ANIMAL-VOCALIST BLENDS IN ROCK MUSIC REVIEWS: A COMPREHENSIVE METHOD

by

SLADE STOLAR

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ABSTRACT

The present study describes music criticism of rock vocalists where their vocalizations are compared to those of animals in the form of the animal-vocalist blend. The animal-vocalist blend (using the framework developed by Fauconnier and Turner) is a representative example of the use of linguistic and cognitive resources in order to convey acoustic and affective information. These blends present an excellent case study in the variety and expressiveness that is present in the dense semantic field of the album review. The current project draws additional resources from linguistic motor theory, cognitive science, and affect psychology to offer a comprehensive model of this creative process. Findings reveal the highly motivated nature of the animal-vocalist blend, the underlying mechanisms or rhetorical common grounds on which speakers discuss responses to music, and the meaningfulness of human-animal interaction.

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DEDICATION

For M.

1. Introduction

This thesis will give an account of the animal-vocalist blend employing an interdisciplinary approach. An example of this kind of blend is where human vocalization is somehow compared to animal vocalization as when Paul Gambaccini writes of Neil Diamond, in *Rolling Stone* Issue 100, Jan 20, 1972: "That style is perfect for his own compositions: spoken, **barked**, semi-recited passages fit in where intended." In the animal-vocalist blend, some of the properties of the sounds made by animals are brought forth in describing the sounds a vocalist made. While this likely occurs throughout the history of writing about music, this thesis will concentrate on the animal-vocalist blend in *Rolling Stone* magazine in the late 1960s, 1970s, and early 1980s. *Rolling Stone* has been selected because it is an early, popular magazine chronicling the emergence of rock and roll, a genre that relies heavily on the slight or extreme variations among singers' techniques. The analysis of the animal-vocalist blend is presented as a methodological tool for the analysis of discourse on music. Using this tool, I am able to account for the complexity and creativity of rock criticism and to add evidence of the cognitively motivated, descriptive power of blending in general.

The multifaceted approach used here will draw resources from cognitive linguistics, acoustics, and affect theory. Cognitive linguistics provides the foundation of the study of conceptual blending, which is a powerful tool for the analysis both of novel language and everyday conceptualization. Additionally, frame semantics offers a way of describing the interplay of systems of knowledge and linguistic interaction. Acoustics gives a description of how sound transmits information to hearers and is introduced in order to discuss speech production and perception. Sylvan Tomkin's affect theory

describes the ways in which emotional meanings are interpreted and emotional reactions are embodied by listeners. Affective reactions include those of excitement, surprise, fear, and disgust. Each theory is applied to this particular case in parallel, in order both to provide a fuller understanding of the animal-vocalist blend, and also to build a theory that shows the compatibility and mutual productivity of what have, until this point, been disparate discourses.

It is useful, at present, to provide some additional background regarding the discourses that allowed the music review to come into being, as they prefigure the environment in which a critic writes. In particular, no theory relating to music criticism is comprehensive if it does not address the surrounding politics, the concept of mimesis, the idea of "the sublime", the possibility of musical semantic content, the notion of universality, and the realities of cultural conditioning. While no theory can hope to account for the myriad aspects of a text, three salient concerns emerge:

1) How is musical meaning embodied and disembodied? This constitutes an interest in the stores of knowledge that people bring to the appreciation of music, and the experiencing bodies that influence intellection on musical topics. The animal-vocalist blend relies on stores of information about animals and singing alike.

2) How has the "moving" experience of music been characterized? Such a characterization is partly the goal of aesthetics (the study of the beauty of art), where the object of study has been called "sublimity" or "beauty" (see, for example, Alison); however, the modern formulation is interested in the psychological and affective responses of the audience. The use of animal vocalization as a description seems to tap

into instinctual feelings and meanings. Similarly, music has often been characterized as powerfully moving in the physical sense (from toe-tapping to elaborate dance). Reactions against perceived "possession" of listeners (combined with the emotional aspects described above) has introduced a moral element into music criticism. While this does not directly enter the blend, the early history of rock music saw a great deal of criticism on moral grounds.

3) How have people described music in the form of text? The rock critic is attempting to render sound in textual form. The critic manages two drives, that of mimicry (to be accurate) and performance (to be entertaining). As we will see, identification with the music critic is a prerequisite for extracting meaning from the animal-vocalist blend.

The current project is located within a recent trend in the study of music. Richard Parncutt, in "Systematic Musicology and the History and Future of Western Musical Scholarship," identifies three phases of music scholarship. The earliest phase (starting with the earliest writings on music) Parncutt calls "Antiquity and Middle Ages" and is characterized as mathematical, acoustic, and mystical (15). This phase pre-figures the second stage, which Parncutt identifies with the 19th century, in which music scholarship is historical and comparative, and sees the emergence of music theory (15). From the twentieth century onward, musicology became "all disciplinary approaches to all questions about all music." For the purposes of describing the animal-vocalist blend, the most important of these "disciplinary approaches" are the physiological (affective and psychoacoustic), cognitive (blending and framing), and rhetorical (persuasive and

discoursal) aspects of the recent history of writing about popular music. Parncutt does not (nor do I) mean to say that with the proliferation and diversification of music scholarship there are no standards to which that scholarship can be held, but rather, that many disciplines are making contributions to the study of musical meaning in a way that was not considered, and likely not even possible, a century ago.

The history of music criticism itself has its roots in mimesis and the moralist thesis: that music has the ability to promote good or evil. Ancients from Plato to Aristotle held that the state was harmonious if music was well regulated.[1] This amounts to decrying the embodied and emotional aspects of response to music.

Aristotle was also interested in the ability of the arts to imitate life. Mimesis is taken up in chapter 4 of the *Poetics*, where Aristotle states:

> Poetry in general seems to have sprung from two causes, each of them lying deep in our nature. First, the instinct of imitation is implanted in man from childhood, one difference between him and other animals being that he is the most imitative of living creatures, and through imitation learns his earliest lessons; and no less universal is the pleasure felt in things imitated. We have evidence of this in the facts of experience. Objects which in themselves we view with pain, we delight to contemplate when reproduced with minute fidelity: such as the forms of the most ignoble animals and of dead bodies. The cause of this again is, that to learn gives the liveliest pleasure, not only to philosophers but to men in general; whose capacity, however, of learning is more limited. Thus the reason why men enjoy seeing a likeness is, that in contemplating it they find themselves learning or inferring, and saying perhaps, 'Ah, that is he.' For if you happen not to have seen the original, the pleasure will be due not to the imitation as such, but to the execution, the colouring, or some such other cause. (48)

In Aristotle's discussion of mimesis or imitation, though intended for use in a discussion of poetry and drama, we have the germ of the theories that will be explained in the current project. Dramatic and poetic mimesis has correspondences both to the musician's ability to render sounds that (the critic deems) are reminiscent of some animal's sound,

[1] Western tradition is by no means alone in this respect. The interested reader is referred to the works of Chinese scholars *Hsi K'ang* [嵇 康] (b. 223 - d. 262) and *Yang Piao-chêng* [楊 表 正] (16th century).

and in the critic's ability to somehow perform qualities of the music in textual form. The delight of the reader is, in an Aristotelian reading, in "learning or inferring", that is, being able to get information from the text (what will be taken up later, called "running the blend").

The Middle Ages provided little by way of advances in theories about musical criticism. I am compelled by Sesemann's assertion that "[m]edieval philosophy showed relatively little interest in the problem of beauty and added nothing essential to Plato and Aristotle's conceptions."(235) The one qualification I would add is that the moralist thesis took on a particularly Christian character in the western tradition. The *Confessions* of Saint Augustine (b. 354 – d. 430) upon hearing well-sung hymns are exemplary:

> I fluctuate between peril of pleasure and approved wholesomeness; inclined the rather (though not as pronouncing an irrevocable opinion) to approve of the usage of singing in the church; that so by the delight of the ears the weaker minds may rise to the feeling of devotion. Yet when it befalls me to be more moved with the voice than the words sung, I confess to have sinned penally, and then had rather not hear music. (Book X)

Contrary to positive embodied or affective responses to music, music was considered good insofar as it was able to convey transcendent truth, correct appreciation of itself, and goodness, while avoiding indulgence or extravagance.

One figure in the history of aesthetics that had a profound appreciation of the moving power of music and its conditioned nature is Archibald Alison (b. 1671 - d.1713). His theory indicates that sounds that are associated with "danger, or power, or majesty" are a source of the sublime.(123) Exemplary sounds include the rumbling of a storm, and the report of guns, where context plays a significant role in interpretation (a storm means something different to a farmer, or sailor; the report of certain guns can be a sign of victory or defeat). He notes that "the sound itself is the same, but the nature of the

sublimity it produces is altogether different, and corresponds, not to the effect upon the organ of hearing, but to the character or situations of the men by whom it is heard, and the different qualities of which it is expressive to them."(125) The culturally conditioned nature of the association is undeniable:

> Every man acquainted with the poetry of distant nations knows […] how much the beauty of many allusions to peculiar sounds of these countries is lost to those who are strangers to them, and who, of consequence have none of those associations which render them so exquisite to the natives. (136)

This theory espouses a relativism that is particularly useful for the current project as it anticipates some discussion of frames. Additionally, Alison has specific insight into the beauty of animal sounds.[2] Alison states that those of fearsome or powerful animals are sublime (139) and those of birds are beautiful. "The howl of the wolf is little distinguished from the howl of the dog, either in its tone or in its strength, but there is no comparison between their sublimity."(139) Similarly, "There are a great variety of tones in the human voice, yet all these tones are not beautiful."(147) The human voice can be beautiful or sublime. Again, I liken "beauty" and "sublimity" to an affective response to the acoustic stimulus.

The musical division of interest in the twentieth century was that between classical and rock music. Folk theories of classical music have it governed by its formal properties, whereas rock music is defined by its performance.(Baugh) Baugh identifies the noteworthy aspects of rock music as loudness, timbre, and rhythm.[3] I argue visceral response to music can be found in all genres, and that one of the ways in which this is

[2] Alison says of associations with sounds: "I believe, in fact, that something of this kind takes place early in life, and that, long before we are able to attend to their formation, we have formed certain general associations with all the great diversities of sound, and that, in after life, they continue to be generally expressive of these characters."(153)

[3] Where Baugh misses the mark, in my estimation, is in assuming that these qualities are confined to rock music alone.

carried out is in the timbral expression of the musician, that is, the ability of the musician to modulate those properties of his or her voice that are not strictly musical, but that are still acoustical. This will be discussed in more detail in Chapter 3.

It is unsurprising, considering the history of music criticism, that writing about music is a difficult task. However, language offers no paucity of resources with which to convert, shape, and create thought about music. In particular, metaphor and conceptual blending (each the foundation of many kinds of reasoning) allow embodied experience to serve as a kind of common ground on which to build understanding of (abstract) musical objects, features, and knowledge. I make the claim that apt writing will employ the vast resources of embodied cognition.

Twentieth century music criticism descended from the traditions discussed above. *Rolling Stone* magazine was established in 1967 in San Francisco to tackle engaging topics like politics, the (counter-)culture, and music. *Rolling Stone's* various contributions to popular culture is a topic that has received some treatment but those contributions will not be addressed here. From its inception, the magazine contained reviews of albums by leading music journalists (Lester Bangs, John Mendelsohn, Ed Ward, and Dave Marsh in the corpus, but also John Morthland, Ralph Gleason, Greil Marcus, and Jon Landau, see also Draper, 82–92). In timeframe under scrutiny, the album section comprised approximately 10% of the magazine and was highly influential on the music scene (including disheartening the likes of Janis Joplin and Eric Clapton and even causing the dissolution of their bands, see Draper, 90–91).

The readership of the magazine was a difficult thing to identify. Founder/owner "Jann Wenner […] believed that the only common trait among this vast but amorphous

constituency was an abiding love for music. And so Wenner's genius dictated a product that was as loosely defined an evolving as the generation it would serve [unlike others] The magazine seemed to understand exactly how important pop music was."(Draper 6–7) The music critics seemed to be powered by pure delight in music. Editor Greil Marcus opines that the critics "wrote in happy oblivion, grateful simply for the outlet."(Draper, 89)

The resultant album reviews often contained creative use of language, in particular, the animal-vocalist blend. The findings related to the animal-vocalist blend (that will be discussed in Chapter 3) are only generalizable if the *Rolling Stone* reviews are exemplary of (in the most specific case) rock music journalism in America in the 60s to 80s or of (in the broadest categorization) human linguistic expressiveness. The analysis to follow will describe the power of the animal-vocalist blend as creative language in use. It will show how some of the most embodied linguistic and psychological phenomena (acoustics and affect) are inextricably tied to some of the most productive and fundamental cognitive operations (blending and frames).

Chapter 2 will describe the different methodologies required in order to better characterize the affective, acoustic, and conceptual structure of the animal-vocalist blend. Chapter 3 will provide examples of the animal-vocalist blend from the *Rolling Stone* corpus alongside analysis of many of the blends. Chapter 4 will provide some additional ideas about applying this more holistic methodology to other kinds of writing; show the complexity of the critic-audience interaction; and consider implications for rhetoric, grammatical manner, and stylistic use of affect.

2. Methods

The current chapter provides relevant theories that explain the animal-vocalist blend. The essential concepts that allow for the animal-vocalist blend begin at the cognitive level with mapping and frames, at the perceptual level with embodiment, and at the psychological level, with affect. While previous studies of blending have had little to say about the perceptual and psychological aspects of the blend, in what follows, these three disciplines will be brought into dialogue.

The smallest conceptual (and cognitive) operation of interest in the current project is *projection* or *mapping*. This quintessential cognitive operation makes metaphor, analogy, metonymy, and blending possible. The term projection is used in a mathematical sense of performing an operation that connects two (in this case conceptual) units in different domains. In the case of the analogy "foot is to man as hoof is to horse" the spatial/functional relation performed by the extremity is *mapped* from one species to another. In the case of the metonymic relation between a capitol city and its government, as in the phrase "Washington announced sanctions", the *projection* is from the complex array of people and governing bodies that makes decisions (many of which occur in the city) to the municipality that is the seat of American government. In the case of metaphor, as in "Having a foggy recollection of the meeting", the source domain (of the visible world that can be obscured) *projects* onto target domain (of memory, something that can fail in various ways). This is just one example of the larger conceptual metaphor of KNOWING IS SEEING[4] that is a common underlying reasoning system in much of

[4] Here, I use the capitalization convention of Lakoff and Johnson.

western thought.[5] The conceptual blend also uses projection; however, the projections are manifold. Distinct from metaphor, the two spaces of a blend project onto and create an *ad-hoc* third space that can be manipulated and conceptualized in new ways, often reflecting back to the input spaces.(Fauconnier and Turner, *Networks*) The conceptual blend, then, is a cognitive mechanism whereby two (or more) conceptual units are combined in order to produce a new concept that is both more and less than the sum of its parts (for example, the blend "air quotes" employs typographic knowledge about reporting text, a spatial arrangement of people in conversation wherein the air serves as a kind of medium, but neglects other things speakers know about air and quotation, e.g. the fact that air is a breathable gas, that the words quoted are presented in spoken, not written, form).

Another fundamental unit in cognitive theory is the *frame*.(Fillmore) Frames are the vast stores of background knowledge that provide characteristics that can be projected into the blended space. For example, when a speaker states that he "rode a horse to work," the immediate impression is one of surprise at the fact that, in the increasingly urban environment of the twenty-first century, this is an unlikely method of arriving at work. The subconsciously activated frame of "horse" calls up the size and shape of the animal, its use as a method of transport, the knowledge of the speaker as owning a horse or being able to ride, the name of the horse, the usual occasions in which a horse might be a mode of conveyance, and a great deal more (insofar as each is known, with the depth to which each is known, and weighted by the contextual relevance). To borrow a phrase, the frame is structured rhizomatically,(Deleuze and Guattari) branching from nodes like a

[5] See also Lakoff and Johnson (53) for a through analysis of KNOWING IS SEEING. Sterne discusses this in some detail, and wishes to revitalize a metaphor of this kind, although using different terms.

web. It operates in concert with contextual information and can expand, deform, and contract for different purposes. As another example, a letter addressed to "Current Occupant" calls up a frame containing an addressee, a renter, mail service and the various connections among them; that is, the legal, societal, postal, and commercial systems. In this, and in many other frames, there are various pre-determined roles that are filled by participants in the discourse. Fillmore summarizes: "in the process of using a language, a speaker "applies" a frame to a situation, and shows that he intends this frame to be applied by using words grounded in such a frame."(382) New meaning can be created by framing by borrowing elements from other frames (as happens in the borrowing of animal communication to discuss human singing): "When a speaker wishes to talk about something for which an appropriate cognitive frame has not been established, or for which he wishes to introduce a novel schematization, he can sometimes accomplish this by transferring linguistic material associated with a frame which makes the distinction he's interested in onto the new situation, relying on the interpreter to see the appropriateness of the transfer."(387) I argue the complexity and appropriateness of the novel schematization is best described using conceptual integration (or blending) theory.

Framing and mapping are constituent parts of a developing theory that accounts for both creative and mundane use of language: conceptual integration or blending theory. Fauconnier and Turner state that the conceptual blend is:

> …dynamic, supple, and active in the moment of thinking. It yields products that frequently become entrenched in conceptual structure and grammar, and it often performs new work on its previously entrenched products as inputs. Blending is easy to detect in spectacular cases but it is for the most part a routine, workaday process that escapes detection except on technical analysis. It is not reserved for special purposes, and is not costly. (*Networks*, 133)

New coinages readily provide examples of blends. The adjective "carbon-neutral" is a compound that exhibits the distinctive features of blends. The chemical element carbon is

highlighted not because the product (or service) described requires carbon to be added, but rather, the collection of processes that allow it to come into being produces atmospheric carbon (often as CO_2). This waste carbon must be somehow offset in order for the product to have produced no *net undesirable* carbon, a feat often accomplished by planting trees, purchasing carbon credits (another emergent property of the blend), or using a process that burns no hydrocarbons. The *emergent structure* of the blend allows for a strange kind of carbon economy in which certain forms of carbon are undesirable (reflecting value judgements back onto the input space of "carbon," or consider "toxic debt"), and in which the objective is not growth, but reduction (reflecting back to the input space of "neutral"). The ethical benefits of carbon-neutrality are also part of the blend's emergent structure: new logic about how consumers can or should act can be considered that was part of neither input. *Fusion* is taking place between the product described and the implications of its manufacture; the ethical implications of a product's manufacture follow the product throughout its life. The chemical element is *decompressed* into its various forms, of which mainly hydrocarbons and carbon dioxide play a part.

"Carbon-neutral" shows how the elements of a blend cannot be guessed based on the inputs (Fauconnier and Turner, *Networks*, 136). Basic chemistry will inform the reader that nearly all processes are carbon neutral in the following sense: if an atom of carbon enters a reaction, an atom of carbon will exit that reaction. Similarly, unless the product in question has a gasoline-burning engine, we assume that it does not emit carbon throughout its lifespan.[6] This blend has the characteristics Fauconnier and Turner (*Networks*) describe as it borrows *partially* from each input, *fuses* certain concepts and

[6] Both of these are plausible readings based solely on the meanings of both words.

decompresses others, and has an *emergent structure* with new relations that were not present in either input space. The main advantage of this blend is that it allows easy reference to and manipulation of a complex set of relations that have cultural currency. The following diagram represents the previously discussed connections. The lines *project* outward from the input spaces into both the generic and blended space, and each corresponding role from both input spaces shares a common item in the generic space. The emergent structure arises from the logic of the blended space, rather than from any single input, and thus, has no connections. There are many items in the input spaces that are not blended, however they have been removed for clarity.

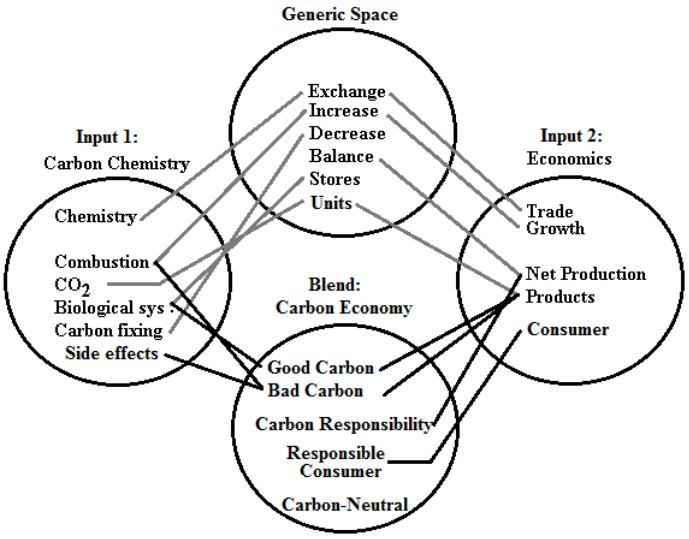

Figure 2.1: Carbon-neutral blend

Another example of the use of blending is in the term "pod-casting". This blend gains much of its appeal from its phonetic similarity to broadcasting. The idea of dissemination of information is part of the "-cast" suffix used in many portmanteaux, ie: "telecast," "simulcast," and (recently) "webcast." "pod" is derived from the trade name of a portable music player on which these files can be stored. The completed blend has some

interesting properties: the personal nature of the individual pod-bound listener (an input space) is in seeming contradiction to the wide-ranged broadcasting input space. The result is that pod-casts are better seen as "narrowcasting", that is, directed at a narrowly-defined audience without any attempt to appeal to a larger market. Here, certain elements in one input space can overpower elements in the other. The sonic element of the blend can be incredibly compelling, as seen in "podcast" and in the coinage "prebuttal", a concept for which the term "procatalepsis" already exists.

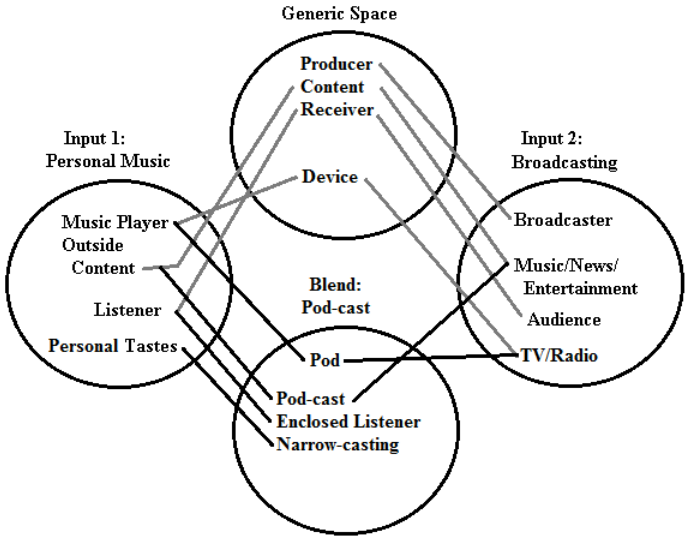

Figure 2.2: Pod-cast blend

By these examples I do not intend to show that blending is solely used in the coining of novel ideas and terms. Blending is at work at many levels of cognition and expression. Take, for example the phrase, "one foot in the grave"[7] for which a metaphorical reading[8] is roughly "half-way or near to death". Here, the blending analysis is more useful. The phrase carries the senses of proximity, and human bipedal motion

[7] For example: OED: 1621 BURTON Anat. Mel. III. iii. IV. ii, *It is most odious, when an old acherontic dizzard that hath one foot in his grave..shall flicker after a young wench.*
[8] A reading that, I believe, is inadequate.

towards some destination, but lacks the notion of intention (something humans normally have while walking). Here, the person under discussion is within one pace of death in the sense of motion being a conceptualization of the progress of a human life through time (not space), and death being metonymically linked to a certain destination (in space). The literal reading is ludicrous, as the standard method of being placed in a grave is not one foot at a time.[9] The blending analysis shows the way in which new meaning is created. Extracting the complex meaning that readers and listeners often take for granted is called "running the blend." This "running" operation is synonymous with success of the act of compression, selection, and the emergence of new structure.

There are many more examples of the use of this burgeoning theory. Blending theory has been used recently in order to explain the intricacies of stylistics (Goguen and Harrell), music (Zbikowski, Holst), rhetoric (Oakley), narratology (Dancygier, and also Oakley), semantics (Fauconnier and Turner, *Polysemy*), and creativity in language (Turner and Fauconnier).

The blends, however, do no exist in a vacuum. The texts under consideration in Chapter 3 were created with a single discoursal topography. First, the singer records his or her voice as part of an album. Second, the critic listens to this recording. Third, the critic writes about the voice of the singer. Fourth, the reader reads the album review, either with or without having heard the album. Often, the critic writes using blends. The reader, therefore, is invited to run those blends.

The resultant construction, the *animal-vocalist blend*, is relatively complex, and follows the criteria that Fauconnier and Turner describe (including partial mapping, emergent structure, fusion, and decompression). One such blend, using a dog's bark as

[9] The interested reader is referred to Fauconnier and Turner (*Networks*) for several instructive examples.

one input space and a singer's notes as the other (For example: "Feargal Sharkey shaves some of the rough edges off his tremulous **bark** for the Beatles-like ballad 'Julie Ocean.'") can be described as follows: Singing and barking are both kinds of vocalization; to entertain and to frighten are their respective intentions; the vocalist and the canid are vocalizers. The singing-barking blend gives the creative aspect (emergent structure) of this process. Intention is compressed into a resultant expressive/melodic-threat/greeting, while the two different vocalizers are compressed into one being. The mapping is partial as the relations of the domestic or wild dog to humans is elided and the frame of performance and musical accompaniment (indeed music itself) is not present for the canid.

The following figure shows the connections of the animal-vocalist blend. For ease of managing the complex web of connections, I employ a table of the kind found below. All horizontal items are mapped (as were those items connected by lines in the previous chapter). Lone items are not mapped (in the case of inputs) and are part of emergent structure if in the blended space (in the lower right-hand side of the table). I highlight "Audience" in the generic space as this requires further discussion and is not as simply mapped as other aspects.

Input 1: Singer	**Generic space**	**Input 2: Dog**	**Blend**
Sing	Vocalization	Bark	"barking singer"
Engage/Entertain	Intention	Threaten/Socialize	Threatening Engagement
Vocalist	Vocalizer	Animal	Animalistic Singer
Studio, concert hall	Locality	Wild, cage	
Critic/Listener	* Audience	Other Dogs/Humans	Critic-Audience
			Incomprehensibility
			Loudness/Harshness

Table 2.1: Barking Singer blend

The role of the audience is where the blend is more complex. This role is not present in the dog input space as a dog has no particular intention to entertain. The critic-

audience to the vocalization is a blend of the listening critic and the non-listening reader: the reader attempts to "listen" to the music by reading the review, or attempts to have some sense of the experience of listening by reading, and placing herself in the critic's shoes.[10] Here the emergent structure is (if the critic is successful, and the reader able to "run the blend") an accurate communication of the nuances of the singer's particular idiom to the reader. Running the blend, however, is contingent upon identification with the critic, that is, the critical discourse invites the reader to combine her own sensibilities, musical tastes, and attitude with those of the critic in order to "listen" more accurately.

In certain ways, the blend draws attention to the situation in which it was produced. If the reader does not identify with the critic, if the reader does not believe the critic, if the reader knows the album described well and disagrees with the review, or if the critic is making reference to things outside the reader's experience (as when too much time has passed), the audience-critic blend will be on shaky foundations. If this blend is not successfully run, or if, after some reading, denatures, the animal-vocalist blend can also fail.[11] However, if the blend is successfully run, the audience-critic blend compresses the time and space of listening (by the critic) with the time and space of reading (by the reader). The two perspectives are temporarily fused, and certain information remains outside the scope of the blend (feelings on non-musical topics, for example). All of this is completed in order to grant a form of access to the sound of the initial vocalist. This is not a vanishing mediation theory of information transfer: only through being creative,

[10] An interesting blend using the concept of self. The personal attitudes of the original wearer are mapped to the second party, as is a mental location conceptualized as a physical location (as in "From where I'm standing…" meaning "From my current (mental) perspective…").
[11] Rhetorically speaking, this is a failure of ethos or a failure of identification.

involved, perceptive, and florid throughout the transfer is the critic able to render apt descriptions.

I wish also to provide a framework within which to discuss the audible object that the critic is using to create a blend. That is, while I do not wish to claim that there is a necessary connection between acoustic properties and description, there are certain properties that serve as good motivators, given an embodied view of speech perception. Certain concepts are required to be able to discuss the nature of this motivation.

In order to better qualify and quantify some of the descriptions made by the critics, it will be useful to discuss the acoustics of the various singers' voices. The human voice is capable of producing a vast array of sounds, many of which never become semantically relevant. Most theories postulate the *contrastive pair* as the basic dichotomy from which all linguistic meaning is created (for example, the contrastive pair /p/ and /b/, yield the difference between "pat" and "bat," a variable called voicing). There are some languages for which nasality (Lakhota), breathyness (Hindi), and pitch (Cantonese) are contrastive, unlike their respective functions in English. If not all of the resources possible in the languages of the world are used in English, this means that there are additional sonic qualities that vocalists can vary without interfering with meaning. A speaker (or singer) is given additional dimensions with which to embellish stylistically (although, in the case of a singer, steady-state pitch might be assigned, transient effects like vibrato, staccato, and legato can still be manipulated).

One visualization of the acoustics of a sound is called a spectrogram. In this kind of diagram, the height of dark spots represent the frequency of the sound, the darkness of spots represents their loudness, while time proceeds along the x-axis. So, for example, a

short clip of quiet white noise would be a vertical line of light grey, while whistling a loud, constant note would be a horizontal line of dark grey. Speech, however, is much more complex, as it is composed of many different frequency bands of energy. In the spectrogram below, the speaker says “laughter can soothe and heal.”:

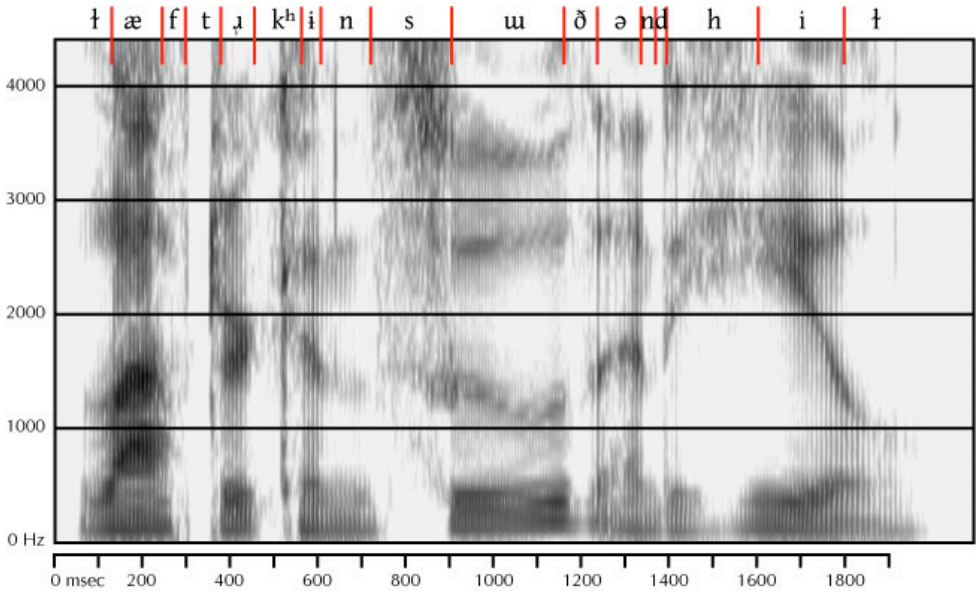

Figure 2.3: Spectrogram (reproduced from Hagiwara)

This image shows how much information is carried in the frequency bands that make up speech. Initial observations yield 1) that vowel information is carried in three or four frequency-bands of energy (called formants), 2) that consonant information occurs at transition points, 3) that the utterance has 17 phonemic units produced in under two seconds, 4) that /h/,/l/,/r/, and /n/ operate similar to vowels, and 5) that the region of interest in the frequency domain is 0-4kHz. While this system readily yields visible information, it is clear that human beings are not mere signal processors.

The question then becomes, how is it that a speaker can decode speech or speech-like sound at all? While blending theory is a powerful tool for the analysis of meaning-making processes once the word level is reached, it offers little by way of interpretation

of speech sounds themselves. For example, in the case of "podcasting", one input of the blend is triggered by a phonetic-acoustic similarity. The full account of the actual phonetic-acoustic connection is difficult or impossible to construct in an exposition of this size. However, one theory of speech perception is particularly well suited to the task of exploring the ability of speakers to understand speech, as it is based on an embodied understanding of speech-processing mechanisms available to listeners.

The *motor theory* of speech perception was proposed by Alvin Meyer Liberman (b. 1917 – d. 2000) and several colleagues in the 1960s, and developed up to the present day, in order to account for some of the incongruities of psychoacoustics.[12] In this theory, speech perception is dependent upon a *motor model* of the vocal tract in the listener's mind that can operate in the forward (speaking) or reverse (hearing) directions. A mathematical analogy would be that speech operates in a similar manner to linear algebra, in which speech events are matrices and production and perception are the transform and the inverse transform respectively.[13] This is required in order to account for the rapid, transitory, complex, and overlapping nature of speech sounds. The forward model can be seen as the following chain of events: mentation informs syntax, syntax informs phonemes, the phoneme is articulated via motor commands that instruct the vocal tract, tongue, lips, and velum to move and change shape, and this articulation produces the acoustic signal. However, the acoustic signal can vary greatly for the same phoneme or be vastly different for the same phoneme, and thus, motor signals offer an efficient

[12] Liberman and Mattingly "The Motor Theory of Speech Perception Revised" (of 1985) is exemplary. However, the interested reader is referred also to Liberman et al. (*Motor Theory*) of 1962 and Liberman et al. (*Speech Code*) of 1967. Galantucci et al. offers a review of recent theory and its continued validity.

[13] Here I am taking liberties with the claim of Liberman and Mattingly that, "for language, perception and production are only different sides of the same coin."(3) In matrix notation this might be rendered as: $S = T^{-1}TS$. Speech matrix (S) is modified by a motor transform (T) and the speech matrix is recreated by the listener by applying an inverse motor transform of T (T^{-1}). The acoustic component is TS, from which I will make some claims about the operation of T and S.

method of communicating speech (see, for example, Galantucci, 362): this amounts to a speaker "asking" the following on some neuro-motor level: "What would I have had to do in order to produce that sound with my own vocal tract?"

Speakers, then, are not processing the speech as acoustic signal, but rather, are recreating speech as the physical movements of a vocal tract (to which their own is similar). Neuro-imaging studies provide one way of gaining access to such a process. Pulvermüller et al., for example, have shown that motor systems in certain areas of the brain are activated when producing speech, and (to a lesser extent) when hearing speech. They summarize their results as follows:

> These results indicate that perception of speech sounds in a listening task activates specific motor circuits in precentral cortex, [an area activated in bodily movement] and that these are the same motor circuits that also contribute to articulatory and motor processes invoked when the muscles generating the speech sounds are being moved. (7868)

Unfortunately for those analysing language in use, it is difficult to gain access to this world of mental representations. As a matter of convenience, I offer the analysis of the acoustic signal, while drawing conclusions based on the embodied nature of speech perception. While the acoustic signal is all that is available to both listeners and acousticians, it is not, as Liberman and Mattingly note, the "object" of speech perception (2). Having taken acoustics as easily extractable intermediary, different voice qualities used by singers (breathy, nasal, vocal fry etc.) can be made visible upon spectrographic analysis. For example, Borch et al. have analysed strained voice in terms of spectra and subglottal pressure. Growl voice has been studied by Loscos and Bonada who have attempted to synthesize the growl effect using variations on the periodic nature of vocal fold vibration. One interesting result of similar studies from the perceptual side is that the perception of growl and rough voice are highly idiosyncratic. Bergan and Titze have seen

a lack of "intersubject reliability" in their own work on the perception of roughness and relay that pathologists have some disagreement in identification of certain pathological voices (165). It is clear that, while a convenient metric, acoustic properties are not be universally defined qualities.

Acoustic analysis is by no means limited to human vocalization, and, as human and animal vocalization are being compared (both here, and in the music reviews), some discussion of animal vocalization is profitable. Cohen and Fox, for example, have shown the complexity of canid vocalizations in "Vocalizations in wild canids and possible effects of domestication". Their study examined the spectrograms of wolves, coyotes, foxes, jackals, and domesticated dogs and found that there are twelve basic sound types (of which "growl" and "bark" are of particular interest).[14] "Growl" was used by many canidae in greetings, defense, threat, and group vocalization (and pain in dogs). "Bark" was used by dogs in the above situations, as well as in play solicitation and care seeking. The full extent to which these more or less scientific definitions of growl and bark are part of folk knowledge is difficult to determine, however, I offer that the OED provides some manner of confirmation[15] and that another article by Tembrock uses these terms when referring to similar spectrograms. The characteristics of barks were that they were short, and cyclical (or "sing-song," Cohen and Fox, 82), while growls were of intermediate duration, non-cyclical, and were used for the maintenance of dominance-relations (82). Social animals (dogs and wolves) were more prone to combining sounds for an averaged effect (85). The extent to which human listeners can attend to these kinds

[14] See table in Cohen and Fox (79)

[15] OED: *growl* v3,1b "Of an animal: To utter a low guttural sound, expressive of rising anger." And 2."Of persons: **a.** *intr.* To murmur angrily.", OED *bark* "**1.** *intr.* To utter a sharp explosive cry. (Orig. of dogs, hence of other animals, and *spec.* of foxes at rutting-time.) Const. *at* (*on*, *upon*, *against*, obs.)." and "**2. a.** *fig.* To speak or cry out in a tone or temper that suggests the bark of a dog."

of animal syntax remains to be seen, however, it is known that humans can attend to some aspects of animal communication (see, for example, Taylor et al.).

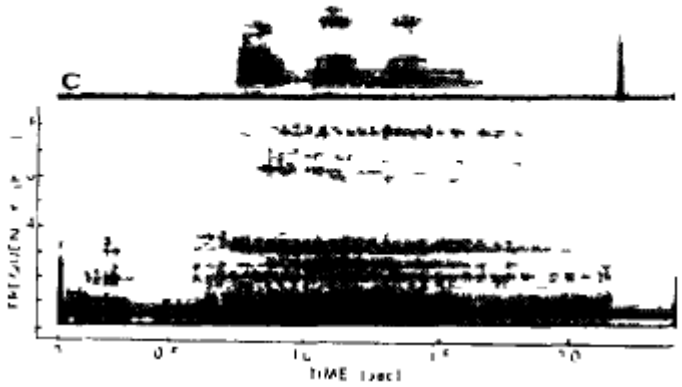

Figure 2.4: Canine vocalizations, C) bark, D) growl.
(reproduced from Cohen and Fox)

Cohen and Fox further claim that their data "imply that canid vocal communication is essentially an 'emotional language', or sound repertoire of emotional reactions and intentions comparable to the intentionality expressed in non-vocal body postures and facial expressions. […] It is analgous […] to the 'paralanguage' or emotional overtones of human speech."(90) In the findings of these authors, affective features are conveyed in intraspecies communication. The fact that these articles are able to go into such detail offers further evidence that humans who have experience with animal communication are capable of understanding the intention of barks and growls.

It is unsurprising then, that metaphors and blends can be created that rely on the underlying knowledge of animal communication. The knowledge is acquired either through contact with these animals (eg: living near or owing a dog), through historical-cultural-discoursal contact (eg: hearing about dogs), or through experiential-acoustic understanding (eg: a bark implies the presence of an animal at a certain proximity, of a

certain size, see also Taylor et al.). These frames are particularly rich and have been employed in metaphors and blends in many different discourses. When Paul Gambaccini writes, "That style is perfect for his own compositions: spoken, **barked**, semi-recited passages fit in where intended", the vocalist being discussed is not simply likened to a canid; a complex set of connections is built that includes the fact that we have only vague notions of the meaning of animal communication but also perceive it as speech-like. That is, in gross acoustic properties, a growl is similar in intensity, spectral grouping, and length to human vocalization; semantically, it conveys certain general types of interactions (similar to prosody or register perhaps); and affectively, it represents powerful, almost animalistic, distilled emotion.

I argue that there is an instinctual side to the kinds of description presented here. While aesthetics is concerned with the ability of the work of art to move the audience on a quasi-spiritual level, the (some would argue lower) emotional level is considered within the psychological affect theory of Silvan Tomkins. In the three-volume *Affect, Imagery, Conciousness*, Tomkins lays out a new foundation for psychology, one based on split-second reactions to stimuli. He argues that these would have been needed in order to survive in prehistory (a wild animal charging forward should be recognized as a danger long before the intellect has time to actually ponder the presence of the wild animal). The most essential affects were the positive (INTEREST, ENJOYMENT), neutral (SURPRISE), and negative (FEAR, DISTRESS, ANGER, DISGUST, DISSMELL[16], SHAME)[17] and each has a corresponding facial expression in infants. Complex emotional responses to affect and social norms regarding expression would be developed later (both

[16] A reaction to foul smells, and a potential source of more abstract (yet viscerally felt) dislikes.
[17] Here I use the primary forms only, and borrow the capitalization convention of Kelly.

in life, and in the course of human evolution). I argue that it is profitable to consider moving responses to art and text affective responses. It is uncontroversial to say that art and text can be surprising, distressing, interesting or disgusting, what I put forward is that these emotional reactions, that are part of all human experience, are best described using Tomkins' system. The following image roughly represents many of the affects in terms of brain activity:

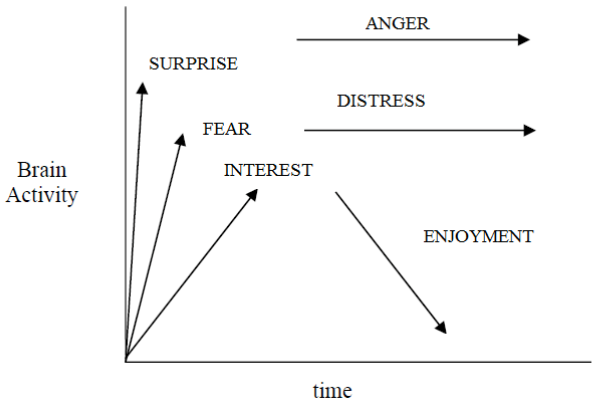

Figure 2.5: Affects in terms of Brain Activity (modified from Kelly)

Pleasurable situations would oscillate around INTEREST and ENJOYMENT. Repeated fearsome stimuli could cause DISTRESS, so too could loud noises for long periods. SURPRISE is neutral, but prepares the experiencer for a transition to a strong affect (positive or negative).

What is productive for this analysis is that language can be used to activate affect, in the form of the symbol-affect construct. "A symbol-affect construct is one in which a linguistic description directly activates affect. If one says to a child 'I don't like you' and the child responds with distress, this is an example of a symbol-affect construct"

(Tomkins, *Vol. 2*, 69).[18] The distinctions I want to make are, however, less easily identified, due in part to the nature of the subtler connection between frame of animal noise and affect. Just as "I don't like you" is a metaphorical violence (causing DISTRESS), so too is barking (so long as the reader is able to sympathize with the critic).

The preceding established the many facets of the expression used by music critics in the corpus selected. The examples of the animal-vocalist blend that are described in the following chapter were extracted from a corpus of album reviews from the American music magazine *Rolling Stone* from November 1967 to September 1982. This period is searchable using the "Bondi Reader" program by Bondi Digital Publishing in their "Rolling Stone 40 Years" DVD released in 2008. The search terms ("bark," "growl," "purr," and "coo") were chosen such that, in each of their histories, they did not describe human sounds or general descriptions of timbral qualities in their early stages. Each example was permitted to have human associations that were figurative, peripheral, and recent. Each sound is made by an animal (dog, bird, cat) with which some human beings have close contact (all three have been domesticated to various degrees, often rely on human beings for food, produce vocalization that human beings can hear and interpret to some degree, and exhibit social behaviour).

The question arises as to why the theory above is needed in order to account for these animal-vocalist constructions. It might seem that a metaphor theory analysis would suffice in order to account for any and all complexities. I offer the preceding discussion and following analysis because "writing about music is like dancing about architecture."

[18] Tomkins continues: "It is all but impossible to exaggerate the extent to which modern man lives and has his being in a medium of words. […] language is the lens of thought through which affects can be brought to a magnifying, searing, white-heat focus. The worlds which have been constructed out of words have promised the wildest excitements and the ultimate shame and terror" (*Vol. 2*, 70–71).

That is, popular opinion is that certain aspects of music criticism are outside the realm of formal analysis, or that there are some readers for whom music criticism is a kind of infuriating cipher. Analysis of music and music criticism are seen as too fantastical, too unreal, or too arbitrary. I offer that these constructions are built upon the same linguistic and conceptual foundation that support other genres, and that competent language users exposed to the world possess all the tools necessary to appreciate music criticism.

The following chapter will give representative examples of animal-vocalist blends that occur with the verbs "bark," "growl," "purr," and "coo." Each blend will be considered in terms of acoustic, affective, and frame-semantic content alongside the blending analysis. The final chapter will provide a synthesis of ideas preciously discussed and offer avenues of research that might benefit from this methodological framework.

3. Analysis of Examples

Collection of examples has focused on finding "bark," "growl," "coo," and "purr" in the corpus of album reviews. Many examples are divisible into a blend of animal and vocalist, and audience and critic. Running of the blend (not always guaranteed, especially for those who have little familiarity with music journalism) both attempts to convey aesthetic information and constitutes a performance in itself.

It is instructive to consider the following example using metaphorical analysis: "Uncle Philip never talked to his wife except to bark brusque commands."[19] Framing that operates in this examples leads one to believe that Uncle Philip is a human male whose character is being criticised in the sentence, husband to a wife with whom he relates little except in a curt way. A less likely reading is that the "his" being referred to is not Philip's wife (compare "his own wife") but rather the wife of some other man, however, a vast store of additional knowledge is brought to bear, including the undesirable social consequences of ordering other people's wives around, making this reading unlikely. An even less likely – but more literal – reading is that Uncle Philip is the name of a dog (the other dog, Aunt Margaret, is his wife, or so the coupling and resultant offspring have been explained to the children), and there is no figurative level at all.

Given ample context, this example would be considered a decidedly *figurative* use of "bark." The metaphor carries the meaning over from the (distal) domain of animal sounds to the (proximal) domain of human interaction. The resultant meaning is that Uncle Philip produces loud, rough, quick, and inarticulate speech. The power of the metaphor is to borrow meaning from the abstract domain to use in conceptualizing the

[19] From the British National Corpus, **FRC 2255**, Carter, Angela. *The Magic Toyshop.* London: Virago Press. 1993. 28–157. (3208 s-units, 41752 words)

(immediate) concrete domain. The reader is easily able to learn about Uncle Philip in this way.

The unidirectional-projection analysis of metaphor theory works well for many examples, but fails to account for the complexity of the animal-vocalist blend. In the case of metaphor, projection only occurs from one domain to another. However, certain linguistic forms contain several projections, or a structure of projections, as in analogy, metonymy, and conceptual integration. Each of theses figures combines projection and framing in different ways, in order to produce its effect (structural comparison, microcosm-macrocosm relations, and novel conceptualization, respectively). In the case of conceptual integration (or blending), the domains become two separate input spaces that allow for projection into a rich third space, and a very general fourth space (called the generic space and containing abstract roles and properties). Thus, even though metaphorical analysis fails to account for the intricacies of the examples from *Rolling Stone* being considered, conceptual integration theory offers insight.

In what follows I will give an analysis of the use of "bark," "growl," "coo," and "purr" in the *Rolling Stone* corpus. In each case I will examine the stylistic and contextual factors, affective overtones, and potential physiological correlates of these verbs in the context of the animal-vocalist blend. Certain examples provide the opportunity to explore other areas, including the audience-critic blend, the use of reporting verbs, double scope blending, category formation, and the extended blend. Additional examples of these descriptors can be found in the attached appendices.

One common usage in the corpus is the word "bark" to describe the singer's voice. The following examples show the versatility of this verb:

> (1) "His Goodlooking Girlfriend" and "I Don't Know" are characteristic romps with background cheerleading, while singer Feargal Sharkey shaves some of the rough edges off his tremulous **bark** for the Beatles-like ballad "Julie Ocean."[20]
>
> (2) They only sing on one or two other songs-which is just as well, because their vocal talents are almost nonexistent, bolstered by pure throat-constricting intensity, a harsh **barking** streetshout style that could be used to good effect with lower, more *evil* material.[21]
>
> (3) The pertinence of this question becomes more obvious when Diamond's style of singing is considered. That style is perfect for his own compositions: spoken, **barked**, semi-recited passages fit in where intended.[22]
>
> (4) He stroked the neck and bass string slides, stinging treble responses, lurking, lunging, lean phrases **barked** out about all the crazy frustrations of his blues.[23]

There is something common, in the estimation of these four writers, in the quality of the voices (in so far as we, as language users, have agreed that a bark is a bark is a bark). In order to analyse the function each noun or verb serves consider what it might be replacing in more literal language; in (1) the noun "vocals", in (2)-(4) versions of the verb "to sing." Each is giving a very different manner in which the vocals or singing is done. The rhetorical effect is different in that these "replacements" are persuasive of something else, ie: that each singer is a loud and emotive agent. The common thread in context is that each of these examples is a stylistic description (examples 2 and 3 mention "style" directly) of the singing as forceful, and intentional. In other words, bark refers to prosodic (sharp blasts of sound), timbral (harsh or rough), and affective features,[24] all borrowed from the frame of canid barking. This is not to say that each example is evoking the same *aspects* of the frame of barking. Within (and influenced by) each context, specific features are made more prominent.

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[20] Positive Touch, The Undertones, by David Fricke, Issue 355, 1981, Oct 29, 1981.
[21] In the Jungle, Babe, The Watts 103rd Street Rhythm Band, by Lester Bangs, Issue 48, Dec 13, 1969.
[22] Stones, Neil Diamond, by Paul Gambaccini, Issue 100, Jan 20, 1972.
[23] Roosevelt Holts and His Friends (self titled), by Marc Ryan, Issue 121, Nov 9, 1972.
[24] The affect is one of SUPRISE (at least) and (perhaps) FEAR. Note the explicit use of "evil" in example (2) and "frustrations" in example (4).

The first excerpt offers a description of the vocals from three songs by the Undertones. Here, the vocalist, Sharkey, is described as having a "tremulous bark" that has, at times, "rough edges": prosodic and timbral features are being highlighted. Roughness, physiologically speaking, can be the result of ventricular (Gerratt and Kreiman) and aryepiglottic phonation (Sakakibara et al.), that is, allowing or encouraging the structures above the vocal folds to vibrate as well. Tremulousness describes amplitude and/or frequency modulation of the singer's voice. In listening, I perceive Feargal Sharkey introducing marked tremolo into his vocal technique during longer notes, and also introducing additional rough vocal qualities. On the other hand, in "Julie Ocean" there is much less remarkable use of these techniques. By using this blend, the critic is able to speak (creatively) about what is heard in the music based on inherent knowledge of vocal tracts and emotional aspects of barking, though neither is explicitly stated.

The "bark" itself is the animal-vocalist blend under consideration.

Input 1: Sharkey	**Generic space**	**Input 2: Dog**	**Blend**
Singing "I Don't Know"	Vocalization	Barking	"bark" of Sharkey
Engage/Entertain	Intention	Threaten/Socialize	Threatening Engagement
Vocalist	Vocalizer	Animal	Animalistic Sharkey
Critic/Listener	* Audience	Other Dogs/Humans	Audience-Critic
			? Incomprehensibility
			Loudness
			Harshness

Table 3.1: Barking Sharkey blend

The blend combines the dog and its bark of one input space, with Sharkey and his singing of another to produce the Barking Sharkey space. Sharkey and the anonymous canid are fused. As expected, there are a great many aspects that are not expressed in the blend, in particular, those related to the realities of modern music production.[25] The frame of dog

[25] The blend is, as a matter of efficiency, less than the sum of its inputs. Much of what we know about dogs is not utilized: that they live indoors or in the wild, that they are often kept as pets, that they are covered in

vocalization exemplifies the specificity or selective nature of the projection (ie: as there is no equivalent, the blend does not incorporate the information).[26] The audience is implicated in a way that also makes it a blend, which I will outline here, although it applies to all such blends.

The reader acts as receiver of the critic's words, while the critic is audience to the musical event, in this case, listening to the album that is being reviewed. In order that the reader might benefit from the review, she must combine her sensibilities as reader and music enthusiast with those of the critic. This might be seen as a textual analogue of the motor theory of speech perception: the question the reader asks herself is "What kind of music would I have had to hear in order to write this same review?" Of course, in order to have a "fitting" interpretation, a better question is "Will I like the kind of music that caused this particular critic to use this particular description?" In order even to consider this question, the listener must blend her sensibilities with those of the critic. As mentioned above, the audience-critic blend compresses the occasion of listening with the occasion of reading. In order for the reader to interpret fully Sharkey's "tremulous bark" of this example, she must have knowledge about both singers and canidae, she must have certain associations with those sounds, she must posit that humans can produce vocalizations that are "rough" in a similar way (or in a way that can be conceptualized as similar), etc. What she receives instantly[27] is a poetic and somehow apt description not only of the singer's timbre, but also of the emotional/affective reaction to that timbre

---

fur, or that they are treated as individuals (ie: bark implies a dog, but not a specific dog, whereas Sharkey is clearly identified), although each is a vital part of the *frame* of dogs. Likewise, the blend does not reflect back on the animal input space to imply that dogs are musical, or that they have an audience or accompaniment (at least in the music-business sense).

[26] Compare: "Blair is the modern Napoleon", (save with explicit context) disregards the fact that Napoleon was French, died in exile, or was born in Corsica, but might be related to military, political, or legal realms.

[27] Fauconnier and Turner state that the blend is not cognitively costly.

(compare the emotional implications of "bark" to "roar" or "bleat" or "purr"), and a critical stance toward that description. The blend feeds back into the audience input to yield: vocalists can be conceived of as vocalizing in a "barking" manner, and the critic invites the reader to do so in order to better understand the music without having heard it directly.

The emergent structure of the blend is what makes it so productive of new ideas and conceptualizations: connections can be drawn, indeed logical operations can be executed, that were not part of the input spaces. That Sharkey is barking reflects the intensity (although, dogs do not consider themselves loud), roughness (again, there is no dog shouting or dog whispering), and abnormality (why should a sung lyric sound similar to a bark?) of Sharkey's technique. A certain logic of emotional reactions is brought into the blended space: if we are shocked and frightened by a barking dog, so much the more should we (as the critic was) be shocked and frightened by a "barking" man.

Each of these four examples has similar selectivity, counterparts, and emergent structure, however, example (3) warrants further discussion. This example refers to the stylistic aspects of Neil Diamond's singing. Given in the context of "spoken" and "semi-recited", "bark" can be read as another example of non-melodic vocalization. In other words, the text establishes the *ad hoc* category of non-melodic vocalization filling the role of singing, for which the critic offers three examples. The blend is as follows:

Input 1: Diamond	**Generic space**	**Input 2: Dog**	**Blend**
Speaking/Shouting	Vocalization	Bark	Diamond "barked"
Engage/Entertain	Intention	Threaten/Socialize	Threatening Engagement
Vocalist	Vocalizer	Animal	Animalistic Diamond
Critic/Listener	* Audience	Other Dogs/Humans	Audience-Critic
			? Incomprehensibility
			Loudness
			Prosodic Extremes

Table 3.2: Barking Diamond blend

The rhetorical figure being used is very different, and yet, the blend remains essentially the same. Neil Diamond is considered to have several similar stylistic modes which have different overtones: "spoken" and "recited" retain the non-melodic character, but show, perhaps, greater spontaneity or more rigid timing (respectively). That they "fit in where intended" shows that these choices somehow match the musical material being presented.

One variation of the previous blend is in the use of verbs of reported speech (as *reporting verbs*). While the most common verbs used to announce and characterize speech in spoken discourse are "say", "be all", "be like", "go", (Barbieri) many more are used in this corpus. The reasons for this are related to both the differences between written and spoken discourse, and between descriptive and creative/performative discourse. "Bark" is used a reporting verb in the following examples from the *Rolling Stone* corpus:

> (5) "I became a *woman*, do you understand?" she **barks**.[28]
>
> (6) It's a measure of Pendergrass' dramatic power that he's totally convincing as a chest-beating love god who can **bark**, "Come here, woman!" without a trace of self-consciousness.[29]
>
> (7) Even the tune I thought was called "Boredom" (actually it's called "Boiler"), with its **barked** "I don't care/You don't care" chorus, turns out not to be a Sex Pistols animadversion but one more slagging femininity in general.[30]

The blend is similar, as are the acoustic properties, however, slight differences on stylistic criteria are being highlighted. The blend seems to be used, in reporting, to give the specified lyrics a kind of force. Prosodic features are a part of example (5), as the italics (present in the original) trace the stress pattern of the lyrical phrase. Example (6) gives a

[28] Caught Up, Millie Jackson, by Paul Gambaccini, Issue 184, Apr 10, 1975.
[29] Life is a Song Worth Singing, Teddy Pendergrass, by Stephen Golden, Issue 272, Aug 24, 1978.
[30] The Biggest Prize in Sport, 999, by Dave Marsh, Issue 320, Jun 26, 1980.

simple indication of loudness with the exclamation mark. Example (7) taken as a whole gives the sense of incomprehensibility, if incorporated with the discussion of the title of the song. In listening, I hear that the sung phrases of (5) and (6) contain the properties described by Sakakibara et al. as aryepiglottic phonation. It is possible that the roughness of the vocals of (7) prevent vowel and consonant sounds from being distinguished. The limited time-frame in which these blends are being evoked offers evidence both that bark is considered to have a prosodic component (not inherent in the singer's voice), and that blends are capable of being constructed on-the-fly to serve immediate purposes, and need not be part of larger narratives of characterization.

While the nested audience-critic blend and the animal-vocalist blend seem complex enough a structure to capture much of what the critic might want to convey, an additional technique can be used. By recursion, the animal input can itself be a blended space, combining additional domains of experience. This is called[31] a *double-scope blend*. Examples of this kind of conceptual integration follow.

> (8) Ferry **barks** out the words like some demented sergeant major; the atmosphere is tense, the band excited, the audience frenzied – and these aren't the usual poseurs, these are rock & roll kids, dancers all.[32]

> (9) But the tempo and mood change almost imperceptibly, and by song's end Pendergrass is **barking** and sputtering like the craftiest of preachers, almost as if this personal catharsis will exorcise the world's evils.[33]

> (10) Singer-guitarist Ian McCulloch specializes in a sort of apocalyptic brooding, combining Jim Morrison-style psychosexual yells, a flair for David Bowie-like vocal inflections and the nihilistic **bark** of his punk peers into a disturbing portrait of the singer as a young neurotic.[34]

[31] Mark Turner gives some illustrative examples in the article "Double-scope stories."
[32] Siren, Roxy Music, by Simon Frith, Issue 203, Jan 1, 1976.
[33] Wake Up Everybody, Harold Melvin and the Blue Notes, by Joe McEwan, Issue 207, Feb 26, 1976.
[34] Psychedelia in the U.K., Crocodiles, and Echo and the Bunnymen, Kilimanjaro and The Teardrop Explodes, by David Fricke, Issue 341, Apr 16, 1981.

Each example draws on another domain of listener experience. In examples (8), (9), and (10), the bark is not that of a dog, but rather, of a sergeant, preacher, and punk respectively. The vehemence and loudness of each is a matter of common knowledge to the audience as part of the frames of shared knowledge, a fact that allows this (even more) complex blend to be constructed.

In example (8), aspects of the "bark" input space are being selected in a different way. Ferry is barking not (directly) in the manner of a dog, but rather, in the same (metaphorical) way a sergeant would. The initial sergeant-animal blend required is thus:

Input 1: Sergeant	**Generic space**	**Input 2: Dog**	**Blend**
Shouted Commands	Vocalization	Barking	"Barking" Sergeant
Instruct/Command	Intention	Frighten/Announce	Frightening Commands
Vocalist	Vocalizer	Animal	Animalistic Sergeant
Soldiers	* Audience	Other Dogs/Humans	Frightened Soldiers
			Roughness
			Incomprehensibility
			Prosodic Extremes

Table 3.3: Barking Sergeant blend

The complete blend is then:

Input 1: Ferry	**Generic space**	**Input 2: Barking Sergeant**	**Blend**
Singing	Vocalization	Barking Commands	"Barking" Ferry
Engage	Intention	Frighten/Instruct	Frightening Engagement
Vocalist	Vocalizer	Animalistic Sergeant	Intimidating Vocalist
Critic/Listener	* Audience	Soldiers	Audience-Critic
			? Incomprehensibility
			? Roughness
			Prosodic Extremes

Table 3.4: Sergeant Ferry blend

In the initial blend, the content of the message is still perceivable, as we have "the words" in tact. This contrasts with previous examples where the comprehensibility is in doubt. However, the sound is not considered sung in a melodic way. This is constructed when the Barking Sergeant space becomes the second input space in the Sergeant Ferry blend.

I argue the audience is re-constructed at each stage of the blending process. That is, the "sergeant major" is not, presumably, barking at his family or neighbours, but at assembled army recruits during a drill. I am inclined to believe that some element of this remains in the final blend, indicating that the critic (here Simon Frith) perceived that he, in listening, felt more like an army recruit would at being commanded than like a person hearing a dog's bark. Despite the fact that both a dog and a sergeant are capable of instilling FEAR in their hearers, the layered nature of this blend is able to specify more than was immediately obvious.[35]

The examples of barking-vocalist blends show several common qualities. They are describing a manner or style that is in various degrees forceful, loud, rough, and incomprehensible. This is accomplished by selectively borrowing from the frame and experiences with barking animals. There is a certain timbral/affective mirroring in that surprising and fearsome sounds can cause (via the analog-affect construct[36]) SURPRISE and FEAR. There is great versatility in this construction as it is used in many situations and with (sometimes) several layers.

The preceding has shown some of the ways in which "bark" operates in blending. This section examines "growl" in order to characterize the ways in which the animal-vocalist blend is used to describe and level criticism at the artists being described. "Growl", for example, is used with greater frequency than "bark" in the period under consideration. The major difference is in the aspects of singing that become part of the resultant blend.

[35] A detailed acoustic analysis of the speech of drill sergeants is not possible here. Suffice it to say that what is being described is an amplitude modulation producing sharp blasts of speech.
[36] Tomkins states: "An analog-affect construct is one in which a state of affairs that is sufficiently similar to that which activates an affect or sufficiently similar to the affect itself, directly activates the affect."(69)

> (11) The Idiot, recorded by Bowie, sung in a tired **growl** excoriated from Jim Morrison via Ray Manzarek, and steeped in the so-called "minimalist" ambiance currently so fashionable among young bands who've spent too much time listening to Iggy and taking him seriously, is the most savage indictment of rock posturing ever recorded.[37]
>
> (12) Again the rhythms and melodic textures jump all over the place (in the same way that Cecil Taylor's do), Beefheart singing like a lonesome werewolf screaming and **growling** in the night.[38]

The "tired growl" of Iggy Pop is treated as an extended action and so, is used to describe the entire album (as opposed to individual songs or words). Some of the temporal properties of canid vocalization are being projected into the blended space. By comparing the two images from Cohen and Fox from Chapter 2, one can see the extended nature of the growl. As the variations in the prosodic features are not being considered (growl has a certain prosodic constancy), timbral features become the main focus. The features of speech production that Iggy produces that could signal "growl" are vocal fry (which I can hear is heavily used) and ventricular or aryepiglottic phonation. The affective features are modulated by this description: as the "growl" is continuous, it is no longer capable of producing FEAR or SURPRISE, but would be a more menacing, intimidating noise, leading to DISTRESS. Iggy Pop's "tired growl" is represented by the following blend:

Input 1: Iggy	**Generic space**	**Input 2: Dog**	**Blend**
Singing "The Idiot"	Vocalization	Growl	Iggy's "growl"
Engage/Intimidate	Intention	Threaten/Express Pain	Threatening Engagement
Vocalist	Vocalizer	Animal	Animalistic Iggy
Critic/Listener	* Audience	Other Dogs/Humans	Audience-Critic
			? Incomprehensibility
			Prosodic Continuity
			Roughness

Table 3.5: Growling Iggy blend

[37] The Idiot, Iggy Pop, by John Swenson, Issue 238, May 5, 1977.
[38] Trout Mask Replica, Captain Beefheart and His Magic Band, by Lester Bangs, Issue 38, July 26, 1969.

The musical and stylistic context of the use of "growl" show that it can be used for both praise (13-14) and blame (15-16), two key tools for the critic:

> (13) On side two Beefheart gets more deeply into something akin to traditional blues, especially with the last three songs; the Captain has never sounded more like Howlin' Wolf that he does here, and he's always had Wolf's **growls** and howls down to a point of virtual transcendence. [39]
>
> (14) Through all the lush arrangements on the record, Tom's plaintive, slightly **growling** style of singing still emerges, trailing clouds of Club 47 glory.[40]
>
> (15) Winwood plays a whale of a lot of frankly noodling guitar, poorly; Capaldi meanders, **growling**, through one of his own "compositions"; Wood doodles with anemic competence, awash in the general ambience of indulgent mediocrity.[41]
>
> (16) People who can take the "singing" voices of Dr. John, Captain Beefheart, or Leon Russell might not have much trouble with Professor Longhair's **growl**, but for me the combination of its heavy tone with mundane songs can be depressing.[42]

These examples show the power of context in influencing which aspects become mapped in the blend. In the first examples the growls (and howls) show powerful (13), and appropriately forceful (14) application of this rough technique. In the later two examples, roughness is taken to extremes of incomprehensibility (15) or harshness (16)[43].

Acoustic analysis is often difficult to bring to bear on these rock styles, as the vast majority of songs do not contain vocals without some manner of background sound. However, there are some passages that can be analysed. The acoustic correlates of "growl" in example (13) are not difficult to find in "The Spotlight Kid". I hear Captain Beefheart introducing extreme tension into his voice producing ventricular and aryepiglottic phonation, which makes the resultant sound harsh- and rough-sounding. This is made manifest acoustically, which is visible in the following two images while

[39] The Spotlight Kid, Captain Beefheart, by Lester Bangs, Issue 105, Mar 30, 1972.
[40] Wrong End of the Rainbow, Tom Rush, by Tim Crouse, Issue 76, Feb 18, 1971.
[41] On The Road, Traffic, by Jim Miller, Issue 151, Jan 3, 1974.
[42] New Orleans Piano, Professor Longhair, by Charlie Gillett, Issue 118, Sep 28, 1972.
[43] Here affective features do not fit musical context.

singing in a "growl", and singing modally. All window lengths are 0.05 seconds, with 70 dB dynamic range.

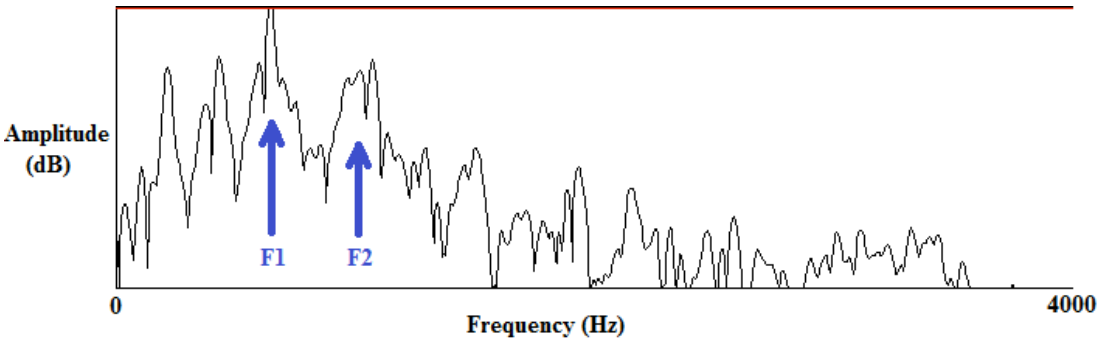

Figure 3.1: Growling spectral slice from "The Spotlight Kid" (6.5 s).

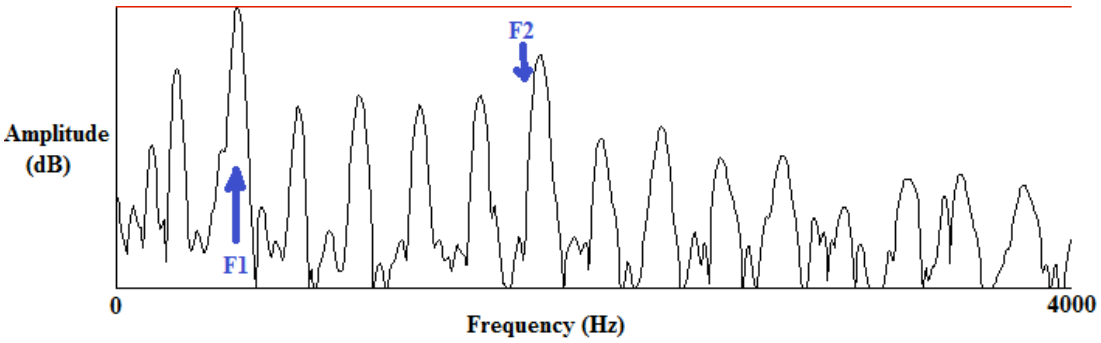

Figure 3.2: Modal spectral slice from "The Spotlight Kid" at (17 s).

The second image shows peaks in energy concentration more typical of modal singing or speech. The first image shows energy outside the usual format structure, but not so indistinct as to imagine this as a fricative, non-vowel, or non-vocal sound.[44] The formants (labelled F1 and F2 in the images) are the bands of energy that are used to make vowel distinctions (IPA [o] and [e]) and which are more visible in the second image. Speech can be conveyed to the listener, as the listener is able to simulate (via the motor model), if not emulate, this technique. The ability of "growl" to convey this sense is dependent upon the reader being able to simulate (in this case) different vocal tract configurations based on

[44] However, it might almost be heard as a non-human sound, and indeed, it is conceptualized as such.

the description and experiences of "growl." I am not, however, arguing a simple correspondence between these descriptors and physiological configurations as such, either in music criticism, or the scientific disciplines that concern themselves with vocal qualities (see also Gerratt and Kreiman). The "fuzzyness" of these categories allows them to be moulded easily for use in criticism.

These four examples also present the affective distinction noted by Alison that "The howl of the wolf is little distinguished from the howl of the dog, either in its tone or in its strength, but there is no comparison between their sublimity."(139) Specifically, these growling styles are defined by the critic within their respective musical contexts (this is given most explicitly in example 16): All vocal styles, I argue, rely on contexts for appropriate conveyance of meaning and conveyance of appropriate meaning. The fact that a blend *selectively* maps from its inputs makes it ideally suited to the task of criticism, and the reader is readily able to interpret various shades of praise or blame.

The examples of growling-vocalist blends show many common qualities. They are describing a manner or style that is in various degrees continuous, intimidating, rough, and incomprehensible. There is a certain timbral/affective mirroring in that distressing sounds can cause DISTRESS (incompatible, as in example 16, with the musical material). There are some acoustic correlates to this construction as it is used in cases that are non-modal singing.

Another blend that employs animal vocalization is use of "coo." The verb initially referred to the sounds of doves but has since been expanded to include a variety of birds' sounds. The following examples are illustrative:

(17) Because here he is, high priest in his Electric Church, as big as sin; wailing, **cooing** and brooding over his drums like Satan over whisky.[45]

(18) She **coos**, whimpers, and otherwise teases – while the band plays her theme song, Ike's "Doin' the Tina Turner," in the background – before running through about eight bars of "Sweet Soul Music" and finally singing a song – "Ooh Poo Pah Doo" – to close out the first side.[46]

(19) On the frantic title song, Norman West and John Colbert Jr. duet like a fired up Sam and Dave, Anita Lewis **coos** "One Broken Home for Sale" (Memphis equivalent of "One Less Bell to Answer") and Lewis and West buoy Colbert's lead on the wrenching "If You Move I'll Fall."[47]

(20) Deep and authoritative, Tosh demands: "Legalize it and I will advertise it" while the singers **coo** in agreement.[48]

The blend of example (19) shows similar connections to those seen for "bark" and "growl":

Input 1: A. Lewis	**Generic space**	**Input 2: Doves**	**Blend**
Singing "One Broken Home for Sale"	Vocalization	Cooing	"Coos" of A. Lewis
Please/Entertain	Intention	Signal Mate/Territory	Pleasant Signalling
Vocalist	Vocalizer	Animal	Animalistic Lewis
Critic/Listener	* Audience	Other Dogs/Humans	Audience-Critic
Musical Means	Mode	(Human Judged) Musical Sound	Natural Music
			Quietness
			Timbral Softness
			Prosodic Constancy

Table 3.6: Cooing A. Lewis blend

The blend containing "coo" borrows much more from the dove input than previous examples. The musical nature of dove song can be projected into the blend, and becomes part of the generic space. The concept of music (as it is being discussed here) is a human concept, and thus, the audience in the blend combines knowledge both of critical stance, and experiential knowledge of birdsong. This provides further evidence of the use of decompression in the blend. The amateur ornithologist that hears the birdsong in the bird input space is decompressed and has many relevant features removed (the occasion and

[45] Expressway to Your Skull, Buddy Miles Expressway, by David Gancher, Issue 26, Feb 1, 1969.
[46] What You Hear Is What You Get, Ike and Tina Turner, by George Kimball, Issue 88, Aug 5, 1971.
[47] Finders Keepers, Soul Children, by Joe McEwan, Issue 214, Jun 3, 1976.
[48] Legalize It, Peter Tosh, by Stephen Davis, Issue 220, Aug 26, 1976.

circumstances of hearing the birds, expertise) while the music-like pitch and volume features in the human perception of birdsong are retained. What I have called musical sound is thus doubly inscribed. Additionally, there is a positive valuation in these examples: positive affective reactions to "coo" are being expressed. However, the blend is used in the corpus (with similar frequency) in a critical manner.

> (21) Truth be uttered, the only selection here that begins to get a little nauseating, gaggingly over-cute, after repeated listenings is "G Man Hoover" (by Clark – as in Ramsey?), which finds V.D. and Rhetta Hughes sweetly **cooing** "Rat tat tat tat" about four times as many times as any human being could reasonably be asked to tolerate.[49]

> (22) After all, what is one to make of a grown man fluttering in a style not dissimilar to Bobby "Boris" Pickett's on "Monster Mash," **cooing** about loves lost and "these vintage years"?[50]

> (23) "I Know," a scampering bit of cuteness, has Essex **cooing** words like "yessirroo" and evoking McCartney at his most cloying, Nilsson as his most uninspired or – clue perhaps to what Essex, with his fluttering lashes and flattering ways, might readily become were there a hip way available – David Cassidy at his most usual.[51]

This use shows a certain gendered element to "coo." The specific reference to "a grown man" in example (22) levels criticism in gender terms, that is, cooing is not considered masculine. The remaining examples refer to excessive "cuteness". Even though the affective features of "coo" are always positive, their use can be seen as an unsuitable or inappropriate on gender grounds. The unintuitive consequence is that positive affective reactions are not always what is desired from music.

The vocal quality of "coo" can also be developed in extended pieces of discourse as in example (24). Here, several blends of bird and vocalist are used in succession, each contributing something different, producing a kind of *extended-blend*:[52]

> (24) Linda Lewis has the pipes of a **canary**, a **fluttering** somewhere near Little Millie Small, or Michael Jackson, but minus any trace of adenoidal squeaking. […] Where her

[49] Discover America, Van Dyke Parks, by John Mendelsohn, Issue 114, Aug 3, 1972. Incidentally, it works out that 4 times is, for Mendelsohn, reasonably tolerable.
[50] Country Life, Roxy Music, by Jim Miller, Issue 181, Feb 27, 1975.
[51] David Essex (self titled), by Tom Nolan, Issue 185, Apr 24, 1975.
[52] Just as a metaphor can become an extended metaphor by being built piecewise over a work.

> previous American release, ***Lark***, spotlighted spare acoustic backdrops to Linda's **cooing** forays, *Fathoms Deep* restores the more elaborate soul-derived orchestral production of her first solo LP.[53]

Having "the pipes of a canary" requires another double-scope projection among spaces. The "pipes" are a relatively simple blend from the domain of (church) organ music which has become common in music circles to describe the vocal instrument. The title of the album "*Lark*" metonymically links the producer of the sound (conceived of as a bird once again) to the product. As the passage continues, it selectively and successively projects from the bird input space in order to describe the Linda Lewis input space.

Input 1: L. Lewis	**Generic space**	**Input 2: Doves**	**Blend**
Singing	Vocalization	Cooing	"Cooing" of L. Lewis
Please/Entertain	Intention	Signal Mate/Territory	Pleasant Signalling
"pipes" (A blend)	Vocal Tract	Canary vocal tract	"pipes of a canary"
Album (*Lark*)	Product	The song of a lark	"Lark"
Critic/Listener	* Audience	Other Birds/Humans	Audience-Critic
Musical Means	Mode	(Human Judged) Musical Sound	Natural Music
			Timbral Softness
			Prosodic Constancy
			A career built on a timbral/emotive property of her voice

Table 3.7: Cooing L. Lewis blend

The extended blend shows the capacity of conceptual integration to be a dynamic, plastic process. There is much greater interplay among input spaces in this example. The blend is shown to be both mutable, and motivated (compare the above passage if the title of the album had been something other than *Lark,* for example *Bark*, that caused a conflict with the continuing integration). The blend, by slight, successive change of focus, drives the critic's narrative forward. The blend is quickly constructed by several references to bird-like qualities, then is to some extent contradicted by the final clause in which the current album, *Fathoms Deep* takes central importance. The point being that,

[53] Fathoms Deep, Linda Lewis, by Jim Miller, Issue 151, Jan 3, 1974.

despite the pervasiveness of the bird input space early in the narrative, it need not be the only way of describing the album.

Acoustically, the passages referred to by these examples are varied. None of these examples was amenable to acoustic analysis because all instances of "cooing" occurred while other instruments were playing. The only common characteristic that I can easily derived by ear is that each is lower volume (relative to background or to non-cooed sections), each is modal or breathy (Gerratt and Kreiman), and each had slow amplitude variation (sung *legato*). Example (21) has trilled /r/s, which is a possible explanation of this description. All of these are relatively simple vocal techniques to simulate.

The examples of cooing-vocalist blends show many commonalities. They are describing a manner or style that is in various degrees continuous, soft, and musical. There may be a certain timbral/affective mirroring in that slowly varying sounds can cause INTEREST and ENJOYMENT.

In order to get a fuller account of the animal-vocalist blend, "purr" was also considered. The following examples show a representative sampling of its uses:

> (25) Mayfield's soothing falsetto **purr** transforms into an anxious cry during climatic moments in the song/stories – he is a tremendous vocal actor: […][54]
>
> (26) Not blessed with a technically perfect voice, Scaggs crams emotion into the most unlikely places, punctuating his songs with heartfelt **purrs** and **growls**.[55]
>
> (27) "Transition," Bowie **purrs**, "transmission," and the beat becomes a series of minor explosions.[56]
>
> (28) Within such a structure, Patti Smith can **growl** like Jim Morrison ("Space Monkey"), practice her initiatory chanting ("Ghost Dance"), or **purr** like Darlene Love ("We Three").[57]

[54] Super Fly, Curtis Mayfield, by Bob Donat, Issue 121, Nov 9, 1972.
[55] Slow Dancer, Boz Scaggs, by Jack Breschard, Issue 159, Apr 25, 1974.
[56] Station to Station, David Bowie, by Teri Moris, Issue 209, Mar 25, 1976.
[57] Easter, Patti Smith Group, by Dave Marsh, Issue 263, Apr 20, 1978.

Upon listening, I find that these examples are united by the common acoustic feature of being sung quietly. This bears some explanation. In the case of acoustically produced music, the loudness of the singer from the perspective of the audience (for example, in an opera, or during live folk music) is related to two factors: the amount of force the vocalist puts into projecting the voice, and the distance between the vocalist and individual audience member. In such a case, the strain on the vocal apparatus is proportional to the output volume desired (mediated by training and technique) which becomes audible as a timbral characteristic. Volume in electronically produced music, on the other hand, is determined by the mix, or the relative ratios among different signals. It was quite possible in the 60s, 70s, and 80s for a vocalist to sing in a breathy voice or near whisper (and retain all the intimacy of such a frame) without being drowned out by electrically amplified guitars, violently struck drums, or a complete string section.

Each of these examples possesses the common property of having the sound of an unstrained voice, and one without ventricular or aryepiglottic phonation, although, it is noted, that this "purring" style is a transient characteristic used in segments of songs (25-27) or for specific songs (28). Corroborating the description of example (26), Boz Scaggs sings quietly, hums (nasal singing), and introduces tremolo, in the song "Sail On White Moon" all of which are quite simple operations for language users. One example is from 1:20 seconds to 1:22 seconds, where the tremolo and vibrato are deep and relatively clear of interference from other instruments. The relevant dimensions are 0-4 kHz, window length 0.05 s, range 70 dB.

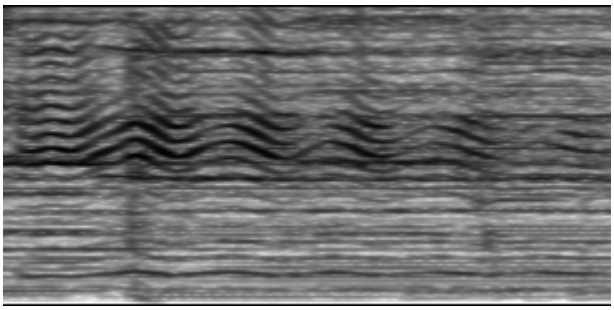

Figure 3.3: Vibrato and Tremolo in "Sail on White Moon"

This is a good candidate for the acoustic motivation of the Purring Scaggs blend. The listener is able to simulate these vibrato and tremolo techniques easily enough as pitch and volume modulation are fundamental techniques of speech production.

Similarly, during Bowie's chorus for "TVC15", he sings "transition" and "transmission" legato whereas, in other sections of the song, there is much more variation in loudness both of vocals and of other instruments. The "series of minor explosions" is an apt description as the amplitude varies widely, and instruments with a sharp attack characteristic (piano, percussion) are used. The spectrogram is given below with the amplitude envelope in yellow (mean dB) and the spectrogram range from 0-4kHz. The blue line traces the extent of the word "transition":

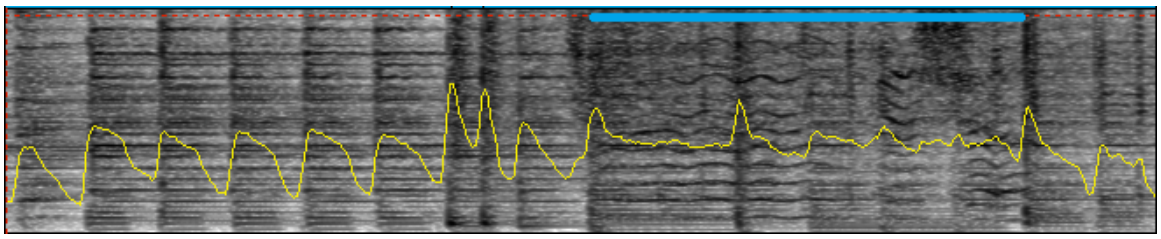

Figure 3.4: "Transmission" in "TVC15"

At 3:40, The initial six hits are piano chords, the following three sharp peaks include drums, and the two sharp peaks following are drum hits overlapping with the singing. The essential quality to note is that the formant bands during the lyrics are only slightly

darker than the spectral lines of the previous piano notes, thus, visually as well as acoustically, Bowie's voice is barely perceivable.

In contrast to example (1), on "We Three", Patti Smith sings what I would call a tremulous whisper, a particularly breathy voice. This combines the two techniques of "TVC15" and "Sail on White Moon".

The criticism levelled on these artists is invariably positive. In this way, "purr" refers to a more widely appropriate vocal technique than that of "coo". Similarly, affective dimensions are of alternating periods of INTEREST and ENJOYMENT. Due to the slow variations of volume and mellow timbres, SURPRISE or FEAR would be unlikely to be activated.

The examples of purring-vocalist blends show many commonalities. They are describing a manner or style that is in various degrees continuous, soft, and unstrained. There may be a certain timbral/affective mirroring in that slowly varying sounds can cause INTEREST and ENJOYMENT; although, this connection is less clear.

The previous discussion has shown some of the acoustic, affective, and discoursal components of blends. The final chapter offers some new directions for this broader blending theory, and a summary of conclusions about language in use.

4. Conclusion

The primary claim I put forward here is that the animal-vocalist blend offers another example of the basic thesis of cognitive linguistics, that so-called upper level cognition relies upon pervasive, subconscious, metaphorical, and embodied meaning. The form of upper level cognition currently under scrutiny is the appreciation of music and conveyance of interpretation. Other than onomatopoeia, there are few linguistic figures that represent sound directly. However, the rock music critic is capable (as we have seen) of deriving a great deal of meaning-making capacity from conceptual integration or blending. The inherent features of the blend; including selectivity, context dependence, compression, and emergent structure; make the blend ideally suited to the novelty, linguistic artistry, and affective expression required in this discoursal situation. The method here described takes embodied meaning, acoustic stimulus, and rhetorical ethos into consideration in a way that has hitherto, at least, to my knowledge, been ignored or taken for granted in blending analyses. This has several corollaries that bear discussion.

The issue of trust in the critic was raised in discussion of the animal-vocalist blend. Aristotelian rhetorical theory states that the persuasiveness of a speaker or writer is dependent upon his ability to be seen as a trustworthy source. The writer must possess those qualities that grant him *ethos*. In the case of the *Rolling Stone* critic, this ethos can be established in several ways, including externally (by being a published writer, by having a famous name), or internally (having a pleasing written style, not boring the audience, telling the audience the kinds of things the audience wants to know). It is vital to note that ethos is not something inherent in the writer, but rather, something that the audience judges (for example, the audience my have a personal dislike of *Rolling Stone*,

or prefer a style that is more or less florid, concise, direct, etc.). Reliant on the concept of ethos, *interpellation*, or calling forth, is required for the transmission of an idea.(Althusser)

While this process is handled as a blend in Chapter 2 and 3, the larger rhetorical corollaries are important to consider. The ability to project the self into different spaces, places, and mindsets relies on this same power: the parental conveyance of wisdom ("If I were you…"), the authority of doctors to enforce compliance ("If you knew what I know, you would take your medication as directed"), and legitimacy of rule, all rely on the ability of the individual to blend his sensibilities with those of an authority. Regarding the analysis of critical texts, one should ask how critical reception changes art and artistry itself, how critics come to develop ethos over time and text, and how language relies on the contact among critical selves. Any answers must lie in the selectivity and emergent structure of the audience-authority blend.

Some answers are provided here regarding the connections among critic, artist, and reader. If the reader identifies with the critic, expertise is lent to the reader. Out another way, the critic performs his own expertise, and invites the reader to observe the (secondary) artistic act. As much as expertise is professional credentials, the music critic persuades his employers to keep him on staff, however, part of the expertise is persuading readers. But, if the critic is persuasive, to what end is that persuasion produced? In grandest terms it is to the proliferation of the section of the economy in which the critic is located (quasi-politicised rock music), but in the specific case, it is to persuade the reader that the animal-vocalist blend (or any other manner of description) is both justified

(semantic) and beautiful (aesthetic). It seems strange that by tapping into deeply rooted knowledge about animals, the critic is able to fulfill both requirements.

The result of this kind of interpretation is the collapse of the ambiguity of artistic intention. By offering up the affective in textual form, the critic removes all doubt as to the emotional overtones of the music. And, while Iggy Pop may unambiguously seen to attempt to frighten, distress, and enrage his audiences (affects of FEAR, DISTRESS, and ANGER), how much of that knowledge comes from stage performances and public persona, as opposed to the "growling" music itself? Likewise, in cases where no affective reaction is felt by the reader at listening to the music, for example, of Linda Lewis on *Fathoms Deep*, how is cooing apt? This is, potentially, the origin of the anger (or ANGER) of readers at a critic with whom they disagree. The anger is at having been presented a wholly inappropriate (to their sensibilities) description. In these cases, the audience-critic blend denatures, fails to run, and ethos of the critic is damaged.

We have seen that the interactions of humans with animals have had an influence on the ways in which humans conceptualize their world. If the reader is able to draw on frames that are being activated by the writer, meaning can be conveyed easily. The long history of contact with dogs has meant that there is a solid, shared understanding of dog vocalization. What arises from this analysis is further confirmation of the conclusions of Cohen and Fox, which bear repeating: "canid vocal communication is essentially an 'emotional language', or sound repertoire of emotional reactions and intentions comparable to the intentionality expressed in non-vocal body postures and facial expressions. […] It is analgous […] to the 'paralanguage' or emotional overtones of

human speech."(90) If a writer were intent on adding "emotional overtones" to a written work, a blend with some experience of animals would be a prime candidate.

What then of the reverse process? One such form is called *personification*, and is recognized as one of the principle poetic figures. It seems strange that *animalification* (to coin a clumsy term) is less well recognized. Perhaps the proliferation of personification results from the human desire to project meaning and intention onto the world-as-experienced, with the goal of saying that it can then be reasoned with, or understood in terms of interpersonal experience. It then stands to reason that it is less likely that we should conceptualize each other as animals.

Consider also the affective features of reading a critical text. Tomkin's affect theory posits that the affects can be activated by texts, as when, while reading, shock, or interest, or joy is experienced. In writing the rock music review, the writer will have affective designs on the reader. Put another way, the critic, in the course of his work, would wish to stimulate interest, via the affects of SURPRISE, INTEREST, ENJOYMENT, and others. These transcend the rhetorical appeal to pathos, as one might have equal INTEREST in, or experience equal ENJOYMENT from, a logical or ethical appeal. One method of stimulating INTEREST is via novelty: a novel situation causes a gradual increase in brain activity. So long as this novelty is resolved (via explanation), ENJOYMENT is produced. Too much novelty might cause SURPRISE, then DISTRESS or even ANGER, as when a text is offensive, complex, unusual, or confusing. If the critic is competent at his art, he is able to sustain a repeating pattern of INTEREST and ENJOYMENT, a sort of carrier wave on which will ride the more sporadic and nuanced

affective contours, including brief moments of FEAR, ANGER, DISGUST, and SURPRISE.

At a semantic level, each of these verbs is used to emphasise *manner*. The animal-vocalist blend appreciates the expressiveness of the human voice, as manner and affect are closely tied. It is an odd thing, however that the critic is borrowing manner wholesale another domain, as these verbs are not primarily human manner (although these peripheral meanings have since become entrenched). I argue that the reason for an overextension or figurative use of these animal manners is that, in music, subtle distinctions in vocal mannerisms are what yield the differences among artists.

The method and observations I have developed show some of the ways in which blending can be enhanced by the incorporation of other disciplines. This new kind of blending allows the rich field of affective response to be brought into choice of blends. The critic is first moved by the album in some direction, and in order to impress upon the reader in a similar way, affect-laden blend inputs are then used. That is, in selecting language, the writer has the option of charging his words with these emotive, instinctual overtones. In the case of other kinds of description, as in simply saying "rough," "soft," "tremulous," no salient affective layer is present. Likewise, previous discussions of blends have not explored the ways in which simulation motivates the choice of blends. The critic in this corpus is able to draw on mental models of vocalization in order to reconstruct some impression of the unheard album. The physiological common ground is the basis of speech perception itself, but also, of this kind of creative language.

The previous analysis was provided to describe the ways in which writers and speakers are able to convey musical information to readers and listeners. We have seen

some of the ways in which this is acoustically motivated, however, acoustical information is, undoubtedly, neither perfectly conveyed nor of primary interest. Contrariwise, the music critic imposes an interpretation of intention on the vocalist, either to intimidate (as in the case of "bark" and "growl") or placate (as in "coo" and "purr"). The conveyance of musical meaning comes in the form of a blend that relies on embodied experience, affective instinct, and frames of knowledge.

Musical meaning might seem to be a form of meaning that can fail in ways other communication does not (recall that "writing about music is like dancing about architecture"). The supposed failure of a blend is best seen as an inability of the reader to run the blend, either by a failure of identification, the poverty of a frame, or an inability to use context to perform selectivity. A similar result, oddly enough, is relayed by Tomkins showing his exasperation at those who were unable or unwilling to see the importance of his revolutionary ideas about affect: "It makes a great difference whether one regards and automobile as a new invention or as a horseless carriage that must be fed gasoline rather than hay"(Demos, ed., 18). While, at its inception, the automobile was easiest to conceptualize in these terms, the emergent structure renders the blend much more than the sum of its inputs. The animal-vocalist blend, also much more than the sum of its inputs, is one poignant example of linguistic artistry that fully appreciates the sound of the human-animal experience, and the sonic experience of the human animal.

Works Cited

Althusser, Louis. "Ideology and Ideological State Apparatuses." In: *Lenin and Philosophy and other Essays*. New York/London: Monthly Review Press: 1971. Print.

Alison, Archibald. *Essays on the Nature and Principles of Taste*. New York: Harper & Brothers. 1853. Print.

Aristotle. *The Poetics*. S. H. Butcher translation. Whitefish: Kessinger Publishing. Print.

Augustine of Hippo. *Confessions*. E. B. Pusey translation. eBooks@Adelaide. <ebooks.adelaide.edu.au/a/augustine/a92c/>. Electronic.

Barbieri, Frederica. "Quotative use in American English: A corpus-based, cross-register comparison." *Journal of English Linguistics* 33 (2005): 222-256. Print.

Baugh, Bruce. "Prolegomena to any aesthetics of rock music." *Journal of Aesthetics and Art Criticism* 51.1 (1993): 23–29. Print.

Bergan, Christine C., and Ingo R. Titze. "Perception of pitch and roughness in vocal signals with subharmonics." *Journal of Voice* 15.2 (2001): 165–175. Print.

Borch, D. Zangger, J. Sundberg, P.- Å. Lindestad, and M. Thalén. "Vocal fold vibration and voice source aperiodicity in 'dist' tones: A study of a timbral ornament in rock singing." *Logoped Phoniatr Vocol* 29.4 (2004): 147–153. Print.

Cohen, J. A., and M. W. Fox. "Vocalizations in wild canids and possible effects of domestication." Behavioural Processes 1 (1976): 77-92. Print.

Coleman, Francis. *The Harmony of Reason: A Study in Kant's Aesthetics*. Pittsburgh: University of Pittsburgh Press. 1974. Print.

Dancygier, Barbara. "Blending and narrative viewpoint: Jonathan Raban's travels through mental spaces." *Language and Literature* 14.2 (2005): 99–127. Print.

Deleuze, Gilles, Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. B. Massumi translation. Minneapolis: University of Minnesota Press. 1987. Print.

Demos, E. Virginia (ed.), and Silvan Solomon Tomkins. *Exploring Affect: The Selected Writings of Silvan S. Tomkins*. Cambridge: Cambridge U P. 1995. Print.

Draper, Robert. Rolling Stone Magazine: The Uncensored History. New York:Doubleday. 1990. Print.

Fauconnier, Gilles and Mark Turner. "Conceptual integration networks." *Cognitive Science* 22. 2 (1998): 133-187. Print.

Fauconnier, Gilles and Mark Turner. “Polysemy and conceptual blending.” In: Brigitte Nerlich, Zazie Todd, Vimala Herman, David D. Clarke (eds.), *Trends in Linguistics: Polysemy: Flexible Patterns of Meaning in Mind and Language*. Mouton de Gruyter: Berlin. 2003: 79–94. Print.

Fillmore, Charles. “Frame Semantics.” In: Dirk Geeraerts (ed.), *Cognitive Linguistics: Basic Readings*. Berlin/New York: Mouton de Gruyter. 2006: 373–400. Print. Reproduced from: *Linguistics in the Morning Calm*. Seoul: Hanshin. 1982: 111–137. Print.

Gerratt, Bruce R., and Jody Kreiman. “Toward a taxonomy of nonmodal phonation.” *Journal of Phonetics* 29 (2001): 365–381. Print.

Goguen, Joseph A., D. Fox Harrell. “Style as a choice of blending principles.” *Style and Meaning in Language, Art, Music and Design*, Proceedings of the 2004 AAAI Fall Symposium, Washington D.C. Print.

Hagiwara, Robert. “Solution for January 2006.” University of Manitoba Linguistics. 2006. <http://home.cc.umanitoba.ca/~robh/archives/arc0601.html>. Electronic.

Holst, Finn. “Conceptual integration in the domain of music.” In: Anders Hougaard & Steffen Nordahl Lund (eds.), *Odense Working Papers in Language and Communication* 23.1 (2002): 181–192. Print.

Hsi K’ang (Xi Kang). Qin Fu [琴 賦]. ca. 250 AD.

Kant, Emmanuel. *Kant’s Critique of Aesthetic Judgement*. J. C. Meredith translation. Oxford: Clarendon Press. 1911. Print.

Kelly, Vernon C., Jr.. *A Primer of Affect Psychology*. The Tomkins Institute: 2009. <http://www.tomkins.org/WhatisASP.html> Electronic.

Lakoff, George, and Mark Johnson. *Philosophy in the Flesh*. New York: Basic Books. 1999. Print.

Liberman, Alvin M., and Ignatius G. Mattingly. “The motor theory of speech perception revised.” *Cognition* 21 (1985): 1–36. Print.

Liberman, A. M., F. S. Cooper, K. S. Harris, and P. F. MacNeilage. “A motor theory of speech perception.” *Proceedings of the Speech Communication Seminar*, Stockholm (1962). Print.

Liberman, A. M., Cooper, F. S., Shankweiler, D. P., & Studdert-Kennedy, M. “Perception of the speech code.” *Psychological Review* 74 (1967): 431–461. Print.

Galantucci, Bruno, Carol A. Fowler, and M. T. Turvey. “The motor theory of speech perception reviewed.” *Psychonomic Bulletin & Review* 13.3 (2006): 361–377. Print.

Locsos, Alex, and Jordi Bonada. “Emulating rough and growl voice in spectral domain.” *Proceedings of the 7th International Conference on Digital Audio Effects, Naples* (2004). Print.

Oakley, Todd V. “Conceptual blending, narrative discourse, and rhetoric.” *Cognitive Linguistics* 9.4 (1998): 320–360. Print.

Parncutt, Richard. “Systematic musicology and the history and future of western musical scholarship.” *Journal of Interdisciplinary Music Studies* 1.1 (2007): 1-32. Print.

Pulvermüller, Friedemann, Martina Huss, Ferath Kherif, Fermin Moscoso del Prado Martin, Olaf Hauk, and Yuri Shtyrov. “Motor cortex maps articulatory features of speech sounds.” *Proceedings of the National Academy of Sciences* 103.20 (2006): 7865-7870. Print.

Rolling Stone Magazine, Issues 1-386. 1967-1982. via Bondi Reader. Electonic.

Sakakibara, Ken-Ichi, Leonardo Fuks, Hiroshi Imagawa, and Niro Tayama. “Growl voice in ethnic and pop styles.” *Proceedings of the International Symposium on Musical Acoustics* (2004). Print.

Sesemann, Vasily. *Aesthetics*. Mykolas Drunga translation. Amsterdam/New York: Rodopi. 2007. Print.

Sterne, Jonathan. *The Audible Past*. Durham and London: Duke University Press. 64–66. Print.

Taylor, Anna M., David Reby, and Karen McComb. “Human listeners attend to size information in domestic dog growls.” *Journal of the Acoustical Society of America* 123.5 (2008): 2903-2909. Print.

Tembrock, Gunter, “Canid vocalizations.” *Behavioural Processes* 1 (1976): 57-75. Print.

Tennyson, Alfred. *The Poetical Works of Alfred Tennyson*. New York: Harper Brothers. 1871. 97. Print.

Turner, Mark, and Gilles Fauconnier. “A mechanism of creativity.” Poetics Today 20.3 (1999): 397–418. Print.

Turner, Mark. “Double-scope stories.” In: David Herman (ed.), *Narrative Theory and the Cognitive Sciences*. Stanford: CSLI Publications: 2003. Print.

Yang Piao-chêng (Yang Biaozheng). [楊 表 正]. *Chongxiu Zhenchuan Qinpu [重 修 真 傳 琴 譜]*. Nanjing: 1585. Print.

Zbikowski, Lawrence. *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*. New York: Oxford University Press: 2001. Print.

Zbikowski, Lawrence. "Metaphor and music theory: Reflections from cognitive science." *Music Theory Online* 4.1 (1998). <http://mto.societymusictheory.org/issues/mto.98.4.1/mto.98.4.1.zbikowski.html>. Electronic.

Zbikowski, Lawrence. "Music, language, and multimodal metaphor." In: Charles J. Forceville and Eduardo Urios-Aparisi (eds.), *Multimodal Metaphor*. Berlin/New York: Mouton de Gruyter. 2009: 359–382. Print.

Zbikowski, Lawrence M. "Metaphor and Music." In: The Cambridge Handbook of Metaphor and Thought. Cambridge: Cambridge University Press: 2008. 502-524. Print.

Appendix A: Bark

Love Connection, The Dells, Joe McEwan, Issue 261, Mar 23, 1978.

> "Wasted Tears," composed by lead singer Marvin Junior (whose throaty baritone **barking** provided the model for Teddy Pendergrass), opens with a neat bit of subway a cappella, complete with echo, and then oozes into the type of tender doo-wop the group might have sung twenty years ago on Vee-Jay.

Jamaican Roundup, Bunny Wailer sings the Wailers; Toots Live, Toots and the Maytals, Jah Malla, by Timothy White, Issue 340, Apr 2, 1981.

> Wailer's singing somehow manages to evoke the reedy authority of Bob Marley and the sizzling **bark** of Tosh while allowing his own self-satisfied, Sam Cooke-style delivery to shine. […] Grinning like a lunatic, growling like a soothsayer on Seconals, Hibbert is pretty tough to ignore.

Captured, Journey, by Peter Puterbaugh, Issue 343, May 14, 1981.

> "Ya see this microphone right here?" **barks** singer Steve Perry like a marine drill sergeant.

Trap Door, T-Bone Burnett, by Ken Tucker, Issue 379, Sept 30,1982.

> It's a very good joke, right down to the way Burnett breaks from the words once cooed by Marilyn Monroe to **bark**, "Let's rock!" after each verse.

Appendix B: Growl

Trout Mask Replica, Captain Beefheart and His Magic Band, by Lester Bangs, Issue 38, July 26, 1969.

> Again the rhythms and melodic textures jump all over the place (in the same way that Cecil Taylor's do), Beefheart singing like a lonesome werewolf screaming and **growling** in the night.

Hate to See You Go, Little Walter Jacobs, by Ed Leimbacher, Issue 50, Jan 21, 1970.

> The stand-out tracks are a harsh and sad "Blue and Lonesome" (with, I think, Luther Tucker earning guitar honors); "Everybody Needs Somebody" for Jacob's beautiful echoing harp and vocal **growl**; "Everything's Going to Be Alright" for Spann's dancing piano and the two-guitars punctuation; plus tow tunes that really jump, "Oh Baby" and my favourite, "Mellow Down Easy," with harp and semi-African drums just naturally laying you in the groove, down and dirty.

Willy and the Poor Boys, Creedence Clearwater Revival, by Alex Dubro, Issue 50, Jan 21, 1970.

> He **growls** and shouts and scats. (of John Fogarty of CCR)

Shazam, The Move, by John Mendelsohn, Issue 58, May 14, 1970.

> Devastatingly brutal and containing some absolutely lewd guitar, it's sung with unutterable viciousness by Wayne, who, delivering some of the nastiest **growling** ever captured on vinyl, sounds like he'd just as soon bite off Susie's head as look at her.

C. J. Fish, Country Joe and the Fish, by Michael G. Davis, Issue 60, Jun 11, 1970.

> In fact, the only number that is up to the Fish's previously high standards is Barry's "The Love Machine" on which he **growls** as convincingly as ever.

Smiley Winters (self titled), by Bill Amatneek, Issue 60, Jun 11, 1970.

> Screaming, **growling**, chattering, raging with high musical taste and exuberance, he immediately sucks you into the flow, to the extent that you find yourself taking synched breaths with him.

If I'm Too High, The Supreme Angels, by David Dalton, Issue 63, 1970.

> That's the Deacon's heavy Bass voice, **growling** like the Wolf on the title track, "If I'm Too High (Lord Bring Me Down)."

New Morning, Bob Dylan, by Ed Ward, Issue 71, Nov 26, 1970.

> Dylan's voice is back in its raspy, rowdy glory; after a list of unusual achievements credited to the gypsy by his dancing girl, we hear Bob **growl**, "He did it in Las Vegas and he can do it here."

American Beauty, Grateful Dead, by Andy Zwerling, Issue 73, Dec 24, 1970.

> Pigpen **growls** as ever.

Life and Death in G&A (single), Joe Hicks, by Gary Von Tersch and Lee Hildebrand, Issue 78, Mar 18, 1971.

> The second part is hypnotic, as Hicks goes through all kinds of changes with his voice, from a whisper to a **growl**, and Sly delves deep into free-form jazz stylings with the organ a la something in the back of Sun Ra's imagination.

Black Oak Arkansas (self titled), by John Mendelsohn, Issue 83, May 27, 1971.

> You'll seldom encounter anything more unforgettable that the Black Oak version of "Singing The Blues," in which the juxtaposition of Mangrum's randy malevolence and dog-eared country kitch works altogether magnificently – his **growling** of "oom-bah oom-bah oom-bah" over the second turnaround makes for the most exciting moment I've encountered on record in 1971.

Here Comes the Sun, Nina Simone, by Timothy Crouse, Issue 88, Aug 5, 1971.

> Her classic numbers – like "Mississippi Goddam," "I Loves You Porgy," "Irate Jenny" or "Ne Quitte Pas" – were nearly all dramatic performances in the grand manner, replete with whispers and **growls** and acting sometimes well past the hilt.

Sly and the Family Stone, There's a Riot Goin' On, by Vince Aletti, Issue 98, Dec 23, 1971.

> He seems to scrape his voice across the song, bringing phrases out of full-throated **growls** or stifled screams.

For Ladies Only, Steppenwolf, by Bud Scoppa, Issue 98, Dec 23, 1971.

> Steppenwolf does have a gifted quarterback in John Kay, whose voice has always seemed to me to be the **growl** of the archetypal lead singer.

Let's Stay Together, Al Green, by Bob Palmer, Issue 105, Mar 30, 1972.

> He can croon, shout, scat, rise to the smoothest of falsettos, and throw in the funkiest **growls**, all in the course of a single tune.

Live at the Paramount, The Guess Who, by Alan Niester, Issue 119, Oct 12, 1972.

> He fills the instrumental segments with **growls**, grunts his final notes a trifle longer than he ought.

The All-Time Greatest Hits of Roy Orbison, Roy Orbison, by Chet Flippo, Issue 127, Feb 1, 1973.

> He could **growl** like an alley cat in "Mean Woman Blues," give a credible Jimmy Reed treatment in "Candy Man," and then deliver a pristine C&W vocal in "Pretty Paper."

Still Alive and Well, Johnny Winter, by Tony Glover, Issue 134, May 10, 1973.

> His fingers are fleet and sure as ever, his vocals have bite and growl, and the flash and power of yore are hanging right in there.

Jamaican Roundup, Bunny Wailer sings the Wailers; Toots Live, Toots and the Maytals, Jah Malla, by Timothy White, Issue 340, Apr 2, 1981.

> Wailer's singing somehow manages to evoke the reedy authority of Bob Marley and the sizzling bark of Tosh while allowing his own self-satisfied, Sam Cooke-style delivery to

shine. […] Grinning like a lunatic, **growling** like a soothsayer on Seconals, Hibbert is pretty tough to ignore.

Appendix C: Purr

Loggins and Messina, self titled, by Steve Ditlea, Issue 132, Apr 12, 1973.

> Running the gamut from wailing Fifties-tinged rock to **purring** ballads, it will make a believer out of even the most hardened counter-counter culturist.

A True Story, Jelly, by Ariel Swartley, Issue 239, May 19, 1977.

> Indeed, without the old-timey "Dr. Jazz" (the album's only nonoriginal), which gives Amy Madigan's enormous husky voice a chance to shout, **purr** and prove she should sing lead more often, the second side would never wake up.

Mary Called Jeanie Greene, Jeanie Green, by Alec Dubro, Issue 98, Dec 23, 1971.

> She uses both a throaty country rocker voice, *a la* Brenda Lee, and kind of a little **purr**.

Journey, Colin Blunstone, by Ben Gerson, Issue 172, Oct 24, 1974.

> Far from the gasping consumptive of "She's Not There," Blunstone sings less nebulously, more decisively than he did on *Ennismore*, but the breathy **purr** is still unmistakeable.