Trapped in the Metric Tar Pit of Common Time

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The use of asymmetric/irregular time signatures in contemporary pop and electronic music is increasingly rare. To enable composers to fully explore alternative meters, the author proposes a method of recognising and formalising inherent metric content in extemporised (i.e. spontaneously-created) speech, and suggests that 'metric maps' derived from this formalisation can serve as a foundation for musical compositions. Inspired by an insight gleaned from composer Frank Zappa, this method employs heterometric time signatures to navigate the diverse range of temporal shifts required in order to make metric sense of the selected audio material. By using tangible examples drawn from the 'real world', the approach provides a concrete basis from which composers may expand beyond common-time meter schemes to embrace asymmetric meter. The methodology is both practical and tangible, allowing composers to engage with metric structures based on their own rhythmic perceptions and analyses of speech-based audio, and thus facilitates the creation of compositions that incorporate non-symmetrical metric frameworks.

1. Background—How Common is Common Time?

Why do so many Western composers and creators of popular and electronic music remain rooted in the restrictive confines of common time (four quarter-beats per bar, rendered as 4/4)? This paper seeks to investigate the scarcity of non-common-time meters ('compound' or 'asymmetric' meters) in contemporary pop music. One potential reason for the dominance of common time is the shift in focus over the past two decades, during which the pop music industry moved from the exploratory and experimental sounds of the 1960s and 1970s to a more conservative, market-driven emphasis on replicating existing formulas with pre-established commercial success (Hamilton and Pearce 2024). This trend persists despite preliminary evidence suggesting that consumers may not be inherently averse to the inclusion of asymmetric meters in pop music (Hardman and Talarczyk 2021).

This paper draws upon the author's extensive personal experience, developed over many years and across a diverse range of technical, social and geographical music-making environments. In this time, the author hals sought to both explore and share an interest in the

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Fig. 1. Surrounded by other victims of metric populism, a despairing violinist struggles to free himself from the restrictions of common time

asymmetrical as a counterbalance to the dominance of symmetrical structures in popular music.

The majority of contemporary pop music relies on common time to convey its message (if indeed pop music has a definable message, but that is a separate discussion). The widespread appeal of the symmetrical 4/4 time signature can be attributed to several factors: its stability, evenness and predictability, as discussed by Zeiner-Henriksen (Zeiner-Henriksen 2010); the influence of market forces; and perhaps even the bipedal nature of human beings. As Alan Lightman observes, "*Symmetry represents order, and we crave order in this strange universe we find ourselves in, as it helps us make sense of the world around us*" (Lightman 2014). The appeal of predictable, symmetrical structures is undeniable, particularly at a time when the majority of contemporary music remains, in terms of meter, firmly entrenched in common time.

The advent of computer technology as a tool for composition and the rise of electronic 'dance' music have, in the author's view, contributed to this metric homogeneity. While this is not to diminish the significance of dance in society (Bojner Horwitz et al. 2022), its prevalence reflects both the reduced musical and rhythmic vocabulary available to current composers and the inherently populist nature of mainstream pop music (Dunkel 2022). The impact of technology is discussed below in chapter 6.

This paper proposes a novel approach to the exploration of asymmetric meter by utilising human speech as a basis for developing heterometric temporal structures in music composition. The author introduces an analytical method that enables the integration of asymmetric meter, derived from natural speech patterns, into the compositional process.[1] This method involves creating a 'metric map' based on the rhythm and meter of extemporised speech, which serves as the foundation for musical composition. The author defines extemporised speech as spontaneous speaking in i.e. impromptu debates and informal discussion, or in response to unexpected developments, and which often feels more conversational and less formal compared to memorised or scripted speeches relying on pre-written material.

This method may therefore result in common time becoming somewhat less common.

2. Slaves to the Rhythm

Rhythm is universally recognised as a fundamental element of language (Fiveash et al. 2021), and studies such as those examining the drummed speech system of the Amazonian Bora provide exemplary insights into this connection (Seifart et al. 2018). Extensive research has explored prosody (Meireles et al. 2017), the inherent melodic properties of human speech, isochrony (the rhythmic properties of speech, initially identified by Pike) (Pike 1945) and metrical phonology (Chomsky and Halle 1968). However, there has been relatively little analysis of speech through the lens of musical meter. Given the often-perceived dysrhythmic nature of speech, this lack of scrutiny is perhaps understandable. Yet the author posits that, with closer examination, meter in extemporised speech can be identified and formalised.

The inspiration for the ideas presented here stems from a comment by composer Frank Zappa (1940-1993), who asserted: "*Any piece of time can be subdivided any old way you like. And that's what happens when people talk, because people don't talk in 4/4 or 3/4 or 2/4 […] they talk all over the place*" (Zappa 1982). Zappa's use of speech rhythms in his compositions is well-documented (Hanspal 2016). This was the genesis of the author's efforts to analyse implied meters in speech.

The integration of speech form into music composition is not a modern phenomenon. The medieval troubadours employed speech-like rhythmic patterns, and later, the 'recitative' form emerged, which mimics natural speech rhythms and focuses on textual prosody. This form has been a vital component of Western music from the Baroque period onward, with composers such as Monteverdi, Bach, Handel, Haydn, Mozart, and Beethoven integrating speech elements into their works. In the 20th century, a range of composers continued this practice, from Modest Mussorgsky (*Boris Godunov*), Kurt Weill (*Threepenny Opera*), George Gershwin (*Porgy and Bess*), Arnold Schoenberg (*Pierrot Lunaire*) and Alban Berg (*Wozzeck*) to Frank Zappa (*Jazz Discharge Party Hats*) and Steve Reich (*Different Trains*). However, in most of these cases, speech is hierarchically subservient to music, as the natural rhythm of the speech content does not directly determine the meter(s) of the accompanying music but is adapted in order to fit. The method outlined in this paper seeks identify underlying metric structures present in extemporised, spontaneously created human speech and to integrate them into music compositions.

There are of course existing tools for detection of meter in recorded audio. Such tools, all of which focus on the identification of existing metric structures in selected music audio recordings, include AnthemScore, Song Master and Song Surgeon. Some Digital Audio Workstations (DAW) such as Logic Pro also offer basic 'beat detection'. Elaborate research in this domain has been undertaken by, among others, J. Cozens and S. Godsill, who note that their '*results indicate high-level accuracy for a variety of polyphonic extracts containing irregular, complex, irrational, and time-varying time signatures*' (Cozens and Godsill 2024).

However, since the primary purpose of this paper, and indeed of this entire approach, is not the identification of metric structures in pre-existing music compositions but the creation of new metric structures through the analysis of non-musical materials, such tools are here of little relevance.

3. Extemporised Speech

This paper proposes a method for (1) identifying underlying implied metric constructions within speech extracts, (2) mapping selected speech onto these metric structures, and then (3) using the resulting map as the basis for a musical composition which reflects the meter changes present in the chosen speech extracts. To demonstrate this process, the paper selects an example of extemporised speech, identifies its component metric structures, constructs a metric map, and uses this map as the metric foundation for a composition.

As noted, extemporised speech is not prepared but is created as thoughts occur to the speaker. The focus here on this form of speech is due to its inherently unstructured metric nature. In contrast, poetry typically follows a defined rhyme scheme/metric structure, which is integral to its function and cannot be easily adapted, discarded or separated from the text. Similarly, prepared speech often contains its own metric framework, but the author believes that the unpredictability of extemporised speech offers more rhythmic possibilities and variations. Therefore, extemporised speech can be viewed as containing metric elements that may be formalised as heterometric—that is, a combination of multiple meters within a linear framework.

The benefit of using a speech-derived metric map as the metric basis for a composition is that it will be highly unpredictable in terms of meter. The character of the metric map depends heavily on the specific speech sample chosen. In early attempts, the author found that certain speech selections produced metric maps which were uninteresting or uninspiring, from his subjective perspective; these judgments of course reflect individual taste rather than universal qualities. It is worth noting that during metric mapping-workshops in Potsdam and Zurich (briefly discussed below in Section 4), participants produced diverse metric analyses of the same speech sample, underscoring the subjective nature of the analytical process.

Earlier compositional experiments by the author involved transcriptions of extemporised speech, which were used as the basis for new compositions, though metric reference to original audio recordings was not integrated into the compositional process . While these experiments were, in the opinion of the author, artistically successful, they revealed his underlying tendency to 'symmetrise'—to impose symmetrical structures upon new compositions.

In an effort to curb this tendency, the author resolved to incorporate the original speech audio directly into the compositional process. To avoid the urge to symmetrise, the author also imposed the rule of not cutting the selected audio at any point. Instead, timing issues were addressed by the use of various time signatures.

4. Composition—Shut that DAW

Has the advent of digital audio production tools contributed to a detachment from fundamental musical components such as meter? Many contemporary composers work with DAWs, where the default time signature for new compositions is set to 4/4. This default setting is a decision made, for a variety of reasons including issues of product support,[2] by the software engineers who designed the DAW. While composers have the option to bypass or adjust default meter settings, many choose not to. This may be due to the increasing simplification of music-making processes, with some arguing that this trend has led to compositional oversimplification (Vandemast-Bell and Ferguson 2019).

In the first semester of 2023, the author addressed these issues at the Filmuniversität Babelsberg Konrad Wolf in Potsdam, Germany, where students were encouraged to create compositions incorporating asymmetric meters. Of the eight participants, roughly half had prior musical training, and all were familiar with the fundamental techniques of DAW-based composition or sequencing. Despite this, all compositions produced were in common time. This outcome prompted a search for an effective approach to support students in developing a greater awareness of asymmetric meters in their everyday environments, rather than viewing them as an exotic or intellectually challenging concept.

An early version of this paper was presented through two workshops at the Hochschule der Künste in Zurich as part of the 2024 TENOR conference (Gordon and Brennecke 2024). The workshops aimed to explore the method outlined in this paper and assess its potential for inclusion in educational curricula. Participants in the workshops had varying levels of experience, though all were familiar with DAWs. They were provided with a selection of text and audio samples, from which they could choose or adapt material according to their preferences. Following an explanation of the method, all participants engaged with the process, with those possessing more musical experience requiring minimal guidance and quickly producing compelling compositions. Participants with less compositional experience required more support, but ultimately, the method was deemed sufficiently engaging and useful to warrant further exploration. Notably, all resulting compositions reflected, to varying degrees, the inherent metric structure derived from the relevant speech audio excerpts, and none adhered to common time.

Building on the insights gained from the Filmuniversität and TENOR workshops, the method was refined, and didactic components were developed for integration into classroom settings. An exemplary composition created using the method is included at the conclusion of this paper, illustrating the application of the approach in practice. The following section addresses the various steps in sequence.

5. Getting Organised

In terms of music's graphic representation, it is clear that music can be organised both vertically (by pitch) and horizontally (by rhythm and meter). The analytical method described in this paper prioritises focuses on rhythmic perception—the distribution of rhythmic content along a temporal axis—rather than vertical pitch perception. This approach is rooted in the author's perception of extemporised speech as inherently non-mechanical and metrically unpredictable yet amenable to metric analysis, offering composers an opportunity to create novel connections between speech and music composition. In this discussion, we focus on the horizontal—specifically, the distribution of the component parts over time; our emphasis is not on harmonic structures, but rather on rhythmic perception.

Identification of Source Material

The nature of the composition is highly influenced by the quality of the selected speech as a template, and initial attempts with certain speech samples failed to produce compelling results. In such cases, the resulting metric map was either uninspiring or lacked interest. The first step in the method outlined here involves identifying appropriate source material. As mentioned, extemporised speech typically offers greater rhythmic and metric variation compared to pre-written content. The examples presented here are drawn from such an 'improvised' section of speech.

The initial phase of this process requires the identification of an audio sample that provides unpredictable and asymmetric metric elements. As noted, trial and error were involved before a suitably inspiring piece of audio was found. In this case, we have selected an excerpt from a speech by an American reality TV personality-turned-politician which meets the criteria of being metrically varied and thus suitable for further analysis (Fig. 2.). This speech is referred to in this paper as the *Bloodbath* speech.

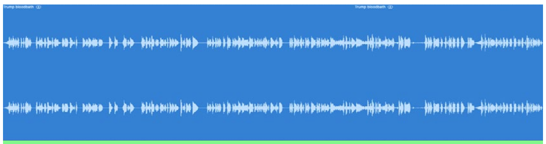

Fig. 2. Audio: *Bloodbath* speech (https://zenodo.org/records/15105471/files/Bloodbath%20%231%20DT%20raw.mp3)

Analysis of Content

Having identified a suitable section of audio, we proceed to analyse its metric structures to create a metric map. We create a new composition in a DAW and import the selected audio. The next step is to arbitrarily identify the first 'strong' beat within the audio and adjust its position along the timeline, moving it left or right until the designated 'first beat' aligns with the first beat of the first bar. Any audio events occurring before this selected beat can be perceived as belonging to the preceding bar. Typically, this strong syllable will be accented by the speaker, though whether this accent is deemed suitable as the first beat of the first bar is ultimately at the discretion of the composer and is inherently subjective.

Establishing Tempo

The default time signature set by the DAW is initially irrelevant, as the primary focus at this stage is on tempo. Once the first beat is identified, we proceed by setting a tempo for the entire speech segment.

Enabling the DAW's metronome will allow the composer, through trial and error, to quickly assess whether the chosen tempo is appropriate or needs to be adjusted faster or slower. It's important that this click track signals the tempo (i.e. beats) only (Fig. 3.), without emphasising any specific subdivision of the bar deriving from any default time signature set when an 'empty' song is first created.

This is necessary to avoid becoming constrained by the DAW's default time signature.

The author's experience in developing this compositional method has shown that there is always a tempo can be effectively applied across the full duration of the selected audio. In this particular example, the author deliberately excludes the use of tempo (speed) changes, which can be another method of resolving meter challenges that may arise using this approach. However, as the focus of this paper is on the integration of varied time signatures to create an underlying metric map, tempo changes are outside the scope of this paper.

Fig. 3. Metronome indicates beats only

Fig. 4. Metronome signals bars and beats

Assigning Initial Meter

Having decided upon a suitable tempo, we now play the audio (with a metronome click) beginning at the first bar.[3]

Once a suitable tempo is determined, we proceed by playing the audio with the metronome click starting from the first bar. While the audio plays, we count the phonemes and syllables in the speech to identify a suitable initial time signature for the first bar or two. For example, if there are six beats in the first bar, a time signature such as 3/4 or 6/8 would be appropriate for the initial time signature value. If seven beats are present in the first bar, a 7/8 time signature would be suitable. Should there be eleven beats, 11/8 may work, or possibly alternating bars of 5 and 6, or even two bars of 4 and one bar of 3—though this anticipates the next step in the process, to which we now come.

Assigning Subsequent Meter

Once an initial time signature is chosen, we adjust the DAW's metronome to now reflect both bar divisions and beats (Fig. 4.), and we play the piece from the first bar. Here we start to consider subsequent meter. At some point, the selected audio and the bar divisions indicated by the metronome for the chosen time signature will inevitably become misaligned. When this happens, we repeat the earlier process of counting phonemes and syllables to determine the number of beats in the next section and identify potential new time signatures for the following bars. Each time we notice that the selected audio no longer aligns with the current time signature's bar divisions, we decide on a corrective approach. We can either (a) revert to the initial time signature or (b) introduce a new time signature. These new time signatures can, of course, employ shorter note values in their denominators, with resolutions such as 16th notes often being sufficient to resolve any meter-related issues, but on this example we stay with quarter notes.

The graphic (Fig. 5.) leads to an audio clip where time signatures and bar/beat divisions are indicated by the metronome. In this example, the structure begins with four bars of 3/4, transitions to one bar of 4/4, continues with two bars of 5/4, reverts to 4/4 for one bar, switches to 6/4 for one bar, and continues in 7/4.

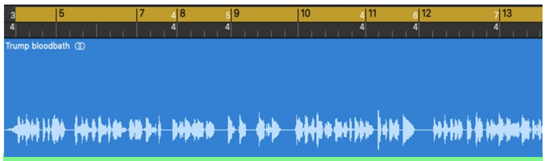

Fig. 5. *Bloodbath* with time signatures, bars and beats indicated (https://zenodo.org/records/15105471/files/Bloodbath%20%233%20DT%20click%20+%20bars.mp3)

The following illustration (Fig. 6.) shows the structural analysis of the above audio in graphic form, resolved to beat-level and indicating the resulting time signatures which have now been inserted. Time signatures are colour-coded.

BLOODBATH

Beats	1	2	3	1	2	3	1	2	3
Bar #	4			5			6		
Time sig	3 /4			3 /4			3 /4		
Speech segment	Let me tell you something to			China if you're listening			President Xi and		

Beats	1	2	3	1	2	3	4
Bar #	7			8			
Time sig	3 /4			4/4			
Speech segment	you and I are friends but			he understands the way I deal			

Beats	1	2	3	4	5	1	2	3	4	5
Bar #	9					10				
Time sig	5/4					5/4				
Speech segment	those big monster					car manufacturing plants that you're building				

Beats	1	2	3	4	1	2	3	4	5	6
Bar #	11				12					
Time sig	4/4				6/4					
Speech segment	in Mexico right now				and you think you're going to get that, you're going to					

Beats	1	2	3	4	5	6	7
Bar #	13						
Time sig	7/4						
Speech segment	not hire Americans and you're going to sell the cars to us, no						

Beats	1	2	3	4	5	6	7
Bar #	14						
Time sig	7/4						
Speech segment	we're going to put a 100% tariff on every single						

Beats	1	2	3	1	2	3	1	2	3
Bar #	15			16			17		
Time sig	3 /4			3 /4			3 /4		
Speech segment	car that			comes across the line			and you're not going to be able to		

Beats	1	2	3	1	2	3	1	2	3
Bar #	18			19			20		
Time sig	3 /4			3 /4			3 /4		
Speech segment	sell those cars if I get			elected			Now if I don't get elected		

Beats	1	2	3	1	2	3	1	2	3	4
Bar #	21			22			23			
Time sig	3 /4			3 /4			4/4			
Speech segment	it's going to be a bloodbath			for the whole			that's going to be the least of it, it's going to be a			

Beats	1	2	3	1	2	3
Bar #	24			25		
Time sig	3 /4			3 /4		
Speech segment	bloodbath for the country			that'll be the the least of it		

Fig. 6. Structural analysis of *Bloodbath*

The below tables 1 & 2 show a tabular view of the same analysis of the *Bloodbath* speech segments, resolved to beats and bars.

Bar	Time sig.	Text
4	3/4	Let me tell you something to
5	...	China if you're listening
6	...	President Xi and
7	...	you and I are friends but
8	4/4	he understands the way I deal
9	5/4	those big monster
10	...	car manufacturing plants that you're building
11	4/4	in Mexico right now
12	6/4	and you think you're going to get that, you're going to
13	7/4	not hire Americans and you're going to sell the cars to us, no
14	...	we're going to put a 100% tariff on every single
15	3/4	car that
16	...	comes across the line
17	...	and you're not going to be able to
18	..	sell those cars if I get

Table 1. Speech resolved to beats and bars

Bar	Time sig.	Text
19	3/4	elected
20	...	Now if I don't get elected
21	...	it's going to be a bloodbath
22	...	for the whole
23	4/4	that's going to be the least of it, it's going to be a
24	3/4	bloodbath for the country,
25	...	that'll be the least of it.

Table 2. Speech resolved to beats and bars (continued)

Creation of Metric Map

Having worked through the entirety of the selected audio material in this manner, you will have created a 'metric map'. This map describes your (subjective) understanding of the underlying metrical structure of the selected audio. The graphic below (Fig. 7.) shows the above analysis as a possible metric map of the *Bloodbath* speech. As preliminary bars have now been deleted, the form starts at bar 1.

Fig. 7. *Bloodbath* metric map

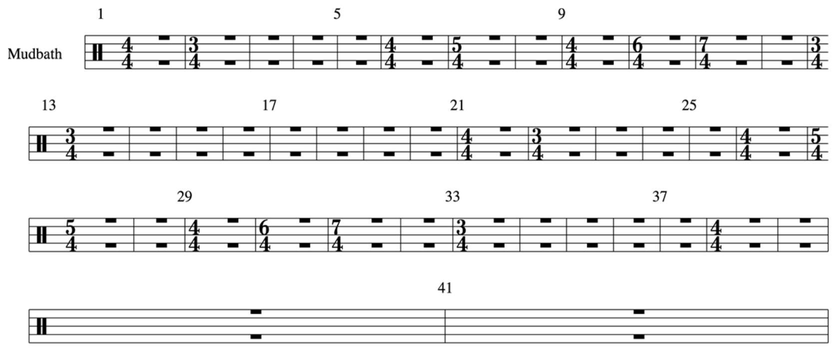

Fig. 8. *Mudbath* metric map

There are, of course, numerous potential metric maps that can be created from the same material, depending on the skills and approach of the composer. More adventurous or resourceful composers may choose to work with longer segments of audio—generally, the longer the initial selection, the more intricate the resulting metric map will be.

The variety of ways in which this metric map can be used as the foundation for composition goes beyond the scope of this paper. Possible strategies might include establishing a one-to-one correspondence with the original prosody, approaching the metric structure as modular content for reorganisation, or incorporating (or not) the original text material into a new composition, among other approaches.

6. Results

Using the now-defined structure of the speech as the foundation, a musical accompaniment was developed. The audio example below blends the original speech with a work-in-progress composition that follows the speech's metric structure.[4]

Upon finalising the musical accompaniment, the original *Bloodbath* speech content (audio and text) was discarded, with only the structure, as defined in the metric map, retained. The author then composed a new melody and lyrics, partly inspired by the 1960s duo Michael Flanders & Donald Swann, who famously sang of the hippopotamus's undying love for mudbaths—an apt metaphor. An introduction was added, along with a linking section, before repeating the entire structure, followed by a coda. The original speech's form extends from bar 2 to bar 20, at which point it repeats. Bars 21-22 of the original form are incorporated into the repeat of the original form, while a coda is inserted as bars 38-41. When the composition, now titled *Mudbath*, was complete, a metric map (Fig. 8.) was created showing the heterometric nature of the integrated time signatures.

Thus, using a process analogous to *chrysopoeia*, previously-orange bile was converted into a shiny new artistic statement, to be heard via the below link (Fig. 9.).

The following graphics (Figs. 10 and 11) show an analysis of the composition '*Mudbath*' in tabular form. As before, similar time signatures are colour-coded.

Fig. 9. Audio—final composition—chrysopoeia transforms a *bloodbath* into a *mudbath* (https://zenodo.org/records/15105471/files/Bloodbath%20%235%20vocal%20+%20music.mp3)

MUDBATH

Beats	1	2	3	4
Bar #	1			
Time sig	4/4			
Speech segment	There's gonna be a			

Beats	1	2	3	1	2	3	1	2	3
Bar #	2			3			4		
Time sig	3 /4			3 /4			3 /4		
Speech segment	mudbath			Mudbath			(Bloodbath)		

Beats	1	2	3	1	2	3	4
Bar #	5			6			
Time sig	3 /4			4/4			
Speech segment	Mudbath						

Beats	1	2	3	4	5	1	2	3	4	5
Bar #	7/4					8				
Time sig	5/4					5/4				
Speech segment	I like to wallow in mud					Good for cooling the blood				

Beats	1	2	3	4	1	2	3	4	5	6
Bar #	9				10					
Time sig	4/4				6/4					
Speech segment	Everybody's saying it				Everybody say mudbath					

Beats	1	2	3	4	5	6	7
Bar #	11						
Time sig	7/4						
Speech segment	Yeahhh						

Beats	1	2	3	4	5	6	7
Bar #	12						
Time sig	7/4						
Speech segment							

Beats	1	2	3	1	2	3	1	2	3
Bar #	13			14			15		
Time sig	3 /4			3 /4			3 /4		
Speech segment	Pole exertion			(Here are monsters)			Pee perversion		

Beats	1	2	3	1	2	3	1	2	3
Bar #	16			17			18		
Time sig	3 /4			3 /4			3 /4		
Speech segment	(There are monsters)			What a monster					

Fig. 10. Structural analysis of *Bloodbath*

Beats	1	2	3	1	2	3	1	2	3	4
Bar #	19			20			21			
Time sig	3 /4			3 /4			4/4			
Speech segment							I'm a large am-			

Beats	1	2	3	1	2	3	1	2	3
Bar #	22			23			24		
Time sig	3 /4			3 /4			3 /4		
Speech segment	phibian			Namibian			(LIbyan)		

Beats	1	2	3	1	2	3	4
Bar #	25			26			
Time sig	3 /4			4/4			
Speech segment	Caribbean						

Beats	1	2	3	4	5	1	2	3	4	5
Bar #	27					28				
Time sig	5/4					5/4				
Speech segment	Hear us holler and stomp					As we swim in the swamp				

Beats	1	2	3	4	1	2	3	4	5	6
Bar #	29				30					
Time sig	4/4				6/4					
Speech segment	Bold and blubbery				Roundly rubbery, mudbath					

Beats	1	2	3	4	5	6	7
Bar #	31						
Time sig	7/4						
Speech segment	Yeahhh						

Beats	1	2	3	4	5	6	7
Bar #	32						
Time sig	7/4						
Speech segment							

Beats	1	2	3	1	2	3	1	2	3
Bar #	33			34			35		
Time sig	3 /4			3 /4			3 /4		
Speech segment	Randy Russkies			(Here are monsters)			Humping Huskies		

Beats	1	2	3	1	2	3	1	2	3	4
Bar #	36			37			38			
Time sig	3 /4			3 /4			4/4			
Speech segment	(There are monsters)			What a monster			Leap with me into a			

Beats	1	2	3	4	1	2	3	4
Bar #	39				40			
Time sig	4/4				4/4			
Speech segment	monster mudbath				Bloodbath			

Fig. 11. *Mudbath*: bars 19—40

7. Conclusion

In an effort to provide a means of integrating asymmetrical meter into the composer's toolbox, the author has developed a method of extracting tangible metric information from extemporised speech, which can then provide a metric basis for composers seeking to avoid commonplace meters. The technique uses 'real-world' metric input to create a foundation for compositional development and indicates that extem-porised speech can be shown to implicitly contain metric information.

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Notes

1. https://martingordon.de/mammal-era/another-words/
https://martingordon.de/mammal-era/another-words-phonecall/

2. Conversation with a product designer from a leading Berlin music software company, January 2025

3. Audio—first step: establish tempo. *Bloodbath* speech with click:
https://zenodo.org/records/15105471/files/Bloodbath%20%232%20DT%20click%20no%20bars.mp3

4. *Bloodbath* speech and work-in-progress composition:
https://zenodo.org/records/15105471/files/Bloodbath%20%234%20DT%20+%20music.mp3

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