures have not been included.

Eric Novod’s *Rock’n’ Jazz Clinic* article on session drummer Jim Keltner states ‘Many of Jim’s ideas are simple but deceptively difficult to execute, demonstrating his advanced level of four-way coordination.’⁴² Keltner reinforces Novod’s views through his innovative patterns in Steely Dan’s *Josie* from their 1977 album *Aja*.⁴³ As can be heard in the link below, Keltner’s produces varying syncopated linear patterns containing displaced hi-hat and snare rhythms, employing four-way integration comprised of ghost notes and open hi-hats (non-accented). The patterns have a low note-count of between 8-10 notes reinforcing Novod’s commentary above of Keltner’s patterns being ‘simple but deceptively difficult to execute.’ The techniques employed by Keltner inclusive of open hi-hat, displacement (hi-hat, snare, and bass drum), omission (of prime notes) and four-way integration have informed the nomenclature developed in this study. Keltner’s low note-count patterns informed the development of counting notes as a step for rearranging signature patterns (Table 8).

Studio great, the late Jeff Porcaro, is renowned for a variety of innovative patterns, with the half-time shuffle in Toto’s *Rosanna* from their 1982 album *Toto IV* of particular interest. In Robyn Flans’ article from 1983 titled *Jeff Porcaro*, Porcaro elaborates on his technical and stylistic influences when creating this innovative pattern by saying ‘Because the tune was a shuffle feel, I felt that the half-time shuffle thing would feel the best. The tune also reminded me of New Orleans type second-line drumming.’⁴⁴ Though the half-time shuffle had already been established by Bernard Purdie in

⁴⁰ Robyn Flans, “Vinnie Colaiuta,” *Modern Drummer*, November 1982, p. 8.

⁴¹ Sting, *Seven Days*, YouTube video, 4.36, recorded 1992, posted by Sting, Jan 12, 2011, accessed July 7, 2020. https://www.youtube.com/watch?v=pG7_gceIFL4

⁴² Eric Novod, “Studio Great Jim Keltner Style & Analysis,” *Modern Drummer*, August 2007, p. 108.

⁴³ Steely Dan, *Josie*, YouTube video, 4.30, recorded 1977, posted by VinylForever, Nov 11, 2014, accessed July 29, 2020. <https://www.youtube.com/watch?v=Gg9RyiPKhx8>

⁴⁴ Robyn Flans, “Jeff Porcaro,” *Modern Drummer*, February 1983, p. 11.

Babylon Sisters a few years earlier, Porcaro directly references the second-line stylistic influence and applying it to the bass drum in *Rosanna* drum pattern (as a 3/2 clave feel). With Porcaro so openly referencing stylistic influences, his statement reinforced this study's investigations into styles as a component of the research undertaken into innovative patterns. Porcaro's use of ghost notes, syncopated bass drum and half-time shuffle within a two-bar pattern contributed to the inclusion of these techniques in the nomenclature developed in this study. The song can be heard on the footnote link below.⁴⁵

The Beatles' Ringo Starr recorded many innovative drum patterns and analysis of his technical syntax was instrumental in the formative stages of this study. Robyn Flans introduces Starr in her article *Ringo* by commenting 'Ringo Starr was originally criticized for his individual style, but by the late '60s, studio drummers throughout the world were being told "play like Ringo."' ⁴⁶ A prime example of Ringo's simple yet creative approach can be heard in *Come Together* from The Beatles album *Abbey Road* released in 1969.⁴⁷ Two patterns from the song, in the introduction and verse sections respectively, highlight Ringo's employment of orchestration and use of toms. Starr orchestrates the introduction pattern using six voices on the drum kit with the verse pattern employing only bass drum and floor tom with heavy accents on beats 1,2,3, & 4. Starr's contribution to this study includes his use of techniques such as orchestration, omission, ambidexterity (open-handed approach in his fills, being left-handed), displacement, syncopation, crash cymbal substituting ride cymbal and creative use of accents. *Come Together* can be heard on the link below.

The late Charlie Watts from the Rolling Stones was also a contender for inclusion in this study. Robyn Flans stated in her 1982 article *Charlie Watts* '...Charlie Watts' no-nonsense drumming with the Rolling Stones has been a major influence in rock drumming for almost twenty years.' ⁴⁸ Watts, like Ringo Starr, had a unique and creative technical syntax, recording numerous innovative patterns in his time. His well-known love for Jazz influenced his drumming style, showcasing the improvised manner by which he performed his signature patterns. Watts' approach in *Start Me Up* from the Rolling Stones 1981 album *Tattoo You* exemplifies this.⁴⁹ This pattern is effectively a 4-bar pattern

⁴⁵ Toto, *Rosanna*, YouTube video, 5.27, recorded 1982, posted by Toto, Jan 10, 2013, accessed July 28, 2020. <https://www.youtube.com/watch?v=qmOLtTGvsbM>

⁴⁶ Robyn Flans, "Ringo," *Modern Drummer*, Dec 1981-Jan 1982, p. 1.

⁴⁷ The Beatles, *Come Together*, YouTube video, 4.28, recorded 1969, posted by The Beatles, June 22, 2018, accessed July 13, 2020. <https://www.youtube.com/watch?v=45cYwDMibGo>

⁴⁸ Robyn Flans, "Charlie Watts," *Modern Drummer*, August/September 1982, p. 1.

⁴⁹ The Rolling Stones, *Start Me Up*, YouTube video, 3.27, recorded 1982, posted by The Rolling Stones, October 3, 2012, accessed July 15, 2020. <https://www.youtube.com/watch?v=SGyOaCXr8Lw>

with an ostinato bass drum on beats 1,2,3, & 4 with Watts using displaced snare (beat 4), ghost notes, open hi-hat (non-accented), syncopation, orchestration, and crash cymbal. A disco stylistic influence is evident also with numerous open hi-hats on the +’s of varying beats. Watts was renowned for omitting the right-hand hi-hat on beats 2 & 4 when the snare drum accents were played. His contribution is ratified by the employment of the above-mentioned techniques and stylistic influences, all of which were included in the nomenclature developed in this study.

Structure of Submission

The dissertation begins with an introduction which outlines the aims, research questions, scope of the project, its significance, and method. The introduction is followed by four parts. Part One contains ten sections and is titled: *Analysis, Procedures, Performance-Practice and Techniques*. Each section provides detailed information on the analysis and identification of the selected drummers, signature drum patterns and techniques leading to methods (stepwise processes) and their integration into performance-practice. Part Two is titled: *Stepwise Processes, Commentary and Transcription of Patterns*. It relates to the identified signature patterns of the project inclusive of the rearranged and new patterns, applied stepwise processes, supporting commentary and transcriptions. Part Three comprises music scores for the forty-eight recordings and encompass transcriptions of full song arrangements. Part Four is a synthesis of the video and audio recordings and constitutes the principal body of work of this performance-based study with commentary on both the CD and video recordings and related track listings, completing the final part of the dissertation.

Part One

Part One contains ten significant sections. Section one introduces the selected drummers for this study and provides a synopsis of their significance in the creation of innovative and signature drum patterns. Section two identifies the signature patterns and corresponding songs which form the basis of the study and recordings. Section three identifies the technical devices employed in the signature patterns. Section four classifies techniques employed creating a rhythmic syntax for each drummer. Section five comprises a nomenclature of techniques as identified and employed in the signature patterns. Section six presents stepwise processes to integrate identified techniques into performance-practice. Section seven introduces a stepwise process to create rhythmic profiles and footprints of drum patterns, demonstrating their relevance and originality. Section eight introduces procedures for recontextualising signature patterns to create rearranged and new patterns. Section nine offers stepwise processes for practising rearranged and new patterns for the purposes of performance-

practice. The last section, Section ten, submits a procedure, in the form of a stepwise process, for the composing of original and innovative patterns implementing the technical and stylistic devices identified within this study.

Part Two

Part Two encompasses procedures and stepwise processes as applied to the sixteen signature patterns and corresponding recordings. The signature patterns are divided into three sections and include commentary, analyses, and procedures as applied to each recording. The three sections include processes as applied to signature patterns leading to the rearranged and new patterns respectively. The stepwise processes and accompanying transcriptions represent the viability of procedures created in this study and provide the technical data employed in their application. Each section forms the (theoretical) core of the forty-eight recordings highlighting the viability of methods as presented in part one and in tabular form in part two of the dissertation.

Part Three

Part Three, titled *The Music Scores: Songs and Transcriptions*, contains song scores with pattern transcriptions and song arrangements of the CD recordings. The scores form a significant part of the project and illustrate the outcome of procedures applied. Each score contains additional rearranged and new drum patterns composed using stepwise processes presented in this study. The additional patterns are referenced accordingly in the commentary and duplicate drum patterns recorded by the selected drummers in the original recordings (in addition to the signature patterns).

Part Four

Part Four, titled *The Audio and Video Recordings: Synthesis*, is the final part of the project and includes nine sections providing details on the performance components of the project. The sections provide information on the recordings and track listings of the six CDs and DVD which support the dissertation. Commentary comprises a detailed breakdown of the technical and performance-led approaches of the recordings, highlighting and substantiating the professional outcomes in both the aural and aesthetic results achieved.

Conclusion

The Conclusion closes the project and its achievements whilst providing scope on areas for further research.

PART ONE: Analysis, Procedures, Performance Practice and Techniques

1.1 Identifying the drummers for this study

This study looks at six representative drummers who remain revered for their innovative drum patterns. The drummers in question are Steve Gadd, Bernard Purdie, Zigaboo Modeliste, Stewart Copeland, Ginger Baker, and Sly Dunbar, who reached arguably the high point of their creativity between 1965-1992. Each of these drummers has in their own way profoundly shaped the direction of pop/rock music, and each of them constitutes a rich resource for the contemporary pop/rock drummer. A brief introduction to the six chosen drummers is as follows:

Ginger Baker

Ginger Baker was born in London in 1939. Baker is recognized for his progressive multi-dimensional drumming. Notable contributions are his backward beat on Cream's 1967 classic *Sunshine of Your Love* and a West-African Yoruba rhythm reminiscent of a Nanigo (in a half-time shuffle) in *Rolling Green* by Masters of Reality (recorded in 1992). These provide a rich vein of study in the current project. Chris Welch writes in *Rhythm Magazine* of Baker, 'Traditional Jazz, Be-bop, and African drumming all helped forge the unique Baker style. When he blended all those influences and set them to work in Cream in 1966, the results were astounding.'⁵⁰ Referencing his influences, Baker states, 'Phil [Seamen-his drum tutor], turned me on to African drumming, which had an enormous effect on my playing.'⁵¹ Indeed it did, as will be demonstrated during the project.

Stewart Copeland

Born in the United States in 1952 and raised in the Middle East, Stewart Copeland managed to distill a multitude of drumming and rhythmic styles into a unique seminal approach. His recording on The Police's *Roxanne* in 1978, exudes a reggae influence, while *Message in a Bottle* recorded in 1979, features cross-stick polyrhythmic six over four phrasing, very common in West-African forms of rhythm (e.g., Yoruba from Nigeria, Togo, and Benin). Copeland's articulate, creative, and intelligent drumming has remained relevant for over 40 years, establishing his candidature in seminal drum performance of the highest pedigree. 'Stewart Copeland is the player who, quite simply, redefined rock drumming in the late 70s and early 80s...[with] his characteristic blend of rock and reggae rhythms, complemented by his uniquely individual hi-hat technique,' writes Louise King.⁵² Copeland's idiosyncratic approach to reggae is the focus in this study.

⁵⁰ Chris Welch, "Ginger Baker: Drums of Fire," *Rhythm Magazine*, January 2002, p. 59.

⁵¹ Chris Welch, "Ginger Baker: Drums of Fire," 62.

⁵² Louise King, "The Rhythm King," *Rhythm Magazine*, November 2001, p. 66.

Sly Dunbar

Born in Kingston, Jamaica in 1952, Dunbar continues to perform and tour globally. The ubiquitous reggae drummer recorded his first track in 1967 and has been at the forefront of the infectious off-beat rhythm. Dunbar's ability to evolve stylistic influences has been noted for its originality in seminal performances. His swung groove in *Right Time* with The Mighty Diamonds, recorded in 1976, is famous for his revolutionary double rim clicks on beats 1&3. In his preface to an interview with Sly Dunbar, Santelli writes, 'It's like this: no drummer in the history of reggae has had more impact on the music, its inward structure, its riddims [sic] and overall progress.'⁵³ Dunbar states in a (later) interview, 'I guess I was responsible for bringing what some people call in Jamaica the military beat [with a bass drum on each beat in the bar] into reggae.'⁵⁴ Dunbar's contribution to Jamaica's rhythmic identity, reggae, and its elevated status in world music, positions him as a drummer of great influence and highly worthy of investigation.

Steve Gadd

Born in Rochester, New York in 1945, Steve Gadd's drumming is demonstrated in his creative adaptation of rudiments in 'Fifty Ways to Leave Your Lover', and the *Mozambique* (African) influenced *Late in the Evening*, both recorded with Paul Simon in 1975. Gadd's application of the *Mozambique* rhythm in this instance is a prime example of cross-cultural influences being integrated into the pop/rock genre of contemporary music. The sheer volume and stylistic diversity of Gadd's output ranks him as one of the most acclaimed drummers of his generation. As Chick Corea has noted: 'Every drummer wants to play like Gadd because he plays perfectly. He has brought orchestral and compositional thinking to the drum kit while at the same time having a great imagination and great ability to swing.'⁵⁵ These qualities, when combined with his cross-cultural borrowings, will be explored here.

Zigaboo Modeliste

Joseph Modeliste, also known as Zigaboo, is an American drummer, and a founding member of the original funk group The Meters. Modeliste is a pioneer of second-line funk drumming and remains active performing and touring. Pete Kaufman writes in *Modern Drummer*, 'How is it that [Modeliste's] drumming is so unusual yet so fully representative of the breadth of New Orleans'

⁵³ Robert Santelli, "Sly Dunbar," *Modern Drummer*, April 1985, p. 8.

⁵⁴ Robert Santelli, "The State of the Art," *Modern Drummer*, January 1986, p. 29.

⁵⁵ John Dolan, "100 Greatest Drummers of All Time," *Rolling Stone*, March 21, 2016, accessed May 21, 2021, <https://www.rollingstone.com/music/music-lists/100-greatest-drummers-of-all-time-77933/steve-gadd-146128/>

remarkable rhythmic legacy?’⁵⁶ Born in 1948 in New Orleans, Modeliste remains a strong influence and his syncopated style remains a reference point for hip-hop artists. The Meters’ 1969 hit *Cissy Strut* demonstrates the application of open-handed syncopated playing in a two-bar measure. Modeliste remarked, ‘I was caught up between doing New Orleans music and fatback [accented back-beat] drumming.’⁵⁷ Modeliste’s highly infectious approach and grooves are highly relevant to this study.

Bernard Purdie

Bernard Purdie has had a career that spans over six decades. Born in Maryland USA, in 1939, he continues to perform and tour globally. His legendary half-time shuffle in Steely Dan’s *Babylon Sister*, recorded in 1980, and classic funk groove in Aretha Franklin’s *Rock Steady* from 1972, remain two of the most infectious, analysed, and stylised drum patterns. Purdie’s professional longevity renders him an outstanding candidate for this study. ‘Bernard always had some unique stylistic thing that he did that you’d never imagine in advance that nobody else would do,’ Steely Dan’s Walter Backer recalls.⁵⁸ Purdie himself states, ‘Melodic rhythm is the key to any playing. You can play in any kind of groove, jazz, rock, rhythm, blues, country, or Latin as long as you play melodically.’⁵⁹ Bernard’s celebrated ‘Purdie shuffle’ is explored here.

The drummers selected here originate from diverse stylistic and technical backgrounds. They represent a broad cross-section of performance practice and are widely recognized as innovators.⁶⁰ All six drummers are named in Rolling Stone’s 100 Greatest Drummers of all time.⁶¹

1.2 Choosing the signature patterns and performance songs.

Table 1 lists compositions confirmed for the recordings. Song durations range from approximately three to six minutes. Transcriptions of the signature drum patterns are detailed below. Their tempi, as they inform performance-practice, are as per original recordings cited.

⁵⁶ Pete Kaufmann, “Zigaboo Modeliste,” *Modern Drummer*, August 2013, p. 42.

⁵⁷ Pete Kaufmann, “Zigaboo Modeliste,” 46.

⁵⁸ John Dolan, “100 Greatest Drummers of all Time,” *Rolling Stone*, March 21, 2016, accessed May 21, 2021. <https://www.rollingstone.com/music/lists/100-greatest-drummers-of-all-time-20160331/bernard-purdie-20160328>

⁵⁹ Cheech Iero, “The New York Scene,” *Modern Drummer*, May-June 1979, p. 20.

⁶⁰ Chad Smith, Joey Jordison, Mike Portnoy, “100 Greatest Drum Beats of all Time.” *Rhythm Magazine*, November 10, 2010, accessed May 20, 2021. <https://www.musicradar.com/news/drums/100-greatest-drum-beats-of-all-time-204008>

⁶¹ John Dolan, “100 Greatest Drummers of All Time,” *Rolling Stone*, March 21, 2016, accessed May 21, 2021. <https://www.rollingstone.com/music/music-lists/100-greatest-drummers-of-all-time-77933/>

Table 1. Complete list of signature patterns and songs

No.	Details	Transcription
1	Drummer: Bernard Purdie Song: <i>Babylon Sisters</i> Artist: Steely Dan Tempo: 125 bpm	
2	Drummer: Steve Gadd Song: <i>Chuck E's in Love</i> Artist: Paul Simon Tempo: 116 bpm	
3	Drummer: Zigaboo Modeliste Song: <i>Cissy Strut</i> Artist: The Meters Tempo: 88 bpm	
4	Drummer: Ginger Baker Song: <i>Crossroads</i> Artist: Masters of Reality Tempo: 132 bpm	
5	Drummer: Steve Gadd Song: <i>Fifty Ways to Leave Your Lover</i> Artist: Paul Simon Tempo: 102 bpm	
6	Drummer: Zigaboo Modeliste Song: <i>Fire on the Bayou</i> Artist: The Meters Tempo: 97 bpm	
7	Drummer: Bernard Purdie Song: <i>Home at Last</i> Artist: Aretha Franklin Tempo: 128 bpm	
8	Drummer: Steve Gadd Song: <i>Late in the Evening</i> Artist: Paul Simon Tempo: 118 bpm	
9	Drummer: Bernard Purdie Song: <i>Memphis Soul Stew</i> Artist: King Curtis Tempo: 114 bpm	

No.	Details	Transcription
10	Drummer: Sly Dunbar Song: <i>Motherless Children</i> Artist: Gregory Isaacs Tempo: 124 bpm	
11	Drummer: Sly Dunbar Song: <i>Right Time</i> Artist: Gregory Isaacs Tempo: 70 bpm	
12	Drummer: Bernard Purdie Song: <i>Rock Steady</i> Artist: Aretha Franklin Tempo: 104 bpm	
13	Drummer: Ginger Baker Song: <i>Rolling Green</i> Artist: Masters of Reality Tempo: 128 bpm	
14	Drummer: Stewart Copeland Song: <i>Roxanne</i> Artist: The Police Tempo: 134 bpm	
15	Drummer: Ginger Baker Song: <i>Sunshine of Your Love</i> Artist: Cream Tempo: 116bpm	
16	Drummer: Stewart Copeland Song: <i>Wrapped Around Your Finger</i> Artist: The Police Tempo: 134 bpm	

1.3 Analysing transcriptions of the selected patterns

Identification of employed techniques in the selected patterns has been accomplished by examining my transcriptions and analyses of them. The following transcriptions of Ginger Baker's signature pattern and its layered rhythms in *Sunshine of Your Love* (Figure 1) illustrate this procedure. The

procedure has been broken down into a series of documented steps, which can ultimately be followed by others. Through the procedure outlined in Table 2 below, the techniques employed in the selected signature patterns have been identified, and how they are implemented in Table 3.



Figure 1. Signature pattern from *Sunshine of Your Love* by Ginger Baker

Table 2. The stepwise process for identifying techniques from Ginger Baker, *Sunshine of Your Love* (Three limb pattern, no pedal hi-hat)

Step	Limb(s)	Drum kit components	Identified Technique(s)	Transcription
1	Left-hand	Small-Med toms	Orchestration	
2	Right-hand	Floor toms	Orchestration	
3	Right-foot	Bass drum	Beat displacement Omission (downbeat)	
4	Left-hand Right-hand	Small-Med and Floor toms	Orchestration Layering	
5	Left-hand Right-foot	Small-Med toms and Bass drum	Orchestration Omission Beat displacement	
6	Right-hand Right-foot	Floor toms and Bass drum	Orchestration Omission Beat displacement Layering	
7	Right-hand Left-hand Right-foot	Small-Med toms Floor toms Bass drum	Orchestration Omission Beat displacement Layering Accents	

1.4 Analysing and identifying techniques employed in the selected patterns

Through this process, the following technical and stylistic elements have been identified in the following drummers' selected signature patterns within this study:

Ginger Baker

- **Techniques**

Beat displacement, layered drumming; hi-hat-pedal (ostinato), syncopation, orchestration, polyrhythms,⁶² omission (of downbeats), four-limb integration, common-time/cut-time (implied simultaneously), accents (juxtaposed)

- **Stylistic influences**

Jazz-swing, West-African rhythms (e.g., Yoruba), Afro-Cuban (Nanigo), Motown

Stewart Copeland

- **Techniques**

Syncopation, downbeat-displacement, open hi-hat accents, open hi-hats (non-accents), orchestration; polyrhythmic devices, omission (omitting snare as back-beat), snare x-stick, four-limb integration, ride-cymbal bell, two-bar patterns, juxtaposed accents, rim-shots

- **Stylistic influences**

Reggae (one-drop/four-drop, x-stick etc.), punk, middle eastern rhythms (e.g., Dumbek)

Sly Dunbar

- **Techniques**

Open hi-hat accents, open hi-hats (non-accents), layered rhythms, half-time patterns, syncopation; displaced accents, rim-shots, x-stick on snare drum, omission, and displacement (downbeats and backbeats), snare drum and x-stick alternating, four-limb integration

- **Stylistic influences**

Ska, reggae, country, R&B, soul, disco, funk, Motown

Steve Gadd

- **Techniques:** Orchestration, syncopation, displacement; open-handed ambidexterity, rudiment adaptation, two-bar drum patterns, linear and layered drumming, open hi-hat accents, pedal hi-hat, step hi-hat (linear patterns), snare ghost notes, snare buzz strokes, rim-clicks, polyrhythms (cross-rhythms), diddle strokes (snare), common-time/half-time (implied simultaneously)

⁶² *Polyrhythms*: also called *Cross-rhythms*, are the simultaneous use of two or more contrasting rhythms, not immediately perceived, that resolve as manifestations derived from the same metre.

- **Stylistic influences:** Jazz (inclusive of be-bop and big-band), Drum-corps; Latin (multiple), orchestral (percussive), New Orleans, soul, R&B.

Zigaboo Modeliste

- **Techniques**
Linear approach,⁶³ open-handed ambidextrous approach, syncopation, omission and displacement of downbeats and back beats, rim-shot (snare), open-hi-hat accents, four-limb integration, accents (syncopated and juxtaposed)
- **Stylistic influences**
New Orleans, Second-line rhythms, funk, jazz

Bernard Purdie

- **Techniques**
Multiple rhythm layering,⁶⁴ snare drum-ghost notes, integrated four-limb rhythmic construction, open hi-hat accents, open hi-hats (non-accents), hi-hat (ostinato by foot), half-time patterns, snare drum x-stick, bell on ride-cymbal, accents (usually on downbeats and backbeats)
- **Stylistic influences**
Latin, jazz, New Orleans, swing, soul, funk, country, R&B

Table 3: Analysing techniques employed in the selected signature patterns

Techniques	Employed by drummer(s)	Observations
Accents	All six drummers	Employed as ostinatos on backbeats, downbeats and/or syncopation and displacement
Bell on ride cymbal	Copeland, Gadd, and Purdie.	Accenting bell creating syncopated and juxtaposed rhythms and/or sonic variation
Brushes	Gadd	Not employed in the selected patterns but used by Gadd in other recorded settings

⁶³ *Linear drumming* is a style in which no drum, cymbal, or other drum component hits simultaneously.

⁶⁴ *Layered drumming* is a style where multiple drums, cymbals or other drum components hit simultaneously.

Techniques	Employed by drummer(s)	Observations
Common-time, half-time & cut-time: (Two of above implied simultaneously)	Baker, Copeland, and Gadd	Implemented and implied by playing accents on upbeats, backbeats and/or downbeats
Cowbell	Gadd	Not employed in the selected patterns but employed by Gadd in other recorded settings
Diddle strokes	Copeland/Gadd	Usually played on snare and hi-hats as embellishments in the form of multiple ghost notes
Displacement of backbeat & downbeat	Baker, Copeland, Dunbar, Gadd, and Modeliste	Linked to stylistic influences and syncopation technique on downbeat & backbeats
Four-limb integration	All six drummers	Employed in patterns with contrasting techniques using layering or linear rhythms
Half-time patterns	Baker, Copeland, Dunbar, Gadd, and Purdie	Linked to techniques employed and stylistic influences applied by the selected drummers
Hi-hat: open accent	All six drummers	Employed and (usually) accented in unison with bass drum or snare as ostinato
Hi-hat: open	Copeland, Dunbar, Gadd, and Purdie	Employed in pattern as ostinato (added voice) not accented in unison with bass drum or other voice
Hi-hat: pedal	Baker, Copeland, Gadd, and Purdie	Used as ostinato and expanding rhythmic density, keeping time, integrating four-limb technique
Hi-hat: step	Copeland, Dunbar, Gadd, and Modeliste	Employed as part of a linear pattern (also in immediate closing after a hi-hat accent)
Hi-hat: foot splashes	Baker and Gadd	Not employed in selected patterns, used by named drummers in other patterns

Techniques	Employed by drummer(s)	Observations
Hi-hat: extra pair (closed)	Copeland, Gadd	Not employed in selected patterns, used by named drummers in other patterns
Layering	All six drummers	Employed in patterns creating contrasting rhythmic density and timbral/sonic depth
Linear	Gadd, and Modeliste	Employing varying techniques including omission, step hi-hat, syncopation, displacement etc.
Omission of single/multiple notes	Copeland, Dunbar, Gadd, and Modeliste	Stylistic influences along with displacement and omitting of backbeats and downbeats
Open-handed approach (ambidexterity)	Baker, Gadd, and Modeliste	Stylistic influences applying orchestration, syncopated linear/layered patterns etc.
Orchestration	Baker, Copeland, and Gadd,	Highlights stylistic influences applying four-limb integration, linear and layering techniques
Polyrhythms (cross-rhythms)	Baker, Copeland, Dunbar, and Gadd	Linked to stylistic influence, orchestration, differing metre implication and layering.
Rim-click (not x-stick)	Gadd	Sonic variation used by Gadd in <i>Late in the Evening</i> replacing hi-hat or cymbal
Rim-shot	All six drummers	Employed in some of the signature patterns though hard to determine from recordings
Rudiments	Gadd and Purdie	Employed in diverse patterns: e.g., <i>Fifty Ways to Leave Your Lover</i> and <i>Memphis Soul Stew</i>
Snare drum: buzz/press strokes	Dunbar and Gadd	Not employed in signature patterns but in other patterns by the named drummers

Techniques	Employed by drummer(s)	Observations
Snare drum: ghost notes	Dunbar, Gadd, and Purdie	<i>Babylon Sisters</i> and <i>Memphis Soul Stew</i> are prime examples and <i>Fifty Ways</i> as rudiments
Snare drum: snares off	Baker, Dunbar, Gadd, and Modeliste	Not employed in selected patterns but used by named drummers in other recordings
Snare drum: x-stick (side stick)	Copeland, Dunbar, and Purdie	Employed on snare-drum rim as stylistically influenced. Gadd employs in other settings
Snare drum & x-stick alternating (1 bar)	Copeland and Dunbar	Dunbar is prime exponent of this in <i>Motherless Children</i> . Copeland in other recordings.
Syncopation	All six drummers	Employed in multiple signature patterns with related techniques such as linear, omission etc.
Two-bar patterns	Copeland and Gadd (Dunbar & Purdie)	<i>Fifty Ways</i> is a prime example though all six drummers vary signature patterns over 2 bars

1.5 Creating a vocabulary of techniques (nomenclature)

Through the procedures outlined above, I have identified techniques used by these drummers, as classified in the nomenclature (Table 4), and how they are implemented in Tables 2 and 3 respectively. The nomenclature is not intended to be a complete listing of all known drum techniques but one constructed for the purposes of this study from those employed by the selected drummers in their signature patterns. Additional techniques have been included which are not employed in the signature patterns but have been identified in drumming pedagogy and are included for the purposes of expanding the capacity of the research. The techniques (technical devices) listed in the nomenclature which are not employed in the identified signature patterns are as follows: brushes, cowbell, extra pair of hi-hats, crash cymbal substitution, hi-hat foot splashes, and snare drum-snares off. The tambourine is employed in *Wrapped Around Your Finger* but not included in the nomenclature (see Score 48 and Track 95, 96).

Table 4. Nomenclature of techniques (T1-T32)

Number	Techniques	Descriptions and Observations
1	Accents (add weight and intensity to specific beats within a pattern)	In this study, particular focus on displaced, juxtaposed, and syncopated accents or application to down-beats (1&3 on bass drum), snare back-beats (2&4).
2	Bell on ride cymbal (cup of cymbal)	Accenting a rhythm within a pattern creating a layered and/or contrasting rhythmic effect
3	Brushes (wire or other alternatives)	Timbral alternative to sticks creating a less staccato sound (on snare drum or other)
4	Common-time, half-time & cut-time implication (effecting metre duality within a pattern)	In this study defined as; the use of opposing accents to create contrasting rhythms within a drum pattern in a 4/4 time-signature and to imply differing metre/tempo simultaneously
5	Cowbell (adding a percussive sonic)	Using the cowbell as an integral drum kit component within a drum pattern
6	Crash cymbal substituting ride cymbal (as a constant in patterns)	Crash cymbal as an ostinato using multiple notes, not just a single hit, replacing ride or hi-hat
7	Diddle stroke (singular-double stroke by either hand)	Used to embellish a pattern usually played on the snare drum in the form of ghost notes
8	Displacement of down-beat and back-beat (as a form of syncopation)	Not playing bass drum on beats 1&3 and snare beats on 2&4 as per traditional pop/rock patterns
9	Four-limb integration (using all four limbs in drum patterns)	Technical device applying four differing rhythms simultaneously and expanding timbral variations. Inclusive of four-note cells played on any given note of a drum pattern (stacking)
10	Half-time patterns (doubling tempo resolutions)	Used to alter the rhythmic feel/pulse within a metre by moving the accented backbeat to beat three instead of accenting beats two and four
11	Hi-hat: open accent (executed by foot and hand combination simultaneously)	Singular/multiple hi-hat accents within a pattern on one or more notes using heel-down or heel-up pedal hi-hat occasioning an accent dynamic
12	Hi-hat: open (executed by foot and hand combination simultaneously)	Often used as a recurring open/close hi-hat effect within a pattern e.g., +’s of each beat, not accented
13	Hi-hat: pedal (executed by hi-hat foot)	Used as an ostinato (usually) in maintaining metre and time keeping, integrated into pattern
14	Hi-hat: step (executed by hi-hat foot)	Single note played by the hi-hat foot, within a pattern applied using the linear technique
15	Hi-hat: splashes (actioned by foot)	Creating varying note-length open hi-hat sounds replicating cymbal splashes
16	Hi-hats: extra pair (closed)	Second hi-hats allows an expanded palette of hi-hat sounds/effects in patterns

Number	Techniques	Descriptions and Observations
17	Layering (multiple drum components played simultaneously in a pattern)	Two or more limbs playing (varied or similar) rhythms via drum components creating density of rhythm
18	Linear (individual drum kit components not played simultaneously in a pattern)	Executed by playing multiple limbs to create a continuous flow of rhythm/notes in the pattern
19	Omission of single/multiple notes (with focus on downbeats and backbeats)	Omission of notes: also, a hybrid of the displacement technique, employed in and creating linear, layered, and syncopated rhythms directly or indirectly
20	Open-handed approach (non-crossed hands)	Playing hi-hat and snare/other drums in a non-traditional manner encouraging ambidexterity
21	Orchestration (employing multiple components of the drum kit)	Achieved by creating sonic, timbral and tonal diversity orchestrated on multiple and varying drum components of the drum kit
22	Polyrhythms (use of cross-rhythms)	The simultaneous use of two or more contrasting rhythms that resolve as manifestations derived from the same metre
23	Rim-click (either hand playing rim of any drum)	Alternative to playing hi-hat, ride cymbal or other drum kit component as a rhythmic pattern
24	Rim-shot (on snare drum)	Heavily accented note(s) on snare drum effected by hitting the rim and snare drum simultaneously
25	Rudiments (utilizing traditional snare techniques)	Applying traditional stickings to embellish and create functional new drum patterns
26	Snare drum: buzz/press stroke (compressed single note on snare)	Embellishment(s) adding nuance, dynamics, subtlety, creating dynamic depth
27	Snare drum: ghost note (quiet single notes usually on snare)	Embellishment(s) adding nuance, dimension, dynamics, and subtlety, creating rhythmic depth
28	Snare drum: snares off (by disengaging snares on bottom head)	Playing the snare drum with snares off to achieve a natural drum timbale-like effect
29	Snare drum: x-stick (playing rim of snare with crossed stick)	Create a differing tonal (clave) effect on the snare drum, alternative to the snare sonic
30	Snare and x-stick alternating (used on snare drum)	Two sonics played on the snare drum creating a call and answer effect within one measure
31	Syncopation (stressing or omitting notes between and including main beats)	Create irregular drum patterns by playing accents on weak beats usually not accented and/or the omission and displacement of notes
32	Two-bar pattern (signature pattern over two bars each differing from the other)	Call & answer patterns allowing for greater technical flexibility, creativity, orchestration, and expanded rhythmic/pattern variations

1.6 Creating a procedure for the integration of techniques

The project has developed a procedure of learning these signature patterns with a view to broader implementation by others. This procedure entails a series of exercises incorporating sequential steps that deconstruct and reintegrate all rhythmic layers within each pattern. This process has also assisted in the analysis of each selected pattern. An example of this process, as applied to Sly Dunbar's pattern in *Motherless Children* (Figure 2), is presented in Table 5, which identifies and isolates all possible rhythmic permutations within it.

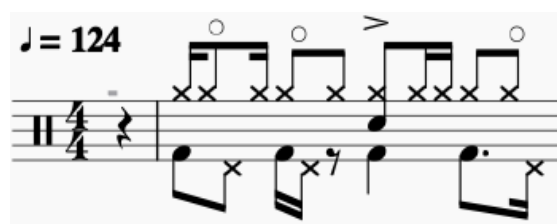
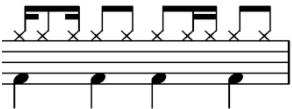
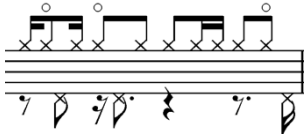




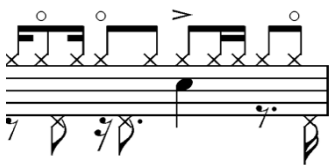





Figure 2. Signature pattern by Sly Dunbar in *Motherless Children*

Table 5. Stepwise exercises for the integration of techniques in Sly Dunbar's *Motherless Children*

Step	Drum components/limbs employed (right-handed drummer)	Transcription
1	Hi-hat Right-hand	
2	Snare Left-hand	
3	Bass drum Right-foot	
4	Pedal hi-hat Left foot	
5	Hi-hat with snare Right-hand and Left-hand	

Step	Drum components/limbs employed (right-handed drummer)	Transcription
6	Hi-hat with bass drum Right-hand and Right-foot	
7	Hi-hat with pedal hi-hat Right-hand and Left foot	
8	Snare with bass drum Left-hand and Right-foot	
9	Snare with pedal hi-hat Left-hand and Left foot	
10	Bass drum with pedal hi-hat Right-foot and Left foot	
11	Hi-hat with snare and bass drum Right-hand, Left-hand, and Right foot	
12	Hi-hat with snare and pedal hi-hat Right-hand, Left-hand, and Left foot	
13	Hi-hat with bass drum and pedal hi-hat Right-hand, Right-foot and Left-foot	
14	Snare with bass drum and pedal hi-hat Left-hand, Right-foot and Left-foot	

Step	Drum components/limbs employed (right-handed drummer)	Transcription
15	Completed pattern: Hi-hat with snare, bass drum and pedal hi-hat Right-hand, Left-hand, Right-foot, and Left-foot	

The following synopsis of Sly Dunbar's pattern can therefore be determined:

- Techniques: Syncopation (RH & LF), half-time feel, open hi-hats (beats 1,2 and 3 +), four-limb integration, step hi-hat, layering and rim-shot on snare. Likely not intended: juxtaposed rhythm played on step hi-hat (preceded by open hi-hats) contrasting with rhythms played on other three limbs.⁶⁵
- Stylistic influences: Four-drop *reggae* feel (bass drum anchor on all four crotchet beats). Hi-hat pattern is adapted from *Ska* rhythms,⁶⁶ and indirectly references *Mambo* patterns often used in *Ska*.⁶⁷

1.7 Creating a rhythmic profile and rhythmic footprint

The creating of rhythmic profiles and footprints exposes the linear rhythm and three-dimensional structure of a drum pattern without indicating its timbral or sonic qualities. This procedure is employed in the construction of rearranged and new patterns when contrasted to the profiles and footprints of the original pattern, retaining the rhythmic integrity of all related patterns in the process.

Table 6. Stepwise process for creating a rhythmic profile and rhythmic footprint

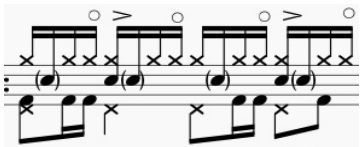


Step	Procedure
1	Selection of drum pattern and relevant details
2	Create a rhythmic profile of the pattern by compressing all drum components played in the original pattern to a single line using only one note per sub-division beat and retaining original note values
3	Expand rhythmic profile to a rhythmic footprint by adding one note for every drum component played on any given note within the pattern, adding three-dimensional density to the footprint.

⁶⁵ *Juxtaposed rhythm*: the placing of two rhythms side by side creating an interesting and contrasting effect

⁶⁶ *Ska* is a music genre that originated in Jamaica in the late 1950s and was the precursor to *rocksteady* and *reggae*. It combined elements of Caribbean *mento* and *calypso* with American *jazz* and *rhythm 'n' blues*

⁶⁷ *Mambo* is of Cuban origin which resembles and is influenced by *rumba* and the *cha-cha* rhythms

Table 7. Creating a rhythmic profile and rhythmic footprint of Bernard Purdie’s *Memphis Soul Stew*

Step	Procedure	Transcription
1	Signature pattern Song: <i>Memphis Soul Stew</i> Drummer: Bernard Purdie	
2	Create a rhythmic profile of the pattern by compressing all drum components (voices) played in the original pattern to a single line using only one note per sub-division beat and retaining original note values e.g., first semi-quaver in the original pattern has three drum components being played simultaneously being hi-hat, bass drum and foot hi-hat, they are compressed into one note.	
3	Expanding the rhythmic profile to a rhythmic footprint by applying one note for every drum component (voices) played on the original pattern on any given note, adding three-dimensional density to the footprint e.g., first semi-quaver in the original pattern has hi-hat, bass drum and foot hi-hat being played simultaneously and thus three notes are placed on the ‘rhythmic footprint’ of the measure. (See Step 7, p.26)	

1.8 Creating a procedure for rearranging signature drum patterns

The procedure and stepwise process for rearranging drum patterns is presented below (see Table 8). This process is also used in the composing of new (reimagined) patterns. Step 4 of the process is repeated until a viable rearranged pattern is achieved. The counting of notes across all four limbs within the pattern is employed to assess the (effects of) techniques to be implemented when rearranging drum patterns this way. The stepwise process is applied to accomplish such rearrangements (see Tables 10-41). This process aims to assist contemporary drummers to implement the techniques and stylistic influences identified through the research.

Development of the stepwise process was underpinned by Bruford’s observations on ‘compositional practice’ in his aforementioned book, in which he states, ‘Compositional practice seeks to push boundaries, question understandings, challenge assumptions, contest and define style, and elicit reaction through the imposition upon the music of a personalized interpretation.’⁶⁸

The procedure presented allows for a personalized interpretation of rhythmic patterns and provides a stepwise process for the contemporary drummer to develop (creative) compositional practice whilst simultaneously contributing to drumming pedagogy.

⁶⁸ Bill Bruford, *Uncharted*: 45.

Table 8. Stepwise process for *rearranging* signature patterns

Step	Procedure
1	Selection of signature pattern entailing transcription and all relevant details
2	Analyze the techniques and stylistic influences employed, creating a rhythmic profile of the source pattern
3	Create a rhythmic footprint of the source pattern and identify techniques and stylistic influences to be implemented in the new/rearranged pattern (as used by selected drummer or self)
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified. This step is repeated until a viable pattern is composed and rehearsed.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern
6	Count the notation of the rearranged pattern against the original pattern, identifying the potential challenges and workability of the new/rearranged pattern (see Part Two commentary notes and Step 6 observations)
7	Completed rearranged pattern entailing transcription and all relevant details

To make these investigative and applicative steps clearer, five concrete examples of rearranged patterns are outlined below. The examples describe the process of rearrangement by implementing the specific techniques and stylistic influences identified within this research. This integration is achieved by applying each drummer's individual processes to an identified pattern and creating a rearranged pattern.

The documented analysis of techniques implemented entail a breakdown of technical and stylistic elements employed including the processes of application. Evaluation entails identifying techniques and devices as applied, their assignment to individual limbs, and to which component of the drum kit. These processes are distilled into a method able to be implemented to pop/rock drum patterns and broader performance practice. This method will encapsulate a broad palette of techniques and devices representing a culmination of the rhythmic syntax of the six drummers. Purdie's signature pattern in *Memphis Soul Stew* (below) has been rearranged into five variations by applying techniques through the systematic seven-step process described above. The newly created patterns demonstrate the viability of stepwise processes developed and which are key components of this research.

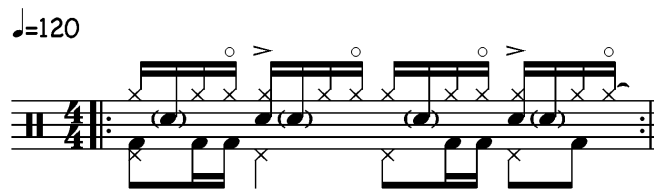


Figure 3. Bernard Purdie's signature pattern in *Memphis Soul Stew* to be rearranged

Bernard Purdie: This pattern is used as a sample for rearrangement to highlight Purdie's incorporation of identified technical elements in a single pattern. The pattern is classified through identification of the following techniques: four-limb integration; linear technique between hi-hat and snare; layering techniques played using all four limbs; ghost notes on the snare drum; open hi-hats with repeated notes on last semi-quaver of each beat and snare accents. Purdie's pattern has twenty-eight notes. Further analysis has revealed the stylistic influence being the hi-hat rhythm, identified as a jazz/swing ride pattern modulated from quaver triplets to a semi-quaver sixteenth note as applied to the funk-soul genre. This stylistic adaptation is particularly relevant to the 1970s in the pop/rock genre employing the technical devices identified above.

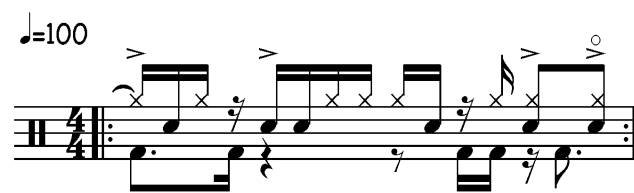


Figure 4. *Memphis Soul Stew* rearranged using **Zigaboo Modeliste** techniques

Zigaboo Modeliste: This transcription applies the *New Orleans/Second-line* stylistic influence often adopted in Modeliste's approach in his performances. The technical devices incorporated include an open-handed ambidextrous approach between the snare and hi-hat; four-limb integration; open hi-hat accents; linear technique and ending with a layered rhythm inclusive of accents and interplay between the snare, bass drum and hi-hat. The transcription above (figure 4) duplicates Purdie's rhythm by the redistribution of the rhythms around the drum kit utilising a more linear and syncopated approach. The pattern incorporates twenty individual notes as opposed to Purdie's pattern having twenty-eight. This reduction of notes exemplifies economy of performance by applying Modeliste's method of

approach. The rearrangement expands creative awareness and requiring four-limb integration through its use of the identified devices though best suited to a tempo of 100 bpm (not 120bpm).

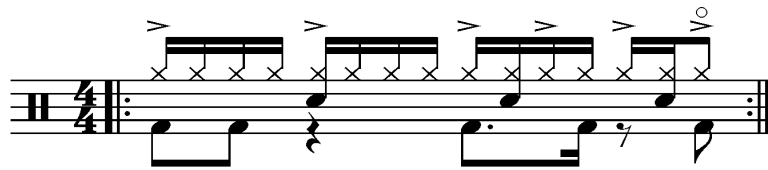


Figure 5. *Memphis Soul Stew* rearranged using **Sly Dunbar** techniques

Sly Dunbar: In this transcription we apply Dunbar's processes including the layering technique with multiple accents played on the hi-hat, being on quarter notes beats of 1,2,3 & 4 plus the + of beat 3. This approach is an example of a *reggae/funk* rhythm in a sixteenth-note form comprising modulating accents and an open accent on the hi-hat on the + of beat 4. The syncopated bass drum pattern compliments Purdie's signature pattern employing snare rhythms which also imply the stylistic influence of Ska via the displaced accents. This rearranged pattern (figure 5) creates unique rhythms within its structure, including rhythmic shifts between all four limbs. Deletion of the ghost notes on the snare drum produces a stronger, more angular pattern. The pattern has four less notes than Purdie's pattern while rhythmically emulating the original pattern.

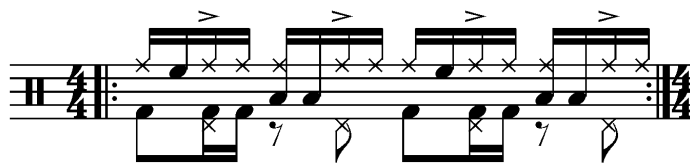


Figure 6. *Memphis Soul Stew* rearranged using **Ginger Baker** technique

Ginger Baker: Baker's assimilation of Jazz is applied here to the ride cymbal and replicates Purdie's modulation of the triplet quaver rhythm being converted to a semi-quaver syncopated rhythm on the ride cymbal (figure 6). The left-hand orchestration on the small and large toms (rather than the snare drum) evokes West-African Yoruba *Bata* drums in tonality. Baker's four-limb integration utilizes the left foot playing hi-hat on all up-beats (+ 's) which replicates the hi-hat pattern on beats 2 & 4 (backbeats) of a swing /jazz rhythm, applied in cut-time. The pattern itself is similar to Purdie's aside the displacement of the hi-hat rhythm to the ride cymbal and snare pattern orchestrated to the small-

tom and floor-tom, producing a timbral contrast to the signature pattern. Baker's technical syntax allow for the duplication of the original rhythms and application at the original tempo of 120 bpm.

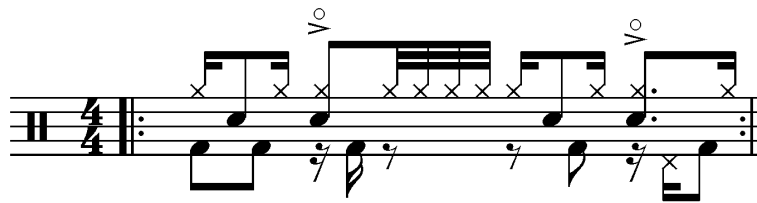


Figure 7. *Memphis Soul Stew* rearranged using **Steve Gadd** techniques

Steve Gadd: Gadd's processes in applying multiple techniques simultaneously is highlighted in this rearrangement as can be seen in the transcription above (figure 7). Purdie's signature pattern is replicated in the rearrangement process and orchestrated according to Gadd's rhythmic syntax. Notwithstanding the complexity of techniques implemented, this rearranged pattern has five less notes than Purdie's pattern. All notes within the semi-quaver *rhythmic profile* are utilised employing a complex process of technical application. Gadd's orchestral and drum corps stylistic influences are applied by implementing his ambidextrous open-handed approach with the left hand playing hi-hat inclusive of a five-stroke roll and open hi-hat accents on beats 2 & 4. This process highlights the importance of the hi-hat in Gadd's performances. Additionally, the syncopated bass drum rhythm implements his stylistic influence in *funk*. This is a challenging rhythm to execute requiring spatial awareness with limb independence being a focal point and best suited to 100 bpm.

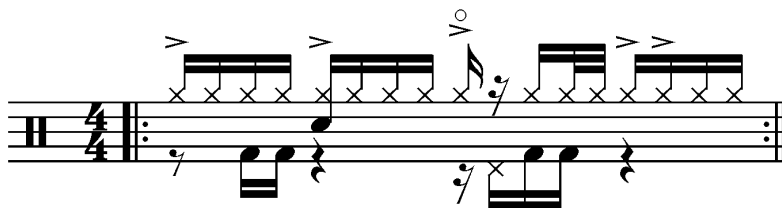


Figure 8. *Memphis Soul Stew* rearranged using **Stewart Copeland** techniques

Stewart Copeland: The rearranged pattern duplicates Purdie's signature pattern implementing Copeland's *rock* and *reggae* influences. This process engages Copeland's process in omitting the bass drum on beats 1 & 3, retaining the last two semi-quaver beats pre-empting the snare accents of beats 2 & 4 (backbeats) and partially replicating the original bass drum pattern. The left- hand pattern reverts

to a simple accent on beat 2 of the bar (removing all ghost notes) typical of Copeland's reggae influenced approach (snare on beat 3). The hi-hat rhythm plays semi-quavers and accents all downbeats (1,2,3,4) with an open hat accent on beat 3 (replacing the omitted bass drum) which implies a *reggae 1-drop* (one bass drum beat per bar). Four-limb integration and 32nd note embellishments on the hi-hat on beat 3, represent additional techniques employed in Copeland's processes. In its completed form, the transcribed pattern (figure 8) is typical of Copeland's innovative rhythmic nuances and assist in expanding one's drum vocabulary. The transcription comprises twenty notes, five less than Purdie's, and is comfortable when played at 100 bpm as opposed to 120 bpm.

1.9 Practising rearranged and new patterns

A sonic diary is used in assessing the viability of the rearranged patterns when practising to recordings of the originals tracks on which they are based. This entails practising along to backing tracks to be used in the CD recordings which are without drums and allow for new and rearranged patterns to be rehearsed, replacing the original drum patterns (see Video 50). ⁶⁹




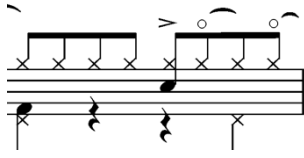


Performance-practice comprises practising songs as originally recorded by the six drummers in addition to two further versions featuring the rearranged patterns, and new patterns composed employing identified techniques as used by the author. Each piece showcases the application of different stylistic and technical concepts. Although rehearsing the repertoire is a fundamental part of the study, the aim is to employ the techniques of the identified artists to develop a creative process then can be integrated into a performance context. The steps include the practising of isolated rhythms assigned to each limb, in addition to the complete drum pattern (see Tables 2 and 5).

⁶⁹ The catalogue of sonic and video diaries used in this study for the purpose of assessing viability of rearranged and new patterns, were not submitted as to not duplicate commentary and observations embedded in Part Two and in Part Four: Audio and Video Recordings, thus not adding unnecessary bulk to the thesis.

1.10 Creating a procedure for composing innovative patterns

The following transcriptions detail the steps developed for this method as seen in Table 9 using Michael Jackson's *Billie Jean* as the selected pattern to employ techniques.

Table 9. Process for composing innovative patterns using *Pop/Rock* pattern from *Billie Jean*

Step Details	Techniques	Styles	Transcriptions
1 Select pattern and identify existing techniques and styles	<i>Accents</i> (T1) on beats 2 & 4 Notes in pattern: 12	Style: <i>Pop/Rock</i> Song: <i>Billie Jean</i> Drummer: Leon (Ndugu) Chancler Artist: Michael Jackson	
2 Apply initial techniques noting any stylistic influence created	<i>Open hi-hats</i> (T12) on + of beats 3 & 4 introduces <i>pedal hi-hats</i> (T13) on beats 1&4) employed with <i>four-limb integration</i> (T9) adding a third technique Drummer influence: Bernard Purdie	No stylistic change intended though a <i>funk</i> hybrid is created	
3 Apply additional techniques and note any stylistic influences created	<i>Accented</i> (T1) snare on beat 3 highlights and strengthens the <i>layering</i> technique (beats 1,3&4) employing a further two techniques Drummer influence: Ginger Baker	The five techniques employed create a <i>Motown/funk</i> stylistic influence	
4 Apply additional techniques and note any stylistic influences created	<i>Omission</i> (T19) of the snare on beats 2 and 4 and bass drum on beat 3, establishes a <i>half-time pattern</i> (T10) employing a further two techniques Drummer influence: Sly Dunbar, Bernard Purdie	The technical variation introduces a <i>reggae/funk</i> stylistic influence (variation on <i>reggae rockers</i>)	
5 Apply additional techniques and note any stylistic influences created	Bass drum <i>displacement</i> (T8) on beat, adding <i>ghost notes</i> (T27) on beat 2, effecting <i>syncopation</i> (T31) and reinforcing the <i>half-time pattern</i> Drummer influence: Stewart Copeland, Bernard Purdie	The addition of three techniques creates a hybrid of <i>funk/hip-hop/fusion</i> stylistic influences	
6 Apply final techniques noting stylistic influences and total techniques employed. Techniques employed: 13 Stylistic influences: 5 Notes in pattern: 10	Further hi-hat <i>syncopation</i> with an <i>open-handed</i> (T20) approach employing <i>linear</i> (T18) sticking across the snare & hi-hat with <i>step hi-hat</i> (T14) on beat 1. Drummer influence: Steve Gadd, Zigaboo Modeliste	The three technical additions create a <i>funk/hip-hop/reggae</i> stylistic hybrid.	

PART TWO: Commentary, Stepwise Processes, and Transcriptions of Patterns

Part Two presents the procedures and stepwise processes as applied to the sixteen signature patterns and corresponding recordings. The signature patterns are divided into three sections and include commentary, analyses, and methods as applied to each recording. The three sections are detailed over five pages which include processes as applied to signature patterns leading to the rearranged and new patterns respectively. The stepwise processes and accompanying transcriptions apply methods created within study and provide the technical data employed in their application. Each section forms the (theoretical) core of the forty-eight recordings highlighting the viability of methods as presented in Part One and in tabular form in Part Two of the dissertation. Sources are categorised into either pedagogical or performance and are reviewed accordingly.

2.1 Commentary and performance/recording notes on signature pattern 1: *Babylon Sisters* by Bernard Purdie

Babylon Sisters was recorded by American jazz-rock band *Steely Dan* and appears on their seventh studio album called *Gaucho*, released on November 21, 1980. Bernard Purdie was the session drummer on the track. The original recording can be heard using the footnote link.⁷⁰

Babylon Sisters is associated with Purdie's iconic and innovative 'half-time shuffle' and has become a template for its use of ghost notes and four-limb integration. The employment of pedal hi-hat on beats 1, 2, 3 & 4 underpins the pattern creating a recurring open hi-hat on the last triplet quaver of each beat. The open hi-hats are not accented but become part of the forward motion of the rhythm reinforcing the triplet feel and adding to the sonic variation between shuffled hi-hats, ghosted (and accented) snare drum and a syncopated bass drum rhythm. Jeff Potter's 'Hitmaker' article was a definitive source of reference when selecting Purdie's signature pattern in *Babylon Sisters* for this study.⁷¹

The pattern is layered in note density contrasting to a linear approach between the shuffled hi-hat and snare drum creating a rolling triplet, punctuated by the snare accent on beat 3 giving it its half-time shuffle. Purdie states that *Babylon Sister* is a two-bar pattern, however, it has been aggregated to the one-bar pattern below, as played in Purdie's original recording and recognised as the signature pattern.

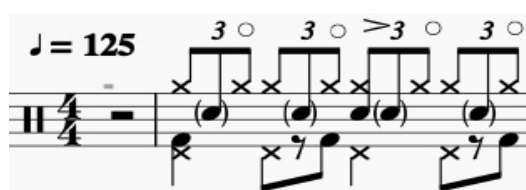


FIGURE 9. SIGNATURE PATTERN 1: *BABYLON SISTERS* BY BERNARD PURDIE

Observations during the practising and recording of this pattern highlight the limb coordination and independence required to facilitate its performance on the drum set. A command of snare drum technique is required in the execution of ghost notes and the snare accent. Combining the pedal hi-hat (ostinato) in unison with hi-hat shuffle pattern being played over the syncopated bass drum requires a command of four-limb integration. Contrasting syncopated rhythms combine to create an innovative pattern complementing the song arrangement and accompanying instrumental parts.

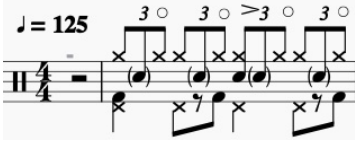





Purdie's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription. The recording includes additional patterns from the introduction, chorus, and bridge sections of the song. The recordings and score are aggregates of Purdie's patterns as per the original recording and as presented in Score 1 and Tracks 1 & 2.

The additional recordings of *Babylon Sisters* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁷⁰ Steely Dan, *Babylon Sister*, HQ Audio, LYRICS, YouTube video, 5:48, recorded November 1980, posted by mirrorro77, November 2, 2013, accessed April 24, 2021, <https://www.youtube.com/watch?v=pAuPMJJK92s>

⁷¹ Jeff Potter, "Bernard Purdie: The Hitmaker," *Modern Drummer*, October 2012, pp. 56-57.

Table 10. Rearrangement of Bernard Purdie’s signature pattern in *Babylon Sisters* using the stepwise process, applying techniques and stylistic influences as used by Zigaboo Modeliste

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Babylon Sisters</i> Drummer: Bernard Purdie 20 notes played in pattern Tempo: 125 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T10. Half-time pattern T12. Hi-hat open T13. Hi-hat pedal T17. Layering T27. Snare drum: ghost notes Analysis of the hi-hat identifies the stylistic influence of Blues-shuffle as applied to the half-time shuffle.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Modeliste to be implemented in the rearranged pattern 	Techniques to be implemented as used by Zigaboo Modeliste: T1. Accents T8. Displacement T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T18. Linear T20. Open-handed approach T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans) 2/3 clave in quaver-triplets.
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Modeliste 	Use of the <i>linear</i> technique produces less notes in the pattern incorporating <i>displacement</i> and <i>syncopation</i> in addition to <i>open hi-hats accent</i> . <i>Open-handed</i> technique creates an ambidextrous approach. The half-time feel is retained with <i>accent</i> on beat 3. Voicings comprise three components of the drum kit being snare, hi-hat, and bass drum as per Purdie’s pattern. Zigaboo’s stylistic influence is New Orleans second-line, which has an implied, though varied, 2/3 clave, played in a quaver-triplet form.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Modeliste’s use of the <i>linear</i> technique voices the rhythm between three drum components creating a fluidity and openness in the rearranged pattern as opposed to the signature pattern. Purdie’s layering of the shuffle hi-hat, overlapping snare <i>ghost notes</i> and <i>open hi-hats</i> is implemented employing the <i>layering</i> technique, not replicated by Modeliste’s processes. Integrated is Modeliste’s stylistic influence of the New Orleans second-line rhythm, is voiced and implied between the bass drum, snare, hi-hat, and hi-hat accent.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	13 notes in the rearranged pattern versus 20 notes in Purdie’s pattern highlights the differences in <i>linear</i> and <i>layering</i> techniques through Modeliste’s use of <i>displaced</i> accents, <i>syncopated</i> snare, and hi-hat.
7	Rearranged pattern Song: <i>Babylon Sisters</i> Techniques/Styles as used by Zigaboo Modeliste 13 notes in pattern Tempo range 100-120 bpm Drum kit components used: Three	

2.2 Commentary and performance/recording notes on signature pattern 1: *Babylon Sisters* by Bernard Purdie applying techniques and stylistic influences as used by Zigaboo Modeliste

Applying the linear technique creates a pattern with less rhythmic density. This is achieved by employing displacement and syncopation in addition to the open hi-hat accent. The employment of open-handed technique (and stickings) creates an ambidextrous pattern requiring technical flexibility.

Voicings in the rearranged pattern comprise three components of the drum kit, being snare, hi-hat, and bass drum, replicating Purdie's signature pattern. Modeliste's stylistic influence of the New Orleans second-line rhythm, has been integrated, based on a 2/3 clave, implied between the bass drum, snare, hi-hat, and hi-hat accent.

Modeliste's use of the linear technique creates fluidity and openness in the rearranged pattern as opposed to the original pattern. Purdie's layering of the shuffle hi-hat, created by the overlapping snare ghost notes and accented open hi-hats on the third quaver of each beat, is not replicated by Modeliste's processes.

There are 13 notes in the rearranged pattern versus 20 notes in Purdie's pattern, highlighting the differences between linear and layering techniques. Modeliste's use of displaced accents and syncopated snare & hi-hat is employed. The rearranged pattern reinforces the functionality of the pattern in areas of tempo and musicality despite rhythmic variations to the original.

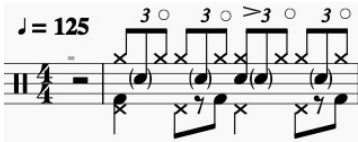



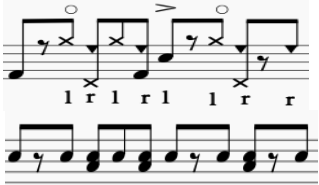



FIGURE 10. SIGNATURE PATTERN 1: *BABYLON SISTERS*. REARRANGED PATTERN- ZIGABOO MODELISTE

Observations during the practising and recording of this pattern highlight the syncopated nature of Modeliste's approach requiring a technical command of coordination and independence on the drum kit. The four-limb integration and orchestration of voicings employed combine to create contrasting rhythms (individual limbs), retaining relevance and suitability to the original recording.

The submitted recordings (Tracks 3 & 4) include rearranged patterns duplicating those from the introduction, chorus, and bridge sections of the original song. The recordings and score (Score 2) are rearranged aggregates of Purdie's patterns as per the original recording.

Table 11. New arrangement of Bernard Purdie’s signature pattern in *Babylon Sisters* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Babylon Sisters</i> Drummer: Bernard Purdie 20 notes played in pattern Tempo: 125 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T10. Half-time pattern T12. Hi-hat open T13. Hi-hat pedal T17. Layering T27. Snare drum: ghost notes Analysis of the hi-hat identifies the stylistic influence of blues-shuffle as applied to the half-time shuffle.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena T1. Accents T5. Cowbell T9. Four-limb integration T11. Hi-hat: accent T13. Hi-hat pedal ostinato T19. Omission of notes T20. Open-handed approach T21. Orchestration T31. Syncopation Stylistic influence: Afro-Cuban cowbell and reggae one-drop.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Use of the <i>cowbell</i> , hi-hat <i>accents</i> and <i>syncopated</i> hi-hat creates a sonically complex pattern. The <i>pedal hi-hat</i> fulfills the time-keeping role in playing beats 2&4 whilst the snare <i>accent</i> on beat implies the half-time shuffle and replicating Purdie’s original pattern. The new pattern is orchestrated over four components of the drum kit, being snare, cowbell, hi-hat, and bass drum.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Purdie’s signature pattern employs a <i>layered</i> technique creating continuity with a shuffle hi-hat pattern and snare <i>ghost-notes</i> whereas the new pattern has only three hi-hat notes and emphasizes beats 2,3 & 4 creating a staggered and regimented pattern. The integration of stylistic influences Afro-Cuban and reggae one-drop is achieved by composing the <i>cowbell</i> in a <i>syncopated</i> form on shuffle beats 2 & 4, duplicating hi-hat, x-stick <i>accents</i> , and snare <i>accent</i> on beat 3, as used in reggae rhythms.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	12 notes in the new pattern compared to 20 notes in Purdie’s pattern highlights the differing technical approaches employing syncopated rhythms underpinned by sparse bass-drum usage. Performance of this pattern reinforces the feasibility of the new pattern at 125 bpm in tempo, musicality, and technical adaptation.
7	New pattern Song: <i>Babylon Sisters</i> Techniques/Styles as applied by Enrico Morena 12 notes in pattern Tempo range 100-120 bpm Drum kit components used: Four	

2.3 Commentary and performance/recording notes on signature pattern 1: *Babylon Sisters* by Bernard Purdie applying techniques and stylistic influences as used by Enrico Morena

The use of the cowbell, open hi-hat accents and syncopated hi-hat creates a sonically complex pattern. The pedal hi-hat fulfills the time-keeping role in playing beats 2 & 4 whilst the snare accent on beat 3 implies the half-time shuffle, replicating Purdie's signature pattern.

Purdie's pattern employs a layered technique creating continuity with a shuffle hi-hat pattern and snare ghost-notes whereas the new pattern has only three hi-hat notes and emphasizes beats 2,3 & 4 (cowbell and snare, aside bass drum on beat 1) creating a staggered and somewhat regimented pattern.

Integrating the stylistic influences of Afro-Cuban cowbell and a reggae one-drop is achieved by implementing the cowbell in a syncopated form on shuffle beats 2 & 4, duplicating hi-hat and x-stick accents rhythms as used in reggae.

There are 12 notes in the new pattern compared to 20 notes in Purdie's pattern highlighting the differing technical approaches and employment of syncopated rhythms underpinned by sparse bass-drum rhythm. The new pattern employs four components of the drum kit, being snare, cowbell, hi-hat, and bass drum. Performance of this pattern reinforces the workability of the new pattern at 125 bpm in tempo, musicality, and technical adaptation.

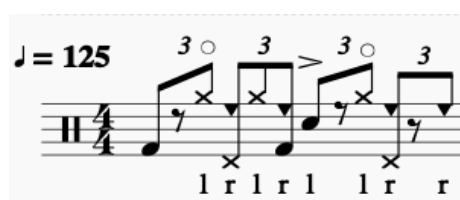


FIGURE 11. SIGNATURE PATTERN 1: *BABYLON SISTERS*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the application of four-limb integration (voicings) whilst implying a common-time metre (against half-time feel) with pedal hi-hat on beats 2 & 4, as mentioned above. Employing four-limb integration on respective drum kit components creates interlocking rhythms combining in effecting a sonically rich pattern.

The new pattern, as heard in the recordings (Tracks 5 & 6) and transcribed in the corresponding score (Score 3) highlights the imaginative use of syncopated linear and layered techniques (upper and lower registers on drum kit respectively) aided by stylistic and orchestrated creativity.

All patterns played in the original recording are rearranged on the new recording as they appear in transcription and performance. The recording and score are rearranged aggregates of Purdie's patterns as in the original song recording.

2.4 Commentary and performance/recording notes on signature pattern 2: *Chuck E.'s in Love* by Steve Gadd

Chuck E.'s in Love is a song by American singer-songwriter Rickie Lee Jones. Released in 1979 on her eponymous debut album *Rickie Lee Jones*, the song became her biggest hit, reaching number 4 on the Billboard U.S. Hot list. Steve Gadd was the session drummer on the track. The original recording can be heard using the footnote link.⁷²

Gadd plays a laid-back half-time shuffle in this pattern created by a snare drum accent on beat 3 of the bar whilst accenting the hi-hat on beats 2&4 effecting a common-time pulse against the half-time metre. Gadd varies the signature pattern throughout the song with a two-bar verse pattern being recognised as the signature pattern in this study. These variations exemplify the creativity and innovations in his approach and application of techniques. Bill Milkowski's insightful article 'The Ultimate Groove' was instrumental in the selection of Gadd's pattern for this study.⁷³

A syncopated snare in the 2nd bar (third triplet quaver of beat 1) is underpinned by the syncopated bass drum, ending with an open hi-hat accent on beat 4 and resolving on beat 1 of the 1st bar. Subsequently, though rhythmically sparse, the pattern is highly effective utilising four-way integration. Nuance is achieved through technical and notational diversity.

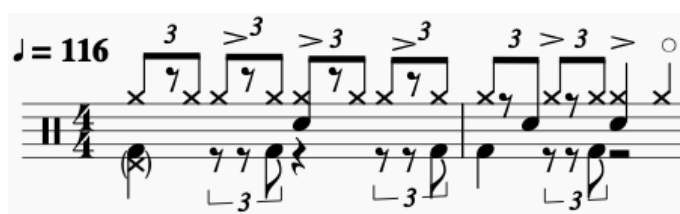


FIGURE 12. SIGNATURE PATTERN 2: *CHUCK E'S IN LOVE* BY STEVE GADD

Observations during the practising and recording of this pattern highlight the jazz/blues influence in Gadd's approach requiring a mastery of coordination and independence on the drum kit. Drum kit voicings incorporated in Gadd's pattern involve executing four opposing, syncopated rhythms with particular attention given to technical command of accents, combining to create a well-crafted pattern.





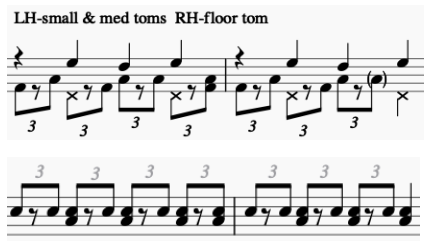

Gadd's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription. The recordings include additional patterns from differing sections of the song. The recordings and score are aggregates of Gadd's patterns as per the original recording and as presented in Score 4 and Tracks 7 & 8.

The additional recordings of *Chuck E.'s in Love* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁷² Rickie Lee Jones. *Chuck E.'s In Love*, YouTube video, 3:34, recorded 1979, posted by QuinhoMaluku, May13, 2009, accessed April 28, 2021, <https://www.youtube.com/watch?v=JrLgvQzzzqE>

⁷³ Bill Milkowski, "Steve Gadd. The Ultimate Groove." *Traps: The Art of Drumming*, Winter 2009, pp. 26-43.

Table 12. Rearrangement of Steve Gadd’s signature pattern in *Chuck E.’s in Love* using the stepwise process, applying techniques and stylistic influences as used by Ginger Baker

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Chuck E.’s in Love</i> Drummer: Steve Gadd 22 notes played in two-bar pattern Tempo: 116 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Steve Gadd: T1. Accents T4. Common & half-time simultaneously T8. Displacement T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Steve Gadd: blues shuffle, jazz, half-time shuffle
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Baker to be implemented in the rearranged pattern 	Techniques to be implemented as used by Ginger Baker: T9. Four-limb integration T12. Hi-hat pedal (as ostinato) T17. Layering T21. Orchestration T31. Syncopation T32. Two-bar pattern Stylistic influence: swing, jazz, West-African <i>Yoruba 12/8 Bata</i> drums timbre and patterns
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Baker 	Use of the <i>layering</i> technique combined with <i>four-way integration</i> create juxtaposed rhythms and a denser pattern underpinned by <i>hi-hat pedal</i> over the two bars on beats 2 & 4. Sound sources comprise five components of the drum kit, being small/med and floor toms, hi-hat, and bass drum. No snare drum.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern. LH-small & med toms RH-floor tom 	Baker’s use of the <i>layering</i> technique with overlapping toms, create timbral fluidity augmented by a <i>syncopated</i> bass drum not dissimilar to Gadd’s bass drum rhythm, though the use of differing drum components in both patterns is sonically evident. Gadd’s pattern implies a <i>cut-time</i> and <i>half-time</i> feel/metre simultaneously by his use of accents on beats 2&4 on the hi-hat whereas Baker’s techniques allow for the timbral implication of it. Baker’s use of techniques combined with West-African stylistic influence and a swing/jazz sensibility result in a resonant and percussive pattern in triplet form. The rearranged pattern is rhythmically appropriate at the original tempo of 116 bpm.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	22 notes in the rearranged pattern replicates 22 notes in the original pattern and highlights the differing sonic approaches though rhythmic similarities exist. Performance of this pattern reinforces the viability of the rearranged pattern in areas of tempo, musicality, and rhythmic density despite differing technical applications to the song.
7	Rearranged pattern Song: <i>Chuck E.’s in Love</i> Techniques/Styles as used by Ginger Baker 22 notes in two-bar pattern Tempo range: 100-120 bpm Drum kit components used: Five	

2.5 Commentary and performance/recording notes on signature pattern 2: *Chuck E.'s in Love* by Steve Gadd applying techniques and stylistic influences as used by Ginger Baker

The rearranged pattern highlights Baker's use of the layering technique incorporating small-tom accents on beats 2&4 applied using syncopated-orchestration, underpinned by a pedal hi-hat on beats 2&4. Further orchestration takes place using med and floor-toms layered over the bass drum rhythm. Rearrangement is achieved by the shuffle rhythm being played between the three toms as opposed to the hi-hat.

Baker's use of the layering technique with overlapping toms is applied here to create timbral fluidity augmented by a syncopated bass drum not dissimilar to Gadd's bass-drum rhythm, though the use of differing drum components in both patterns is sonically evident. Gadd's pattern implies a cut-time and half-time feel/metre simultaneously by his use of accents on beats 2&4 on the hi-hat whereas Baker's techniques allow for the timbral implication of it.

Baker's use of techniques combined with West-African 12/8 Yoruba *Bata* drums stylistic-influence and a swing/jazz sensibility result in a resonant and percussive pattern in triplet form. The rearranged pattern can be played with rhythmical relevance at the original tempo of 116 bpm. 22 notes in the rearranged pattern replicates 22 notes in the original pattern and highlights the differing sonic approaches though rhythmic similarities exist.

Sound sources comprise six components of the drum set, being snare, hi-hat, bass drum and all three toms which highlight the timbral density of Baker's sonic choices influenced by his affinity of and for West-African *Bata* drums in a Yoruba 12/8 pattern (6/8 Nanigo) rhythm.

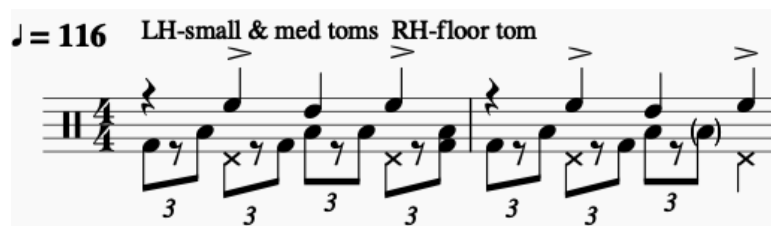




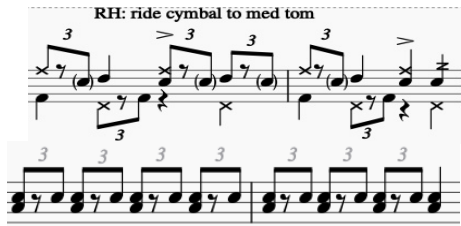
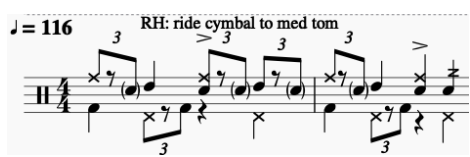


FIGURE 13. SIGNATURE PATTERN 2: *CHUCK E.'S IN LOVE*. REARRANGED PATTERN - GINGER BAKER

Observations noted during the practising and recording of the rearranged pattern highlighted the musical adaptability in the Baker-influenced pattern employing four-way integration requiring technical command of independence. The respective drum components employed, create interlocking rhythms combining to create a functional and creative drum pattern.

The bridge and chorus section of the recordings (Tracks 9 & 10) include additional rearranged patterns which duplicate Gadd's corresponding patterns as played in the original recording. These rearranged patterns further demonstrate Baker's choice of techniques being musically adaptable and if applied imaginatively, can assist in the creating of other innovative patterns. The recordings and score (Score 5) are rearranged aggregates of Gadd's patterns as per the original recording.

Table 13. New arrangement of Steve Gadd's signature pattern in *Chuck E.'s in Love* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Chuck E.'s in Love</i> Drummer: Steve Gadd 22 notes played in two-bar pattern Tempo: 116 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Steve Gadd: T1. Accents T4. Common & half-time simultaneously T8. Displacement of back-beat T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Steve Gadd: blues shuffle, jazz, half-time shuffle
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T4. Common & half-time simultaneously T9. Four-limb integration T21. Orchestration T26. Snare: buzz stroke T27. Snare: ghost notes T31. Syncopation T32. Two-bar pattern Stylistic influence: jazz/swing/be-bop
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementing <i>orchestration</i> allows for a multi-timbral effect underpinned by the snare drum having three dynamic elements to it being, <i>accent</i> , <i>ghost notes</i> and <i>buzz stroke</i> . The medium-tom on beats 2 & 4 imply a <i>common-time</i> 4/4 metre juxtaposed against the <i>half-time</i> shuffle with snare <i>accent</i> on beat 3.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Time and metre are implied by the ride cymbal playing on beats 1&3 and the hi-hat pedal playing beats 2&4 whilst a constant rhythm on beats 2,3 and 4 carries counter-point metre played by the snare drum and medium-tom as mentioned above. <i>Linear</i> technique (though not mentioned above) is also applied to the right/left hand patterns despite the whole pattern having a more <i>layered</i> rhythm. Sound sources comprise five components of the drum kit, being snare, hi-hat, bass drum, medium-tom, and ride cymbal. The new pattern is embedded with applied techniques and timbral variation being musically fluent at the original tempo of 116 bpm.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	The new pattern replicates the 22 notes in Gadd's original pattern, however, the redistribution of notes and timbral variations implemented, highlights creative use of techniques underpinned by the jazz stylistic influence. Performance of this pattern reinforces the viability of the new pattern in areas of tempo and percussive relevance to the original despite differing technical applications.
7	New pattern Song: <i>Chuck E.'s in Love</i> Techniques/Styles as applied by Enrico Morena 22 notes in two-bar pattern Tempo range 100-120 bpm Drum kit components used: Five	

2.6 Commentary and performance/recording notes on signature pattern 2: *Chuck E.'s in Love* by Steve Gadd applying techniques and stylistic influences as used by Enrico Morena

In implementing the layering technique in conjunction with orchestration has allowed for the creation of a multi-timbral pattern juxtaposed with snare drum accents, ghost notes and buzz stroke.

Medium-tom on beats 2 & 4 imply a common-time 4/4 against the half-time shuffle of snare accent on beat 3, whilst the ride cymbal plays on beats 1&3 with hi-hat pedal holding down beats 2&4. Emphasis on beats 2,3 and 4 between the medium-tom and snare establishes an underlying rhythm. Linear technique is applied to the right/left hand patterns despite the complete pattern having layered rhythms.

Voicings comprise five components of the drum set, being snare, hi-hat, bass drum, medium-tom, and ride cymbal. The new pattern is embedded with applied techniques and timbral variations being musically and rhythmically fluent when played at the original tempo of 116 bpm.

Performance-practice reinforces the viability of the new pattern in areas of tempo and percussive relevance notwithstanding differing technical applications. The new pattern replicates the 22 notes in Gadd's original pattern, however, the redistribution of notes and timbral variations implemented, highlights creative use of techniques underpinned by the jazz stylistic influence.



FIGURE 14. SIGNATURE PATTERN 2: *CHUCK E.'S IN LOVE*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the necessity of cohesive limb coordination in addition to left-hand snare technique focusing on accents and varying dynamic execution. Application to the drum set voicings using four-way integration required attention to orchestration whilst creating interlocking rhythms, establishing a viable, sonically rich pattern.

The introduction and chorus sections of the new recordings (Tracks 11 & 12) include additional patterns, as per transcriptions (Score 6) corresponding with Gadd's original recordings. The new patterns employ open hi-hat accents, rim-click, and cowbell, in a reimagining of the originals. The recordings and score are rearranged aggregates of Gadd's patterns as per the original recording.

2.7 Commentary and performance/recording notes on signature pattern 3: *Cissy Strut* by Zigaboo Modeliste

Cissy Strut is a 1969 funk instrumental recorded by The Meters. Released as a single from their eponymous debut album it reached No. 4 on the R&B Charts and No.23 on the Billboard Hot 100. Modeliste was the drummer with The Meters and recorded the drum track. The original recording can be heard using the footnote link.⁷⁴

The innovative pattern highlights Modeliste's use of the linear technique, aside the snare/hi-hat combo on beats 2,4 & 4+ respectively. The pattern is noted for its use of an open-handed, ambidextrous approach, employing syncopation and the omission of commonly used rhythms in similar patterns, to create an irregular rhythm punctuated with snare rim-shot accents. Modeliste is renowned for playing between the 'cracks', implying a hybrid of straight and swung rhythms to create his own unique feel. Mark Griffith's article from January 2000 was a contributing factor in selecting Modeliste's iconic pattern for this study.⁷⁵

Modeliste's stylistic influence in this pattern, is the New Orleans second-line rhythm, applied (implied) in the 3/2 clave, or in 2/3 and repeated 3/3 clave in other career recordings.



FIGURE 15. SIGNATURE PATTERN 3: *CISSY STRUT* BY ZIGABOO MODELISTE

Observations during the practising and recording of this pattern highlight the percussive nature of Modeliste's approach requiring a technical command of coordination and independence on the drum set. Each limb and drum components employed, enact opposing syncopated rhythms creating this innovative pattern. The optional hi-hat on + of beat 2, is played on the submitted recording and expands on Modeliste's use of it in the original recording. Although the pattern is presented with no open hi-hats or hi-hat accents, these techniques, are applied in the original song recording.



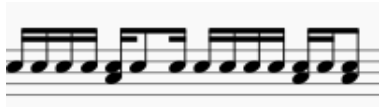

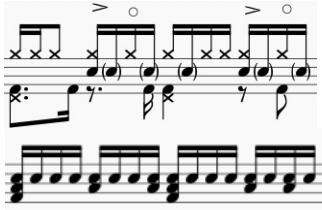

Modeliste does employ four-way integration and is duplicated on the recordings as they appear in transcription. The recordings and score include additional patterns and are aggregates of Modeliste's patterns in the original recording as presented in Score 7 and Tracks 13 & 14.

The additional recordings of *Cissy Strut* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁷⁴ The Meters, *The Meters - Cissy Strut*, YouTube video, 3:06, recorded 1969, posted by lavinder11, January 28, 2010, accessed September 27, 2021, https://www.youtube.com/watch?v=4_iC0MyIyKM

⁷⁵ Mark Griffith, "The Top 50: 'MD' Salutes the Most Influential Drum Grooves," *Modern Drummer*, January 2000, pp. 114-128.

Table 14. Rearrangement of Zigaboo Modeliste's signature pattern in *Cissy Strut* using the stepwise process, applying techniques and stylistic influences as used by Bernard Purdie

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Cissy Strut</i> Drummer: Zigaboo Modeliste 19 notes played in pattern Tempo: 88 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Zigaboo Modeliste: T1. Accents T18. Linear T19. Omission of notes T20. Open-handed approach T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans) implying a 3/2 clave
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Purdie to be implemented in the rearranged pattern 	Techniques to be implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T12. Hi-hat open (as ostinato) T17. Layering T27. Ghost notes T31. Syncopation Stylistic influence: Funk: syncopated hi-hat and bass drum
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Purdie 	Implementing the <i>layering</i> technique incorporates snare drum <i>ghost notes</i> and <i>accents</i> and a <i>syncopated</i> hi-hat pattern, is reinforced by <i>open hi-hats</i> on the '+'s of beats 2 & 4, created by <i>hi-hat pedal</i> being played on beats 1 & 3. Sound sources comprise three components of the drum kit, being snare, hi-hat and bass drum with the open hi-hat adding to the expanded sonic variation of the rearranged pattern
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Purdie's use of the <i>layering</i> technique creates timbral fluidity and is underpinned by a <i>syncopated</i> bass drum pattern, contrasting with Modeliste's <i>linear</i> approach which creates a fragmented and irregular sonic pattern. Purdie's applied techniques allow the rearranged pattern to be played comfortably at the original tempo of 88 bpm. The <i>layering</i> technique and note distribution applied, results in a condensed notational pattern identified with multiple 2-3 note cells and note count (see below)
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	The rearranged pattern comprises 26 in contrast to 19 notes in Modeliste's pattern, highlighting the differing technical approaches though rhythmic similarities do exist. Performance of the rearranged pattern reinforces the viability in areas of tempo and musicality, despite differing rhythmic density and technical applications to the song.
7	Rearranged pattern Song: <i>Cissy Strut</i> Techniques/Styles as used by Bernard Purdie 26 notes in pattern Tempo range 80-100 bpm Drum kit components used: Three	

2.8 Commentary and performance/recording notes on signature pattern 3: *Cissy Strut* by Zigaboo Modeliste applying techniques and stylistic influences as used by Bernard Purdie

The rearranged pattern highlights Purdie's use of the layering technique incorporating snare accents and ghost notes accompanied by a syncopated hi-hat pattern with open accents combined to create a condensed (notational) hi-hat and snare rhythm. Effecting open hi-hats on the + 's of beats 2&4 is created by the hi-hat pedal being played on beats 1&3. Further rearrangement is achieved by the bass drum underpinning and replicating Modeliste's own bass drum rhythm.

Sound sources comprise three components of the drum set, being snare, hi-hat and bass drum with the open hi-hat accents adding to the sonic variation of the rearranged pattern. The composed pattern compromises 26 notes versus 19 notes in Modeliste's pattern, highlighting the differing technical approaches though rhythmic similarities exist.

Performance-practice of this pattern reinforces the viability of it in areas of tempo, musicality, rhythmic relevance, despite having contrasted technical applications to the song.





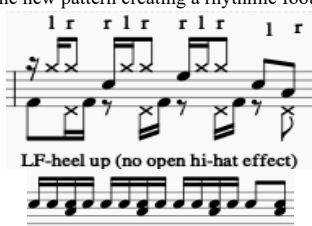



FIGURE 16. SIGNATURE PATTERN 3: *CISSY STRUT*. REARRANGEMENT- BERNARD PURDIE

Key observations during the practising and recording of this pattern highlighted the fluidity in Purdie's syntax when applying four-way integration, highlighting the technical command of independence require. All limbs and drum kit components (voicings) employed create interlocking rhythms combining to create a fluid, viable and creative drum pattern.

The B section of the recordings (Tracks 15 & 16) include an additional rearranged pattern, duplicating Modeliste's corresponding patterns in the original recording. The rearranged pattern, as heard in the recording and transcribed in the corresponding score (Score 8) highlights Purdie's use of syncopated snare, bass drum and hi-hat rhythms (combined), being a rearranged aggregate of Modeliste's patterns in the original recording.

Table 15. New arrangement of Zigaboo Modeliste's signature pattern in *Cissy Strut* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Cissy Strut</i> Drummer: Zigaboo Modeliste 19 notes played in pattern Tempo: 88 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Zigaboo Modeliste: T1. Accents T18. Linear T19. Omission of notes T20. Open-handed approach T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans) implying a 3/2 clave
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T4. Common-time & cut-time implication T9. Four-limb integration T13. Hi-hat: pedal used as ostinato T18. Linear T20. Open-handed approach T21. Orchestration. T31. Syncopation Stylistic influence: samba orchestrated over toms against hi-hat on up-beats creating cut-time feel.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Use of the <i>linear</i> technique implementing <i>orchestration</i> on hi-hat/snare/med-tom/ floor-tom applied with <i>open-handed</i> ambidextrous technique. The new pattern is underpinned by a <i>syncopated</i> bass drum and <i>pedal hi-hats</i> on the + 's of all beats creating a <i>cut-time</i> against the <i>common-time</i> 4/4 metre. Sound sources comprise five components of the drum kit, being snare, hi-hat, bass drum the medium and floor toms.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	The <i>linear</i> technique creates timbral fluidity and is underpinned by a <i>syncopated</i> bass drum and hi-hat pattern in contrast with Modeliste's <i>linear</i> approach which creates a fragmented and irregular sonic pattern. The newly applied techniques allow the pattern to be played comfortably at the original tempo of 88 bpm. Redistribution of rhythms has created a sonic/timbral and percussive pattern in contrast to the original, evident in how it combines the <i>linear syncopation</i> of Modeliste's original pattern, and the fluidity of Purdie's <i>layered</i> rearranged pattern.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	Having 18 notes in the new pattern versus 19 notes in Modeliste's original pattern highlights the redistribution of notes, timbral variations implemented and creative employment of techniques in addition to the samba stylistic influence. Performance of this pattern reinforces its viability in areas of tempo, musicality, percussive fluidity, despite different technical applications to the song pattern.
7	New pattern Song: <i>Cissy Strut</i> Techniques/Styles as applied by Enrico Morena 18 notes in pattern Tempo range 80-100 bpm Drum kit components used: Five	

2.9 Commentary and performance/recording notes on signature pattern 3: *Cissy Strut* by Zigaboo Modeliste applying techniques and stylistic influences as used by Enrico Morena

Use of the linear technique is highlighted by the implementation of orchestration on hi-hat/snare/med-tom/ floor-tom and applied with an open-handed approach. The new pattern is underpinned by a syncopated bass drum and pedal hi-hats on the +’s of all beats creating a cut-time against the common-time 4/4 metre. The employment of the linear technique in orchestration creates timbral fluidity contrasting with Modeliste’s linear approach creating a fragmented and irregular sonic pattern. The pedal hi-hat introduces a layering effect though the upper register evokes a linear rhythm.

The applied techniques function fluently (with technical command) when performed at the original tempo of 88 bpm. The redistribution of notes creates a timbral percussive pattern contrasting with Modeliste’s original. This is evidenced in how it combines the linear syncopation of Modeliste’s pattern with the fluidity of Purdie’s layered pattern to create a hybrid of the two.

Sound sources comprise five components of the drum set, being snare, hi-hat, bass drum, and the medium & floor toms reinforcing the technical application of orchestration.

Performance of the new pattern highlights its functionality in areas of tempo, musicality and technical fluidity notwithstanding the differing techniques used. Both patterns have a similar note count, 18 in the new pattern to 19 in the original despite the timbral variations composed. The new pattern highlights the creative use of techniques and applying a samba influence using the small and floor toms implementing orchestration.



FIGURE 17. SIGNATURE PATTERN 3: *CISSY STRUT*. NEW PATTERN- ENRICO MORENA

Key observations during the practising and recording of this pattern highlighted the importance of fluid linear technique when applied around the drum set using four-way integration, creating a cut-time feel the hi-hat pedal rhythm on (heel down, minimising open hi-hat effect). Each limb and respective drum component employed, create interlocking rhythms combining to create a sonically new pattern.

The B section of the new recordings (Tracks 17 & 18) has an additional pattern which reimagines Modeliste’s corresponding pattern, as played on the original recording. The new pattern, as heard in the recording and transcribed in the corresponding score, (Score 9) highlights the use of syncopated snare, accents and ghost notes with linear snare, bass drum and hi-hat snare accent rhythms combined with the introduction of cowbell on beat 1.

2.10 Commentary and performance/recording notes on signature pattern 4: *Crossroads* by Ginger Baker

On March 10, 1968, Ginger Baker, drummer with Cream, recorded *Crossroads* during a concert at the Winterland Ballroom in San Francisco. The song became the opening number on the live half of Cream's *Wheels of Fire* double album, released in August 1968. The original recording can be heard on the footnote link.⁷⁶

On this recorded live version of *Crossroads*, Baker uses the Motown influence with quarter-notes on the snare underpinned by displaced bass drum notes (that punctuate the guitar riff). The pattern also incorporates a hi-hat accent on the & of 4 closed with a pedal hi-hat on beat 1. Baker employs four-way integration using syncopation and accented hi-hats, highlighting Baker's creativity in the layering of his patterns. The displaced bass drum notes are likely influenced by Baker's background in jazz bebop comping. Robin Tolleson's interview with Baker in 1993 was a primary source of reference informing the selection of Baker's signature pattern in *Crossroads* for this study.⁷⁷



FIGURE 18. SIGNATURE PATTERN 4: *CROSSROADS* BY GINGER BAKER

Observations during the practising and recording of this pattern highlight the jazz influence in Baker's pattern, requiring a mastering of coordination and independence on the drum kit. Techniques employed by Baker involve executing opposing rhythms simultaneously, with particular attention to the bass drum displacement, in creating this well-crafted innovative rock pattern. The stylistic influence of Motown is evidenced by the snare drum accents on all four crotchet beats of 1, 2, 3, & 4.





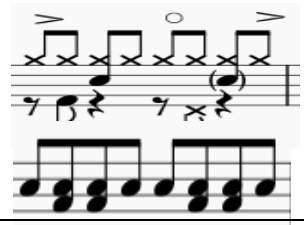

Baker's patterns, as played in the original recording, are duplicated on the new recordings as they appear in transcription. The recordings include patterns from additional sections of the song. The recordings and score (Score 10) are aggregates of Baker's patterns in original recording and as presented (Tracks 19 & 20).

The additional recordings of *Crossroads* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁷⁶ Cream. *Cream Crossroads*, YouTube video, 4:16, recorded March 10, 1968, posted by 1951Fidel, October 17, 2012, accessed September 23, 2021, <https://www.youtube.com/watch?v=PE9HvSdcaL4>

⁷⁷ Robin Tolleson, "The Blossoming of Ginger Baker," *Modern Drummer*, May 1993, pp. 20-25. 62-74.

Table 16. Rearrangement of Ginger Baker’s original pattern in *Crossroads* using the stepwise process, applying techniques and stylistic influences as used by Stewart Copeland

Step	Procedure	Details/Notes/Observations
1	Original pattern 	Song: <i>Crossroads</i> Drummer: Ginger Baker 15 notes played in pattern Tempo: 132 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T8. Displacement of back-beat T9. Four-limb integration T11. Hi-hat: accent T17. Layering T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Ginger Baker: motown, jazz be-bop (bass-drum comping)
3	Create a rhythmic footprint of the original pattern and identify techniques and stylistic influences as used by Copeland to be implemented in the rearranged pattern 	Techniques to be implemented as used by Stewart Copeland: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T12. Hi-hat: accent T17. Layering T19. Omission of notes T31. Syncopation Stylistic influence: reggae
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Copeland 	Implementing Copeland’s employment of techniques in bass drum and hi-hat <i>displacement</i> , <i>omission</i> of down-beats and back-beats, <i>hi-hat accents</i> , and <i>syncopation</i> , culminates in a juxtaposed pattern with contrasting rhythms. Baker’s snare on beats 1,2,3 and 4 is implied by distributing the accents between hi-hat, snare, and hi-hat accent. Similar techniques are employed by both drummers though producing contrasting patterns. Sound sources comprise three components of the drum kit, being, snare, hi-hat, and bass drum, duplicating Baker’s pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Techniques as used by Copeland create a call and answer effect between drum components (<i>four-limb integration</i>) in contrast to Baker’s pattern which emphasizes the <i>accented</i> quarter-note pulse in a more regimented manner as influenced by the Motown style. The rearranged pattern requires technical control and attention to hi-hat accents to be musically fluent at the original tempo of 132 bpm.
6	Count the notation of the rearranged pattern against the original pattern, identifying the potential challenges and workability of the rearranged pattern	Both patterns comprise 16 notes which highlights how applying differing techniques can influence rhythm within a drum pattern. Performance of this pattern reinforces the workability of the rearranged pattern in areas of tempo and rhythmic diversity despite differing technical applications.
7	Rearranged pattern Song: <i>Crossroads</i> Techniques/Styles as used by Stewart Copeland 15 notes in pattern Tempo range 110-135 bpm Drum kit components used: Three	

2.11 Commentary and performance/recording notes on signature pattern 4: *Crossroads* by Ginger Baker applying techniques and stylistic influences as used by Stewart Copeland

Implementing Copeland's applied techniques of bass drum and hi-hat displacement, omission of down-beats and back-beats, hi-hat accents, and syncopation, culminates in a contrasting pattern incorporating juxtaposed rhythms. Baker's snare on beats 1,2,3 and 4 are implied by distributing the accents between hi-hat, snare, and hi-hat accent. Similar techniques are employed by both drummers though producing contrasting patterns.

Sound sources in the rearranged pattern comprise three components of the drum set, being, snare, hi-hat, and bass drum, duplicating Baker's pattern. Techniques as used by Copeland, create a call and answer effect between drum components employing four-way integration as opposed to Baker's pattern which states the accented quarter-note pulse in a more regimented manner as influenced by the Motown style. Both patterns comprise 16 notes highlighting how applying differing techniques can influence rhythm within a drum pattern.

Performance of this pattern reinforces the viability of the rearrangement in areas of tempo and rhythmic diversity despite different technical applications. The rearranged pattern requires technical control with attention to hi-hat accents to be musically fluent at the original tempo of 132 bpm.









FIGURE 19. SIGNATURE PATTERN 4: *CROSSROADS*. REARRANGED PATTERN - STEWART COPELAND

Observations noted during the practising and recording of the rearranged pattern highlighted the musical flexibility of Baker's pattern when employing four-limb integration. The rearranged pattern does require a technical command of limb coordination and independence. Employing Copeland's syntax produces a low notational and rhythmically sparse pattern. Each limb and respective drum component employed, creates a series interlocking rhythms combining in the composition of a creative and juxtaposed pattern.

The chorus and solo section of the new recordings include additional rearranged patterns duplicating Baker's corresponding patterns, as played in the original recording. These rearranged patterns further demonstrate how Copeland's choice of techniques are rhythmically adaptable and if applied imaginatively, can assist in the composing of creative patterns.

The recordings and score are rearranged aggregates of Baker's patterns in the original recording and as presented in Score 11 and Tracks 21 & 22.

Table 17. New arrangement of Ginger Baker’s original pattern in *Crossroads* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Original pattern 	Song: <i>Crossroads</i> Drummer: Ginger Baker 15 notes played in pattern Tempo: 132 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T8. Displacement of back-beat T9. Four-limb integration T11. Hi-hat: accent T17. Layering T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Ginger Baker: Motown-soul
3	Create a rhythmic footprint of the original pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: accent T17. Layering T19. Omission of notes T31. Syncopation Stylistic influence: Nigerian Afrobeat. Jamaican reggae
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementation of techniques includes <i>four-limb integration</i> applying <i>hi-hat/snare accents</i> , <i>open hi-hat accent</i> and <i>omission</i> with <i>displacement</i> of the down-beat bass drum enhanced by a reggae-influenced hi-hat rhythm. The Motown-influenced accents on crotchet notes of Baker’s pattern are not duplicated (see comment below) Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and cowbell.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Use of the snare <i>accents</i> on 2+ & 4+ of the new pattern are influenced by Nigerian Afrobeat rhythms and underpinned by a <i>syncopated</i> bass drum rhythm (and <i>step hi-hat</i>). The hi-hat pattern implies a reggae feel by creating emphasis on beats 1 & 3. The new pattern contrasts with Baker’s original pattern by replacing the Motown feel with syncopated contrasting rhythms. The new pattern requires mastery of <i>four-way integration</i> to be performed at the original tempo of 132 bpm.
6	Count the notation of the new pattern against the original pattern, identifying the potential challenges and workability of the new pattern	18 notes in both patterns, however, the redistribution of notes and stylistic variations implemented, highlights creative use of techniques and diverse stylistic influences. Performance of this pattern reinforces the viability of the rearrangement in areas of tempo, musicality, and rhythmic fluidity.
7	New pattern Song: <i>Crossroads</i> Techniques/Styles as applied by Enrico Morena 18 notes in pattern Tempo range 80-100 bpm Drum kit components used: Four	

2.12 Commentary and performance/recording notes on signature pattern 4: *Crossroads* by Ginger Baker applying techniques and stylistic influences as used by Enrico Morena

Implementation of techniques include four-limb integration as applied to hi-hat and snare accents, open hi-hat accent, omission, and displacement of the down-beat bass drum. The new pattern is enhanced by a reggae-influenced hi-hat rhythm. The Motown-influenced accents on crotchet notes of Baker's pattern are not duplicated (see comment below).

Application of the snare accents of quaver notes on beats 2 & 4 of the new pattern are influenced by Nigerian Afrobeat rhythms, underpinned by a syncopated bass drum, and augmented by a step hi-hat. The hi-hat pattern implies a reggae feel by creating emphasis on the three-note quaver rhythm starting on beats 1 & 3 respectively. The new pattern contrasts with Baker's original pattern by deleting the Motown feel and replacing it with a juxtaposed rhythm influenced by a jazz be-bop bass drum on the + of beat 4 and jazz ride pattern played in a straight feel, not swung.

The new pattern requires fluency in four-way integration at the original tempo of 132 bpm. Both patterns have 18 notes. Rearrangement of Baker's pattern applying stylistic influences highlights the creative employment of technique, reinforcing the viability of the new pattern in its musicality and rhythmic fluidity. Sound sources in the new pattern comprise four components of the drum set, being snare, hi-hat, bass drum, as per Baker's original performance recording.



FIGURE 20. SIGNATURE PATTERN 4: CROSSROADS. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the importance of independence and snare dynamics when applying accents and the layered (accented) hi-hat creating overlapping rhythms. Employing four-way integration required attention to voicings with interlocking rhythms and establishing a cohesive and fluent pattern.

The chorus and solo sections of the recording include additional new patterns, as per transcriptions, corresponding with Baker's original recordings and employing open hi-hat accents, cowbell, open-handed approach, and implication of half-time pattern against a common-time 4/4 metre in reimagining and duplicating the original patterns.

Baker's patterns, as played in the original recording, are duplicated on the new recordings as they appear in transcription. The recordings include patterns from additional sections of the song. The recordings and score are rearranged aggregates of Baker's patterns in the original recording and as presented in Score 12 and Tracks 23 & 24.

2.13 Commentary and performance/recording notes on signature pattern 5: *Fifty Ways to Leave Your Lover* by Steve Gadd

50 Ways to Leave Your Lover is a song by the American singer-songwriter Paul Simon. It was the second single from his fourth studio album, *Still Crazy after All These Years* recorded in 1975 with Steve Gadd playing drums on the album. The original recording can be heard in the footnote link.⁷⁸ Bill Milkowski's investigative article (and transcriptions) into Gadd and his signature patterns were a primary source of data and affirmed selection of this iconic pattern for this study.⁷⁹

Gadd employs the linear technique to this legendary pattern. He implements rudiments, diddle-strokes, orchestration, step hi-hat and a 3-note grouping employing his often-used open-handed technique, culminating in a two-bar pattern. This signature pattern engages four-way integration embedding accents in a call and answer motif with the floor-tom on beat 3 of the 1st bar and beat 4 of the 2nd bars respectively. As Gadd explains... "*Fifty Ways* was just a result of sitting at the drums and playing the hi-hat with my left hand. When playing be-bop, sometimes the hi-hat will play in four, or in different places, rather than just 'two and four'. So, *Fifty Ways* was a result of using the hi-hat in different places and using the left hand on the hi-hat."⁸⁰



FIGURE 21. SIGNATURE PATTERN 5: *FIFTY WAYS TO LEAVE YOUR LOVER* BY STEVE GADD

Observations during the practising and recording of Gadd's pattern makes apparent the rudiment and marching snare-drum influence in his syntax. Orchestration and mastering four-limb independence of linear groupings is key to the musicality and creativity of his rhythmical composition. Techniques employed by Gadd involve executing opposing rhythms, with particular attention to the step hi-hat and snare drum displacement within the pattern.

Gadd's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription. The recordings include patterns from additional sections of the song. The recordings and score are aggregates of Gadd's patterns in the original recording and as appear in Score 13 and Tracks 25 & 26.

The additional recordings of *Fifty Ways to Leave Your Lover* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁷⁸ Paul Simon, *50 Ways to Leave Your Lover* (Audio), YouTube video, 3:39, recorded 1975, posted by Paul Simon, September 12, 2013, accessed September 26, 2021,





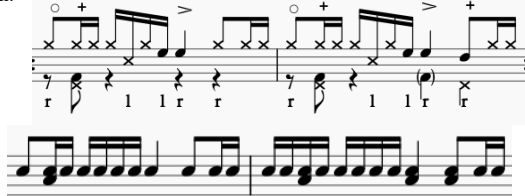

<https://www.youtube.com/watch?v=ABXtWqmArUU>

⁷⁹ Bill Milkowski, "Steve Gadd. The Ultimate Groove." *Traps: The Art of Drumming*, 2009, pp. 26-42.

⁸⁰ Bart Elliot, "Education Resources. Paul Simon: '50 Ways To Leave Your Lover' - Steve Gadd Drum Groove," *Drummer Café*, 23 April, 2008, accessed June 12, 2021,

<http://www.drummercafe.com/education/lessons/steve-gadd-50-ways-drum-groove.html>

Table 18. Rearrangement of Steve Gadd’s original pattern in *Fifty Ways to Leave Your Lover* using the stepwise process, applying techniques and stylistic influences as used by Stewart Copeland

Step	Procedure	Details/Notes/Observations
1	Original pattern 	Song: <i>Fifty ways to Leave Your Lover</i> Drummer: Steve Gadd 31 notes played in two-bar pattern Tempo: 102 bpm Drum kit components used: Four
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Steve Gadd: T1. Accents T7. Diddle stroke T9. Four-limb integration T14. Hi-hat: step T18. Linear T20. Open-handed approach T21. Orchestration T25. Rudiments T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Steve Gadd: jazz be-bop and drumline rudiment-based snare drum
3	Create a rhythmic footprint of the original pattern and identify techniques and stylistic influences as used by Copeland to be implemented in the rearranged pattern 	Techniques to be implemented as used by Stewart Copeland: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open T18. Linear T21. Orchestration T29. Snare: cross-stick T32. Two-bar pattern Stylistic influence: reggae one-drop
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Copeland 	Application of the <i>linear</i> technique combined with <i>orchestrated</i> tom accents on beat 3 and <i>open hi-hat</i> on beat 1 imply a reggae one-drop whilst duplicating Gadd’s original pattern which pauses on beat 3. Copeland’s sparse use of bass drum is highlighted and underpins the <i>two-bar pattern</i> with <i>snare x-stick</i> adding sonic diversity, a feature of Copeland’s reggae influences. Sound sources comprise five components of the drum kit, being small and med toms, hi-hat, bass drum and snare drum.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern. 	Copeland’s use of toms, create timbral variance and the <i>orchestration</i> of small and medium toms is applied in the rearranged pattern to duplicate Gadd’s bass drum rhythm. The techniques, when applied in this manner, produce a higher-toned sonic pattern compared to Gadd’s tendency to anchor patterns from the bass drum. Techniques, as employed by Copeland, combined with a reggae influence, produce a <i>linear</i> pattern (as seen in the notation), allowing the rearranged pattern to be rhythmically applicable played at the original tempo of 102 bpm.
6	Count the notation of the rearranged pattern against the original pattern, identifying the potential challenges and workability of the re-arranged pattern	27 notes in the rearranged pattern versus 31 notes in Gadd’s pattern, highlights the differing technical and stylistic approaches though rhythmic similarities exist. The rearranged pattern is well constructed and rhythmically adept in performance within the song.
7	Rearranged pattern Song: <i>Fifty ways to Leave Your Lover</i> Techniques/Styles as used by Stewart Copeland 27 notes in two-bar pattern Tempo range: 90-110 bpm Drum kit components used: Five	

2.14 Commentary and performance/recording notes on signature pattern 5: *Fifty Ways to Leave Your Lover* by Steve Gadd applying techniques and stylistic influences as used by Stewart Copeland

Application of the linear technique in conjunction with orchestrated tom accents on beat 3 and open hi-hat accents on beat 1 imply a reggae one-drop, duplicating Gadd's original pattern which pauses on beat 3 in both bars. Copeland's sparse use of bass drum notes is highlighted and underpins the two-bar pattern with snare x-stick adding sonic diversity, a feature of Copeland's reggae influences.

Copeland's use of toms, create timbral variance and the orchestration of small and medium toms is applied in the rearranged pattern to duplicate Gadd's bass drum rhythm. The techniques, when applied in this manner, produce a higher pitched (tonal) drum sound compared to the original pattern. Gadd's tendency is to anchor his drum patterns from the bass drum and lower toms. Sound sources in the rearranged pattern comprise five components of the drum set, being, small and med toms, hi-hat, bass drum and snare drum.

The techniques adopted here and combined with a reggae influence, produce a sonically rich pattern, allowing the rearranged pattern to be rhythmically viable at the original pattern's tempo of 102 bpm. 27 notes in the rearranged pattern in contrast to 31 notes in Gadd's pattern, highlights the differing technical and stylistic approaches though rhythmic similarities exist. The rearranged pattern is well constructed and rhythmically strong in performance of the song.

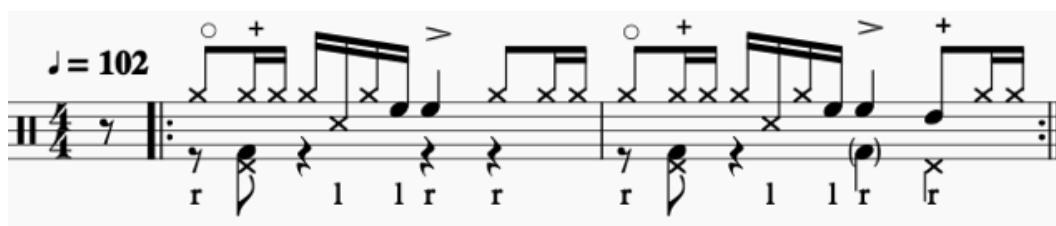






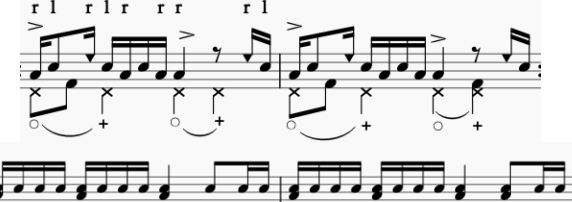

FIGURE 22. SIGNATURE PATTERN 5: *FIFTY WAYS TO LEAVE YOUR LOVER*. REARRANGED PATTERN - STEWART COPELAND

Observations noted during the practising and recording of the rearranged pattern highlighted the musical adaptability in the Copeland-influenced pattern, its incorporating of all limbs and requiring technical command of independence on the drum kit. The voicings employed produce interlocking rhythms combining to create a functional and creative drum pattern.

The chorus section of the recording includes another rearranged pattern, duplicating Gadd's corresponding pattern played in the original recording. The rearranged pattern further demonstrates how Copeland's syntax is rhythmically adaptable and if applied imaginatively, can assist in the composing of creative patterns. Additional techniques employed in Gadd's recording performance, as notated in the corresponding score, includes bell on the ride cymbal and snare drum accents.

The recordings and score are rearranged aggregates of Gadd's patterns in the original recording and as presented in Score 14 and on Tracks 27 & 28.

Table 19. New arrangement of Steve Gadd’s signature pattern in *Fifty Ways to Leave Your Lover* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern ♩ = 102 r r l l l r l r l r r l r l 	Song: <i>Fifty ways to Leave Your Lover</i> Drummer: Steve Gadd 31 notes played in two-bar pattern Tempo: 102 bpm Drum kit components used: Four
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Steve Gadd: T1. Accents T7. Diddle stroke T9. Four-limb integration T14. Hi-hat: step T18. Linear T20. Open-handed approach T21. Orchestration T25. Rudiments T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Steve Gadd: jazz be-bop and drumline rudiment-based snare drum
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T5. Cowbell T9. Four-limb integration T15. Hi-hat: splashes T18: Linear T21. Orchestration T28. Snare drum: snares off T31. Syncopation T32. Two-bar pattern Stylistic influence: West-African <i>Bata</i> drums. Afro-Cuban cowbell & tumbao.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementing the <i>linear</i> technique combined with <i>cowbell</i> , snare and floor-tom <i>orchestration</i> allows for a multi-timbral effect underpinned by the <i>hi-hat splashes</i> and tumbao bass drum. Sound sources comprise five components of the drum kit, being, snare with snares off, hi-hat, bass drum, floor-tom, and cowbell.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern r l r l r r r l 	Time and metre are implied (stated) by the <i>hi-hat foot splashes</i> opening on beats 1&3 and closing on beats 2&4. <i>Accents</i> on the floor-tom and <i>open hi-hat splashes</i> on beats 1&3 give the pattern a down-beat pulse juxtaposed to <i>syncopated cowbell</i> and tumbao bass drum rhythm. <i>Linear</i> technique is applied to the right/left hand and bass drum with crochet spacing on beats 3 duplicating Gadd’s original pattern. The new pattern has nine applied techniques duplicating Gadd’s original pattern and rhythmically valid at the original tempo of 102bpm though technically demanding.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	The new pattern has 30 notes as opposed to the 31 notes in Gadd’s original pattern. The redistribution of notes and timbral variations implemented highlights creative use of techniques underpinned by the West-African & Afro-Cuban stylistic influence.
7	New pattern Song: <i>Fifty Ways to Leave Your Lover</i> Techniques/Styles as applied by Enrico Morena 30 notes in two-bar pattern Tempo range 90-110 bpm Drum kit components used: Five	♩ = 102 Snares off r l r l r r r l LF- hi hat splash 

2.15 Commentary and performance/recording notes on signature pattern 5: *Fifty Ways to Leave Your Lover*' by Steve Gadd applying techniques and stylistic influences as used by Enrico Morena

Implementing the linear technique and orchestration on snare, floor-tom and cowbell creates a multi-timbral effect underpinned by the hi-hat splashes, and tumbao-influenced bass drum pattern. The metre is implied by the hi-hat foot splashes opening on beats 1 & 3 and closing on beats 2 & 4. Accents played on the floor-tom on beats 1 & 3 reinforce the hi-hat splashes, giving the pattern a down-beat emphasis juxtaposed to the syncopated cowbell and afro-Cuban tumbao bass drum. Linear technique is applied to the right/left hand and bass drum with crochet spacing on beats 3 duplicating Gadd's original pattern.

The new pattern has nine applied techniques duplicating Gadd's signature pattern, rhythmically valid at the original tempo of 102bpm though technically demanding. Both patterns comprise similar note counts being 30 in the new pattern versus 31 notes in Gadd's pattern. However, the redistribution of notes, embellished by the orchestrated voicings, highlights the creative use of techniques underpinned by the timbral West-African *Bata* drums & Afro-Cuban stylistic influence.

Sound sources comprise five components of the drum set, being, snare with snares off, hi-hat, bass drum, floor-tom and cowbell which align with the stylistic influences.

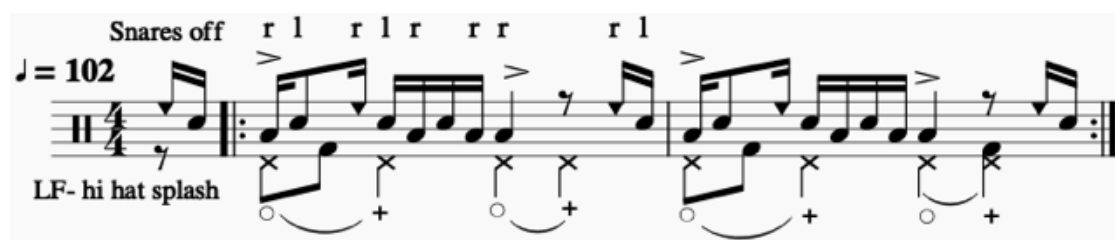


FIGURE 23. SIGNATURE PATTERN 5: *FIFTY WAYS TO LEAVE YOUR LOVER*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the importance of independence in coordinating the hi-hat splashes and orchestrating syncopated rhythms with accents and layering of notes. Application using four-limb integration required attention to drum components employed with interlocking rhythms and establishing a viable pattern.

The chorus section of the recording includes additional new patterns, as per transcription, corresponding with Gadd's original recording and employing other techniques including, hi-hat pedal (ostinato), displacement of back-beat/down-beat, implying common-time & cut-time simultaneously, influenced by the reggae one-drop.

The recordings and score are rearranged aggregates of Gadd's patterns in the original recording as presented in Score 15 and on Tracks 29 & 30.

2.16 Commentary and performance/recording notes on signature pattern 6: *Fire on the Bayou* by Zigaboo Modeliste

Fire on the Bayou is from the sixth studio album by the funk band The Meters. The album, also called *Fire on the Bayou*, was released in July 1975, at a time when the band was opening for the Rolling Stones on their U.S. tour. Zigaboo Modeliste was the drummer with The Meters. The original recording can be heard on the footnote link.⁸¹

The pattern adopts a layered technique employing open-handed sticking, common in Modeliste's technical syntax. He accents the bass drum and hi-hat in unison stating the 3-clave of the New Orleans second-line stylistic influence. Four-way integration is applied using an open hi-hat on beat 4 and closing on the next quaver with a closed hi-hat in unison playing a displaced snare drum accent.

The applied techniques also highlight Modeliste's syncopated approach aided by the omission of back-beats and down-beats, except for the bass drum on beat 1. Mike Adamo's informative article on Modeliste's signature patterns was a primary source of transcription and aided in the selection of this inventive pattern for this study.⁸²

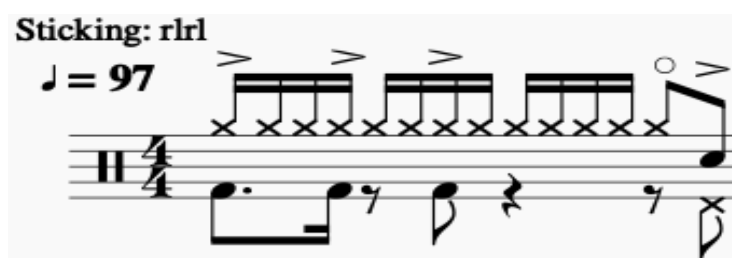


FIGURE 24. SIGNATURE PATTERN 6: *FIRE ON THE BAYOU* BY ZIGABOO MODELISTE





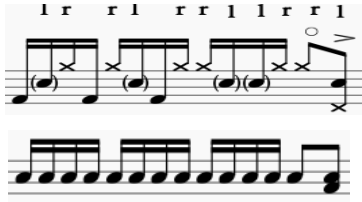

Observations during the practising and recording of this pattern highlight the second-line influence in Modeliste's pattern and his playing 'between the cracks' of the straight and swung semi-quaver subdivision. Techniques and drum components employed by Modeliste focus upon three voicings of bass drum, snare drum and hi-hat inclusive. His approach most often incorporates a displaced snare drum in conjunction with open hi-hat accents resulting in patterns with minimal note usage. The new recording duplicates variations in the original recording by employing the half-open hi-hats in the B section. The open hi-hat on beat 4, associated with the A section of *Cissy Strut*, has not been replicated in this recording.

Modeliste's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription. The recordings and score are aggregates of Modeliste's patterns in the original recording as presented in Score 16 and Tracks 31 & 32. The additional recordings of *Fire on the Bayou* represent the rearranged and new patterns from the original recording and include transcriptions of additional patterns performed in differing sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁸¹ The Meters, *The Meters* - "Fire on the Bayou", YouTube video, 4:09, recorded 1975, posted by fabioLNDT, May 5, 2010, accessed September 25, 2021, <https://www.youtube.com/watch?v=phUTCsVAKXA>

⁸² Mike Adamo, "Zig's Signature Beats," *Modern Drummer*, August 2013, pp. 59-61.

Table 20. Rearrangement of Zigaboo Modeliste's signature pattern in *Fire on the Bayou* (1975, track 2) using the stepwise process, applying techniques and stylistic influences as used by Steve Gadd

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Fire on the Bayou</i> Drummer: Zigaboo Modeliste 18 notes played in pattern Tempo: 97 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Zigaboo Modeliste: T1. Accents T8. Displacement of back-beat T9. Four-limb integration T11. Hi-hat: accent T20. Open-handed approach T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans) implying and stating a 3/2 clave
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Gadd to be implemented in the rearranged pattern 	Techniques to be implemented as used by Steve Gadd: T1. Accents T9. Four-limb integration T12. Hi-hat: accent T18. Linear T25. Rudiments T27. Ghost notes T31. Syncopation Stylistic influence: 3/2 Afro-Cuban/second-line clave and snare-drum rudiments
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Gadd 	Implementing Gadd's use of <i>linear</i> technique incorporating <i>ghost notes</i> and a <i>7-stroke roll</i> and linear sticking applied between hi-hat, snare, and bass drum, duplicates Modeliste's original pattern utilising less notes. Similar technique on beat 4 with a <i>displaced snare accent</i> and <i>hi-hat accent</i> . Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum, duplicating Modeliste's pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Techniques, as used by Gadd, create <i>linear</i> fluidity in the rearranged pattern, underpinned by a <i>syncopated</i> bass drum pattern, contrasting with Modeliste's <i>layered</i> process which creates a more concentrated pattern. Applying techniques as are used by Gadd, allow the rearranged pattern to be played with fluidity and musicality at the original tempo of 97 bpm.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	15 notes in the rearranged pattern versus 18 notes in Modeliste's pattern highlights the differing technical approaches though rhythmic similarities exist. Performance of this pattern reinforces the viability of the rearranged pattern in tempo and rhythmic relevance, despite differing technical applications to the song.
7	Rearranged pattern Song: <i>Fire on the Bayou</i> Techniques/Styles as used by Steve Gadd 15 notes in pattern Tempo range 80-100 bpm Drum kit components used: Three	

2.17 Commentary and performance/recording notes on signature pattern 6: *Fire on the Bayou* by Zigaboo Modeliste applying techniques and stylistic influences as used by Steve Gadd

Implementing Gadd's use of linear technique incorporating ghost notes, rudiments (seven-stroke roll), displacement and syncopation, highlights his rhythmic syntax as employed utilising three most-often used components of the drum kit being hi-hat, snare, and bass drum. Modeliste's second-line bass drum pattern is duplicated as are the open hi-hat on beat 4 and snare drum on + of beat 4.

Gadd's processes duplicate Modeliste's open-handed approach of ambidexterity using linear sticking over differing voicings. Techniques as used by Gadd, create linear fluidity in the rearranged pattern, underpinned by a syncopated bass drum pattern and contrasting with Modeliste's layered approach. The rearranged pattern is secure in performance at the original tempo of 97 bpm.

15 notes in the rearranged pattern versus 18 notes in Modeliste's pattern highlights the differing techniques applied, though rhythmic similarities exist. Performance of the pattern reinforces the validity of the rearrangement in rhythmic relevance.







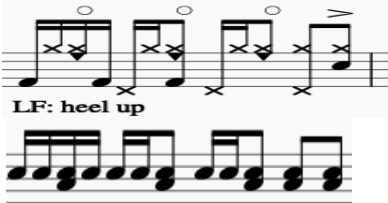

FIGURE 25. SIGNATURE PATTERN 6: *FIRE ON THE BAYOU*. REARRANGED PATTERN - STEVE GADD

Observations during the practising and recording of the rearranged pattern highlight the application of (snare drum) rudiments within the 3/2 Afro-Cuban/second-line clave. Techniques such as linear coordination and snare-drum dynamics (ghost notes), as employed by Gadd, involve executing individual rhythms with precision and particular attention to the hi-hat displacement, creating a challenging yet creative pattern.

The new recordings (Tracks 33 & 34) duplicate pattern variations as played by Modeliste in the original recording, employing identified techniques and as notated in the corresponding score (Score 17) of the song.

The recordings submitted, include rearrangements of original patterns performed in the bridge section of the song, utilising the stepwise process developed, its application in transcription and the corresponding recording.

Table 21. New arrangement of Zigaboo Modeliste's signature pattern in *Fire on the Bayou* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Original pattern 	Song: 'Fire on the Bayou' Drummer: Zigaboo Modeliste 18 notes played in pattern Tempo: 97 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the original pattern 	Techniques implemented as used by Zigaboo Modeliste: T1. Accent T8. Displacement of back-beat T9. Four-limb integration T11. Hi-hat: accent T20. Open-handed approach T24. Rim shot (snare) T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans) implying and stating a 3/2 clave
3	Create a rhythmic footprint of the original pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T5. Cowbell T9. Four-limb integration T11. Hi-hat: accent T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T20. Open-handed approach T21. Orchestration. T31. Syncopation Stylistic influence: Afro-Cuban 3/2 clave. Disco-pop.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Use of the <i>layering technique</i> implemented by an <i>open-handed approach</i> between hi-hat, snare and cowbell underpinned by <i>open hi-hats</i> and <i>cowbell</i> on the +s of beats 1, 2 & 3. <i>Syncopated</i> hi-hat pattern played by the left-hand. Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and cowbell.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Use of the <i>layered technique</i> creates crossover patterns and rhythmic density underpinned by a <i>syncopated</i> bass drum rhythm and ostinato <i>pedal hi-hat</i> pattern on beats 2,3 & 4. The new pattern contrasts with Modeliste's original pattern despite both patterns having 18 notes. The rearranged pattern requires <i>four-way integration</i> played at the original tempo of 97 bpm. Heel-up on the <i>hi-hat pedal</i> reduces the volume and impact of the <i>open hi-hat accents</i> thus giving more weight to the <i>step hi-hat</i> on the +s of beats 2,3 & 4. An expanded and percussive pattern in comparison to the original with multiple techniques involved, producing counter-rhythms.
6	Count the notation of the new pattern against the original pattern, identifying the potential challenges and workability of the new pattern	18 notes in both patterns, however the redistribution of notes and stylistic variations implemented, highlights creative use of techniques and diverse stylistic influences. Performance of this pattern reinforces the functionality of the new pattern in tempo, musicality, and percussive fluidity, despite differing technical applications.
7	New pattern Song: <i>Fire on the Bayou</i> Techniques/Styles as applied by Enrico Morena 18 notes in pattern Tempo range 80-100 bpm Drum kit components used: Four	

2.18 Commentary and performance/recording notes on signature pattern 6: *Fire on the Bayou* by Zigaboo Modeliste applying techniques and stylistic influences as used by Enrico Morena

The layering technique is implemented by the application of an open-handed ambidextrous approach between hi-hat, snare and cowbell underpinned by open hi-hats and cowbell on the +’s of beats 1, 2 & 3. The syncopated hi-hat pattern is played by the left-hand. Use of the layered technique creates crossover patterns and rhythmic density anchored by a syncopated bass drum rhythm (duplicating Modeliste’s original) and ostinato pedal hi-hat on beats 2, 3 & 4.

The new pattern contrasts with Modeliste’s original pattern despite both patterns having 18 notes. The rearranged pattern requires a mastery four-limb integration played at the original tempo of 97 bpm. Heel-up on the hi-hat pedal reduces the volume and impact of the open hi-hat (avoiding accent dynamics), giving weight to the step hi-hat on the +’s of beats 2, 3 & 4.

Performance of this pattern reinforces the functionality of the new pattern in tempo, musicality, and percussive fluidity, despite differing technical applications. The redistribution of notes and stylistic variations implemented, highlights creative use of techniques in addition to the afro-Cuban cowbell and disco-pop (open hi-hat) stylistic influences.



FIGURE 26. SIGNATURE PATTERN 6: *FIRE ON THE BAYOU*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of the new pattern highlight the expanded and percussive elements in comparison to the original. The new pattern reinforces four-limb integration and suggests counter-rhythms alongside the 3/2 afro-Cuban and second-line clave, achieved via cowbell and pedal hi-hat notation as mentioned above. It is challenging and musically rewarding when played along to the backing track.

The recordings (Tracks 35 & 36) duplicate pattern variations Modeliste performs in his original recording, employing relevant techniques as notated in the corresponding score (Score 18) of the song.

The additional recordings of *Fire on the Bayou* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

2.19 Commentary and performance/recording notes on signature pattern 7: *Home at Last* by Bernard Purdie

Home at Last is from the record *Aja*, the sixth studio album by the American jazz-rock band Steely Dan. It was released on September 23, 1977, and features band leaders Donald Fagen and Walter Becker. Bernard Purdie was the session drummer on the track. The original recording can be accessed via the footnote link.⁸³

Although identical to Purdie's innovative pattern in *Babylon Sister*, the pattern, as recorded in *Home at Last*, demonstrates how the retraction of one key technique, or adversely, non-inclusion of that technique, can alter the rhythmic manifestations of that pattern. *Home at Last* has been included specifically for the purpose of demonstrating the efficacy of techniques when applied and the resultant rhythmic nuances.

Despite *Home at Last* having only one less note than *Babylon Sister* (ghost note on the + of beat 3 quaver triplets), the variances of these respective patterns are important and warrant investigation. The non-employment of pedal hi-hat on beats 1, 2, 3 & 4 in *Home at Last*, deletes the open hi-hats of *Babylon Sister* in addition to negating four-limb integration, two core techniques applied in *Babylon Sister*. Elaborating further, the omission of one technique effects the exclusion of an additional two techniques and the resultant notational change. Jim Payne's article informed the decision to include *Home at Last* as a signature pattern for this study.⁸⁴

The first technique not to be engaged in Purdie's pattern here is four-way integration, eliminating the pedal hi-hat and consequently the open hi-hats on the last triplet of each quaver beat. When combined with the absent ghost note after the snare accent on beat 3, it creates a rhythmically cleaner, less linear, distinct half-time pattern.

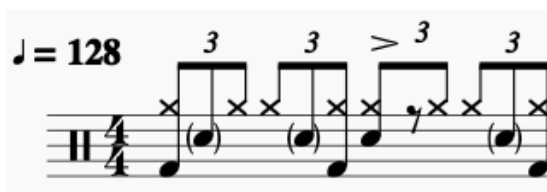


FIGURE 27. SIGNATURE PATTERN 7: *HOME AT LAST* BY BERNARD PURDIE







Observations during the practising and recording of this pattern highlight the prominent Blues-Shuffle influence (by the absence of continual ghost notes). The new recordings duplicates pattern variations in Purdie's original recording by employing the pedal hi-hat on beats 1, 2, 3 & 4 and displacing the hi-hat shuffle to the ride cymbal. Bass-drum syncopation improvisation is also duplicated.

Purdie's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription. The recordings and score are aggregates of Purdie's patterns in the original recording and are presented in Score 3.19 and on Tracks 37 & 38. The additional recordings of *Home at Last* represent the rearranged and new patterns from the original recording and include transcriptions of additional patterns performed in differing sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁸³ Steely Dan, *Home at Last*, YouTube video, 5:35, recorded September 23, 1977, posted by Steely Ben, June 20, 2014, accessed September 28, 2021, <https://www.youtube.com/watch?v=9EoM7qn2Cyk>

⁸⁴ Jim Payne, "The Purdie Shuffle. Revisiting a Classic," *Modern Drummer*, July 2010, pp. 39-41.

Table 22. Rearrangement of Bernard Purdie’s signature pattern in *Home at Last* using the stepwise process, applying techniques and stylistic influences as used by Stewart Copeland

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Home at Last</i> Drummer: Bernard Purdie 15 notes played in pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T10. Half-time pattern T17. Layering T24. Rim-shot: snare T27. Snare drum: ghost notes T31. Syncopation: bass drum Analysis of the hi-hat identifies the stylistic influence of a blues-shuffle as applied to the half-time shuffle. Jazz shuffle.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Copeland to be implemented in the re-arranged pattern 	Techniques to be implemented as used by Stewart Copeland: T1. Accents T8. Displacement T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T19. Omission: down-beats T29. Snare drum: x-stick T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Stewart Copeland: reggae one-drop.
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Copeland 	Employing <i>accents</i> on hi-hat and <i>open hi-hat</i> with <i>snare x-stick</i> and <i>bass drum displacement</i> over a <i>two-bar pattern</i> in addition to <i>omission</i> of down-beat and <i>syncopation</i> . Sound sources utilize three components of the drum kit, being snare, hi-hat, and bass drum as per Purdie’s original pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	The rearranged pattern is expanded to two-bars and makes use of Copeland’s call and answer hi-hat technique and duplicating Purdie’s bass drum rhythm. The hi-hat shuffle pattern remains in both patterns. Copeland’s stylistic influence is reggae one-drop which is implied by open hi-hat and hi-hat accents, x-stick on beat 3 and bass drum pattern (omission on beat 1). .
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	15 notes in the original pattern compared to 21notes in the <i>two-bar</i> rearranged pattern in essence, creating an expanded pattern. The rearrangement highlights how application of established techniques can be adapted creatively whilst allowing for the functionality of rearranged patterns in areas of tempo, musicality, and rhythmic contrast with economy of note usage.
7	Rearranged pattern Song: <i>Home at Last</i> Techniques/Styles as used by Stewart Copeland 21 notes in two-bar pattern Tempo range 120-140 bpm Drum kit components used: Three	

2.20 Commentary and performance/recording notes on signature pattern 7: *Home at Last* by Bernard Purdie applying techniques and stylistic influences as used by Stewart Copeland

The rearranged pattern employs techniques often used by Copeland including open hi-hat accents combined with trademark reggae-influenced snare x-stick, bass drum displacement and syncopation. Expanding the pattern to two bars has allowed for the application of Copeland's call and answer hi-hat technique duplicating Purdie's bass drum rhythm and omission of related down-beats. The hi-hat shuffle pattern remains the same in both patterns.

Copeland's stylistic influence is reggae one-drop which is implied by open hi-hat and hi-hat accents, x-stick on beat 3 and bass drum pattern utilizing three components of the drum kit, being snare, hi-hat, and bass drum, as per Purdie's original pattern. The pattern, though using a layered technique, is sparse in notation yet fulfills the rhythmic requirements of it.

There are 15 notes in the original pattern compared to 21 notes in the two-bar rearranged pattern, in essence, creating an expanded pattern. The rearrangement highlights how application of established techniques can be adapted creatively whilst allowing patterns to focus on and succeed in the areas of tempo, musicality, and rhythmic contrast.







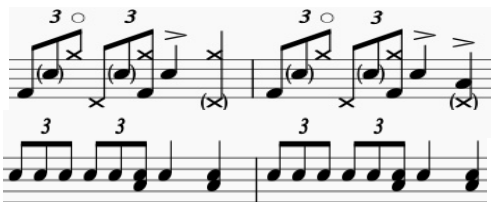

FIGURE 28. SIGNATURE PATTERN 7: *HOME AT LAST*. REARRANGED PATTERN - STEWART COPELAND

Observations during the practising and recording of this pattern highlights the reggae-one drop influence using the appropriate drum components and voicings being the bass drum, snare drum (x-stick), hi-hat and the pedal hi-hat (four-limb integration) creating a simple yet well-constructed and versatile pattern.

The new recordings duplicate pattern variations Purdie performs in the original recording by employing hi-hat embellishments and bell-ride cymbal as notated in the corresponding score of the song. Bass-drum syncopation and reggae-four drop (bass drum) improvisation is also duplicated.

The recordings and score are rearranged aggregates of Purdie's patterns in the original recording and are presented in Score 20 and on Tracks 39 & 40.

Table 23. New arrangement of Bernard Purdie’s signature pattern in *Home at Last* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Home at Last</i> Drummer: Bernard Purdie 15 notes played in pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T10. Half-time pattern T17. Layering T24. Rim-shot: snare T27. Snare drum: ghost notes T31. Syncopation: bass drum Analysis of the hi-hat identifies the stylistic influence of a blues-shuffle as applied to the half-time shuffle.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena T1. Accents T4. Common-time and half-time simultaneously T9. Four-limb integration T11. Hi-hat: accent T13. Hi-hat: pedal T18. Linear T21. Orchestration T31. Syncopation T32. Two-bar pattern Stylistic influence: marching and drum-corps.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	The <i>pedal hi-hat</i> on beats 2&4 and snare <i>accent</i> on beat 3 implies <i>common-time and half-time</i> simultaneously. <i>Ghost notes</i> on the +’s of beats 1&2 suggest a <i>linear pattern</i> between bass drum and hi-hat. <i>Orchestration</i> is facilitated by a floor-tom accent on beat 4 of the second bar. Hi-hat accents are part of a <i>syncopated</i> hi-hat rhythm. The new pattern employs four components of the drum kit, being snare, hi-hat, bass drum and floor-tom.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Purdie’s original pattern employs a <i>layered</i> technique creating continuity with a shuffle hi-hat pattern, <i>snare accent</i> on beat 3 and <i>syncopated</i> bass drum. The new pattern expands on the original, as seen in the differing profile and footprints, reimagining the pattern with new techniques creating a musically adaptive rhythmic pattern. The stylistic influence of a marching-drum corps rhythm, though less fluid, implies the quaver-triplet feel necessitated and facilitates its successful application to the song.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	20 notes in the new two-bar pattern versus 15 notes in Purdie’s signature pattern highlights the differing technical approaches, both of which are underpinned by sparse bass-drum usage and confirming ‘creativity composition’ as a key to combining techniques. Performance reinforces the viability of the new pattern in tempo, musicality, rhythmical and technical adaptation.
7	New pattern Song: <i>How at Last</i> Techniques/Styles as applied by Enrico Morena 20 notes in pattern Tempo range 110-130 bpm Drum kit components used: Four	

2.21 Commentary and performance/recording notes on signature pattern 7: *Home at Last* by Bernard Purdie applying techniques and stylistic influences as used by Enrico Morena

Purdie's original pattern employs a layered technique creating continuity with a shuffle hi-hat pattern, snare accent on beat 3 and syncopated bass drum. The new pattern expands on the original, as seen in the differing profile and footprints, reimagining the pattern with new techniques, creating a musically adaptive rhythmic pattern.

The pedal hi-hat on beats 2 & 4 and snare accent on beat 3 implies common-time and half-time metre simultaneously. Ghost notes on the +'s of beats 1 & 2, infer a linear technique between bass drum and hi-hat. Orchestration is facilitated by a floor-tom accent on beat 4 of the second bar. Hi-hat accents are part of a syncopated hi-hat rhythm.

The stylistic influence of a marching-drum corps 'compound rhythm' implies a quaver-triplet feel and facilitates its successful application to the song. Four components of the drum kit being snare, hi-hat, bass drum and floor-tom, are employed in the reimagined two-bar pattern.

There are 20 notes in the new pattern versus 15 notes in Purdie's original pattern highlighting the differing technical syntaxes employed with both patterns underpinned by sparse bass-drum notes, suggesting compositional creativity as key to combining techniques.



FIGURE 29. SIGNATURE PATTERN 7: *HOME AT LAST*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlight the rhythmic and stylistic influence of *marching* and *drum corps* 'compound-metre' underpinned by the sonic regularity (voicings) of the four drum kit components, being, bass drum, snare drum hi-hat and floor-tom accent.

The recordings duplicate pattern variations Purdie performs in the original recording by employing the pedal hi-hat on beats 1,2,3 & 4, displaced and syncopated ride-cymbal bell with snare-drum rudiments (double-stroke roll) as notated in the corresponding scores of the song. Bass-drum syncopation improvisation is also duplicated.

The recordings and score are rearranged aggregates of Purdie's patterns in the original recording and are presented in Score 21 and on Tracks 41 & 42.

2.22 Commentary and performance/recording notes on signature pattern 8: *Late in the Evening* by Steve Gadd

Late in the Evening is a song by American singer-songwriter Paul Simon. It was the lead single from his fifth studio album, *One-Trick Pony* released in 1980. Steve Gadd was the drummer on the album and recorded *Late in the Evening* with Simon. The original recording can be accessed via the footnote link.⁸⁵

Steve Gadd's iconic Mozambique-influenced pattern is recognized for its innovative use of two-sticks in each hand and orchestration of rhythms. The application of the right-hand played as rim-clicks on the floor-tom in combination with Gadd's left-hand orchestration on small-tom, medium-tom, and floor-tom, produces timbral depth and variation reminiscent of tribal African drums. Gadd demonstrates his creative approach whilst performing this innovative pattern, resultingly confirming its selection for this study.⁸⁶

Four-limb integration is employed with bass drum and pedal hi-hat on beats 1, 2, 3, & 4, anchoring the pattern. The only variation is when Gadd reorchestrates his floor-tom rim-clicks to the ride cymbal bell in the B section. The pattern has a linear application of hand rhythms (except for beat 1) and is underpinned by the layered bass-drum and hi-hat crotchet pulse. The innovation is in the contrasting techniques on the drum kit creating a weighted yet open, forward-moving pattern.



FIGURE 30. SIGNATURE PATTERN 8: *LATE IN THE EVENING*. ORIGINAL PATTERN BY STEVE GADD

Observations during the practising and recording of this pattern noted the Afro-Cuban and West-African *Bata* drums timbre in Gadd's pattern and its orchestration to the drum kit. Applying four-limb integration of linear groupings to the selected drum components is key to the musicality of the rhythms inherent with the pattern. Techniques employed by Gadd demonstrate tonal musicality through displacement and orchestration to compose a well-crafted and inventive pattern.




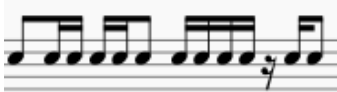


Gadd's patterns, as played in the original recording, are duplicated on the recordings as they appear in transcription in Score 22 and on Tracks 43 & 44.

The additional recordings of *Late in the Evening* represent the rearranged and new patterns from the original recording and include transcriptions of additional patterns performed in differing sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

Table 24. Rearrangement of Steve Gadd's signature pattern in *Late in the Evening* using the stepwise process, applying techniques and stylistic influences as used by Zigaboo Modeliste

⁸⁵ Paul Simon, *Paul Simon- Late in the Evening (Remastered, HQ)*, YouTube video, 4:05, recorded 1977, posted by HD_AUDIO, February 2, 2016, accessed September 26, 2021, <https://www.youtube.com/watch?v=-ZcGQX7lw68>

⁸⁶ Steve Gadd, *Steve Gadd: Late in the Evening*, YouTube video, 2.50, No date given, posted by Hudson Music, February 24, 2010, accessed March 11, 2021, <https://www.youtube.com/watch?v=I7W33sLJi78>

Step	Procedure	Details/Notes/Observations
1	Signature pattern RH on floor-tom rim & two sticks in each hand 	Song: <i>Late in the Evening</i> Drummer: Steve Gadd 24 notes played in pattern Tempo: 118bpm Drum kit components used: Five
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Steve Gadd: T8. Displacement T9. Four-limb integration T13. Hi-hat: pedal T18. Linear T20. Open-handed T21. Orchestration T23. Rim-click T31. Syncopation Stylistic influence implemented as used by Steve Gadd: Mozambique pattern and West-African <i>Bata</i> drums timbre
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Modeliste to be implemented in the re-arranged pattern 	Techniques to be implemented as used by Zigaboo Modeliste: T1. Accents T8. Displacement T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T18. Linear T19. Omission T20. Open-handed T24. Rim-shot T31. Syncopation Stylistic influence: second line, (New Orleans)
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Modeliste 	Application of the <i>linear</i> technique combined with <i>syncopation</i> , <i>displacement</i> , and <i>accents</i> performed in an <i>open-handed approach</i> , culminate to create a <i>half-time</i> pattern in contrast to Gadd's original pattern. Gadd's applied Mozambique rhythm to the floor-tom rim, and left-hand orchestrated tom rhythms, are duplicated and implied by <i>orchestration</i> to three drum components in the rearranged pattern. Sound sources comprise three voicings of the drum kit, being hi-hat, bass drum and snare drum.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern. 	Modeliste's-influenced pattern incorporates <i>syncopated</i> variance, and collectively implies and duplicates all three rhythms in Gadd's original pattern. The employed techniques, despite differing from the original, applied in the reimagined manner, produce a successful rearrangement. Snares off is an option that Modeliste uses in creating timbral diversity as per second-line drumming. The stylistic influence of New Orleans second-line (3-clave), allows for rhythmic flexibility in the rearranged pattern. The rearranged pattern, though juxtaposed to Gadd's pattern, successfully duplicates the original pattern's '3-side' clave at the original tempo of 118 bpm.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	15 notes in the rearranged pattern versus 24 notes in Gadd's pattern, highlights the differing technical and stylistic syntaxes, though rhythmic similarities exist and overlap. The rearranged pattern is well constructed and rhythmically strong in performance of the song.
7	Rearranged pattern Song: <i>Late in the Evening</i> Techniques/Styles as used by Zigaboo Modeliste 15 notes in new pattern Tempo range: 110-125 bpm Drum kit components used: Four	

2.23 Commentary and performance/recording notes on signature pattern 8: *Late in the Evening* by Steve Gadd applying techniques and stylistic influences as used by Zigaboo Modeliste

Application of the linear technique combined with syncopation, displacement, and accents performed with an open-handed approach, culminate to create a half-time pattern contrasting to Gadd's original pattern. Gadd's applied Mozambique rhythm, played on the floor-tom rim with the linear left-hand rhythm orchestrated to small, medium and floor toms, is duplicated in the rearranged pattern by orchestration to three alternate voicings on the drum kit, being the bass drum, snare, and hi-hat.

Four-limb integration combined with syncopated linear notation create three distinct and opposing rhythms, replicating the influence of second-line 3-clave, giving the rearranged pattern rhythmic flexibility, and allowing it to be musically viable at the original tempo of 118 bpm.

Sound sources comprise three components of the drum kit, being hi-hat, bass drum and snare drum, as per the recording. Snares-off is an option that Modeliste has used in creating timbral diversity as per second-line drumming and which is applied here.

There are 15 notes in the rearranged pattern versus 24 notes in Gadd's pattern, highlighting the differing technical and stylistic syntaxes, though rhythmic similarities exist and do overlap. The rearranged pattern is well constructed and rhythmically strong in performance of the song.







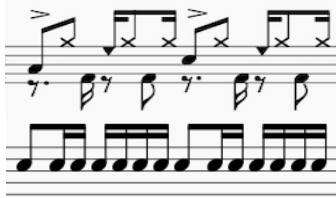

FIGURE 31. SIGNATURE PATTERN 8: *LATE IN THE EVENING*. REARRANGED PATTERN - ZIGABOO MODELISTE

Observations during the practising and recording of this pattern highlight the second-line influence in the rearrangement. Techniques employed by Modeliste, such as a linear approach with open-handed stickings, are often combined and applied to the three prime drum kit components being the bass drum, snare drum and hi-hat. Modeliste's syntax often includes a displaced snare drum in unison with open hi-hat accents, creating bespoke patterns using minimal notes. A mastery of independence and limb coordination is necessary to perform the rearranged pattern with the precision required.

The new recordings duplicate the pattern variation in the B section as played in the original recording by Gadd. The rearrangement employs the layering/unison techniques, with minimal sonic choices and includes the omission of down and back-beats.

The recordings of the rearranged patterns, utilising the stepwise process developed in this study and its application in transcription and my performance of them, as can be seen in Score 23 and heard on Tracks 45 & 46.

Table 25. New arrangement of Steve Gadd's signature pattern in *Late in the Evening* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Late in the Evening</i> Drummer: Steve Gadd 24 notes played in pattern Tempo: 118 bpm Drum kit components used: Five
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Steve Gadd: T8. Displacement T9. Four-limb integration T13. Hi-hat: pedal T18. Linear T20. Open-handed approach T21. Orchestration T23. Rim-click T31. Syncopation Stylistic influence implemented as used by Steve Gadd: Mozambique pattern. West-African <i>Bata</i> drums timbre
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T4. Common-time & Half-time T5. Cowbell T8. Displacement T18: Linear T19. Layering T21. Orchestration T31. Syncopation Stylistic influence: West-African <i>Bata</i> drums, Afro-Cuban tumbao
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementing the <i>linear</i> technique combined with cowbell, snare and floor-tom <i>orchestration</i> allows for a multi-timbral effect underpinned by tumbao bass drum pattern. Sound sources comprise five components of the drum kit, being, hi-hat, snare, bass drum, floor-tom, and cowbell.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern RH: f/tom & cowbell LH: hi-hat 	<i>Common-time and half-time</i> metre is implied by floor-tom and snare on beats 1&3 and cowbell on beats 2&4. Afro-Cuban tumbao rhythm on bass drum is juxtaposed against <i>displaced</i> tumbao on hi-hat. <i>Syncopated</i> hi-hat rhythm combined with bass drum and <i>cowbell</i> duplicate Gadd's syncopated and orchestrated multiple-tom rhythm. Gadd's emphasis on beats 1,2,3 and 4 is recreated by orchestrating floor-tom, snare, and <i>cowbell</i> . The new pattern is sonically different to the original by employing <i>orchestration</i> , <i>omission</i> of hi-hat and applying <i>linear</i> technique, in contrast to Gadd's use of both <i>linear</i> and <i>layering</i> techniques in the original pattern.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	The new pattern has 14 notes versus 24 notes in Gadd's original pattern and is exemplified by the redistribution of notes occasioning timbral variations. This creative use of techniques is underpinned by the West-African & Afro-Cuban stylistic influence.
7	New pattern Song: <i>Late in the Evening</i> Techniques/Styles as applied by Enrico Morena 14 notes in pattern Tempo range 110-125 bpm Drum kit components used: Five	

2.24 Commentary and performance/recording notes on signature pattern 8: *Late in the Evening* by Steve Gadd applying techniques and stylistic influences as used by Enrico Morena

The new pattern implements the linear technique combined with cowbell, snare and floor-tom orchestration allowing for a multi-timbral effect underpinned by tumbao bass drum pattern.

Common-time and half-time metre is implied simultaneously by the floor-tom and snare on beats 1&3 and cowbell on beats 2&4. The tumbao rhythm on bass drum is juxtaposed against a syncopated hi-hat rhythm creating a displaced ‘call and answer’ internal rhythm within the pattern. Both bass drum and cowbell duplicate Gadd’s syncopated and orchestrated multiple-tom rhythm. Gadd’s emphasis on beats 1,2,3 and 4 is recreated by orchestrating floor-tom, snare, and cowbell.

Sound sources comprise five components of the drum kit, being, hi-hat, snare, bass drum, floor-tom, and cowbell. The new pattern is sonically different to the original pattern, achieved by employing orchestration, omission of hi-hat notes and applying linear technique, contrasting with Gadd’s application of (both) linear and layering techniques in the original pattern.

The new pattern has 14 notes versus 24 notes in Gadd’s pattern, achieved by the redistribution of notes occasioning timbral variations and adoption of the linear technique. This creative use of techniques is underpinned by the West-African drum (timbral) and Afro-Cuban stylistic influences.

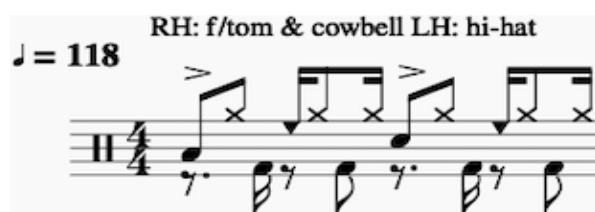


FIGURE 32. SIGNATURE PATTERN 8: *LATE IN THE EVENING*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this reimagined pattern highlights the rhythmic and stylistic influence of rhythms in Gadd’s original pattern. The new pattern is strengthened by the sonic repetition of the drum kit voicings being bass drum, snare drum, cowbell, hi-hat, and floor-tom, all combining to create a recurring percussive influence similar to the original pattern.

The recordings duplicate the pattern variation Gadd performs in the original recording (B section) by employing the pedal hi-hat on beats 1,2,3 & 4 and the accompanying (syncopated) open hi-hat accents, as notated in the corresponding score of the song (Score 24). The corresponding score utilises the stepwise process developed in this study and its application both in transcription and my performance of them as can be heard on Tracks 47 & 48.

2.25 Commentary and performance/recording notes on signature pattern 9: *Memphis Soul Stew* by Bernard Purdie

Memphis Soul Stew was originally recorded in 1967 by American saxophonist King Curtis with Gene Chrisman playing drums on the track. King Curtis rerecorded the song in 1971 on his *King Curtis Live at the Fillmore West* album with Bernard Purdie playing the drums. The innovative pattern in this study is Purdie's recording of the song from the 1971 album. Purdie's recording can be accessed via the footnote link.⁸⁷

Purdie employs pedal hi-hat on all quarter (crotchet) notes and when played with the hi-hat rhythm, produces an open hi-hat on the last semi-quaver of each beat. His use of ghost notes and accented back-beats on the snare imply a linear rhythm with the hi-hat pattern. The pattern is layered with overlapping rhythms, confirmed by observing its corresponding rhythmic profile. Chuck Silverman's article elucidates on Purdie's approach in the construction of this innovative pattern and his transcriptions assisted in its inclusion for this study.⁸⁸

The syncopated bass drum pattern displaces the downbeat of beat 3 and when viewed in unison with the pedal hi-hat and snare drum rhythms (excluding the hand hi-hat rhythm), it also implies a linear technique (as mentioned above). Purdie's snare drum technique in controlling the dynamics between the accented notes on beats 2 & 4 with an immediate ghost note on the following semi-quaver, is what gives this pattern its nuanced depth and sonic intensity.

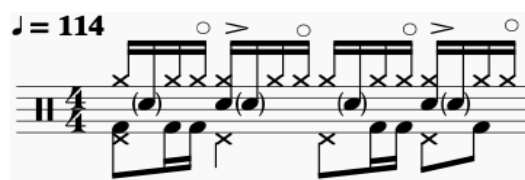


FIGURE 33. SIGNATURE PATTERN 9: *MEMPHIS SOUL STEW* BY BERNARD PURDIE

Observations during the practising and recording of this pattern highlights Purdie's use of ghost notes and the sonic depth he extricates from the drum kit components employed, being bass drum, snare drum and hi-hat. His use of pedal hi-hat as an ostinato (four-limb integration) underpins the pattern. Recording the innovative pattern was technically challenging in articulating the interplay of four-limb coordination whilst sustaining consistency in the ghosted snare notes and open hi-hat (non-accented).





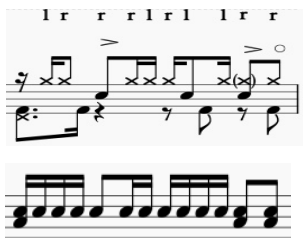

The new recordings duplicate pattern variations in Purdie's performance by moving the hi-hat rhythm to the ride cymbal and maintaining the pedal hi-hat on all crotchet notes. The ride cymbal variation is notated in the corresponding score of the song with Purdie's improvised bass-drum syncopation also being duplicated (Score 25 and Tracks 49 & 50).

The additional recordings of *Memphis Soul Stew* represent the rearranged and new patterns based on patterns from the original recording and include transcriptions of additional patterns performed in other sections of the song, utilising the stepwise processes and their application as applied in the recorded performances.

⁸⁷ King Curtis, *Memphis Soul Stew*, *Live at The Fillmore West*, YouTube video, 7:37, recorded July 3, 1971, posted by My name is Nobody, October 6, 2012, accessed September 9, 2021, <https://www.youtube.com/watch?v=yRuLc2d5x5g&list=PLxlqJ4zRuDzIilbHZUrsiCVx49wSy06ld>

⁸⁸ Chuck Silverman, "The Purdie Connection," *Modern Drummer*, May 1993, p. 48.

Table 26. Rearrangement of Bernard Purdie’s original pattern in *Memphis Soul Stew* using the stepwise process, applying techniques and stylistic influences as used by Zigaboo Modeliste

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Memphis Soul Stew</i> Drummer: Bernard Purdie 28 notes played in pattern Tempo: 112bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T12. Hi-hat open T13. Hi-hat pedal T17. Layering T27. Snare drum: ghost notes Analysis of the hi-hat identifies the stylistic influence of jazz, which is converted from triplet quavers to semi-quavers as applied to the funk-soul style.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Modeliste to be implemented in the rearranged pattern 	Techniques to be implemented as used by Zigaboo Modeliste: T1. Accents T8. Displacement T9. Four-limb integration T11. Hi-hat accent T18. Linear T20. Open-handed approach T31. Syncopation Stylistic influence implemented as used by Zigaboo Modeliste: second-line (New Orleans)
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Modeliste 	Use of the <i>linear</i> technique results in a rhythmically juxtaposed pattern incorporating <i>displacement</i> and <i>syncopation</i> in addition to <i>open hi-hats accent</i> . <i>Open-handed approach</i> creating ambidexterity and effecting an open ‘feel’. Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum.
5	Transcribe the re-arranged pattern creating a rhythmic footprint of the pattern 	Modeliste’s use of the <i>linear</i> technique distributes the rhythm over three limbs creating less timbral fluidity and a more concentrated pattern. Purdie’s ostinato hi-hat pattern and subsequent <i>open hi-hats</i> on each beat create a <i>layered</i> approach and is not replicated by Modeliste’s processes. The rearranged pattern is rhythmically fluent in performance at the original tempo of 120 bpm once mastered technically. We integrate Modeliste’s stylistic influence of the New Orleans second-line rhythm, based on a 3/2 clave, to be implied between the bass drum, snare, and hi-hat.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the re-arranged pattern	16 notes in the rearranged pattern versus 28 notes in Purdie’s pattern highlights the differing technical approaches with Modeliste’s use of syncopation and the linear technique. Performance of this pattern reinforces the viability of the rearranged pattern in areas of tempo, musicality, and rhythmic similarity despite differing technical applications and syntaxes.
7	Rearranged pattern Song: <i>Memphis Soul Stew</i> Techniques/Styles as used by Zigaboo Modeliste 16 notes in pattern Tempo range 100-120 bpm Drum kit components used: Three	

2.26 Commentary and performance/recording notes on signature pattern 9: *Memphis Soul Stew* by Bernard Purdie applying techniques and stylistic influences as used by Zigaboo Modeliste

Application of the linear technique can be seen in the respective rhythmic footprints highlighting the differences in processes adopted by both Purdie and Modeliste. The note count of the rearranged pattern is significantly less than the original, nevertheless, it employs diverse techniques, such as the displacement of core notes, syncopation and open hi-hat accents, in addition to the open-handed ambidextrous approach associated with Modeliste.

Modeliste's use of the linear technique redistributes rhythms to differing limbs with less timbral fluidity and creating a rhythmically contrasting pattern. Purdie's ostinato hi-hat pattern and subsequent open hi-hats on each beat create a layered approach, this is not replicated by and in Modeliste's processes. The stylistic influence of New Orleans second-line is integrated based on a 3/2 clave and implied between the bass drum, snare, and hi-hat.

There are 16 notes in the rearranged pattern compared to 28 notes in Purdie's pattern highlighting the differing technical approaches especially Modeliste's use of syncopation and the linear technique.

Performance of this pattern reinforces the workability of the rearranged pattern in areas of tempo, clave, and rhythmic similarity despite differing technical applications to the song. Sound sources utilize three components of the drum kit, being snare, hi-hat, and bass drum.



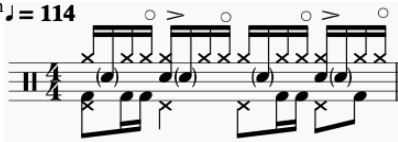





FIGURE 34. SIGNATURE PATTERN 9: *MEMPHIS SOUL STEW*. REARRANGED PATTERN - ZIGABOO MODELISTE

Observations during the practising and recording of this pattern highlight the *second-line* influence in the Modeliste-inspired pattern. Techniques employed by Modeliste, such as linear with open-handed stickings, are almost always applied to the three prime drum kit components of the bass drum, snare drum and hi-hat. Modeliste's technical syntax suggests that displaced snare drums in unison with open hi-hat accents are intrinsic in the composition of his unique patterns. A mastery of independence and coordination is required to perform the rearranged pattern with precision.

The new recordings duplicate the B section pattern variation, as performed by Purdie, in the original recording. The rearranged pattern is an aggregate of variations in Modeliste's processes as are other variations on the recordings as transcribed. Other techniques such as omission of down and back-beats are employed.

The recordings include transcriptions of rearranged patterns utilizing the stepwise process developed and its application in transcription and my performance of them (see Score 26 and Tracks 51 & 52).

Table 27. New arrangement of Bernard Purdie’s signature pattern in *Memphis Soul Stew* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern $\text{♩} = 114$ 	Song: <i>Memphis Soul Stew</i> Drummer: Bernard Purdie 28 notes played in pattern Tempo: 112bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T12. Hi-hat open T13. Hi-hat pedal T17. Layering T27. Snare drum: ghost notes Analysis of the hi-hat identifies the stylistic influence of jazz, which is converted from triplet quavers to semi-quavers as applied to the funk-soul style.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena T1. Accents T4. Cut-time implication T%. Cowbell T9. Four-limb integration T13. Hi-hat pedal ostinato T18. Linear T19. Omission of notes T27. Snare drum: ghost notes Stylistic influence implemented as used by Enrico Morena: Latin cowbell having Afro-Cuban rhythmic and sonic origins
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Use of the <i>linear</i> technique creates an open pattern incorporating only one/two bass-drum beats in the bar. The <i>cowbell</i> , <i>pedal hi-hat</i> , inclusive of snare <i>accents</i> and <i>ghost notes</i> , replicate Purdie’s ostinato hi-hat pattern. The <i>cowbell</i> is also used to duplicate Purdie’s bass drum pattern with beat 3 omitted intermittently. Sound sources adopted employ four components of the drum kit, being snare, cowbell, hi-hat, and bass drum.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern RH: cowbell LH: snare 	Use of ostinato <i>pedal hi-hat</i> on the + of each beat creates and <i>implies a cut-time feel</i> against the 4/4 metre. The techniques employed allow the new pattern to be rhythmically effective at the original tempo of 120 bpm. We integrate the stylistic influence of Afro-Cuban and a Latin <i>feel</i> by implementing the <i>cowbell</i> in a syncopated form.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the re-arranged pattern	20 notes in the new pattern versus 28 notes in Purdie’s pattern highlights the differing technical syntaxes applying <i>cowbell</i> /snare <i>linear</i> technique underpinned by sparse bass-drum usage. Performance of this pattern reinforces the viability of the new pattern in areas of tempo, musicality and confirming differing technical applications can work in the song setting.
7	New pattern Song: <i>Memphis Soul Stew</i> Techniques/Styles as applied by Enrico Morena 20 notes in pattern Tempo range 100-120 bpm Drum kit components used: Four	$\text{♩} = 114$ 

2.27 Commentary and performance/recording notes on signature pattern 9: *Memphis Soul Stew* by Bernard Purdie applying techniques and stylistic influences as used by Enrico Morena

Application of the linear technique results in a rhythmically cleaner pattern incorporating only one bass drum beat in the bar (option of two in B section). The cowbell and pedal hi-hat, inclusive of snare accents and ghost notes, replicate Purdie's ostinato hi-hat pattern. The cowbell is also used to duplicate Purdie's bass drum pattern with beat 3 omitted and played intermittently.

Use of ostinato pedal hi-hat on the '+'s of each beat creates a cut-time feel against the 4/4 metre (with bass drum and snare playing beats 1,2,3 & 4). Integrating the Afro-Cuban stylistic influence creates the sonics of a Latin feel by implementing the cowbell in a syncopated form (duplicating Purdie's bass drum rhythm). Sound sources employ four components of the drum kit, being snare, cowbell, hi-hat, and bass drum.

The new pattern has 20 notes versus 28 notes in Purdie's pattern highlighting the differing technical approaches via the snare and hi-hat linear rhythm, underpinned by sparse bass-drum usage. Performance of this pattern reinforces the workability of the new pattern in areas of tempo, musicality and confirming differing technical applications can work in the song setting.



FIGURE 35. SIGNATURE PATTERN 9: *MEMPHIS SOUL STEW*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of the new pattern highlight the impact stylistic influence and efficacy of the rearrangement process can have when applied creatively. The new pattern has an expanded sonic palette with the use of a cowbell underpinned by the combined bass drum, snare drum and hi-hat producing contrasting yet cohesive percussive rhythms. The recontextualising of Purdie's original pattern, through transcription and subsequent recording of it, introduces the concept of multiple percussive rhythms played simultaneously on a drum kit.

The new recordings (Tracks 53 & 54) duplicate pattern variations on the original recording (B section) by employing the ride-cymbal bell as notated in the corresponding score of the song (Score 27)

The recordings as presented, include additional new patterns and transcriptions, as seen on corresponding scores, utilizing the stepwise process, and its application both in transcription and my performance of them.

2.28 Commentary and performance/recording notes on signature pattern 10: *Motherless Children* by Sly Dunbar

Motherless Children was recorded by Jamaican reggae artist Gregory Isaacs and released in 1979 as the B-side to his single *Going Down Town*. Sly Dunbar was the drummer on the recording, renowned for his reggae playing and known for his creative patterns in that genre. The original recording can be heard via the footnote link.⁸⁹

Dunbar employs four-limb integration in this innovative pattern with a syncopated, half-time metre, supported by the four-drop bass drum on all crotchets of the bar. His employment of pedal hi-hat and resultant step hi-hat, underpin the pattern giving it a percussive palette with rhythmic depth and complexity. Dunbar accentuates the snare accent on beat 3 creating the half-time feel. The snare is highly pitched with snares-off (no bottom drumhead) to replicate a timbale, duplicating Dunbar's recorded performance. Eric Novod's article and transcription informed my decision for its inclusion in this study.⁹⁰

The syncopated hi-hat pattern has its origins in ska and Afro-Cuban bell patterns. This unique pattern highlights use of the step hi-hat (closing on the semi-quaver after the open hi-hats), creating contrasting rhythms underpinning the pattern and act as counterpoint to the stated half-time rhythm.

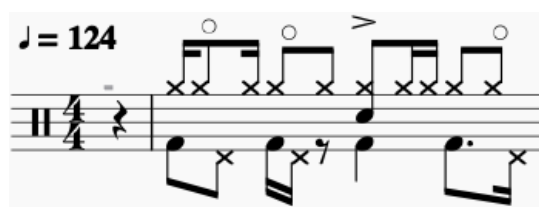


FIGURE 36. SIGNATURE PATTERN 10: *MOTHERLESS CHILDREN* BY SLY DUNBAR

Observations during the practising and recording of this pattern highlight Dunbar's employment of layering and four-limb integration to create rhythmically contrasting patterns anchored by the four-drop bass drum. His sonic choices incorporate three components of the drum-kit being the bass drum, snare drum and hi-hat, very much part of his stylistic syntax.

Performing the pattern required technical command of four-limb independence in articulating the step hi-hat and creating a counterpoint rhythm to the bass drum played on all four crotchet beats. Other challenges included executing the open hi-hats with clarity and precision.

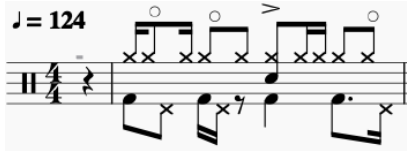





The new recordings (Tracks 55 & 56) duplicate pattern variations in Dunbar's song recording (Intro and B sections) as notated in the corresponding score of the song and my recording of them (Score 28). Techniques applied include four-limb integration and semi-quaver fills at the end of each bar.

The recordings of rearranged and new patterns incorporate additional patterns as performed by Dunbar and utilize the stepwise process developed in this study and my performances of them.

⁸⁹ Gregory Isaacs, *Motherless Children*, YouTube video, 6:03, recorded 1978, posted by Gregory Isaacs – Topic, November 9, 2014, accessed August 29, 2021, https://www.youtube.com/watch?v=VLC1ZTOPPzs&list=RDVLC1ZTOPPzs&start_radio=1&rv=VLC1ZTOPPzs&t=6

⁹⁰ Eric Novod, "Sly Dunbar: Heavy Kicks and Double Rimclicks," *Modern Drummer*, August 2012, p. 46.

Table 28. Rearrangement of Sly Dunbar’s signature pattern in *Motherless Children* using the stepwise process, applying techniques and stylistic influences as used by Zigaboo Modeliste

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Motherless Children</i> Drummer: Sly Dunbar 18 notes played in pattern Tempo: 124 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Sly Dunbar: T1. Accent T9. Four-limb integration T10. Half-time pattern T12. Hi-hat: open T13. Hi-Hat: pedal T17. Layering T24. Rim shot- snare T31. Syncopation Stylistic influence implemented as used by Sly Dunbar: Ska, Afro-Cuban 4/4 bell patterns. Timbale drum.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Modeliste to be implemented in the rearranged pattern 	Techniques to be implemented as used by Zigaboo Modeliste: T1. Accents T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T17. Layering T20. Open-handed T24. Rim-shot T25. Syncopation Stylistic influence: second line (New Orleans) 3/2 clave
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Modeliste 	Application of the <i>layering</i> technique combined with <i>syncopated</i> hi-hat and bass drum, snare and <i>open hi-hats</i> performed with ambidextrous <i>open-handed</i> technique, culminates in a <i>half-time</i> pattern and duplicating aspects of Dunbar’s original pattern. Dunbar’s four-drop bass drum rhythm is not duplicated directly though implied within the completed pattern. The Ska influenced hi-hat is directly replicated. Sound sources comprise three components of the drum kit, being, hi-hat, bass drum and snare drum.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern. 	Modeliste’s second-line pattern has <i>syncopated</i> , and rhythmic similarity underpinned by the <i>half-time</i> rhythm and bass drum locking in with Dunbar’s hi-hat pattern. In performance, Modeliste’s techniques, applied in this manner, produce a viable rearrangement. Dunbar’s <i>hi-hat pedal</i> rhythm, in closing on semi-quavers after <i>open hi-hats</i> , creates a counter-rhythm within the pattern and is not replicated in the rearrangement, with no detriment to the rhythm. The second-line 3/2 clave, when adapted and juxtaposed against the original pattern, allows for a successful rearrangement as heard and confirmed on the recordings.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	15 notes in the rearranged pattern versus 18 notes in Dunbar’s pattern highlights different stylistic approaches, though rhythmic similarities exist and overlap. The rearranged pattern is rhythmically strong in performance when played.
7	Rearranged pattern Song: <i>Motherless Children</i> Techniques/Styles as used by Zigaboo Modeliste 15 notes in two-bar pattern Tempo range: 110-130 bpm Drum kit components used: Three	

2.29 Commentary and performance/recording notes on signature pattern 10: *Motherless Children* by Sly Dunbar applying techniques and stylistic influences as used by Zigaboo Modeliste

The rearranged pattern is composed by employment of layering technique with syncopated hi-hat and bass drum rhythms, a snare accent and open hi-hats. It duplicates Dunbar's half-time pattern except the four-drop bass drum rhythm implied and redistributed to the bass drum, hi-hat, and snare drum respectively. The Ska and Afro-Cuban influenced (syncopated) hi-hat is directly replicated.

Modeliste's processes are applied using a second-line 3/2 clave underpinned by the half-time metre and a bass drum locking in with Dunbar's hi-hat pattern. In performance, these techniques, when applied in this manner, produce a successful rearrangement. Dunbar's hi-hat pedal rhythm, closing on semi-quavers after each open hi-hat and creating a counter-point rhythm within the pattern, is not replicated in the rearranged pattern with no loss of rhythmic efficacy.

The second-line 3/2 clave, when adapted and juxtaposed against the original pattern, allows for a successful rearrangement, as heard, and confirmed on the recordings. The pattern is played on three components of the drum kit, being, hi-hat, bass drum and snare drum.

The rearranged pattern has 15 notes versus 18 notes in Dunbar's pattern, highlighting different stylistic influences, however, rhythmic similarities do exist and overlap. The rearranged pattern is rhythmically strong in performance when recorded.



FIGURE 37. SIGNATURE PATTERN 10: *MOTHERLESS CHILDREN*. REARRANGED PATTERN - ZIGABOO MODELISTE

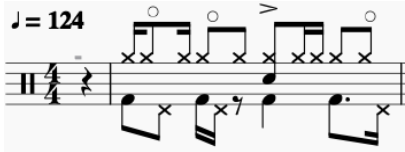




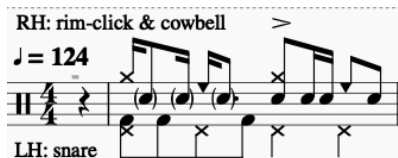
Observations during the practising and recording of this pattern highlight Dunbar's use of layering and four-limb integration. These techniques are applied in the rearranged pattern as per Modeliste's processes and focusing on sonic choices prevalent in his patterns, being the bass drum, snare drum and hi-hat. His use of snare-drum rim-shots, open hi-hat accents (and resultant pedal hi-hat) underpins the pattern giving it a percussive palette with rhythmic depth and complexity. Examples of three-note cells, (three-limb) layering, is also highlighted in this rearranged pattern.

Performing and recording the pattern was challenging in attaining the independence required to facilitate and articulate the syncopated bass drum and hi-hat rhythms. Other challenges included the stickings involved in performing with open-handed ambidexterity.

The recordings (Track 57 & 58) duplicate pattern variations in Dunbar's performance (Intro and B sections) by applying differing syncopation and open hi-hat accents as notated in the corresponding score of the song (Score 29).

The recordings, as presented, also include transcriptions of rearranged patterns which utilize the stepwise process developed in this study and of its application in transcription and my performance of them.

Table 29. New arrangement of Sly Dunbar's signature pattern in *Motherless Children* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Motherless Children</i> Drummer: Sly Dunbar 18 notes played in pattern Tempo: 124 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Sly Dunbar: T1. Accent T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: accent T13. Hi-Hat: pedal T17. Layering T24. Rim-shot T31. Syncopation Stylistic influence implemented as used by Sly Dunbar: Ska, Afro-Cuban 4/4 bell patterns, Timbale drum
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T4. Common-time & Half-time T5. Cowbell T7. Diddle stroke T9. Four-limb integration T13. Hi-hat: pedal T18. Linear: between hands T23. Rim-click: small-tom T27. Snare: ghost notes Stylistic influence: Funk with Afro-Cuban <i>Songo</i> bell pattern.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementing <i>linear</i> technique employed between <i>cowbell</i> , <i>rim-click</i> , <i>ghost notes</i> and <i>accented snare</i> underpinned by <i>hi-hat pedal</i> keeping metre on all beats. Bass drum duplicates rhythms imbedded in Dunbar's original pattern with an expanded timbral palette. Sound sources comprise five components of the drum kit, being, hi-hat, snare, bass drum, small-tom rim, and cowbell.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	<i>Common-time</i> and <i>half-time</i> metre implied by <i>rim-clicks</i> on beats 1&3 and <i>cowbell</i> on beats 2&4 contrast against snare <i>accent</i> on beat 3 and bass drum rhythm on 1+ of beat 1 and + of beat 2. Dunbar's hi-hat rhythm and <i>accents</i> have Ska origins and are duplicated in the new pattern via <i>snare ghost</i> and <i>diddle notes</i> . <i>Pedal hi-hats</i> on all crotchet beats directly replicate Dunbar's four-drop bass drum. <i>Ghost notes</i> are influenced by funk <i>linear</i> -snare embellishments and <i>rim-click</i> and <i>cowbell</i> have <i>Songo</i> quarter-note implications. The new pattern is sonically dissimilar to the original by use of alternate drum components, however it does compliment the original pattern and facilitates a creatively reimaged new pattern.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	Both patterns have 18 notes despite employing differing techniques. The use of different sound sources and resulting timbral variations in the new pattern highlights creative application of techniques reinforced by alternate voicings.
7	New pattern Song: <i>Motherless Children</i> Techniques/Styles as applied by Enrico Morena 18 notes in pattern Tempo range 110-130 bpm Drum kit components used: Three	 RH: rim-click & cowbell LH: snare J = 124

2.30 Commentary and performance/recording notes on signature pattern 10: *Motherless Children* by Sly Dunbar applying techniques and stylistic influences as used by Enrico Morena

The new pattern implements linear technique employing cowbell, rim-click, ghost notes and accented snare underpinned by pedal hi-hat playing (ostinato) on all crotchet beats. In addition, the bass drum duplicates rhythms imbedded in Dunbar's pattern on the bass drum, step hi-hat and hi-hat.

Common-time and half-time metre is implied by rim-clicks on beats 1&3 and cowbell on beats 2&4 contrasting with the snare accent on beat 3 and bass drum rhythm on 1+ of beat 1 and + of beat 2. Dunbar's hi-hat rhythm and accents have Ska origins and are duplicated in the new pattern via snare ghost notes and diddle notes (variations in score). Pedal hi-hats on all crotchet beats directly replicate Dunbar's four-drop bass drum. Ghost notes are influenced by 'funk' linear-snare embellishments and rim-click and cowbell have Afro-Cuban *Songo* quarter-note implications.

Sonic differences between the patterns are apparent due to the use of differing drum kit components, however, the new pattern does compliment the original pattern by creative rearrangement. Sound sources comprise five components of the drum kit, being hi-hat, snare, bass drum, rim of small-tom, and cowbell. Both patterns have 18 notes despite the employment of differing techniques. The use of different sound sources within the new pattern and timbral variations highlights creative use of techniques reinforced by alternate voicings.

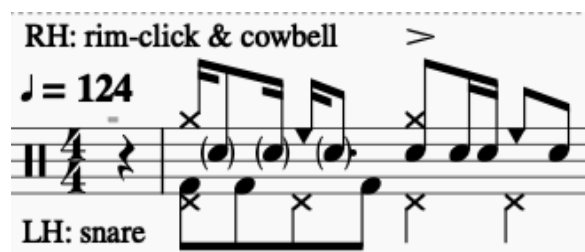


FIGURE 38. SIGNATURE PATTERN 10: *MOTHERLESS CHILDREN*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlight Dunbar's use of layering and four-limb integration to create contrasting patterns and rhythms. His sonic choices are usually only three components of the drum-kit being the bass drum, snare drum and hi-hat. The new pattern has expanded on that selection of voicings by introducing a timbral palette requiring greater attention to coordinated movement between components and the technical execution of snare ghost notes.

Performing and recording the pattern was challenging in attaining the independence required to facilitate four-limb integration including the technical and dynamic control of the snare drum rhythm in linear juxtaposition to the bass drum pattern. The snare drum rhythm is made up of four nomenclature techniques: snare accent; snare ghost notes; snare buzz/press stroke; diddle stroke.

The recordings (Track 59 & 60) duplicate pattern variations in Dunbar's performance (Intro and B sections) by applying snare buzz/press strokes and related techniques as transcribed in the corresponding score (Score 30).

The recordings include transcriptions of new patterns which utilize the stepwise process developed in this study and its application in transcription and my performance of them.

2.31 Commentary and performance/recording notes on signature pattern 11: *Right Time* by Sly Dunbar

Right Time is from the 1976 debut studio album of influential Jamaican Reggae band the *Mighty Diamonds*. Sly Dunbar was the session drummer on the track. The album was also titled *Right Time*. The original recording can be accessed via the footnote link.⁹¹

The pattern selected for this study is an aggregate of the recorded performance, however, it is the predominant pattern Dunbar plays in section A on the recording. Dunbar's pattern is a swing shuffle formatted on sextuplets (sixteenth note triplets). Its dominant stylistic influence is the one-drop reggae intertwined with a blues-shuffle and Dunbar's improvising x-stick hinting at jazz comping. Dunbar cites... 'I'd take chances, y'know. But it gave me a chance to be a leader and an innovator.'⁹²

This pattern highlights Dunbar's x-stick rhythm on beats 1 & 3 in addition to the traditional x-stick on beats 2 & 4 (in unison with bass drum in reggae), augmenting the one-drop pattern. The x-stick on beats 1 & 3 normally would be associated and played on the bass drum in a pop/rock format. Dunbar effectively is amalgamating the two styles. He employs displacement (reversal of x-stick rhythm) and syncopation in latter sections (see transcription) enhancing the pattern with bass drum and x-stick embellishments. Eric Novod's transcription and supporting commentary on Dunbar's innovative informed in its selection for this study.⁹³



FIGURE 39. SIGNATURE PATTERN 11: *RIGHT TIME* BY SLY DUNBAR

Observations during the practising and recording of this pattern highlights Dunbar's use of layering engaging three limbs (no pedal hi-hat). His sonic choices use only three components of the drum-kit being the bass drum, snare drum and hi-hat. The sixteenth note shuffle hi-hat drives the pattern, underpinned by the unison x-stick and bass drum. The additional rhythms are played by the x-stick adding to the rhythmic palette creating depth and complexity.

Performing and recording the pattern highlighted the importance of precision when executing the hi-hat and x-stick parts, paying attention to not flaming the two voices. Other challenges included executing the x-stick rhythmic transitions between each section. Technical control is required within the confines of the syncopated rhythms.

The recordings (Track 61 & 62) duplicate pattern variations in Dunbar's performance (Intro and B sections) by employing displacement, omission of down-beats and syncopation, engaging three limbs (voices), as notated in the corresponding score of the song (Score 31).





The additional recordings of this song include transcriptions of rearranged and new patterns utilising the stepwise process developed, in transcription and my own performance of them.

⁹¹ Mighty Diamonds, *Might Diamonds – Right Time – Right Version (Locks)* 1975, YouTube video, 5:46, recorded 1975, posted by Jahharvey76, January 22, 2012, accessed August 29, 2021, <https://www.youtube.com/watch?v=6UgcYqwIJhE>

⁹² Robert Santelli, 'The State of the Art'. *Modern Drummer*. January 1986, p. 29.

⁹³ Eric Novod, "Sly Dunbar: Heavy Kicks and Double Rimclicks," *Modern Drummer*, August 2012, p. 46.

Table 30. Rearrangement of Sly Dunbar’s signature pattern in *Right Time* using the stepwise process, applying techniques and stylistic influences as used by Ginger Baker

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Right Time</i> Drummer: Sly Dunbar 24 notes played in pattern Tempo: 70 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Sly Dunbar: T1. Accent T8. Displacement T17. Layering T19. Omission T29. Snare drum: x-stick T31. Syncopation Stylistic influence implemented as used by Sly Dunbar: Blues-shuffle and jazz. Reggae one-drop.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Baker to be implemented in the rearranged pattern 	Techniques to be implemented as used by Ginger Baker: T4. Common-time & cut-time simultaneously T8. Displacement of down-beat T9. Four-limb integration T13. Hi-hat: pedal T17. Layering T21. Orchestration T25. Syncopation Stylistic influence: jazz, bebop and West-African Yoruba <i>Bata</i> drum.
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Baker 	Application of the <i>layering</i> technique combined with <i>syncopated</i> bass drum, <i>cut-time pedal hi hat</i> /jazz-ride rhythm, <i>orchestrated</i> small/med/floor toms, <i>implying 4/4 common-time metre</i> juxtaposed against cut-time feel stated above. The rearranged pattern retains sextuplet-subdivision of Dunbar’s original pattern whilst replicating the <i>x-stick</i> rhythms by <i>orchestrating</i> between the three toms. Dunbar’s reggae hi-hat rhythm is also replicated between differing drum kit components. Sound sources comprise six components of the drum kit being, hi-hat, bass drum, small-tom, medium-tom, floor-tom, and ride cymbal.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern. 	Baker’s jazz and West-African Yoruba <i>Bata</i> drums stylistic influences are employed to create a sonically rich pattern with timbral diversity intertwined with rhythmic <i>syncopation</i> . The floor-tom on beats 2&4 replicate the reggae one-drop bass drum retaining the original ‘feel’ as played by Dunbar. In performance, when applying Baker’s processes, the rearranged pattern creates challenging <i>four-limb integration</i> . Once mastered, the pattern is rhythmically musical and orchestral in ‘feel’.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	24 notes in both patterns highlights the use of <i>layering</i> techniques for both drummers. However, the different stylistic influences and related techniques, i.e., <i>orchestration</i> , create divergent patterns.
7	Rearranged pattern Song: <i>Motherless Children</i> Techniques/Styles as used by Ginger Baker 24 notes in pattern Tempo range: 65-75 bpm Drum kit components used: Six	

2.32 Commentary and performance/recording notes on signature pattern 11: *Right Time* by Sly Dunbar applying techniques and stylistic influences as used by Ginger Baker

The rearranged pattern applies the layering technique, employing syncopated bass drum, cut-time pedal hi hat with a jazz-ride rhythm and orchestrated small/med/floor toms. A common-time 4/4 metre is implied by the orchestrated toms when juxtaposed against the cut-time ‘feel’ stated above.

Applying Baker’s processes in the rearranged pattern retains the sextuplet-subdivision of Dunbar’s original pattern whilst replicating the x-stick notes by orchestrating the rhythm between the three toms. Dunbar’s reggae hi-hat rhythm is also replicated between differing drum kit components.

Baker’s jazz and African stylistic influences are employed to create a sonically rich pattern with a timbral diversity and rhythmic syncopation. The floor-tom on beats 2 & 4 replicate Dunbar’s reggae one-drop bass drum, retaining the feel played by Dunbar. Sound sources comprise six components of the drum kit being, hi-hat, bass drum, small-tom, medium-tom, floor-tom, and ride cymbal. The bass drum anticipated ‘push’ is directly related to Baker’s jazz bebop influence

In performance, when applying Baker’s processes and techniques, the rearranged pattern creates challenging four-limb integration. Once mastered, the pattern is rhythmically musical and orchestral in ‘feel’. Both patterns have 24 notes highlighting the use of the layering technique, employed in both drummers’ syntaxes, though applying differing stylistic influences and related techniques, i.e., orchestration, create divergent patterns.



FIGURE 40. SIGNATURE PATTERN 11: *RIGHT TIME*. REARRANGED PATTERN - GINGER BAKER






Observations during the practising and recording of this pattern highlight Baker’s use of layering and four-limb integration. The techniques applied in the rearranged pattern, as adopted in Baker’s processes, focus on timbral choices prevalent in many of his patterns by employing multiple toms, bass drum, snare drum, hi-hat, and ride-cymbal simultaneously. Baker’s stylistic influences of West-African Yoruba *Bata* drum (timbre & rhythms) and jazz ride/bebop (and resultant pedal hi-hat), underpins the pattern giving it a percussive palette with rhythmic depth and complexity.

Performing the pattern required mastering the independence to facilitate and articulate the syncopated bass drum and hi-hat rhythms. Other challenges include stickings involved in performing the pattern with an open-handed ambidextrous technique.

The recordings (Track 63 & 64) duplicate pattern variations in Dunbar’s performance (Intro and B sections) by applying syncopation and orchestration as notated in the corresponding score of the song (Score 32).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 31. New arrangement of “Sly Dunbar’s signature pattern in *Right Time* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Right Time</i> Drummer: Sly Dunbar 24 notes played in pattern Tempo: 70 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Sly Dunbar: T1. Accent T8. Displacement T17. Layering T19. Omission T29. Snare drum: x-stick T31. Syncopation Stylistic influence implemented as used by Sly Dunbar: Blues-shuffle and jazz. Reggae one-drop.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T9. Four-limb integration T11. Hi-hat: open T12. Hi-hat: pedal T17. Layering T26. Snare: Buzz stroke T27. Snare: Ghost notes T30. Snare & x-stick alternating T31. Syncopation Stylistic influence: Afrobeat. Disco. Jazz bebop.
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementing of <i>layering</i> technique employing <i>ghost notes</i> , <i>accented</i> and <i>buzz strokes</i> on snare underpinned by <i>hi-hat pedal</i> keeping metre on all crotchet beats with a <i>syncopated</i> bass drum. Dunbar’s <i>x-stick</i> pattern is implied by the bass drum and <i>snare & x-stick alternating</i> in a ‘call and answer’ manner creating an expanded sonic palette. Sound sources comprise five components of the drum kit, being, hi-hat, snare, bass drum though employing nine techniques.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	The stylistic disco feel is implied by <i>open-hi-hats</i> on the + of every beat and actioned by <i>pedal hi-hat</i> on all crotchet beats. Dunbar’s shuffled hi-hat sextuplets have blues-shuffle origins and used in reggae. The new pattern employs three drum components to replicate the shuffled pattern engaging snare, bass drum and hi-hat which have Afrobeat and jazz-bebop influences in its construction (see commentary) The new pattern has greater timbral variety compared to the original by its use of alternate drum kit components and differing stylistic influences. The new pattern compliments the original pattern offering and facilitating a well-balanced alternative.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	The new pattern has 23 notes versus the original pattern’s 24, confirming similarities when employing the <i>layering</i> technique. Differing stylistic influences and the application of expanded techniques create a decidedly different though rhythmically relevant new pattern.
7	New pattern Song: <i>Right Time</i> Techniques/Styles as applied by Enrico Morena 23 notes in pattern Tempo range 60-75 bpm Drum kit components used: Three	

2.33 Commentary and performance/recording notes on signature pattern 11: *Right Time* by Sly Dunbar applying techniques and stylistic influences as used by Enrico Morena

The new pattern implements a layering technique employing snare drum techniques of ghost notes, accents, buzz strokes and x-stick. Other techniques implemented include hi-hat pedal (keeping time/metre on all crotchet beats) and a syncopated bass drum. Dunbar's x-stick pattern is implied by the bass drum and snare & x-stick alternating in a 'call and answer' manner creating an expanded sonic palette.

Stylistic influence is adapted by implying a *disco* 'feel' with open-hi-hats on the + of every beat and actioned by pedal hi-hat on all crotchet beats. Dunbar's shuffled hi-hat (sextuplets) have *blues-shuffle* origins and used in *reggae*. The new pattern employs three drum components replicating the shuffled pattern employing snare, bass drum, hi-hat, and have *Afrobeat* (displaced and syncopated bass drum & snare drum notes) and *jazz-bebop* (snare drum embellishments) influences in its internal rhythms.

The new pattern has timbral variety compared to the original in its use of alternate drum kit components and differing stylistic influences. It rhythmically complements the original pattern composing a well-balanced, alternate, and new pattern.

Selected sound sources comprise five components of the drum kit, being, hi-hat, snare, bass drum and employing nine (nomenclature) techniques. The new pattern has 23 notes versus the original pattern's 24, confirming similarities in employment of the *layering* technique.



FIGURE 41. SIGNATURE PATTERN 11: *RIGHT TIME*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlights Dunbar's use of layering and rhythmic interplay. His sonic choices comprise three components of the drum-kit being the bass drum, snare drum and hi-hat. The new pattern duplicates that selection though expanding the sonic variation by employing varying snare drum techniques and creating greater dynamic density.

Performing and recording the pattern is challenging in attaining the independence to facilitate the four-limb integration required, including technical and dynamic control of the snare drum notes and its counterpoint to the bass drum rhythm.

The recordings (Track 65 & 66) duplicate pattern variations in Dunbar's performance (Intro and B sections) by applying snare diddle-strokes and other related techniques as transcribed on the relevant score (Score 33).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

2.34 Commentary and performance/recording notes on signature pattern 12: *Rock Steady* by Bernard Purdie

Rock Steady was recorded by American singer Aretha Franklin in 1971 and released on her eighteenth studio album, *Young, Gifted and Black*, in 1972. Bernard Purdie was the drummer on the album. The original recording can be accessed via the footnote link.⁹⁴

Purdie's trademark processes involving four-limb integration and layering multiple (overlapping) rhythms simultaneously, are highlighted in this pattern. Playing individuated (syncopated) hi-hat, bass drum and snare drum rhythms (inclusive of ghost notes), creates a rhythmic density and underpinned by an ostinato pedal hi-hat on beats 2 & 4, also effecting open hi-hats on the + 's of beats 1 & 3. Jim Payne's article on Purdie's *Rock Steady* was an important source reference in its selection for this study.⁹⁵

The pattern's rhythmic footprint highlights multiple three-note cells and focusing attention on the interplay between accented snare beats on 2 & 4, embellished with multiple ghost notes. Purdie's stylistic influences of *Soul* and *R&B* evident, however, the interplay between ghost notes and hi-hat pays homage to the stylistic influence of Boogaloo. Purdie states... 'You're molding that one beat (pattern) to be so big that it's gonna sound like several things happening...and that's why my beats come out heavy.'⁹⁶ Employing the layering technique endorses this statement.



FIGURE 42. SIGNATURE PATTERN 12: *ROCK STEADY* BY BERNARD PURDIE

Observations during the practising and recording of this pattern highlights Purdie's use of the layering technique engaging four-limb integration. His sonic choices comprise three components of the drum-kit being the bass drum, snare drum and hi-hat. The sixteenth note hi-hat rhythm, inclusive of the open hi-hats, sit above the pattern suggesting forward movement, underpinned by the heavily syncopated snare drum and bass drum rhythms which produce sonic depth, adding to the rhythmic palette, creating depth and complexity.

Performing and recording the pattern highlighted the importance of precision when executing the hi-hat and snare parts, paying attention to not flaming the three voices. Other challenges included executing the contrasting hi-hat and bass drum rhythms cleanly. Technical awareness is required when combining syncopated rhythms.

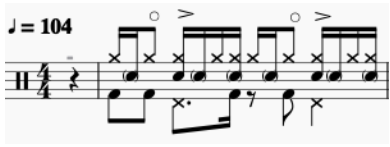





The recordings (Track 67 & 68) duplicate pattern variations in Purdie's performance (Intro and B sections) by playing ride cymbal and expanding the pedal hi-hat application, as notated in the corresponding score of the song (Score 34). The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

⁹⁴ Aretha Franklin, *Rock Steady*, YouTube video, 3:10, recorded 1978-1980, posted by Jonny Drop, October 2, 2009, accessed September 24, 2021, <https://www.youtube.com/watch?v=EXJx2NnmxA0>

⁹⁵ Jim Payne. "Rock Steady. Demystified." *Modern Drummer*. April 2015, p. 43.

⁹⁶ Cheech Iero. "The New York Scene. Bernard Purdie." *Modern Drummer*. May/June 1979, p. 20.

Table 32. Rearrangement of Bernard Purdie’s signature pattern in *Rock Steady* using the stepwise process, applying techniques and stylistic influences as used by Sly Dunbar

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Rock Steady</i> Drummer: Bernard Purdie 24 notes played in pattern Tempo: 104 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T27. Snare-drum: ghost notes T31. Syncopation: bass drum Stylistic influence: Boogaloo. Soul, R&B.
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Dunbar to be implemented in the rearranged pattern 	Techniques to be implemented as used by Sly Dunbar: T9. Four-limb integration T12. Hi-hat: open T17. Layering (snare) T18. Linear T19. Omission: down-beats T29. Snare drum: x-stick T30. Snare and x-stick alternating T31. Syncopation T32. Two-bar pattern Stylistic influence implemented as used by Sly Dunbar: reggae one-drop and Ska
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Dunbar 	Employing <i>alternate snare x-stick & single strokes</i> over a <i>two-bar pattern</i> with <i>open hi-hat</i> accent and bass drum reggae one-drop on beats 2&4 replicating Purdie’s snare <i>accents</i> and <i>pedal hi-hats</i> . The quaver hi-hat and x-stick pattern duplicates Purdie’s <i>syncopated</i> hi-hat/snare rhythm inclusive of <i>ghost notes</i> (in addition to the <i>omission</i> of the bass drum on beat 1). Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum as per Purdie’s pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	The rearranged pattern employs Dunbar’s reggae-influenced quaver hi-hat rhythm aligning to Purdie’s <i>syncopated</i> hi-hat. Dunbar often applies single-stroke <i>linear</i> rhythms to hi-hat and snare which is underpinned by bass drum and <i>accents</i> on the snare. The rearrangement highlights Purdie’s use of <i>layering</i> as opposed to Dunbar’s combining <i>linear</i> with a <i>layered</i> snare accent in addition to sonic and stylistic differences. Dunbar’s stylistic influence is reggae one-drop and ska-influenced <i>x-sticks</i> on the snare, substituting <i>ghost notes</i> as used implying the boogaloo style, by Purdie on the original pattern.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	There are 30 notes in the rearranged two-bar pattern compared to 24 notes in Purdie’s original one-bar pattern. The functionality of the rearranged pattern in areas of tempo, musicality and rhythmic contrast is confirmed in performance.
7	Rearranged pattern Song: <i>Rock Steady</i> Techniques/Styles as used by Sly Dunbar 30 notes in two-bar pattern Tempo range 100-110 bpm Drum kit components used: Three	

2.35 Commentary and performance/recording notes on signature pattern 11: *Rock Steady* by Bernard Purdie applying techniques and stylistic influences as used by Sly Dunbar

The rearranged pattern employs alternate snare x-stick & single strokes over an expanded pattern of two bars. Open hi-hat accents and reggae one-drop bass drum on beats 2 & 4 replicate Purdie's snare accents and pedal hi-hats. The quaver hi-hat, x-stick pattern, duplicates Purdie's syncopated hi-hat and snare rhythm inclusive of ghost notes (in addition to the omission of bass drum on beat 1).

Dunbar's reggae-influenced quaver hi-hat rhythm is applied and aligns within Purdie's syncopated hi-hat pattern. Dunbar often applies linear rhythms hi-hat and snare rhythms which is underpinned by bass drum and (layered) accents on the snare. The rearrangement highlights Purdie's use of the layering technique as opposed to Dunbar's combining linear with a layered snare accent in addition to sonic and stylistic differences.

Dunbar's stylistic influence is reggae one-drop and ska-influenced x-sticks on the snare, substituting ghost notes used by Purdie implying the boogaloo, on the original pattern.

Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum as per Purdie's pattern. There are 30 notes in the rearranged two-bar pattern compared to 24 notes in Purdie's one-bar pattern. The functionality of the rearranged pattern in areas of tempo, musicality and rhythmic contrast is confirmed in performance.

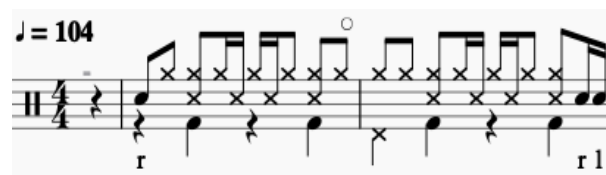


FIGURE 43. SIGNATURE PATTERN 12: *ROCK STEADY*. REARRANGED PATTERN - SLY DUNBAR







Observations during the practising and recording of this pattern highlights Dunbar's use of layering and syncopated rhythms. The techniques applied in the rearranged pattern, as adopted in Dunbar's processes, focus on sparse bass drum rhythms (aligning to reggae one-drop or four-drop), the application of x-stick and snare drum simultaneously, open hi-hat (accents) and ostinato hi-hat rhythms.

Performing and recording the pattern requires consistency in x-stick syncopation and actioning the open hi-hat. Playing transitions to four-drop (bass drum) was also noted for requiring consistency. Other challenges include single-stroke snare rolls played at tempo onto the first beat of the bar.

The new recordings (Track 69 & 70) duplicate pattern variations in Purdie's performance (Intro and B sections) by applying alternate syncopation and four-drop bass drum, as notated in the corresponding score of the song (Score 35).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 33. New arrangement of Bernard Purdie’s signature pattern in *Rock Steady* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Rock Steady</i> Drummer: Bernard Purdie 24 notes played in pattern Tempo: 104 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T27. Snare-drum: ghost notes T31. Syncopation: bass drum Stylistic influence: Boogaloo. Soul, R&B
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as applied by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena T1. Accents T4. Common-time and cut-time simultaneously T9. Four-limb integration T13. Hi-hat: pedal T17. Layering T18. Linear T21. Orchestration T31. Syncopation Stylistic influence: West-African <i>agogo</i> bell rhythms (on drums) and Afro-Cuban Samba <i>batucada</i>
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as applied by Morena 	<i>Orchestrated</i> toms and snare <i>accent</i> on beats 2&4 state <i>common-time metre</i> juxtaposed against a <i>syncopated</i> bass drum with <i>hi-hat pedal</i> on +’s of each beat <i>implying a cut-time metre</i> . The new pattern is constructed using both <i>linear</i> and <i>layered</i> rhythms. Creative use of timbral colour is highlighted in the new pattern which employs six components of the drum kit, being snare, hi-hat, bass drum, small, medium and floor-toms.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Purdie’s original pattern employs a <i>layered</i> technique creating rhythmic continuity via snare <i>accents</i> , <i>ghost notes</i> and <i>syncopated</i> bass drum. The new pattern, though similar in profile, has less notes as seen in the respective footprints. Reimagining Purdie’s pattern with new techniques creates a diverse, yet rhythmically related pattern and more percussive than the original, The stylistic influence of West-African <i>agogo</i> bells and Afro-Cuban Samba <i>batucada</i> rhythm, when orchestrated creatively, facilitates successful application to the song.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	18 notes in the new pattern versus 24 notes in Purdie’s original pattern highlights the differing technical approaches, both of which are underpinned by minimal bass-drum usage and confirming that creative reimagining using a workable methodology is a key element to combining techniques. Performance reinforces the workability of the new pattern in tempo, musicality, and technical adaptation.
7	New pattern Song: <i>Rock Steady</i> Techniques/Styles as applied by Enrico Morena 18 notes in pattern Tempo range 100-110 bpm Drum kit components used: Six	

2.36 Commentary and performance/recording notes on signature pattern 12: *Rock Steady* by Bernard Purdie applying techniques and stylistic influences as used by Enrico Morena

The new pattern employs orchestrated toms in combination with snare accents on beats 2 & 4 implying a 4/4 common-time metre and is underpinned by a syncopated bass drum rhythm with hi-hat pedal on +’s of each beat implying a cut-time metre (2/2). Purdie’s pattern is duplicated implementing the linear technique. The technique of layering is introduced when applying and playing the foot rhythms.

Purdie’s original pattern employs a layered technique creating continuity via snare accents, ghost notes and syncopated bass drum. The new pattern, though similar in profile, has less notes, as seen in the respective footprints. Reimagining Purdie’s pattern with new techniques creates a diverse, though related pattern and is more percussive than the original.

Timbral colour is highlighted in the new pattern which employs six components of the drum kit, being snare, hi-hat, bass drum, small, medium and floor-toms. West-African *agogo* bell rhythms and Afro-Cuban Samba *batucada* rhythms (see stepwise process), influence the pattern and when orchestrated creatively, facilitate a successful adaptation to the song.

Performance of the new pattern reinforces the workability of the stepwise process employed in functionality and technical adaptation. The new pattern has 18 notes versus 24 notes in Purdie’s pattern highlighting the differing technical approaches. Both patterns are underpinned by minimal bass drum usage, confirming that creative reimagining is a key element to combining techniques.



FIGURE 44. SIGNATURE PATTERN 12: *ROCK STEADY*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlights Purdie’s use of layering and rhythmic interplay. His sonic choices are only three components of the drum-kit being the bass drum, snare drum and hi-hat. The new pattern duplicates rhythms embedded in Purdie’s original, expanding the timbral depth and linear distribution of the composed rhythms. This is achieved by employing divergent techniques paying particular attention to orchestration and the implication of multiple metres concurrently.

Performing and recording the pattern required coordinating four-limb integration with accuracy and orchestrating over the bass drum and pedal hi-hat ostinato.

The new recordings (Track 71 & 72) duplicate pattern variations in Purdie’s performance (Intro and B sections) by applying cowbell, hi-hat foot-splashes, *Afro-beat* stylistic influence and other related techniques as transcribed on the relevant score (Score 36).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

2.37 Commentary and performance/recording notes on signature pattern 13: *Rolling Green* by Ginger Baker

Rolling Green is a track from *Sunrise on the Sufferbus*, the second studio album by American rock band Masters of Reality, released in 1992. On the album, the band was joined by British drummer Ginger Baker. The original recording can be accessed via the footnote link.⁹⁷

Rolling Green features Baker's West-African influenced pattern reminiscent of a Nanigo 6/8 rhythm and written in compound metre as a half-time shuffle. Baker's heavily accents beats 1 & 3 embellishing the pattern with open-handed technique playing the syncopated hi-hat (Yoruba) rhythm. The use of pedal hi-hat on beats 1, 2 & 3 helps anchor the pattern, keeping time, and produces open hi-hats on the preceding quaver notes creating contrasting counterpoint rhythm. Baker comments on this technique... 'Basically I play with my left foot as the time-keeper, and I regard that as playing another drum.'⁹⁸

The bass drum is used sparingly and applied to emphasize the beginning of the pattern creating a three-note cell on the first beat of the pattern in unison with hi-hat and pedal hi-hat (see rhythmic footprint Table 34). Baker employs four-limb integration to facilitate the individual rhythms imbedded in the pattern and is a prime example of how simple processes can facilitate creativity. William F. Miller's article and transcriptions on Baker's lesser known 'Masters of Reality' recordings, highlight the importance of this innovative pattern validating its inclusion in this study.⁹⁹

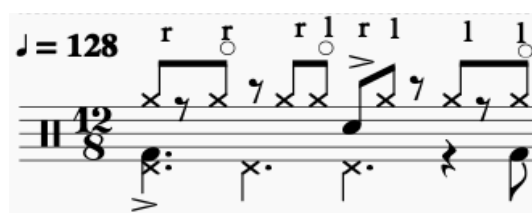


FIGURE 45. SIGNATURE PATTERN 13: *ROLLING GREEN* BY GINGER BAKER

Observations during the practising and recording of this pattern highlights Baker's use of the layering technique engaging four-limb integration. His sonic choices comprise three components of the drum-kit being the bass drum, snare drum and hi-hat. The compound pattern is anchored on a quarter note half-time pulse on snare drum and bass drum under the hi-hat rhythm, creating a juxtaposed pattern.

Performing and recording the pattern highlighted the importance of precision when executing the hi-hat and bass drum (unison) parts, paying attention to not flaming the two voices. Other challenges included executing the contrasting hi-hat and open hi-hat rhythms.

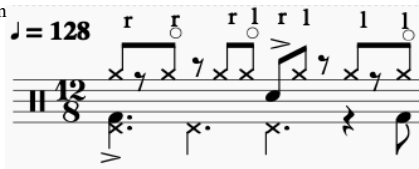



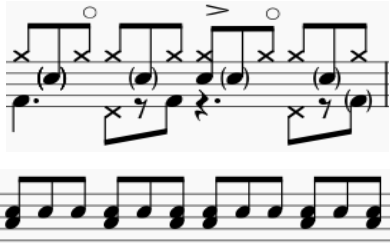
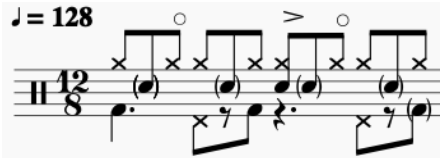
The new recordings (Track 73 & 74) duplicate pattern variations in Baker's original recording in the modulated 4/4 metre pattern (B section). The 8-bar C section of descending tom fills is replicated but not notated. The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them (see Score 37).

⁹⁷ Masters of Reality, *Masters of Reality – Rolling Green (HD+Lyrics)*, YouTube video, 3:41, recorded 1992, posted by sublaimer, September 27, 2012, accessed September 26, 2021, <https://www.youtube.com/watch?v=UjKtQLDIGHY>

⁹⁸ Chris Welch, "Ginger Baker: Alive and Well," *Modern Drummer*, March 1983, p. 25.

⁹⁹ William F Miller, "Ginger on Track," *Modern Drummer*, May 1993, p. 24.

Table 34. Rearrangement of Ginger Baker’s signature pattern in *Rolling Green* using the stepwise process, applying techniques and stylistic influences as used by Bernard Purdie

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Rolling Green</i> Drummer: Ginger Baker 13 notes played in pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T9. Four-limb integration T10. Half-time pattern T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T20. Open-handed approach T31. Syncopation Stylistic influence implemented as used by Ginger Baker: Afro-Cuban: West-African Yoruba, 6/8 Nanigo and Bembe 3/2 clave
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Purdie to be implemented in the rearranged pattern 	Techniques to be implemented as used by Bernard Purdie: T1. Accents T9. Four-limb integration T10. Half-time pattern T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T27. Snare: ghost notes T31. Syncopation Stylistic influence: blues-shuffle
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Purdie 	Implementing Purdie’s techniques including <i>layering</i> , <i>ghost notes</i> and <i>syncopated</i> bass drum together with <i>pedal hi-hat</i> on beats 2&4 effecting <i>open hi-hats</i> . The rearranged pattern culminates in a (triplet) rhythmic profile, contrasting with Baker’s <i>syncopated</i> hi-hat rhythm and <i>open hi-hats</i> . Similar techniques are employed by both drummers though producing contrasting patterns. Sound sources comprise three components of the drum kit, being, snare, hi-hat, and bass drum, duplicating Baker’s original pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Stylistic influences used by Baker create a ‘call and answer’ effect as per 3/2 <i>clave</i> employing <i>four-limb integration</i> in contrast to Purdie’s shuffle pattern which states the quarter- note pulse in a more <i>linear</i> form as seen in the rhythmic footprint. Both patterns are underpinned by the <i>pedal hi-hat</i> ...beats 2&4 for the rearranged pattern and Baker’s <i>pedal hi-hat</i> engaging on beats 1,2 and 3. Both patterns comprise <i>syncopated</i> rhythms. The rearranged pattern requires technical control on the snare and attention to hi-hat accents, however, it is musically fluent at the original tempo of 128 bpm.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	The rearranged has 18 notes versus 13 in Baker’s highlighting how applied techniques can greatly influence a one-bar drum pattern. Performance of this pattern reinforces its viability in the areas of tempo, despite differing technical/stylistic applications.
7	Rearranged pattern Song: <i>Rolling Green</i> Techniques/Styles as used by Bernard Purdie 18 notes in pattern Tempo range 115-135 bpm Drum kit components used: Three	

2.38 Commentary and performance/recording notes on signature pattern 13: *Rolling Green* by Ginger Baker applying techniques and stylistic influences as used by Bernard Purdie

Implementing Purdie's techniques creates layered pattern rearrangement. The inclusion of ghost notes and a syncopated bass drum, together with pedal hi-hat on beats 2 & 4 producing open hi-hats on the last triplet of beats 1 & 3, are all trademark features of Purdie's processes. The rearranged pattern has a layered (triplet) rhythmic profile, contrasting with Baker's syncopated (Yoruba) hi-hat rhythm and open hi-hats. Similar techniques are employed by both drummers, producing contrasting patterns.

Stylistic influences used by Baker creates a 'call and answer' effect (as per 3/2 clave) in contrast to Purdie's shuffle pattern which states the quarter-note pulse in a suggested linear manner, despite the layering processes and as seen in the rhythmic footprint (Table 34). Both patterns are underpinned by the pedal hi-hat, implemented for timekeeping purposes (beats 2 & 4 in rearrangement, beats 1, 2 & 3 in Baker's) composing contrasting syncopated rhythms. Sound sources in both patterns engage three components of the drum kit, being, snare, hi-hat, and bass drum.

Performance of the pattern reinforces the workability in the areas of tempo and created rhythms, despite differing technical and stylistic applications. The rearranged pattern has 18 notes versus 13 in Baker's, highlighting how applied techniques can greatly influence a one-bar drum pattern.

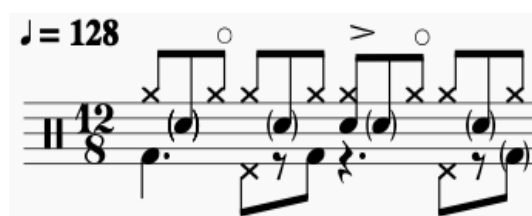


FIGURE 46. SIGNATURE PATTERN 13: *ROLLING GREEN*. REARRANGED PATTERN - BERNARD PURDIE





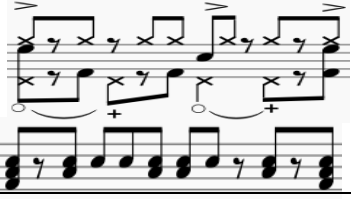

Observations during the practising and recording of this pattern highlights Purdie's use of layering and interlocking rhythms. The techniques applied in the rearranged pattern, as adopted in Purdie's processes, highlight creativity in compound metre (half-time shuffle) with application of ghost notes and open hi-hats, four-limb integration, and ostinato hi-hat rhythms.

Performing and recording the pattern requires attaining consistency in playing ghost notes and open hi-hat accents in unison with pedal hi-hat and the syncopated bass drum.

The recordings (Track 75 & 76) duplicate pattern variations in Purdie's performance (B & C sections) by applying the ride cymbal and pedal hi-hat ostinato, as notated in the corresponding score of the song (Score 38).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 35. New arrangement of Ginger Baker's signature pattern in *Rolling Green* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Rolling Green</i> Drummer: Ginger Baker 13 notes played in pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T9. Four-limb integration T10. Half-time pattern T12. Hi-hat: open T13. Hi-hat: pedal T17. Layering T20. Open-handed approach T31. Syncopation Stylistic influence implemented as used by Ginger Baker: Afro-Cuban: 6/8 Nanigo and Bembe 3/2 clave. West-African Yoruba
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as applied by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T8. Displacement T9. Four-limb integration T15. Hi-hat: splashes T16. Hi-hat: 2 nd set T17. Layering T21. Orchestration T31. Syncopation Stylistic influence: Afro-Cuban: 6/8 Nanigo, Bembe 3/2 clave. Samba: Surdo and Guiro patterns. Jazz bebop bass drum, <i>Bata</i>
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as applied by Morena) 	Implementation of techniques includes <i>four-limb integration</i> applying <i>hi-hat splashes</i> , <i>orchestration</i> using snare and small-tom, with <i>displaced</i> and <i>syncopated</i> bass drum and a Yoruba/Nanigo hi-hat rhythm, (as used by Baker). The open and closed <i>hi-hat foot splashes</i> are influenced by Samba surdo, and guiro rhythms replicating Baker's <i>pedal-hi-hat</i> on beats 1,2 and 3. Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and small-tom.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	<i>Orchestration</i> of the small tom on last quaver of beat 4 and first quaver of beat 1, replicates Baker's bass drum part and is influenced by a Samba <i>syncopated</i> bass drum and Yoruba <i>Bata</i> drum tonalities. The new pattern contrasts with Baker's original pattern by its use of <i>layering</i> and multiple-stylistic influences, replacing it with a pattern of contrasting yet integrated rhythmic cells. The new pattern requires technical control of four-limb integration for it to be performed at the original tempo of 128 bpm.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	17 notes in the new pattern to 13 in the original highlights the use of the <i>layering</i> technique, redistribution and addition of notes and exemplifying creative use of techniques and diverse stylistic influences. Performance of the new pattern reinforces the efficacy of the processes used, in areas of tempo, musicality, and rhythmic fluidity. It is written and played in a 12/8-time signature (compound metre).
7	New pattern Song: <i>Rolling Green</i> Techniques/Styles as applied by Enrico Morena 17 notes in pattern Tempo range 120-135 bpm Drum kit components used: Five	

2.39 Commentary and performance/recording notes on signature pattern 13: *Rolling Green* by Ginger Baker applying techniques and stylistic influences as used by Enrico Morena

The new pattern incorporates orchestration of the small-tom on the last quaver of beat 4 and first quaver of beat 1, replicating Baker's bass drum part and influenced by a Samba syncopated bass drum rhythm. The reimagined pattern contrasts with Baker's signature pattern by its use of the layering technique and different stylistic influences, replacing it with a rhythmically contrasting alternative. The hi-hat rhythm is played on a second set of hi-hats placed to the right of the drum kit above the floor-tom and allowing the hi-hat foot splashes to be unimpeded.

Implementation of techniques includes four-limb integration applying hi-hat splashes, orchestration via snare and small-tom (as mentioned above), displaced and syncopated bass drum with a Yoruba (Nanigo) hi-hat rhythm, as applied by Baker. The open and closed hi-hat foot splashes are influenced by Samba surdo and guiro rhythms replicating Baker's pedal-hi-hat on beats 1,2 and 3.

Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and small-tom. The new pattern has 17 notes versus 13 in Baker's pattern. This note count is achieved by implementing the layering technique and facilitated by redistributing and adding notes. The reimagining of Baker's pattern is an example of the creative application of techniques and divergent stylistic influences. Recording the new pattern reinforces the efficacy of the processes used, in tempo, musicality, and rhythmic fluidity. It is written and played in a 12/8-time signature (compound metre).



FIGURE 47. SIGNATURE PATTERN 13: *ROLLING GREEN*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlight the layering technique and rhythmic interplay engaging four-limb integration. Timbral choices comprise five components of the drum-kit being, the bass drum, snare drum, hi-hat, and an extra set of hi-hats. The new pattern consists of multiple rhythms with timbral depth and linear distribution of rhythms, employing diverse techniques with particular attention to orchestration and the stating of multiple metres simultaneously.

Performing and recording the pattern challenges coordination and requires the facilitating of four-limb integration with accuracy when orchestrating. The bebop-influenced bass drum and pedal hi-hat splashes also required attention.

The new recordings (Tracks 77 & 78) duplicate pattern variations in Baker's performance (B section) by applying crash-cymbal substituting for the ride cymbal, expanded orchestration over toms and a hi-hat foot-splashes variation whilst applying West-African *Bata* drums as a timbral influence (like Baker's own influences) and other related techniques, as transcribed on the relevant score (Score 39).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

2.40 Commentary and performance/recording notes on signature pattern 14: *Roxanne* by Stewart Copeland

Roxanne is a song by English rock band The Police. The song was written by lead singer and bassist Sting and was released in 1978 as a single in advance of the November release of their debut album *Outlandos d'Amour* on which *Roxanne* appears. Stewart Copeland was the drummer with The Police. The original recording can be accessed via the footnote link.¹⁰⁰

Copeland's reggae influence is evident in this pattern with displaced and omitted bass drum (down-beats) in addition to omitted snare drum (back-beats). Also highlighted is his use of open hi-hats (non-accented) and subsequent pedal hi-hat on closing the hats. Despite Copeland's use of the layering technique, his tendency is to play fewer notes, omitting the traditional pop/rock drum notation. Copeland comments... 'Whether it's jazz, blues, or funk, the backbeat is in there. So, the backbeat is a towering force in music. Along came reggae, which dispensed with the backbeat-which is one thing that really intrigued me about it.'¹⁰¹ Ed Breckenfield's article and transcriptions of Copeland's innovative style and patterns informed the inclusion of this signature pattern in this study.¹⁰²

Copeland employs accents on the hi-hat reinforcing snare accents, and implied on beats 1&3, inclusive of the closing on beat 1 of the open hi-hat. He displaces the bass drum a quaver from beat 1 to the + and pre-empting the snare accent on beat 2. The signature pattern in this study is an aggregation of Copeland's verse pattern and includes the snare accent on beat 4, which he introduces in the 2nd verse.



FIGURE 48. SIGNATURE PATTERN 14: *ROXANNE* BY STEWART COPELAND

Observations during the practising and recording of this pattern highlights Copeland's use of the layering technique engaging four-limb integration. His sonic choices comprise three components of the drum-kit being the bass drum, snare drum and hi-hat. The pattern is anchored using snare accents on beats 2 & 4 with consistent quavers played on the hi-hat. Copeland's syntax includes displacing and omitting bass drum notes giving the pattern implied syncopation underpinning the hi-hat rhythm.

Performing and recording the pattern highlighted omission and displacement of the of bass drum on beats 1&3 and snare on beats 2&4. Challenges included executing the contrasting accented hi-hats and open hi-hat rhythm.




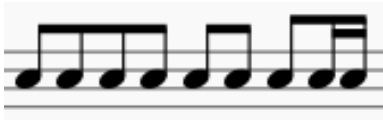
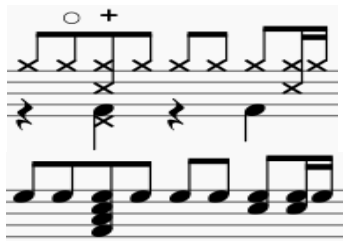
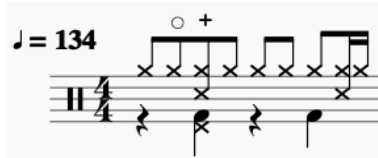
The recordings (Tracks 79 & 80) duplicate pattern variations in Copeland's original recording (B and C sections) by implementing the ride cymbal bell playing a contrasting (counterpoint) rhythm and orchestrated using the small and floor toms, as notated in the corresponding score of the song (Score 40). The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

¹⁰⁰ The Police, *The Police – Roxanne*, YouTube video, 3:09, posted by The Police, August 20, 2010, accessed September 23, 2021, <https://www.youtube.com/watch?v=3T1c7GkzRQQ>

¹⁰¹ Ted Boner, "Stewart Copeland. Top of the Pecking Order," *Modern Drummer*, November 2001, p. 72.

¹⁰² Ed Breckenfeld, "Stewart Copeland – Style & Analysis," *Modern Drummer*, November 2001, pp. 142-145.

Table 36. Rearrangement of Stewart Copeland's signature pattern in *Roxanne* using the stepwise process, applying techniques and stylistic influences as used by Sly Dunbar

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Roxanne</i> Drummer: Stewart Copeland 13 notes played in pattern Tempo: 134 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Stewart Copeland: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: accent T17. Layering T19. Omission: down-beats T31. Syncopation Stylistic influence: reggae
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Dunbar to be implemented in the rearranged pattern 	Techniques to be implemented as used by Sly Dunbar: T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open accent T17. Layering T19. Omission: down-beats T29. Snare drum: x-stick T31. Syncopation Stylistic influence implemented as used by Sly Dunbar: reggae one-drop and Ska
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Dunbar 	Employing <i>snare x-stick</i> with <i>open hi-hat</i> accent, <i>displaced x-stick</i> on beat 4 over bass drum reggae one-drop on beats 2&4 replicating Copeland's s snare <i>accents</i> . The quaver hi-hat and <i>x-stick</i> pattern duplicates Copeland's hi-hat/snare rhythm in addition to the <i>omission</i> of the bass drum on beat 1. Dunbar's 32 nd note embellishment on hi-hat replaces Copeland's open -hi-hat <i>accent</i> on + of beat 4. Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum as per the original pattern.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	The rearranged pattern employs Dunbar's reggae-influenced sonic choices supported by the <i>layering</i> technique as per Copeland's syntax application. Both patterns <i>omit</i> playing down-beats (beats 1&3) on the bass drum. The rearranged pattern applies Dunbar's stylistic influence in reggae one-drop and ska with non-accented hi-hat and <i>x-stick</i> embellishments as opposed to Copeland's heavier rock-style <i>accented</i> hi-hat and snare drum on beats 2&4.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the re-arranged pattern	There are 13 notes in the rearranged pattern versus 14 notes in Copeland's original pattern. The functionality of the rearranged pattern in areas of tempo, musicality and rhythmic cohesion is confirmed in performance.
7	Rearranged pattern Song: <i>Roxanne</i> Techniques/Styles as used by Sly Dunbar 14 notes in pattern Tempo range 125-140 bpm Drum kit components used: Three	

2.41 Commentary and performance/recording notes on signature pattern 13: *Roxanne* by Stewart Copeland applying techniques and stylistic influences as used by Sly Dunbar

The rearranged pattern applies Dunbar's stylistic influence of reggae one-drop, ska hi-hat rhythms and x-stick embellishments in contrast to Copeland's heavier rock accented hi-hats and snare drum on beats 2 & 4. Employing the layering technique corresponds with Copeland's processes in addition to both patterns omitting in playing downbeats (beats 1&3) on the bass drum.

Techniques implemented, include snare x-stick with an open hi-hat accent, displaced x-stick on + of beat 4 played over a bass drum reggae one-drop on beats 2 & 4, duplicating Copeland's snare accents. The quaver hi-hat and x-stick pattern replicates Copeland's hi-hat/snare rhythm in addition to the omission of the bass drum on beat 1. Dunbar's 32nd (demi-semi quaver) note embellishment on the hi-hat replaces Copeland's open hi-hat on + of beat 4.

Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum as per the original pattern. There are 13 notes in the rearranged pattern versus 14 notes in Copeland's original pattern. The functionality of the rearranged pattern in areas of tempo, musicality and rhythmic cohesion is confirmed in performance.

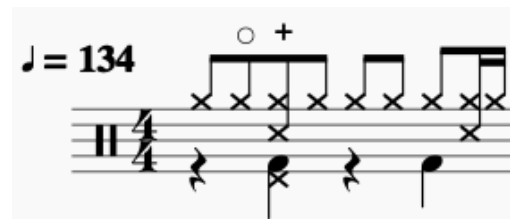


FIGURE 49. SIGNATURE PATTERN 14: *ROXANNE*. REARRANGED PATTERN - SLY DUNBAR





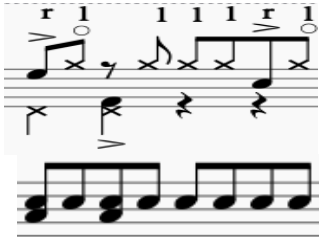

Observations during the practising and recording of this pattern highlights Dunbar's use of the layering technique and his reggae influences. The techniques applied in the rearranged pattern, as adopted in Dunbar's processes, highlights the extensive use of snare x-stick, open hi-hat accents, four-limb integration, displaced backbeat (x-stick), ostinato hi-hat rhythms and snare drum and hi-hat embellishments.

Performing and recording the pattern focused on the open hi-hat and its closing on beat 2, creating a four-note cell, as seen in the pattern transcription above and its rhythmic footprint (Table 36).

The recordings (Track 81 & 82) duplicate pattern variations in Copeland's recording (B & C sections) by applying snare drum and hi-hat accents, snare drum embellishments and a reggae four-drop 'feel' as notated in the corresponding score of the song (Score 41).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 37. New arrangement of Stewart Copeland’s signature pattern in *Roxanne* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Roxanne</i> Drummer: Stewart Copeland 13 notes played in pattern Tempo: 134 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Stewart Copeland: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open-accent T17. Layering T19. Omission: down-beats T31. Syncopation Stylistic influence: reggae
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as applied by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T8. Displacement of down & back-beats T9. Four-limb integration T11. Hi-hat: open-accents T18. Linear: between hands T20. Open-handed T21. Orchestration T31. Syncopation Stylistic influence: reggae
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as applied by Morena 	The new pattern employs <i>four-limb integration</i> implementing <i>open hi-hat accents</i> , <i>orchestration</i> (via snare and small-tom), <i>displaced</i> bass drum and an <i>open-handed</i> ambidextrous approach. The <i>linear</i> technique is utilized except on beats 1&2. Copeland’s rhythmic profile is duplicated and both patterns having a reggae-influenced bass drum rhythm with the <i>omission</i> of down-beats. Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and small-tom.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	<i>Orchestration</i> and accenting of the small-tom on beat 1, implies a downbeat and gives the new pattern a timbral diversity, though rhythmically similar to the original. Both patterns are <i>syncopated</i> in their emphasis on off-beats. The new pattern requires attention to <i>four-limb integration</i> and ambidexterity for it to be performed at the original tempo of 134 bpm.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	10 notes in the new pattern versus 13 in the original highlights the use of the <i>linear</i> technique with a subtraction of notes and creative use of techniques and similar stylistic influence. Performance of this pattern reinforces the efficacy of the processes employed in areas of tempo, musicality, and rhythmic fluidity.
7	New pattern Song: <i>Roxanne</i> Techniques/Styles as applied by Enrico Morena 10 notes in pattern Tempo range 125-140 bpm Drum kit components used: Four	

2.42 Commentary and performance/recording notes on signature pattern 14: *Roxanne* by Stewart Copeland applying techniques and stylistic influences as used by Enrico Morena

The new pattern employs four-limb integration implementing open hi-hat accents, orchestration of snare and small-tom, displaced bass drum and employing an open-handed (ambidextrous) approach. The linear technique is utilized except on beats 1 & 2 (pedal hi-hat resolving after open hi-hats) and as seen on the rhythmic footprint (Table 37). Copeland's rhythmic profile is duplicated with both patterns having a reggae-influenced bass drum with the omission of down-beats.

Orchestrating and accenting the small tom on beat 1 implies the downbeat and gives the new pattern a timbral diversity in contrast to Copeland's. Though the new pattern is rhythmically similar to the original, both patterns are syncopated in their emphasis on off-beats.

The new pattern requires attention to four-limb integration and the ambidexterity required for it to be performed at the original tempo of 134 bpm. Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and small-tom. The use of linear technique highlights the difference in note count, 10 notes in the new pattern versus 13 in the original. Performance of this pattern reinforces the processes employed.



FIGURE 50. SIGNATURE PATTERN 14: *ROXANNE*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the efficiency of linear techniques engaged using four-limb integration. The new pattern consists of four contrasting (juxtaposed) rhythms combined to affect timbral depth employing diverse techniques with particular attention to orchestration.

Performing and recording the pattern required coordinating the ambidexterity of four-limb integration whilst orchestrating and displacing (and omitting) downbeats.

The recordings (Track 83 & 84) duplicate pattern variations in Baker's performance (B section) by applying open and displaced hi-hat accents, syncopated hi-hats, displaced bass drum, snare, and ride cymbal, as transcribed on the relevant score (Score 42).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

2.43 Commentary and performance/recording notes on signature pattern 15: *Sunshine of Your Love* by Ginger Baker

Sunshine of Your Love is a 1967 song by the British rock band Cream, Ginger Baker was the drummer with the band. The song was included on Cream's best-selling second album *Disraeli Gears* in November 1967. The original recording can be accessed via the footnote link.¹⁰³

Baker employs Motown as an influence in this pattern with emphasis (accents) on the downbeats of the bar. West-African *Bata* drums timbral & rhythms are also implied with quarter notes on varying toms throughout the pattern and orchestrated to punctuate the guitar-riff. Baker anchors the pattern with quarter notes with pedal hi-hat on each beat and displaced by bass drums on the +’s of beats 2 & 4. Baker’s bass-drum improvisation is encapsulated in the aggregated pattern in this study. Brad Schlueter’s analysis and transcriptions of Baker’s pattern was a primary resource assisting in the decision to include it as one of the signature patterns in this study.¹⁰⁴

As with many of Baker’s patterns, he layers his rhythms, displacing, and orchestrating notes on multiple toms. His process in inverting rhythms is also noted here and cited by Baker himself... ‘Jack introduced the riff, and I, famously said “it’s awful, we need to slow it down”. So, I added a backwards drum beat on the riff instead of the normal 2 & 4 on the snare, and it immediately became, Wow!’¹⁰⁵

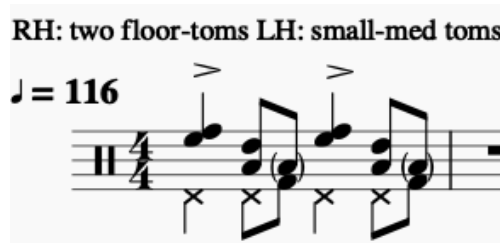


FIGURE 51. SIGNATURE PATTERN 15: *SUNSHINE OF YOUR LOVE* BY GINGER BAKER

Observations during the practising and recording of this pattern highlights Baker’s use of the layering technique engaging four-limb integration. His sonic choices comprise six components of the drum-kit being the bass drum, hi-hat, small/medium/floor tom and an added second floor-tom adding timbral depth to the pattern. The pattern creates layered and contrasting rhythms on multiple drums.

Performing and recording the pattern highlighted the timbral applications of orchestration, especially when creating tonal colours (on toms) underpinned with the bass drum. Other challenges included consistency in executing the contrasting rhythms to four different drums.


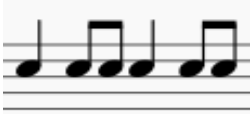


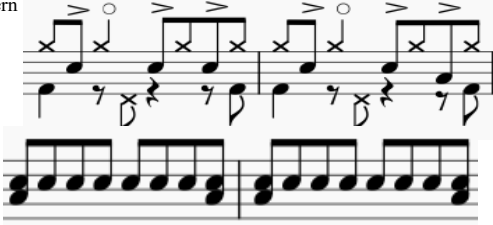

The new recordings (Tracks 85 & 86) duplicate pattern variations in Baker’s original recording, exemplified by additional rearrangements and as notated in the corresponding score of the song (Score 43). The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

¹⁰³ Cream. *Cream – Sunshine of Your Love (HD)*, YouTube video, 4:05, recorded April-May 1967, posted by Rock s Musicas, January 30, 2013, accessed April 29, 2021, <https://www.youtube.com/watch?v=zt51rTH3EA>

¹⁰⁴ Brad Schlueter, “Hot Licks: Classic Ginger Baker ‘60s Drum Part,” *DRUM! Magazine*, June 19, 2013, accessed May 4, 2021. <http://drummagazine.com/hot-licks-classic-ginger-baker-60s-drum-parts/>

¹⁰⁵ Adam Budofsky, “Sounds and Setups,” *Modern Drummer*, July 2017, accessed May 4, 2021, <https://www.moderndrummer.com/article/july-2017-sounds-and-setups/>

Table 38. Rearrangement of Ginger Baker's signature pattern in *Sunshine of Your Love* using the stepwise process, applying techniques and stylistic influences as used by Steve Gadd

Step	Procedure	Details/Notes/Observations
1	Signature pattern RH: two floor-toms LH: small-med toms 	Song: <i>Sunshine of Your Love</i> Drummer: Ginger Baker 16 notes played in pattern Tempo: 116 bpm Drum kit components used: Six
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T8. Displacement of back-beat and down-beat T9. Four-limb integration T13. Hi-hat: pedal T17. Layering T21. Orchestration T31. Syncopation Stylistic influence implemented as used by Ginger Baker: West-African Yoruba <i>Bata</i> drums and Motown
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Gadd to be implemented in the rearranged pattern 	Techniques to be implemented as used by Steve Gadd: T1. Accents T9. Four-limb integration T8. Displacement of back-beat and down-beat T10. Common-time and half-time simultaneously T12. Hi-hat: open accent T14. Hi-hat: step T18. Linear T20. Open-handed T21. Orchestration T31. Syncopation T32. Two-bar pattern Stylistic influence: Brazilian samba/bossa-nova foot pattern.
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Gadd 	Implementing Gadd's applied techniques including, <i>linear</i> , <i>open hi-hat accents</i> , <i>step hi-hat</i> , <i>displacement</i> , <i>omission</i> of back-beats, <i>syncopation</i> , and <i>orchestration</i> . The pattern is expanded to a <i>two-bar pattern</i> composed of contrasting rhythms. Baker's <i>accents</i> on beats 1&3 and emphasis on beats 2&4 is replicated by distributing the accents to four drum kit components using the <i>linear</i> technique. Sound sources comprise four components of the drum kit, being, snare, hi-hat, floor-tom, and bass drum.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	Techniques as used by Gadd create a 'call and answer' effect employing <i>four-limb integration</i> as does Baker in his original pattern. Baker employs <i>layered</i> rhythms with an <i>accented</i> quarter-note pulse in a regimented manner and uses multiple toms as influenced by West-African Yoruba <i>Bata</i> drums. The rearranged pattern requires technical control and attention to <i>linear</i> and <i>four-limb integration</i> . The <i>half-time</i> metre is implied by a samba/bossa nova bass drum pattern crossing each measure and snare <i>accents</i> on beat 3 of each bar. The pattern is effective at the original tempo of 116 bpm despite differing processes and technical applications.
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	The signature pattern has 16 notes versus the rearranged pattern's 20 in two bars, highlighting comparative use of <i>linear</i> and <i>layering</i> techniques and their effect on rhythmic patterns. Performance and recording of the rearranged pattern confirm validity in the areas of tempo and rhythmic compatibility.
7	Rearranged pattern Song: <i>Sunshine of Your Love</i> Techniques/Styles as used by Steve Gadd 20 notes in two-bar pattern Tempo range 110-120 bpm Drum kit components used: Four	RH: snare & f/tom LH: hi-hat 

2.44 Commentary and performance/recording notes on signature pattern 15: *Sunshine of Your Love* by Ginger Baker applying techniques and stylistic influences as used by Steve Gadd

The rearranged pattern implements multiple techniques from Gadd's syntax including the linear technique, open hi-hat accents, step hi-hat, displacement, omission of backbeats, syncopation, and orchestration. The pattern is expanded to a two-bar pattern composed of contrasting rhythms. Baker's accents on beats 1 & 3 and emphasis on beats 2 & 4 is replicated by redistribution of accents and emphasis on differing drum kit components applying the linear technique.

Techniques as used by Gadd, which employ four-limb integration (as per Baker), create a 'call and answer' effect, as seen in this two-bar pattern. Baker creates layered rhythms when applying his processes as opposed to Gadd's application of the linear technique to rhythms grouped as single notes.

Sound sources comprise four components of the drum kit, being, snare, hi-hat, floor-tom, and bass drum. The rearranged pattern requires technical control and attention to linear and four-limb integration (coordination). A half-time metre is implied by a samba/bossa nova bass drum pattern crossing each measure with snare accents on beat 3. The rearranged pattern is rhythmically effective at the original tempo of 116 bpm notwithstanding employing different techniques.

Performing and recording of Baker's pattern highlights the efficacy of recontextualisation in tempo and rhythmic diversity. The original pattern has 16 notes versus the rearranged pattern's 20 in two-bars highlighting the effects of employing the linear and layering techniques respectively.








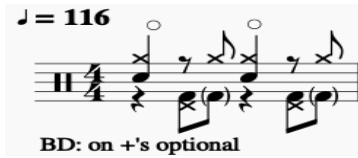
FIGURE 52. SIGNATURE PATTERN 15: *SUNSHINE OF YOUR LOVE*. REARRANGED PATTERN - STEVE GADD

Observations during the practising and recording of the new pattern highlights Gadd's use of the linear technique and the *Latin (samba)* stylistic influence. The techniques applied in the rearranged pattern, as adopted in Gadd's processes, highlight his use of open hi-hat accents, step hi-hat, four-limb integration, displacement, syncopated hi-hat and snare, open-handed ambidexterity, and orchestration.

The recordings (Tracks 87 & 88) duplicate pattern variations in Baker's recording (B & C sections) by applying the layering technique with a jazz, Motown, and Afro-Cuban tumbao stylistic influence, as notated in the corresponding score of the song (Score 44).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 39. New arrangement of Ginger Baker's signature pattern in *Sunshine of Your Love* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern RH: two floor-toms LH: small-med toms 	Song: <i>Sunshine of Your Love</i> Drummer: Ginger Baker 15 notes played in pattern Tempo: 116 bpm Drum kit components used: Six
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Ginger Baker: T1. Accents T8. Displacement of back-beat T9. Four-limb integration T11. Hi-hat: open accent T13. Hi-hat: pedal T17. Layering T21. Orchestration T31. Syncopation Stylistic influence implemented as used by Ginger Baker: West-African Yoruba <i>Bata</i> drums and Motown
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T8. Displacement of back-beat and down-beat T9. Four-limb integration T11. Hi-hat: accent T13. Hi-hat: pedal T17. Layering T19. Omission of notes T31. Syncopation Stylistic influence: jazz ride pattern and Afrobeat (displacement)
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as used by Morena 	Implementation of techniques includes <i>four-limb integration</i> applied using <i>open hi-hat and snare accents</i> , <i>omission</i> of hi-hat notes, <i>displacement</i> (reversal) of the backbeat and down-beat creating a backward pattern. A jazz-influenced hi-hat rhythm is applied in addition to the <i>linear</i> technique. The new pattern replicates Baker's rhythmic profile though not in the rhythmic footprint. Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	Use of the <i>open hi-hat accents</i> on beats 1&3 closing on beats 2&4 using <i>pedal hi-hat</i> gives implies the influence of the <i>Jazz-ride</i> . Baker's pattern is influenced by West-African <i>Bata</i> drums & Motown crotchet pulse underpinned by the <i>syncopated</i> bass drum on '+'s of beats 2&4 and <i>pedal hi-hat</i> on crotchet beats. The new pattern compliments Baker's original pattern though not sonically (no <i>orchestration</i>), replacing it with other drum kit voicings. The new pattern requires technical command of <i>four-limb integration</i> (coordination) to be performed with control and definition at the original tempo of 116 bpm.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	12 notes in the new pattern versus Baker's 15 in the original, highlighting the (successful) creative application of <i>layered</i> techniques employing differing stylistic influences. Performance of this pattern reinforces the workability of the reimagined pattern in areas of tempo, musicality. and rhythmic fluidity as per Afrobeat displaced snare and bass drum (reversed)
7	New pattern Song: 'Sunshine of Your Love' Techniques/Styles as applied by Enrico Morena 12 notes in pattern Tempo range 110-125 bpm Drum kit components used: Three	 BD: on '+'s optional

2.45 Commentary and performance/recording notes on signature pattern 15: *Sunshine of Your Love* by Ginger Baker applying techniques and stylistic influences as used by Enrico Morena

The implementation of techniques is achieved by applying four-limb integration, open hi-hat and snare accents, omission of hi-hat notes and displacement of the downbeat/backbeat, creating a ‘backward’ (reversed) pattern. A jazz-influenced hi-hat rhythm is applied in addition to the linear technique and displaced snare & bass drum as per Afrobeat rhythms. The new pattern replicates Baker’s rhythmic profile though not in the rhythmic footprint (see Table 39).

Use of the open hi-hat accents on beats 1 & 3 and closing on beats 2 & 4 (actioned by the pedal hi-hat) is influenced by the Jazz hi-hat rhythm. Baker’s influences are West-African *Bata* drums and the Motown crotchet pulse, underpinned by the syncopated bass drum on +’s of beats 2&4 and pedal hi-hat on all crotchet beats. The new pattern rhythmically compliments Baker’s original pattern though not sonically (orchestration), employing differing drum kit voicings.

Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum. The rearranged pattern requires secure four-limb integration to be performed comfortably at the original tempo of 116 bpm. There are 12 notes in the new pattern versus 15 in Baker’s pattern, highlighting the creative application of layered techniques and the use of different stylistic influences.

Performance of this pattern reinforces the workability of the rearrangement in areas of tempo, musicality, and rhythmic fluidity

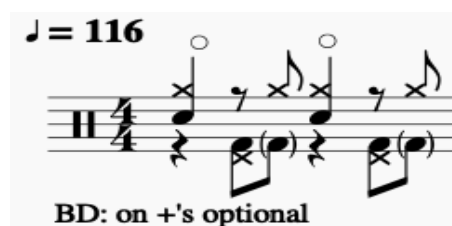


FIGURE 53. SIGNATURE PATTERN 15: *SUNSHINE OF YOUR LOVE*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the efficacy of creative composition when employing layered techniques engaging four-limb integration. The new pattern consists of multiple rhythms employing diverse techniques with particular attention to displacement of backbeats and downbeats.

Performing the new pattern requires coordinating four-limb integration, displacing backbeats, and downbeats in addition to the syncopated hi-hat rhythm and its pedal hi-hat closure on beats 2 & 4.

The recordings (Tracks 89 & 90) duplicate pattern variations in Baker’s performance (B & C sections) by applying orchestration with syncopated hi-hats and other related techniques, as transcribed on the corresponding score (Score 45).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

2.46 Commentary and performance/recording notes on signature pattern 16: *Wrapped Around Your Finger* by Stewart Copeland

Wrapped Around Your Finger is from The Police's fifth and final album *Synchronicity*, released in 1983. Stewart Copeland was the drummer in The Police. The original recording can be accessed via the footnote link.¹⁰⁶

Copeland employs techniques in this two-bar pattern, synonymous with his drumming syntax in the application of four-limb integration, displacement/omission of backbeats and downbeats, open hi-hats, accented hi-hats, snare x-stick and the layering technique. His syncopated reggae influence is applied in the pattern using a one-drop feel with the bass drum on beat 3 implying a half-time feel. Mark Griffith's astute commentary and transcription of the pattern was a confirming influence in the decision to include it in this study.¹⁰⁷

The hi-hat accents in the first bar are repeated as open hi-hats in the second bar implying a 'call and answer' theme. Copeland plays other variations in the recording, another feature stemming from his jazz and improvisational influences. The pattern presented here is an aggregation of those in the recording and examples Copeland's propensity to leave rhythmic space and 'holes.' Copeland elucidates... 'When I heard Reggae for the first time, it actually connected with my Arab rhythmic sensibility-leaving holes in the beat. That's where it came from for me, at least that's my pet theory.'¹⁰⁸

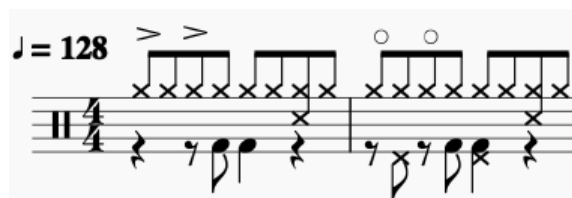


FIGURE 54. SIGNATURE PATTERN 16: *WRAPPED AROUND YOUR FINGER* BY STEWART COPELAND

Observations during the practising and recording of this pattern highlights Copeland's use of the layering technique engaging four-limb integration. His sonic choices comprise three components of the drum-kit being the bass drum and hi-hat. The pattern is layered though having a linear rhythmic profile as can be seen in Table 40.

Performing and recording the pattern highlighted the 'call and response' hi-hat rhythms (accents and open hi-hats) and sparsity of rhythm in the bass drum and snare (x-stick). Implementing the pedal hi-hat is also challenging when maintaining consistency not accenting the open hi-hats.

The recordings (Tracks 91 & 92) duplicate pattern variations in Copeland's performance in the original recording highlighting the use of the ride-cymbal bell (contrasting accented rhythms) as notated in the corresponding score of the song (Score 46). The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

¹⁰⁶ The Police, *The Police – Wrapped Around Your Finger*, YouTube video, 5:04, posted by The Police, February 24, 2010, accessed September 28, 2021, <https://www.youtube.com/watch?v=svWINSRhQU0>

¹⁰⁷ Mark Griffith, "The Top 50: 'MD' Salutes the Most Influential Drum Grooves," *Modern Drummer*, January 2000, pp. 114-128.

¹⁰⁸ Stewart Copeland, *Jools Holland interviews Stewart Copeland (The Police) on the Caribbean Island of Montserrat in 1981*, YouTube video, 6.36, recorded 1981, posted January 5, 2015, accessed April 4, 2021, <https://www.youtube.com/watch?v=OjAi9yQyxpg>

Table 40. Rearrangement of Stewart Copeland's signature pattern in *Wrapped Around Your Finger* using the stepwise process, applying techniques and stylistic influences as used by Steve Gadd

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Wrapped Around Your Finger</i> Drummer: Stewart Copeland 24 notes played in pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Stewart Copeland: T1. Accents T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open accent T17. Layering T19. Omission: back-beats and down-beats T29. Snare drum: x-stick T31. Syncopation T32. Two-bar pattern Stylistic influence: reggae: one-drop. Jazz improvisation
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as used by Gadd, to be implemented in the rearranged pattern 	Techniques to be implemented as used by Steve Gadd: T1. Accents T3. Common-time and Half-time simultaneously T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open accent T18. Linear T19. Omission: back-beats and down-beats T20. Open-handed T21. Orchestration T31. Syncopation Stylistic influence implemented as used by Steve Gadd: Afro-Cuban: tumbao. New Orleans: second-line, 3/3 clave.
4	Create a rhythmic profile of the rearranged pattern and implement the techniques and stylistic influences identified as used by Gadd 	Highlighting Gadd's use of <i>linear</i> , <i>open-handed approach</i> along with <i>orchestration</i> , <i>omission</i> of and <i>displacing beats</i> , <i>open hi-hat accent</i> whilst inferring a <i>half-time</i> and <i>common-time</i> metre <i>simultaneously</i> and underpinned with tumbao bass drum rhythm culminating in a <i>two-bar pattern</i> . The rearranged pattern duplicates Copeland's closed and <i>open hi-hat accents</i> , bass drum rhythm and <i>x-sticks</i> on beat 4. Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and floor tom.
5	Transcribe the rearranged pattern creating a rhythmic footprint of the pattern 	The rearranged pattern employs <i>syncopated accents</i> played over <i>orchestrated</i> voicings supported by the <i>linear</i> technique contrasting with Copeland's rock-orientated approach. Both patterns <i>omit</i> playing <i>down-beats</i> on beats 1&3 and <i>back-beat</i> on beat 2. The rearranged pattern differs in that Copeland employs <i>layering</i> in his patterns and reggae one-drop influence though having a similar rhythmic footprint to the original. It consequently works well when recorded to the song. Gadd's use of techniques is functional and efficiently applied resulting in minimal notation (see below note count)
6	Count the notation of the rearranged pattern against the signature pattern, identifying the potential challenges and workability of the rearranged pattern	There are 19 notes in the rearranged two-bar pattern compared to 24 notes in Copeland's original pattern. The adaptability of the rearranged pattern in areas of tempo, musicality and rhythmic cohesion is confirmed in performance and recording of it.
7	Rearranged pattern Song: <i>Wrapped Around Your Finger</i> Techniques/Styles as used by Steve Gadd 19 notes in two-bar pattern Tempo range 120-130 bpm Drum kit components used: Four	LH: hi-hat RH: f/tom & snare J = 128 

2.47 Commentary and performance/recording notes on signature pattern 16: *Wrapped Around Your* by Stewart Copeland applying techniques and stylistic influences as used by Steve Gadd

The rearranged pattern highlights Gadd's use of linear and open-handed techniques when employing orchestration, omission of (and displacing) beats and open hi-hat accents. The pattern infers a half-time and common-time metre simultaneously and is underpinned using a *tumbao* bass drum rhythm. Copeland's *two-bar pattern* is retained.

Copeland employs layering in his patterns with a *reggae one-drop* influence despite having a rhythmic footprint similar to its rearranged opposite. Gadd's processes are rhythmically efficient and when applied creatively produce a low note count (see Table 40).

The rearranged pattern uses syncopated accents employing orchestrated sound sources and supported by the linear technique contrasting with Copeland's rock-orientated approach. Both patterns omit playing downbeats on beats 1&3 and backbeat on beat 2. The rearranged pattern duplicates Copeland's closed and opened hi-hat accents, bass drum rhythm and x-sticks on beat 4.

Sound sources comprise four components of the drum kit, being snare, hi-hat, bass drum and floor tom. There are 19 notes in the rearranged two-bar pattern compared to 24 notes in Copeland's original pattern. The adaptability of the rearranged pattern in areas of tempo, musicality and rhythmic cohesion is confirmed in performance.

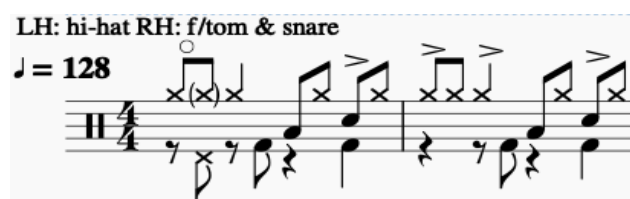






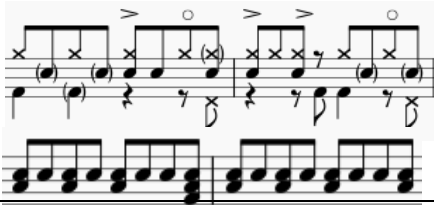

FIGURE 55. SIGNATURE PATTERN 16: *WRAPPED AROUND YOUR FINGER*. REARRANGED PATTERN - STEVE GADD

Observations during the practising and recording of this pattern highlights Gadd's use of the linear technique and his multiple stylistic influences. The rearranged pattern has an underlying repeated 3-clave as used in New Orleans second-line. The techniques applied in the rearranged pattern, as adopted in Gadd's processes, highlights the economical employment of multiple techniques simultaneously.

The recordings (Tracks 93 & 94) duplicate pattern variations in Baker's original recording (B & C sections) by applying Gadd's processes in adopting a layering technique with the ride-cymbal bell, pedal hi-hat and other nomenclature techniques, as notated in the corresponding score of the song (Score 47).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

Table 41. New arrangement of Stewart Copeland’s signature pattern in *Wrapped Around Your Finger* using the stepwise process, applying techniques and stylistic influences as used by Enrico Morena

Step	Procedure	Details/Notes/Observations
1	Signature pattern 	Song: <i>Wrapped Around Your Finger</i> Drummer: Stewart Copeland 24 notes played in two-bar pattern Tempo: 128 bpm Drum kit components used: Three
2	Analyze the techniques and stylistic influence creating a rhythmic profile of the signature pattern 	Techniques implemented as used by Stewart Copeland: T1. Accents T4. Common-time and half-time simultaneously T8. Displacement of down-beat T9. Four-limb integration T11. Hi-hat: open accent T17. Layering T19. Omission: back-beats and down-beats T29. Snare drum: x-stick T31. Syncopation T32. Two-bar pattern Stylistic influence: reggae: one-drop
3	Create a rhythmic footprint of the signature pattern and identify techniques and stylistic influences as applied by Morena to be implemented in the new pattern 	Techniques to be implemented as applied by Enrico Morena: T1. Accents T8. Displacement of back-beat and down-beat T9. Four-limb integration T10. Half-time pattern T11. Hi-hat: open-accent T17. Layered T28. Snare drum: ghost notes T31. Syncopation Stylistic influence: Funk
4	Create a rhythmic profile of the new pattern and implement the techniques and stylistic influences identified as applied by Morena 	The new pattern implements <i>four-limb integration</i> , applying <i>open hi-hat accents</i> , snare <i>ghost notes</i> , <i>displaced</i> bass drum and snare back-beats creating a <i>syncopated half-time pattern</i> . The <i>layering</i> technique is also utilized resulting in a similar note count (see below). Copeland’s pattern is duplicated with the <i>hi-hat accents</i> in 1 st bar allocated to bass drum and snare in the 2 nd bar of the new pattern. Sound sources comprise three components of the drum kit, being snare, hi-hat, and bass drum.
5	Transcribe the new pattern creating a rhythmic footprint of the pattern 	The employment of snare <i>ghost notes</i> and <i>accents</i> , gives the new pattern a deeper sonic than the original with <i>syncopated</i> hi-hat and snare rhythms, stylistically influenced by funk patterns, and being dissimilar to the original. Both patterns are <i>syncopated</i> resulting from the application of beat displacement. The new pattern requires command of <i>four-limb integration</i> and snare drum dynamics for it to be performed musically at the original tempo of 128 bpm.
6	Count the notation of the new pattern against the signature pattern, identifying the potential challenges and workability of the new pattern	25 notes in the new pattern compared to 24 in the original pattern highlights the use of the <i>layered</i> technique supported by the creative use of techniques and sparse bass drum rhythm (as per Copeland’s). Performance of this pattern reinforces the workability of the processes used in areas of tempo, musicality, and rhythmic fluidity.
7	New pattern Song: <i>Wrapped Around Your Finger</i> Techniques/Styles as applied by Enrico Morena 25 notes in two-bar pattern Tempo range 120-135 bpm Drum kit components used: Three	

2.48 Commentary and performance/recording notes on signature pattern 16: *Wrapped Around Your* by Stewart Copeland applying techniques and stylistic influences as used by Enrico Morena

The new pattern applies open hi-hat accents, snare ghost notes, displaced bass drum and snare back-beats implementing four-limb integration to create a syncopated half-time pattern. The layering technique is also employed resulting in a similar note count (see Table 41). Copeland's hi-hat accents in the 1st bar and open hi-hat accents in the 2nd bar are duplicated using alternating bass drum and snare in the new pattern.

The employment of snare drum ghost notes and accents, gives the new pattern a timbral depth not evident in the original. The reimagining employs syncopated hi-hat and snare rhythms, stylistically influenced by *funk* patterns, being dissimilar to the original. Open hi-hat accents on beat 4 of each bar in the new pattern replaces Copeland's x-stick. Both patterns are syncopated resulting from the application of beat displacement.

There are 25 notes in the new pattern compared to 24 in the original pattern highlighting the use of the layered technique (in both patterns) and applying techniques with the sparse use of bass drum being a prime example. Performance of this pattern reinforces the workability of the processes used in areas of tempo, musicality, and rhythmic fluidity.



FIGURE 56. SIGNATURE PATTERN 16: *WRAPPED AROUND YOUR FINGER*. NEW PATTERN - ENRICO MORENA

Observations during the practising and recording of this pattern highlighted the efficacy of layered techniques when engaging four-limb integration creating, in effect, four rhythms played simultaneously. Sound sources comprise three components of the drum-kit being, the bass drum, snare drum and hi-hat. The new pattern requires coordination of four-limb integration, displacing backbeat and downbeats, in addition to the syncopated hi-hat rhythm and pedal hi-hat closures on the +’s of beat 4 in both bars.

The recordings (Tracks 95 & 96) duplicate pattern variations in Copeland's recordings (B & C sections) by orchestrating drum kit components including (syncopated) tambourine, ride cymbal and multiple toms. Techniques such as implying common-time and cut-time metre simultaneously are also utilized, as transcribed on the corresponding score (Score 48).

The additional patterns utilize the stepwise process developed in this study and their application in transcription and my performance of them.

PART THREE: The Music Scores: Songs and Transcriptions

Part Three comprises song transcriptions of the CD recordings entailing the selected sixteen songs and encompassing forty-eight scores. Each of the sixteen songs have three corresponding recordings. The three corresponding versions represent the signature pattern, rearranged pattern, and new pattern respectively.

The first version and its relevant score is a duplication of patterns played in the original recordings by the selected drummers of this study. They include the signature patterns identified in this study, in addition to pattern variations performed in differing sections in each of the original recordings (intro, bridge, chorus etc.)

The second version and its relevant score represents the rearranged patterns created in this study, employing techniques employed by the named drummers as identified for this project by the author.

The third version and its relevant score, represents new patterns created in this study by rearranging (reimagining/recontextualising) the signature patterns as identified for this project by the author.

Drum fills, inclusive of variations of the signature patterns (as recorded by the selected drummers in the original recordings), are not reflected in the recordings nor transcriptions presented. The transcriptions, as described in the synthesis, highlight the signature pattern and its rearranged counterparts, and are an aggregate of the original recorded performance. All transcriptions presented are transcribed by the author's hand.

Babylon Sisters

Signature Patterns as recorded by Bernard Purdie

Steely Dan

$\text{♩} = 125$ fill

Intro 3 3

half-time shuffle % 3 3 3 3 3 Chorus pattern (2x)

13 Verse **A**

27 Chorus **B** 3 3 3 3 3 3 3 3 3 3

41 Bridge **C** 3 3 3 3 3 3 3 3 3 3

55 D.S. al Coda **D** CODA 3 3 3 3 3 3 3 3 3 3 fill

66 Instrumental **E** 3 3 3 3 3 3 3 3 3 3 Verse **A** 3 3 3 3 3 3 3 3 3 3

76 Chorus **B** 3 3 3 3 3 3 3 3 3 3

90 Outro 3 3 3 3 3 3 3 3 3 3

104 Fade....

Babylon Sisters

Rearranged Patterns using Zigaboo Modeliste techniques

Steely Dan

$\text{♩} = 125$

1 r r l r l l

10 Verse
Half-time feel **A** 3 3 3 3
r l r l r l r l r l

24 Chorus **B** 3 3 3 3
r l r l r l r l r l

38

52 Bridge **C** 3 3 3 3
D.S. al Coda **D** 3 3 3 3
Coda

63 Instrumental **E** 3 3 3 3
1

74 Verse **A** 3 3 3 3

86 Chorus **B** 3 3 3 3

98 Outro 3 3 3 3
Fade....

The musical score is written for a single instrument, likely a drum or a synthesizer, in 4/4 time. It features a variety of rhythmic patterns, including triplets, eighth notes, and sixteenth notes. The score is divided into sections labeled A through E, each with a specific rhythmic pattern. The tempo is marked as 125 beats per minute. The score includes a key signature of one flat (Bb) and a time signature of 4/4. The score is arranged in a way that allows for a variety of playing styles, from a steady half-time feel to a more complex, syncopated rhythm. The score is written in a clear, legible font, with all notes and rests clearly marked. The score is a good example of how to use rhythmic patterns to create a unique sound.

Babylon Sisters

New Patterns by Enrico Morena

Steely Dan

♩ = 125
half-time feel

r l l r l r

11 Verse (Bridge pattern 2x)

l r l r l l r r

25 Chorus (Bridge pattern 2x)

39 Bridge

53 LH: hi-hat & snare RH: rim-click & f/tom D.S. al Coda

66 Instrumental LH: hi-hat & snare RH: rim-click & s/tom & f/tom

77 Chorus

91 Outro

Fade....

105

Score 4. *Chuck E's in Love*: Signature patterns as recorded by Steve Gadd

Chuck E's In Love

Signature Patterns as recorded by Steve Gadd

Rickie Lee Jones

J = 113
Intro half-time feel
fill

A

B

C

D **J = 90**
Bridge colla voce
fill 2x cont.sim.

A

B

C

fills.....

bell
fill
Outro
sim...

Chuck E's In Love

Rearranged Patterns using Ginger Baker techniques

Rickie Lee Jones

Intro

♩ = 113

LH: s/m toms RH: f/tom

fill

A

10

B

21

A

31

B

C

fill

39

♩ = 90

D colla voce rall 2x

A

52

B

63

fills.....

C

75

bell 2

Outro

92

Chuck E's In Love New Patterns by Enrico Morena

Rickie Lee Jones

♩ = 113

Intro
x: rim-clicks

fill **A** 3 > 3 3

B 3

RH: ride cymbal to med tom

10 3 2 2 2 LH-hi hat RH-snare/small tom

A 3 > 3 3 3 2 2 2 **B** 3

21 3

32 3 2 fill **C** 3 > 3 > 3 > 3

44 **D** colla voce rall 2x **A** 3 > 3 3 3 2 **RH: ride cymbal to med tom**

54 2 2 **B** 3 > 3 3 2 2 2 2 fills.....

70 **C** 3 > 3 3 > 3 sim...with open hat variations fill

Outro
x: rim-clicks

84 3

Cissy Strut

Signature Patterns as recorded by Zigaboo Modeliste The Meters

$\text{♩} = 88$

A X^4 **B**

snare accents all thru

C Keys solo D.C.

7

12 X^2 **B** X^2 **A**

20 X^4 **B** **A**

27 **B**

36

l r l r l l r r

l r l r r l r r

> > > > > >

Score 8. *Cissy Strut*: Rearranged patterns using Bernard Purdie techniques

Cissy Strut

Rearranged Patterns using Bernard Purdie techniques Rickie Lee Jones

$\text{♩} = 88$

A $\times 4$ **B** $\times 2$

8 **A** keys solo D.C. **B** $\times 2$

16 $\times 2$ **A** $\times 4$ **B**

24 **A** **B**

32 Some variation on snare accents

The musical score is written for a single staff in 4/4 time. It begins with a tempo marking of 88 beats per minute. The score is divided into measures, with measure numbers 8, 16, 24, and 32 indicated. Pattern A is a complex rhythmic figure consisting of eighth and sixteenth notes with various accents and ties. Pattern B is a simpler rhythmic figure consisting of eighth notes. The score includes several repetitions of these patterns, indicated by 'x' followed by a number. A 'keys solo' section is marked with 'D.C.' (Da Capo). The final section, starting at measure 32, is titled 'Some variation on snare accents' and shows a sequence of snare drum hits with accents.

Cissy Strut

New Patterns by Enrico Morena

Rickie Lee Jones

A 1 r r l r r l r 1 r **B** X4

$\text{♩} = 88$

No LF- 1x. open- hi-hats 2x

A1 keys solo **B** Snare optional 4/4+

8 D.C. X2

16 X2 **A** X4 **B**

24 **A** **B**

LF:heel down (open hi-hat effect)

32

Crossroads

Signature Patterns as recorded by Ginger Baker

Cream

Intro $\text{♩} = 132$

verse

vary bass drum

14

vary bass drum

X3

heavy ride

vary snare

27

vary bass drum ad.lib

busier 2x

verse

41

Guitar solo

heavy ride

57

fill

Motown influence

73

Guitar solo

Bugaloo influence

sim.ad.lib

verse

86

sim.ad.lib

fill

Crossroads

Rearranged Patterns using Stewart Copeland techniques

Cream

Intro
♩ = 132

Verse
A

extra bass drum 3x

14

Guitar solo
B

X3

extra bass drum 2x

29

Verse
A

45

Guitar solo
B

61

Guitar solo
C

Bugaloo influence
Guitar solo
D

74

sim.ad.lib

Verse
E

sim.ad.lib

90

fill

Crossroads

New Patterns by Enrico Morena

Cream

Intro $\text{♩} = 132$

Verse

Guitar solo LH: hi hat & snare beats 2/4
RH: cowbell & snare beat 3

14 X3

29 Verse

BD variations

44 Guitar solo

60 Motown influence
Guitar solo

73 Guitar solo

86 Verse

fill

Score 13. *Fifty Ways to Leave Your Lover*: Signature patterns as recorded by Steve Gadd

Fifty Ways to Leave Your Lover

Signature Patterns as recorded by Steve Gadd Paul Simon

Intro
♩ = 102

r r l l l l r l r l r r r l r l r r l l

A Verse

5 8X

B Chorus

8 1. 2. sim...

14 3. 4. **A Verse** 8X 2

19 **B Chorus** 4x 1.

25 2. sim... 3. 4.

Outro

29 2 2 2 2

Fifty Ways to Leave Your Lover

Rearranged Patterns using Stewart Copeland techniques

Paul Simon

♩ = 102

Intro 3X

4X band enters

Verse 8X

6

Chorus

1.2.3. 4.

12

Verse 8X

18

Chorus 4X

1.2.3. 4.

25

Outro

Fifty Ways to Leave Your Lover

New Patterns by Enrico Morena

Paul Simon

♩ = 102

Intro 3X r l r l r l r r l

band enters 4X 2

A Verse 8X

Snares off
LF: hi-hat splashes

RH: cymbal LH: med-tom & x-stick

6

B Chorus

12

1.2.3. 4.

A Verse 8X 2

17

B Chorus

1.2.3.

23

4.

Outro 2-bar pattern reversed

2 2

30

2

fill

Fire on the Bayou

Signature Patterns as recorded by Zigaboo Modeliste

The Meters

J = 97 Slightly swung
Guitar intro

Band in sticking: rrlr

Vox in 2X

Verse
No repeat on D.S.

A

Chorus

B

fill

C

Bridge

organ in 1x
3X

fill last x

Chorus

B

D.S. al Coda

C

Coda Bridge

Organ in 1x
4X

fill last x

fill

Fire on the Bayou

Rearranged Patterns using Steve Gadd techniques

The Meters

J = 97 Slightly swung

Guitar intro

Band enters

Vox in 2X

l r r l l r l r r l r

A Verse l r r l r r l l r r l

9

B Chorus

17

C Bridge

25

organ in 1x 3X

fill 3X

B Chorus

l r r l r r l l r r l r r

C Coda

Bridge

33 D.S. al Coda

Organ in 1x 4X

45

fill

Fire on the Bayou

New Patterns by Enrico Morena

The Meters

$\text{♩} = 97$ Slightly swung

LH: hi-hat RH: cowbell & snare

Guitar intro fill Intro

Vox in 2X

A Verse

LF: heel up for minimal open hi-hat

11

B Chorus

LF: heel down for pronounced open hi-hat

C Bridge

LH: hi-hat RH: toms

organ in 1x 3X fill 3X

B Chorus

LF: heel down for open hi-hat

25

C Coda

Organ in 1x 4X fill

34

47

fill

Home at Last

Signature Patterns as recorded by Bernard Purdie

Steely Dan

J = 128 Half-time shuffle

Piano Intro fill

Intro horn line 3 3 3 3

A Verse ghost notes 3 3 3 3

14 fill Bass drum variations fill

B 3 3 3 3 3X figures fill ghost notes 3 3 3 3

25 snare ghost notes

B1 Bridge Ad lib to figures 3 3 3 3

35 horn line D.S. figures fill

C Keys 3 3 3 3

49 snare ghost notes

D Guitar solo fill 3 3 3 3

B Chorus 3 3 3 3

59 fill X3 Figures fill

E Repeat to end- Guitar solo & horn line 3 3 3 3

73 Bass drum variations 8X

Home at Last

Rearranged Patterns using Stewart Copeland techniques

Steely Dan

$\text{♩} = 128$ half-time feel

Piano Intro fill

band in 1st bar only

A Verse Verse 2: hi-hat variations

14 fill

hi-hat variations 2nd chorus

Chorus

B

25

2 3X figures fill

horn line

33

D.S.

Bass drum variations 2X

Bridge

B1

41

figures fill

C Keys

Guitar solo

D

52

fill

Bass drum variations

Chorus

B

65

X3 Figures fill

Repeat to end-guitar solo & horn line

E

Bell variations

75 8X

The musical score is written for a drum set in 4/4 time with a half-time feel (128 bpm). It includes various drum patterns such as hi-hat variations, bass drum variations, and bell variations. The score is divided into sections labeled A through E, with specific measures and repeat signs indicated. The notation uses standard drum symbols: 'x' for hi-hat, 'y' for snare, and 'z' for bass drum. Some measures are marked with 'D.S.' (Da Capo) or 'Repeat to end-guitar solo & horn line'.

Home at Last

New Patterns by Enrico Morena

Steely Dan

J = 128 half-time feel
Piano Intro

fill

Intro

A Verse

B Chorus

C Keys

D Guitar solo

E Repeat to end-guitar solo & horn lines

horn lines

figures

fill

X3 Figures

8X

Late in the Evening

Signature Patterns as recorded by Steve Gadd

Paul Simon

♩ = 118

2 sticks in both hands RH: f/tom rim & LH: toms

Guitar intro

4

Intro

8

12

16

A Verse Repeat 3x

20

24

28

fill

B Horns

32

36

40

fill

A Verse

44

48

52

C drums & percussion

fill

56

Horns

60

B

64

68

72

fill (back to rims)

D Guitar solo Repeat 4X

76

Outro

80

tagg

Late in the Evening

Rearranged Patterns using Zigaboo Modeliste techniques Paul Simon

$\text{♩} = 118$

Guitar intro snares off Intro

l r l r r l r l l/r

15 Verse repeat 3x

28 Horns

35 Horns sim... Verse

44 fill drums & percussion

57 Horns

66 sim... variations fill Guitar solo repeat 4x

79 variation

The musical score is written for guitar, horns, and drums/percussion. It begins with a guitar intro and a snare-off section. The main body of the score consists of several measures of music, with various performance instructions and repeat signs. The score is divided into sections labeled A, B, C, and D, each with specific musical notations and performance instructions. The tempo is marked as 118 beats per minute.

Late in the Evening

New Patterns by Enrico Morena

Paul Simon

♩ = 118

guitar

Intro

repeat 3x

A Verse

B Horns

LF: heel down

A Verse

C drums & percussion

fill

Horns

B Horns

Guitar solo

D repeat 4x

fill

Outro

tagg

The musical score is written for guitar, horns, and drums/percussion. It begins with a tempo of 118 beats per minute. The guitar part starts with a series of eighth notes and rests, followed by a series of eighth notes with accents. The horns part enters with a series of eighth notes and rests, followed by a series of eighth notes with accents. The drums and percussion part enters with a series of eighth notes and rests, followed by a series of eighth notes with accents. The score includes several repeat signs and section markers (A, B, C, D) indicating different parts of the song. The guitar solo section is marked 'repeat 4x'. The score ends with an 'Outro' section and a 'tagg' section.

Memphis Soul Stew

Signature Patterns as recorded by Bernard Purdie

King Curtis

♩ = 114

Bass vamp Vox intro 4 8 'of bass' 12 'drums'

Vox repeat 3x

A 'organ' (2x) 16 'burner' (3x) 'guitar' (1x) 20 'horn' (2x) 'now... 3x

...beat 'well' 24 **B** Sax solo repeat 5x 28

begin to fade 4x 32 36 fills

The musical score is written on a single staff in 4/4 time. It begins with a 'Bass vamp' section, followed by a 'Vox intro' of 4 measures. Measures 8 and 12 are marked with 'of bass' and 'drums' respectively. The score then enters a section marked 'A' with a 'Vox repeat 3x' instruction. This section includes patterns for 'organ' (2x, measures 16-17), 'burner' (3x, measures 18-20), 'guitar' (1x, measure 21), 'horn' (2x, measures 22-23), and 'now...' (3x, measures 24-26). A '...beat' is marked at measure 24. The section concludes with a 'well' pattern at measure 24. This is followed by a section marked 'B' with a 'Sax solo repeat 5x' instruction, spanning measures 28-32. The final section, starting at measure 32, is marked 'begin to fade 4x' and includes 'fills' at measure 36.

Memphis Soul Stew

Rearranged Patterns using Zigaboo Modeliste techniques King Curtis

J = 114

Bass vamp Vox intro 'of bass' 'drums'

Vox
repeat 3X l r r r l r l l r r l r r r l r l l r r

14 **A** 'organ' 2x 'burner' 'guitar' 'horn' 'now...
sim... 3x 1x 2x 3x

Sax solo
repeat 5x

23 'beat' 'well' fill sim... begin to fade 4x

36 fills

Memphis Soul Stew

New Patterns by Enrico Morena

King Curtis

J = 114

Bass vamp Vox intro 'of bass' 'drums'

Vox repeat 3x RH: cowbell LH: snare

14 **A** 'organ' 2x 'burner' 3x 'guitar' 1x 'horn' 2x 'now.....beat' 3x 'well' fill

25 **B** Sax solo repeat 2x

36 **C** Sax solo (cont) repeat 5x

fills (to cowbell bar 4) begin to fade 4x

48 fills

Motherless Children

Signature Patterns as recorded by Sly Dunbar

Gregory Isaacs

$\text{♩} = 124$

Intro

Vox (snare)

fill

'Motherless children' Verse (timbale snare)

11 2x 'no clothes'

'Yes they... A1

23 B 'protect them' A 'Motherless children...'

32 B 'defend them...' A 'Motherless children...'

'no clothes' repeat 3x B

45 last x 'oh yeah...' A 'Motherless children...'

54 2x 'in all cases' C 'your love mean a lot... r 1 sim... repeat and fade

Motherless Children

Rearranged Patterns using Zigaboo Modeliste techniques Gregory Isaacs

♩ = 124

Intro *'Motherless children'* **A** *sim...*

12 *'no clothes 2x* **A1** *sim...*

23 *'protect them...* **B** *'Motherless children* **A**

33 *'defend them...* **B** *'Motherless children* **A**

45 *'no clothes... repeat 3x* **B** *last x 'oh yeah...* **A** *"Motherless children* *2x 'and in all cases"*

56 *' your love mean a lot...* **C** *sim...* *repeat and fade*

Motherless Children

New Patterns by Enrico Morena

Gregory Isaacs

$\text{♩} = 124$ RH: rim-click LH: snare

Intro

RH: rim-click & cowbell
'Motherless children...'

A

11 'no clothes 2x

A1 'Yes they... sim...

23 **B** 'protect them... 2x **A** 'Motherless children...'

28 **B** 'defend them... **A** 'Motherless children...'

41 'no clothes **B** 'no clothes... repeat 3x last x 'oh yeah... **A** 'Motherless children...'

51 2x 'and in all cases" **C** 'Your love mean a lot.... sim... repeat and fade

The musical score is written for a drum set. The right hand (RH) plays rim-clicks and cowbells, while the left hand (LH) plays snare. The tempo is 124 beats per minute. The score is divided into sections labeled A, A1, B, and C. Section A is the main melody, A1 is a variation, B is a counter-melody, and C is a final section. The lyrics are written above the notes, and the drum patterns are indicated by 'x' marks on the staff lines.

Score 31. *Right time*: Signature patterns as recorded by Sly Dunbar

Right Time

Signature Patterns as recorded by Sly Dunbar Mighty Diamonds

$\text{♩} = 70$

Intro

5 **VOX**

15

25

35 **Chorus**

45 **Outro**

Score 32. *Right Time*: Rearranged patterns using Ginger Baker techniques

Right Time
Rearranged Patterns using Ginger Baker techniques Mighty Diamonds

$\text{♩} = 70$

1 $\text{♩} = 70$

5 **Vox** **A** Verse

9 **B** Chorus **A** Verse pattern variation

19 **A1** band **A** Verse pattern variation

30 **B** pattern variation Chorus

40 **C** Ad lib Vox **D** Outro 'yeah yeah... band plays out... 2x fade...

Score 33. *Right Time*: New Patterns by Enrico Morena

Right Time

New Patterns by Enrico Morena

Mighty Diamonds

♩ = 70

Slightly swung

Vox

LF: heel down

A Verse LF: heel down

B Chorus

Verse-pattern variation

A

A1 band

Verse-pattern variation

A

Chorus

C Ad lib Vox

D Outro

'yeah yeah... band plays out... 2x fade...

Rock Steady

Signature Patterns as recorded by Bernard Purdie Aretha Franklin

♩ = 104

Intro (Measures 1-5)

A Verse (Measures 9-13)

B Chorus (Measures 17-21)

A Verse (Measures 25-29)

B1 Chorus (Measures 33-37)

C Bridge horns (Measures 41-45)

D drum break (Measures 49-53)

E Outro horns in 2x (Measures 57-61)

Tagg 2x (Measures 65-69)

Rearranged Patterns using Sly Dunbar techniques

Aretha Franklin

[illegible]

♩ = 104 Organ intro

Intro
 r l r [>]r l r l r [>]r l l

Verse
A 3x r l r [>]r l r l r [>]r l l

Chorus
B l l [>]r r r l r [>]r

Verse
A

Chorus
B1 r [>]r l r l l r l r l l

Bridge-Horns
C

drum break
D r l r l sticking

Outro horns in 2x
E

fill to accents 2x

LF: hi-hat splashes 1x

Rolling Green

Signature Patterns as recorded by Ginger Baker *Masters of Reality*

Half-time feel
♩ = 128

A *r r r l r l l l*

Verse
No repeat 2x

B

Chorus
♩ = 80 *snare ghosts not notated*

C *sim...*

Bridge
♩ = 128

D *repeat 4x descending toms*

fill

D.C. from A

Guitar solo
♩ = 128

Verse
B

Outro
C *sim...*

Fill

52

Rearranged Patterns using Bernard Purdie techniques Masters of Reality

Rolling Green

New Patterns by Enrico Morena

Masters of Reality

♩ = 128 Half-time feel

A RH: 2nd hi-hats LH: small-tom & snare
LF: hi-hat splashes

Verse
No repeat 2x

B

♩ = 80 Chorus RH: crash & f/tom LH: s/tom & snare
LF: hi-hat splashes

C D.C. from A

♩ = 128 Bridge repeat 4x
descending toms

D **♩ = 128** Guitar solo

B Verse sim... fill

C Outro fill

Roxanne

Signature Patterns as recorded by Stewart Copeland

The Police

Intro

$\text{♩} = 134$

Verse

A

A1

B Chorus

fill...

1.

B1 2. Back to A

B2

50

Roxanne

Rearranged Patterns using Sly Dunbar techniques

The Police

$\text{♩} = 134$

Intro $\circ +$ $r r$

Verse $\circ +$ 1. 2. $\circ +$

tacit on 2nd verse

LF: heel down

A1 $> \circ + > > >$ $> \circ +$ **B** Chorus snare accents shown below fill...

1.

2 2 2 2 fill

B1 2. $> > > > >$ $> > > > >$ $r l \circ r l$ sim... **B2** 2 2 2 2 2

D.S.

57 2

Roxanne
New Patterns by Enrico Morena

The Police

$\text{♩} = 134$

Intro r l l l l r l

Verse r l l l l r l

Chorus fill B

1. **2.** **B1** **D.S.** **B1** **HH heel down**

44 **B2** **sim...** **2** **2**

55 **2** **fill**

Sunshine of Your Love
Signature Patterns as recorded by Ginger Baker Cream

♩ = 116

Intro

A Intro RH: 2 floor toms LH: s&m toms

B Chorus sim...

Guitar solo

A1 1. 2. sim...

B1 Guitar solo Chorus fill

A Verse 3 4x

B Chorus sim... sim... sim... sim...

60 sim...

Sunshine of Your Love

Rearranged Patterns using Steve Gadd techniques

Cream

♩ = 116

Intro RH: snare & f/tom LH: hi-hat

Verse 1 & 2

9 **A** **B** Chorus RH: snare LH: hi-hat

Heel down on H-H.

Guitar solo

21 sim.. sim... **A1** **2**

30 **B1** Chorus (Intro feel)

Verse 3 repeat 4x minor pattern variations

45 **A** **B** Chorus repeat 3x

57

Sunshine of Your Love

New Patterns by Enrico Morena

Cream

$\text{♩} = 116$

Intro

Verse 1 & 2 **A**

Chorus **B** RH: f/tom & snare LH: hi-hat

Guitar solo **A1**

Guitar solo Chorus **B1**

Verse 3 repeat 4x **A**

Chorus repeat 3x **B**

The musical score is written for a single staff in 4/4 time, with a tempo of 116 bpm. The key signature is one flat (Bb). The score is divided into several sections, each with a specific label and a corresponding letter in a box. The sections are: Intro, Verse 1 & 2 (labeled A), Chorus (labeled B), Guitar solo (labeled A1), Guitar solo Chorus (labeled B1), Verse 3 repeat 4x (labeled A), and Chorus repeat 3x (labeled B). The notation includes various rhythmic patterns, accidentals, and dynamic markings. The score is written for a single staff, with the right hand (RH) playing the f/tom & snare and the left hand (LH) playing the hi-hat. The score is divided into measures, with some measures containing multiple notes and rests. The score is written in a standard musical notation style, with a key signature of one flat and a tempo of 116 bpm.

Wrapped Around Your Finger
Signature Patterns as recorded by Stewart Copeland The Police

♩ = 128

Intro

A

B

C

D Sim

E

F

G fill

bell variations...

Intro Vamp

bell variations

hhat variations

Repeat 3X

120

Wrapped Around Your Finger

The Police

Rearranged Patterns using Steve Gadd techniques

♩ = 128

LH-hi-hat RH-f/tom & snare

9 **A** open hi-hat replaces 2nd bar accents on repeat hat variations

18 **B**

32 **A**

41 **C**

56 intro vamp

68 **D** Sim **E**

84 **F** LH: hi-hat & snare RH: ride bell

97 **G** outro vamp

111 repeat 3x

1 1 1 r 1 r 1

Wrapped Around Your Finger

The Police

New Patterns by Enrico Morena

$\text{♩} = 128$

9 **A**

22 **B**

35 **A** similar **snare variations**

43 **C**

57 **intro vamp**

71 **D** Sim **E**

87 **F** RH-tambourine

101 **G** outro vamp

115 repeat 3x

PART FOUR: The Audio and Video Recordings: Synthesis

4.1 Commentary on the audio recordings.

There are forty-eight audio files included in this project. The sixteen songs which contain the signature patterns selected for this study are each recorded in three differing versions. Each recording includes either a signature pattern, rearranged or new pattern. The rearranged and new patterns are created using the stepwise processes from the investigations undertaken.

The recordings include additional patterns to the ones mentioned above. These additional patterns replicate those played on the original recordings in differing sections of the song (intro, chorus, bridge etc.). The additional patterns are recorded and created in the same format as employed for the signature patterns with resulting rearranged and new patterns respectively.

Music scores were written for each recording and entail transcriptions of the relevant signature patterns and their respective rearranged and new patterns. (See Part Three: The Music Scores: Songs and Transcriptions). Drum fills and improvised variations on the patterns, as played on the original recordings, were generally not replicated on the submission recordings, nor notated on relevant scores, however, some variations have been included where deemed necessary and notated accordingly. All tracks were recorded live in single non-interrupted takes with no edited drop-ins.

Eleven of the sixteen backing tracks used for the recordings were downloaded from the internet (See List of Sources: Primary Sources: A.5 Online Backing Tracks). The remaining five backing tracks were unable to be sourced online resulting in session musicians being employed to rehearse and record the remaining five backing tracks required. The recordings were done at Mixmaster's Studios in Adelaide, South Australia. (See Acknowledgements). The completed forty-eight recordings, as presented in the dissertation, were recorded using the above-mentioned backing tracks and studio recordings mastered at the author's home studio as seen in the video recordings.

The backing tracks are duplications of the original recordings in terms of tempo, arrangements, and instrumental parts. To highlight the drumming performances, vocal tracks were not included in the recordings, excepting for four of the studio-recorded backing tracks, where they were used as guides, as can be heard in the audio files. To highlight the drum performances and viability of the rearranged and new patterns, 'drum only' versions of each of the forty-eight recordings have been included in the submission, with backing tracks muted.

To replicate the studio environment of pre-digitization (as was the case for most of the original recordings), click-tracks (though available), have not been used in the downloaded or studio backing tracks. Resultingly, minor fluctuations in ‘time’ may be audible. Perfection in performance recordings has not been a focus of this project, aiming to replicate the analogue recording era and thus requiring higher levels of performance on the drumming practitioner (the author in this case).

The recording ‘mastering’ levels vary within the song files. Audibility of the recording files can be enhanced by adjusting volume levels accordingly. For greater clarity it is advised that headphones be worn when deciphering the drum patterns and overall performance within the recordings. The audio files are listed in alphabetical order. Mastering volume is low-medium.

The prohibitive costs (borne by the author), of session musicians and studio time etc. did not allow for the downloaded eleven backing tracks to be bespoke re-recorded for this study. It is felt that the downloaded backing tracks are of a professional and applicable standard for the purposes required for this study and fulfilled that role appropriately.

Track listings are presented in numerical order using a six CD platform to facilitate hard copy reproduction of the dissertation in a book, CD and DVD format.

4.2 Track listing of CD 1

Track 1. <i>Babylon Sisters</i> : Signature patterns as recorded by Bernard Purdie (0.16)	5.20
Track 2. <i>Babylon Sisters</i> : Signature patterns as recorded by Bernard Purdie. Drums	5.20
Track 3. <i>Babylon Sisters</i> : Rearranged patterns using Zigaboo Modeliste techniques (0.16)	5.20
Track 4. <i>Babylon Sisters</i> : Rearranged patterns using Zigaboo Modeliste techniques. Drums	5.20
Track 5. <i>Babylon Sisters</i> : New patterns by Enrico Morena	4.48
Track 6. <i>Babylon Sisters</i> : New patterns by Enrico Morena. Drums	4.48
Track 7. <i>Chuck E's in Love</i> : Signature patterns as recorded by Steve Gadd	3.28
Track 8. <i>Chuck E's in Love</i> : Signature patterns as recorded by Steve Gadd. Drums	3.28
Track 9. <i>Chuck E's in Love</i> : Rearranged patterns using Ginger Baker techniques	3.28
Track 10. <i>Chuck E's in Love</i> : Rearranged patterns using Ginger Baker techniques. Drums	3.28
Track 11. <i>Chuck E's in Love</i> : New patterns by Enrico Morena	3.28
Track 12. <i>Chuck E's in Love</i> : New patterns by Enrico Morena. Drums	3.28
Track 13. <i>Cissy Strut</i> : Signature patterns as recorded by Zigaboo Modeliste.	3.44
Track 14. <i>Cissy Strut</i> : Signature patterns as recorded by Zigaboo Modeliste. Drums	3.44
Track 15. <i>Cissy Strut</i> : Rearranged patterns as recorded by Bernard Purdie (0.12)	4.00
Track 16. <i>Cissy Strut</i> : Rearranged patterns as recorded by Bernard Purdie. Drums	4.00
Track 17. <i>Cissy Strut</i> : New patterns by Enrico Morena	3.43
Track 18. <i>Cissy Strut</i> : New patterns by Enrico Morena. Drums	3.43
Running time	66.38

4.3 Track listing of CD 2

Track 19. <i>Crossroads</i> : Signature patterns as recorded by Ginger Baker	4.08
Track 20. <i>Crossroads</i> : Signature patterns as recorded by Ginger Baker. Drums	4.08
Track 21. <i>Crossroads</i> : Rearranged patterns using Stewart Copeland techniques	4.16
Track 22. <i>Crossroads</i> : Rearranged patterns using Stewart Copeland techniques. Drums	4.16
Track 23. <i>Crossroads</i> : New patterns by Enrico Morena	4.16
Track 24. <i>Crossroads</i> : New patterns by Enrico Morena. Drums	4.16
Track 25. <i>Fifty Ways to Leave Your Lover</i> : Signature patterns as recorded by S. Gadd	4.00
Track 26. <i>Fifty Ways to Leave Your Lover</i> : Signature patterns as recorded by S. Gadd. Drums	4.00
Track 27. <i>Fifty ways to Leave Your Lover</i> : Rearranged patterns using Copeland techniques	4.00
Track 28. <i>Fifty Ways to Leave Your Lover</i> : Rearranged patterns using Copeland techniques. D.	4.00
Track 29. <i>Fifty Ways to Leave Your Lover</i> : New Patterns by Enrico Morena	4.00
Track 30. <i>Fifty Ways to Leave Your Lover</i> : New Patterns by Enrico Morena. Drums	4.00
Track 31. <i>Fire on the Bayou</i> : Signature patterns as recorded by Zigaboo Modeliste	4.16
Track 32. <i>Fire on the Bayou</i> : Signature patterns as recorded by Zigaboo Modeliste. Drums	4.16
Track 33. <i>Fire on the Bayou</i> : Rearranged patterns using Steve Gadd techniques	4.16
Track 34. <i>Fire on the Bayou</i> : Rearranged patterns using Steve Gadd techniques. Drums	4.16
Track 35. <i>Fire on the Bayou</i> : New patterns by Enrico Morena	4.16
Track 36. <i>Fire on the Bayou</i> : New patterns by Enrico Morena. Drums	4.16
Running time	74.56

4.4 Track listing of CD 3

Track 37. <i>Home at Last</i> : Signature patterns as recorded by Bernard Purdie	5.36
Track 38. <i>Home at Last</i> : Signature patterns as recorded by Bernard Purdie. Drums	5.36
Track 39. <i>Home at Last</i> : Rearranged patterns using Stewart Copeland techniques	5.36
Track 40. <i>Home at Last</i> : Rearranged patterns using Stewart Copeland techniques. Drums	5.36
Track 41. <i>Home at Last</i> : New patterns by Enrico Morena	5.36
Track 42. <i>Home at Last</i> : New patterns by Enrico Morena. Drums	5.36
Track 43. <i>Late in the Evening</i> : Signature patterns as recorded by Steve Gadd	4.17
Track 44. <i>Late in the Evening</i> : Signature patterns as recorded by Steve Gadd. Drums	4.17
Track 45. <i>Late in the Evening</i> : Rearranged patterns using Zigaboo Modeliste techniques	4.20
Track 46. <i>Late in the Evening</i> : Rearranged patterns using Zigaboo Modeliste techniques. Drums	4.20
Track 47. <i>Late in the Evening</i> : New Patterns by Enrico Morena	4.16
Track 48. <i>Late in the Evening</i> : New Patterns by Enrico Morena. Drums	4.16
Running time	59.22

4.5 Track listing of CD 4.

Track 49. <i>Memphis Soul Stew</i> : Signature patterns as recorded by Bernard Purdie	3.08
Track 50. <i>Memphis Soul Stew</i> : Signature patterns as recorded by Bernard Purdie. Drums	3.08
Track 51. <i>Memphis Soul Stew</i> : Rearranged patterns using Modeliste techniques	3.43
Track 52. <i>Memphis Soul Stew</i> : Rearranged patterns using Modeliste techniques. Drums (0.26)	3.43
Track 53. <i>Memphis Souls Stew</i> : New patterns by Enrico Morena	4.16
Track 54. <i>Memphis Souls Stew</i> : New patterns by Enrico Morena. Drums (0.26)	4.00
Track 55. <i>Motherless Children</i> : Signature patterns as recorded by Sly Dunbar	3.56
Track 56. <i>Motherless Children</i> : Signature patterns as recorded by Sly Dunbar. Drums	3.56
Track 57. <i>Motherless Children</i> : Rearranged patterns using Zigaboo Modeliste techniques	4.08
Track 58. <i>Motherless Children</i> : Rearranged patterns using Zigaboo Modeliste techniques. Drums	4.08
Track 59. <i>Motherless Children</i> : New patterns by Enrico Morena	4.00
Track 60. <i>Motherless Children</i> : New patterns by Enrico Morena. Drums	4.00
Track 61. <i>Right Time</i> : Signature patterns as recorded by Sly Dunbar	3.52
Track 62. <i>Right Time</i> : Signature patterns as recorded by Sly Dunbar. Drums	3.52
Track 63. <i>Right Time</i> : Rearranged patterns using Ginger Baker techniques	3.40
Track 64. <i>Right Time</i> : Rearranged patterns using Ginger Baker techniques. Drums	3.40
Track 65. <i>Right Time</i> : New Patterns by Enrico Morena	3.28
Track 66. <i>Right Time</i> : New Patterns by Enrico Morena. Drums	3.28
Running time	66.06

4.6 Track listing of CD 5

Track 67. <i>Rock Steady</i> : Signature patterns as recorded by Bernard Purdie	3.20
Track 68. <i>Rock Steady</i> : Signature patterns as recorded by Bernard Purdie. Drums	3.20
Track 69. <i>Rock Steady</i> : Rearranged patterns using Sly Dunbar techniques	3.20
Track 70. <i>Rock Steady</i> : Rearranged patterns using Sly Dunbar techniques. Drums	3.20
Track 71. <i>Rock Steady</i> : New patterns by Enrico Morena	3.20
Track 72. <i>Rock Steady</i> : New patterns by Enrico Morena. Drums	3.20
Track 73. <i>Rolling Green</i> : Signature patterns as recorded by Ginger Baker	3.40
Track 74. <i>Rolling Green</i> : Signature patterns as recorded by Ginger Baker. Drums	3.40
Track 75. <i>Rolling Green</i> : Rearranged patterns using Bernard Purdie techniques	3.43
Track 76. <i>Rolling Green</i> : Rearranged patterns using Bernard Purdie techniques. Drums	3.43
Track 77. <i>Rolling Green</i> : New patterns by Enrico Morena	3.44
Track 78. <i>Rolling Green</i> : New patterns by Enrico Morena. Drums	3.44
Track 79. <i>Roxanne</i> : Signature patterns as recorded by Stewart Copeland	3.28
Track 80. <i>Roxanne</i> : Signature patterns as recorded by Stewart Copeland. Drums	3.28
Track 81. <i>Roxanne</i> : Rearranged patterns using Sly Dunbar techniques	3.20
Track 82. <i>Roxanne</i> : Rearranged patterns using Sly Dunbar techniques. Drums	3.20
Track 83. <i>Roxanne</i> : New patterns by Enrico Morena	3.28
Track 84. <i>Roxanne</i> : New patterns by Enrico Morena. Drums	3.28
Running time	62.46

4.7 Track listing of CD 6

Track 85. <i>Sunshine of Your Love</i> : Signature patterns as recorded by Ginger Baker	4.08
Track 86. <i>Sunshine of Your Love</i> : Signature patterns as recorded by Ginger Baker. Drums	4.08
Track 87. <i>Sunshine of Your Love</i> : Rearranged patterns using Steve Gadd techniques	4.16
Track 88. <i>Sunshine of Your Love</i> : Rearranged patterns using Steve Gadd techniques. Drums	4.16
Track 89. <i>Sunshine of Your Love</i> : New patterns by Enrico Morena	4.00
Track 90. <i>Sunshine of Your Love</i> : New patterns by Enrico Morena. Drums	4.00
Track 91. <i>Wrapped Around Your Finger</i> : Signature patterns as recorded by Copeland	5.20
Track 92. <i>Wrapped Around Your Finger</i> : Signature patterns as recorded by Copeland. Drums	5.20
Track 93. <i>Wrapped Around Your Finger</i> : Rearranged patterns using S. Gadd techniques	5.20
Track 94. <i>Wrapped Around Your Finger</i> : Rearranged patterns using S. Gadd techniques. Drums	5.20
Track 95. <i>Wrapped Around Your Finger</i> : New patterns by Enrico Morena	5.20
Track 96. <i>Wrapped Around Your Finger</i> : New patterns by Enrico Morena. Drums	5.20
Running time	60.34
Total running time of 6 CDs	390.22

4.8 Commentary on the video recordings

There are fifty video files recorded for this project. They are listed in song-title alphabetical order aside from Videos 49-50.

Videos 1-48 are introduced stating the video number, whether it is a signature, rearranged or new pattern, and corresponding song. Further information is narrated identifying which selected drummer's techniques are being applied in the video recording. All video patterns, inclusive of the sixteen signature patterns, directly correspond to those selected for the study or composed using the stepwise processes developed within this investigation (See Part Two: Stepwise Processes, Commentary and Transcriptions of Patterns).

The sixteen signature patterns selected are videoed in three differing versions and are numbered accordingly Video 1-48. Each video recording comprises either a signature pattern, rearranged or new pattern (in that order), performed by the author for either an 8/12/16 bar length, depending on tempo and song arrangements. The respective backing tracks, as used in the audio recordings, can be heard as accompaniment, engaged by the author after the introductory announcement, with the corresponding pattern played to the relevant section of the song.

Video 49 demonstrates the composing of innovative patterns using Michael Jackson's recording of *Billie Jean*¹⁰⁹ and applying the stepwise process as seen in Table 9 (Part One:1.10). The drummer on the original recording is Leon Ndugu Chancler, not, as stated, JR Robinson.

Video 50 is an example of the video-diary employed to assist performance-practice throughout the study. It demonstrates the application and performance of the signature patterns, rearranged patterns, and new patterns played along to the backing track for Steely Dan's *Babylon Sisters*¹¹⁰. This process is engaged to demonstrate the viability of the rearranged and new patterns alongside the signature pattern, ensuring rhythmic functionality and compatibility with the accompanying instrumental parts. To enhance performance-practice, the patterns are played in succession.

The videos were recorded in the author's studio, on the drum kit used for the audio recordings, in an acoustic, non-recording format, aside the video recorder. The audio is taken directly from the

¹⁰⁹ Michael Jackson. "Billie Jean". *Thriller*. Recorded 1982. CBS Epic- HE 48112, 1983. CD. Track 6

¹¹⁰ Steely Dan. "Babylon Sisters". *Gaucho*. Recorded 1980. MCA MCAD-37220, 1984. CD. Track 1

video recorder sound card (sim card). The backing tracks heard are a duplication of the original recordings inclusive of tempo, arrangements, feel and instrumental parts as used in the audio file recordings. To highlight the drumming performances, vocal tracks were not included in the recordings submitted, excepting for four of the studio-recorded backing tracks, as mentioned above and can be heard in the audio files.

To further replicate the studio environment of pre-digitization pertaining to most of the original recordings, click-tracks (though available), have not been used in either the downloaded or studio backing tracks. Perfection in performance-recordings has not been a focus of this submission and is intended to replicate the analogue recording era of the signature patterns, thus imposing the need for higher levels of performance on the drumming practitioner (the author in this case). All videos were recorded in single non-interrupted takes. No drop-ins.

Audio and visual quality are consistent and are a true reflection of the patterns performed. For greater audible clarity it is advised headphones to be worn in assisting to decipher the drum patterns and overall performance within the video recordings. The prohibitive costs (to be borne by the author), of employing session musicians and videographers etc. did not allow for the videoing of full-song performances in a professional studio. It is felt that the video recordings, as presented, along with the downloaded backing tracks, are of a professional and applicable standard for the purposes required, demonstrating sufficient visual and audio data on any technical challenges encountered by the author in performing the patterns presented in this study.

Video listings are presented in numerical order to facilitate hard copy reproduction of the dissertation in a book, CD and DVD format.

4.9 Listings of the Video Recordings

Video 1. <i>Babylon Sisters</i> : Signature Pattern 1 by Bernard Purdie	0.40
Video 2. <i>Babylon Sisters</i> : Rearranged Pattern using Zigaboo Modeliste techniques	0.43
Video 3. <i>Babylon Sisters</i> : New Pattern by Enrico Morena	0.38
Video 4. <i>Chuck E's in Love</i> : Signature Pattern 2 by Steve Gadd	0.36
Video 5. <i>Chuck E's in Love</i> : Rearranged Pattern using Ginger Baker techniques	0.34
Video 6. <i>Chuck E's in Love</i> : New Pattern by Enrico Morena	0.36
Video 7. <i>Cissy Strut</i> : Signature Pattern 3 by Zigaboo Modeliste	0.38
Video 8. <i>Cissy Strut</i> : Rearranged Pattern using Bernard Purdie techniques	0.36
Video 9. <i>Cissy Strut</i> : New Pattern by Enrico Morena	0.34
Video 10. <i>Crossroads</i> : Signature Pattern 4 by Ginger Baker	0.37
Video 11. <i>Crossroads</i> : Rearranged Pattern using Stewart Copeland techniques	0.36
Video 12. <i>Crossroads</i> : New Pattern by Enrico Morena	0.33
Video 13. <i>Fifty Ways to Leave Your Lover</i> : Signature Pattern 5 by Steve Gadd	0.38
Video 14. <i>Fifty Ways to Leave Your Lover</i> : Rearranged Pattern using S. Copeland techniques	0.51
Video 15. <i>Fifty Ways to Leave Your Lover</i> : New Pattern by Enrico Morena	0.47
Video 16. <i>Fire on the Bayou</i> : Signature Pattern 6 by Zigaboo Modeliste	0.46
Video 17. <i>Fire on the Bayou</i> : Rearranged Pattern using Steve Gadd techniques	0.43
Video 18. <i>Fire on the Bayou</i> : New Pattern by Enrico Morena	0.37
Video 19. <i>Home at Last</i> : Signature Pattern 7 by Bernard Purdie	0.41
Video 20. <i>Home at Last</i> : Rearranged Pattern using Stewart Copeland techniques	0.42
Video 21. <i>Home at Last</i> : New Pattern by Enrico Morena	0.43
Video 22. <i>Late in the Evening</i> : Signature Pattern 8 by Steve Gadd	0.44
Video 23. <i>Late in the Evening</i> : Rearranged Pattern using Zigaboo Modeliste techniques	0.47
Video 24. <i>Late in the Evening</i> : New Pattern by Enrico Morena	0.42
Video 25. <i>Memphis Soul Stew</i> : Signature Pattern 9 by Bernard Purdie	0.41

Video 26. <i>Memphis Soul Stew</i> : Rearranged Pattern using Zigaboo Modeliste techniques	0.45
Video 27. <i>Memphis Souls Stew</i> : New Pattern by Enrico Morena	0.44
Video 28. <i>Motherless Children</i> : Signature Pattern 10 by Sly Dunbar	0.43
Video 29. <i>Motherless Children</i> : Rearranged Pattern using Zigaboo Modeliste techniques	0.44
Video 30. <i>Motherless Children</i> : New Pattern by Enrico Morena	0.42
Video 31. <i>Right Time</i> : Signature Pattern 11 by Sly Dunbar	0.51
Video 32. <i>Right Time</i> : Rearranged Pattern using Ginger Baker techniques	0.49
Video 33. <i>Right Time</i> : New Pattern by Enrico Morena	0.46
Video 34. <i>Rock Steady</i> : Signature Pattern 12 by Bernard Purdie	0.35
Video 35. <i>Rock Steady</i> : Rearranged Pattern using Sly Dunbar techniques	0.34
Video 36. <i>Rock Steady</i> : New Pattern by Enrico Morena	0.32
Video 37. <i>Rolling Green</i> : Signature Pattern 13 by Ginger Baker	0.32
Video 38. <i>Rolling Green</i> : Rearranged Pattern using Bernard Purdie techniques	0.33
Video 39. <i>Rolling Green</i> : New Pattern by Enrico Morena	0.31
Video 40. <i>Roxanne</i> : Signature Pattern 14 by Stewart Copeland	0.43
Video 41. <i>Roxanne</i> : Rearranged Pattern using Sly Dunbar techniques	0.45
Video 42. <i>Roxanne</i> : New Pattern by Enrico Morena	0.44
Video 43. <i>Sunshine of Your Love</i> : Signature Pattern 15 by Ginger Baker	0.48
Video 44. <i>Sunshine of Your Love</i> : Rearranged Pattern using Steve Gadd techniques	0.36
Video 45. <i>Sunshine of Your Love</i> : New Pattern by Enrico Morena	0.45
Video 46. <i>Wrapped Around Your Finger</i> : Signature Pattern 16 by Stewart Copeland	0.45
Video 47. <i>Wrapped Around Your Finger</i> : Rearranged Pattern using Steve Gadd techniques	0.45
Video 48. <i>Wrapped Around Your Finger</i> : New Pattern by Enrico Morena	1.10
Video 49. <i>Billie Jean</i> . Composing Innovative Patterns by Enrico Morena (see Table 10).	2.06
Video 50. <i>Babylon Sisters</i> : Three versions in performance-practice	1.40
Running time	34.37
	204

Conclusion

The essential thrust of this performance-based study has been to examine ways of using micro-elements of rhythmic patterning and it is hoped this thesis has presented that micro-detailing in a thorough and interesting manner that will be of use to future performers and scholars. But, just like the painter who has been working very closely to the canvas, it is necessary here in its conclusion, to step back from the detailing in the canvas to get a clearer view of the whole picture. Once we step back in this way, just like the painter, the micro-detailing assumes a different significance and we become more aware of the macro-structure, and the positioning of the micro-details within the larger structure.

Creativity in pop/rock drum-pattern composition has remained elusive and challenging for all but a few elite drummers. The application of established techniques and stylistic influences in composing rhythmic patterns is often overlooked, simply not known or a priority in current pedagogy. This anomaly has demanded deliberate, sophisticated, and purposeful organisation within the remit of this investigation. Not only did these techniques require defining and put into tabular form but attention was also cast on a pedagogical method with practical applications for the performance-led drummer.

This study, through its in-depth investigation of six renowned drummers in their creation of innovative pop/rock drum patterns, has developed stepwise processes for the deconstruction and reintegration of identified techniques and stylistic influences. In addition, processes facilitating rhythmic outcomes have been developed and applied successfully in performance-practice.

An example of this pedagogy is the tabling of a nomenclature of techniques comprising definitions, creating a rhythmic dictionary akin to a drumming alphabet (see Table 4). In addition, ingredients of drum patterns were investigated and codified. This micro-level analysis has produced novel processes as in the counting of notation within a pattern (Step 6, Table 8) and creating rhythmic profiles and rhythmic footprints of those patterns (Table 6). The use of these processes in the rearrangement and reimagining of drum patterns are outcomes of this performance-led research (see Tables 10-41).

Apart from the abovementioned processes, other developed processes include: the identification of techniques (Table 2); the rehearsing of rearranged and new patterns (see Table 5); the rearranging of patterns (Table 8) and a stepwise process for composing new patterns (see Table 9). This method, achieved by micro-analysis, offers a rich resource in deconstructing the layered complexities of drum patterns and deciphering its component parts for pedagogical and performance applications.

By simplifying the steps, this study provides the contemporary drummer with an opportunity to access drum patterns which may have been previously inaccessible. Further outcomes of the micro-analysis of this investigation are the rehearsing of fifteen rhythmic permutations contained within a one-bar pattern using four-limb integration, and its application to performance-practice. This outcome and insight offer opportunities for future investigations (see Table 5).

The nomenclature compiled has thirty-two techniques, of which twenty-six were identified in the sixteen signature patterns. Due to several patterns consisting of the same techniques, it was necessary to limit the number of patterns in the project so that there was no unnecessary repetition. Six additional techniques were added, with only one technique, applying brushes, not employed in the recorded performances. Techniques (drum components and percussion) not included in the nomenclature, such as double bass-drum and tambourine, have already been discussed in this project.

Due to the study's empirical nature, I felt it necessary to integrate a performance component into this project's submission. The purpose of providing recorded performances was to demonstrate innovations of selected signature patterns and the successful application of stepwise processes in performance settings. Also under scrutiny was my ability to reproduce the selected signature patterns and subsequent rearranged patterns in song-recording sessions. The performance component of this project is further highlighted by the forty-eight recordings presented in duplicate with 'drums only' versions.

Demonstrations on the DVD provide the reader with a medium by which they can more easily comprehend the featured patterns in this study. The advantage of using this medium is that the techniques applied can be better understood through visual analysis, and it is hoped that the DVD provides that support to the written text in this thesis.

The audio CDs feature performances of the selected songs and patterns, and provide the outcome of the project's methodology. It provides the reader with practical evidence that the exercises and step-by-step processes assist with the learning of selected and created patterns. As with any empirical study it is hoped that it will be used by teachers, students and drum practitioners who wish to explore the step-by-step procedures so that they may be tried and tested in daily teaching and performance settings. Not only can this study be carried out in a practical setting or private studio but in any music institution and is intended to be transferrable to any drum pattern in the pop/rock idiom.

Being a professional drummer inspired me to confront the technical challenges of the CD and Video recordings. I have replicated the signature patterns and original song recordings as if I was the session drummer hired to fulfil that role. Transcribing the patterns and full song performances has allowed me to assimilate and understand, in a sequential format, the outcomes of this study. The recording of rearranged and new patterns has also been an important part of this project. I feel it is an optimal demonstration of the learning and application of the developed method and processes so that they can be adapted to drummers of all levels.

As highlighted, six renowned drummers, all associated with innovative patterns in the pop/rock idiom during the same period (1965-1992), were also considered for this study. The drummers in question are Jeff Porcaro, John Bonham, Jim Keltner, Ringo Starr, Charlie Watts, and Vinnie Colaiuta. Each of these drummers would be a rich resource for any future study into the composing of creative and innovative drum patterns.

While this study provides a list of published sources on creativity in contemporary drumming pedagogy and performance-practice, the template of the study could also be adapted to investigate applied techniques and influences of different stylistic rhythmic patterns. Solving the technical and rhythmical challenges found in complex patterns is not only a pop/rock-specific technical issue but an issue that exists across the board in all stylistic categories and which requires further investigation. The expansion and application of techniques, as they appear in the nomenclature, would prove a fertile area of future investigation.

The study could be adapted to serve rhythmic composition, not initially conceived as an outcome. Through the prism of micro-analysis into rhythmic permutations within one-bar drum patterns, future research focusing on drummers playing four delineated rhythms, could produce new processes.

The ever-evolving processes on how to employ techniques and stylistic influences is an area that needs to be consistently researched so that systematic and practical solutions can be provided to drumming practitioners who then pass this knowledge on to future generations of drummers. The method and resultant recordings in this submission seek to validate this statement.

The journey of this study, from its conception to its submission, has assisted me to recalibrate the way I play the drums. Throughout the journey, my investigations have necessitated a methodological and pragmatic approach. Playing and learning the drum patterns for the first time required me to analyse the micro-elements of which they are comprised. It provided me with the opportunity to pivot on the individual rhythms played by different limbs and why these patterns function as they do.

By learning and understanding the rhythmic components of drum patterns, how they operate, are employed independently and in affiliation with each other, has guided me in the method developed in this study. Applying this knowledge and the application of it in recordings submitted in this thesis, has constructively impacted on my performance-practice and how I analyse other drummers and drum patterns. The layered complexities and techniques have been reduced to a micro-level enabling me to simplify intricacies into their basic form, resulting in my personal and professional growth during this study with the audio recordings as a resulting artefact.

Exploration into the notational counts of drum patterns and their relationship with specific techniques is worthy of further investigation as an aid to rhythmic composition. Employing rhythmic profiles and rhythmic footprints in recontextualising and reimagining pop/rock patterns has been an emergent concept of this study and the development of this concept in both pedagogical and performance-led research offers great potential for future studies.

The development, understanding and categorising into tabular form of identified drum techniques as opposed to the traditional snare drum rudiments, establishes a precedent in drumming pedagogy and performance-practice. Applying these techniques has been illuminating for me in deciphering the similarities and differences of elementary pop/rock drum patterns in all their possible permutations.

In closing, this study portrays the selected drummers as artists whose canvases are represented by the legacy of their recordings and the innovative patterns that sit within those recordings. By rearranging and reimagining the selected patterns, new canvases have been produced through the recontextualisation of those patterns. This macro-view of such artefacts, in this case the recordings, has allowed me to step away from the canvas and observe the results of the compositional method employed. Viewing this thesis through the prism of the submitted recordings, along with their accompanying scores, is akin to the painter looking upon a completed canvas and analysing the technical and stylistic choices made in its creation. The success of macro-level structures produced have been made possible by the investigations into micro-elements in rhythmic patterning positioned within this study.

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