GUIDELINES FOR DRUMSET NOTATION

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Introduction

How should one notate music for the drumset? This seems a simple question, yet an examination of the published resource materials and performance literature reveals that composers, arrangers, editors, authors, and educators often embrace different views on the subject. This study will attempt to answer the question by surveying the published literature and forming a compendium of symbols and notational procedures currently employed for drumset notation. By itself, a compendium of current notational practices does not completely answer the question. David Cope writes that:

The point is, what really needs to be done is not to keep listing the diverse ways each composer symbolized his music or create substantially new and negating systems of notation, but to concentrate on codifying one way for future composers to symbolize their music.¹

Recent history offers two examples of attempts to codify a language. Esperanto was an effort to create an international spoken and written language that would be used by all the peoples of the earth. MIDI is a computer protocol which enables electronic musical instruments to communicate with other computer based systems. Esperanto was a failure, MIDI a success. The success or

¹Cope, David, *New Music Notation* (Dubuque, Iowa: Kendall/Hunt Pub. Co., 1976), xi.

failure of any codified system rests on the desire to adopt a standard without regard to special interests or personal views.

In an effort to avoid special interests, twenty reference works and two-hundred performance works are included in this survey. Reference and performance materials are further divided into two categories: those works which employ precise notation, and those based on improvisatory frameworks. In an attempt to avoid bias, no composer, arranger, or author's material is represented in this survey more than twice.

This paper will not try to create a uniquely new notational system for the drumset. Instead, it will present a clarification, simplification, and amplification (when required) of the notational systems already in use in the majority of analyzed works. I have chosen to follow the path of Frank McCarty who wrote that the main goal of a standardized notation,

is to strengthen the notational language between composers and performers by simplifying and clarifying its content and standardizing its applicability without, however, limiting its potential for expansion.²

I have avoided a discussion of the conventions of normal musical layout (stem direction, beaming rules, spacing tables, etc.), except when traditional, accepted practice is obviously at odds with the notation encountered during the analysis. I have also avoided working with notational systems that are purely "graphic" in concept. These unique notational systems are highly individual—fusing the notation to a specific work—and not a part of

²Frank McCarty, "Percussion Notation," *Percussionist* 15 (Winter 1978): 50.

the notational system generally in use by the majority of composers and arrangers. These graphic systems are "too special and distinctive either to offer or require any standards at this time."³

This paper is intended as a guidebook for the composer, arranger, performer, educator, and editor, who may be looking for a notational system for the drumset that will be clear, concise, and (hopefully) adopted by the drumming community. Only when the composer and performer understand the same language, can true communication take place.

Even if the observations and suggestions presented in this paper are not fully supported by the drumming community, it is hoped that the ideas presented within will stimulate awareness of the problem of drumset notation and will inspire others to write more on the subject. At the very least, this study should show that a logical and consistent notational system for the drumset has been long overdue.

³Ibid., 51.

CHAPTER ONE

THE NEED FOR A STANDARDIZED DRUMSET NOTATION

Musical notation is a fascinating topic. Its long history is ripe with dynamic developments, exotic systems, and a passion for blending the two dichotomies of simplicity and precision. Virginia Gaburo stated the importance of notation on our musical experience when she wrote:

Notation's benefits for the facilitation of musical idea manipulation have been immense, not only for the achievement of theoretical and analytical objectives, but for the achievement of compositional ones as well. ¹

Defining musical notation in a clear and simple manner is an elusive task. Some authors define notation in ways that emphasize the pragmatic communication aspect. Other authors have taken a more general approach by offering a definition that can be applied to any type of musical notational system.

Perhaps the clearest example of a practical communicative definition comes from John C. O'Neill, who says that "...symbols in music are used to indicate what to do, as well as how, where, and with what to do it." Another practical definition is given by

¹Virginia Gaburo, Notation (a lecture to be performed by solo speaker to attentive audience) (La Jolla, CA.: Lingua Press, 1977), 43.

²John C. O'Neill, "Recent Trends in Percussion Notation" (*Percussionist* 18, September 1966), 20.

Michael Udow. Mr. Udow emphasizes the relationship between the composer and the performer, as well as the relationship between the composer and the notational system when he writes:

The composer of music, through a selected notation asks the interpreter/performer to take the score and bring it "alive" to the listening audience. This puts an awesome responsibility on the composer to select a notation that will best reflect the desired acoustical result.³

The definition offered by Gaburo implies musical performance, but also includes notational systems which may be designed only for mental reproduction, such as musical analysis or "concept music" never intended for actual performance. Gaburo states that "Musical notation can be graphic representation of one man's (a composer's) musical idea, and it can have the purpose of making that idea reproducible in the minds of others." Richard Ristall takes a similar approach by offering the following definition of musical notation: "The written symbols (which may include verbal instructions) by which musical ideas are represented and preserved for future performance or study."

One common thread runs through these definitions: A notational system is used by one person to convey ideas to another person. The graphic and/or verbal symbols of musical notation form a language of communication.

³Michael W. Udow, "Visual Correspondence Between Notation Systems and Instrument Configurations," *Percussionist* 18 (Winter 1981): 15.

⁴Gaburo, *Notation*, 45.

⁵Richard Rastall, *The Notation of Western Music* (London: J.M. Dent & Sons Ltd, 1983), 2.

Hugo Cole writes: "The first purpose of a notation is to put over the message clearly and concisely." While the purpose of using a musical notation may be obvious, the notation's meaning itself is not always so apparent. Kurt Stone writes: "Musical notation, after all, is not an ideal method of communication, utilizing, as it does, visual devices to express aural concepts. But it is all we have." All communication systems require convention, and musical notation is no exception. In order for communication to take place, the speaker must use a language familiar to the listener. Rastall assumes that the "...composer and performer have a basic common understanding of what is implied by the notation." Yet, this common understanding between composer and performer often breaks down, leaving the performer confused concerning the exact intent of the composer.

When discussing notational problems that create confusion for performers, Cole offers the following list of the eight most common causes of problematic notation:

- 1) Graphical faults (poor spacing and alignment, badly-formed symbols, unclear layout).
- 2) Inconsistency (contradictory markings, symbols used in different senses without good cause).
- 3) Too little information given (that is, too little for adequate performance under the prevailing conditions).

⁶Hugo Cole, Sounds and Signs: Aspects of Musical Notation, (London: Oxford University Press, 1974), 28.

⁷Kurt Stone, Music Notation in the Twentieth Century: A Practical Guidebook (New York: W.W. Norton & Company, 1980), xvii.

⁸Rastall, Notation of Western Music, 11.

The most treacherous situation of all is that of the generally consistent writer who abandons consistency. If, for instance, nearly all simultaneous notes are properly aligned, the few exceptions will be much more likely to mislead than if alignment was haphazard throughout.

- 4) Too much information given (that is, unnecessarily much under prevailing conditions).
- 5) Meaningless precision.
- ... but unnecessary instructions such as fingerings for expert players or bowings on every note are unnecessary in all conceivable contexts, and so unjustifiable. Excessive use of redundant and precautionary markings is also a symptom of overanxiety, and is to be deprecated.
- 6) Uncertainty as to terms of contract (degree of latitude to be taken in interpretation).
- 7) Ambiguity (where signs may have two meanings, only one of which can be right).
- 8) Insufficiency of notation for the job at hand.9

Percussion notation has its own unique set of problems in addition to those listed by Cole. As composers and arrangers invent signs, symbols, and terminology, the percussionist is faced with learning a multitude of musical languages. The famous German percussionist, Cristoph Caskel wrote:

Anyone who, as a percussionist, has been engaged in the preparation of contemporary music for performance surely has noticed—even in technically undemanding scores—that there are often difficulties traceable to notation.¹⁰

Frank McCarty realizes that today's performers have a demanding task in deciphering contemporary percussion notation. He states:

As new notational formats appear, performers are placed in strange and complex surroundings. This is especially true for

⁹Cole, Sounds and Signs, 32-33.

¹⁰Cristoph Caskel, "Notation for Percussion Instruments," trans. Vernon Martin. *Percussionist* 8 (March 1971): 80.

percussionists, who suffer the fate of having to play a wide variety of instruments in many different ways.

At present, the percussionist is often faced with compositions using different notations to stand for the same sound, instrument, or performance technique. In some cases, the staff may be augmented or replaced by written instructions or graphic symbology. One characteristic of a large percentage of recently composed music is the appearance of a "legend" to describe or define unfamiliar signs and special notational practices. Among other things, the composer has become a cartographer, and performers have had to become logicians and cryptologists!¹¹

One of the primary difficulties in percussion notation lies in the multitude of unusual percussion instruments that have found their way into the literature. David Cope discusses this problem in New Music Notation:

The percussion section at present writing holds an almost limitless variety of nonstandardized (in some cases, multistandardized) notational problems. First and foremost of these is the constant expansion of numbers and types of instruments, the validity of which few questions, but the categorization, notation, and organization of which has become increasingly complex.¹²

Vaclav Nelhybel agrees that the notation of percussive sounds is a complex matter. He believes that the problem is most serious when composers find it necessary to verbalize instructions to the performer, cluttering the music with whole sentences of instruction. Roderick Biss blames percussion notation problems on composers who "...do not quite know how to write for

¹¹Frank McCarty, "Notational Standards for Percussion: A Report on the Ghent Conference" The Instrumentalist 29 (June 1975): 53.

¹² David Cope, New Music Notation, (Dubuque, Iowa: Kendall/Hunt Pub. Co., 1976), 74.

¹³ Vaclav Nelhybel, "Percussion Notation," The Instrumentalist 29 (June 1975): 56.

percussion."¹⁴ Yet, composers are not the only ones who confess deficiencies in their knowledge of percussion notation. John Cacavas textbook, *Music Arranging and Orchestration*, dismisses a thorough discussion concerning percussion notation with the statement: "In conclusion, let me say that it is hard to keep up with new developments in the percussion field."¹⁵

While information concerning contemporary percussion notation is available to serious composers and those in the academic world (even if several sources conflict with each other), there is very little information offering suggestions for drumset notation. Several books on orchestration and arranging make no mention of drumset notation or performance. Walter Piston's text, Orchestration, states: "We shall deal only with instruments that have had a fair amount of use by serious composers of orchestral music. 16 And, Francis Collinson's statement concerning notation for the drumset borders on disdain for percussionists. He writes:

There is not much which can be be said regarding the use of the drums in terms of general advice; the most important of which is to use them as little as possible during the vocal parts of a number, whether it be for soloist or chorus.¹⁷

Information that is available concerning the "proper" method of drumset notation is often contradictory. Ryszard Pusz¹⁸ and

¹⁴Roderick Biss, "Percussion: Notation," Composer 11 (Spring 1963): 27.

¹⁵John Cacavas, *Music Arranging and Orchestration* (Melville, NY: Belwin-Mills Publishing Corp., 1975), 93.

¹⁶Walter Piston, Orchestration (New York: W.W. Norton & Company, 1955), 296.

¹⁷Francis M. Collinson, *Orchestration for the Theatre* (London: The Bodley Head, 1949), 318.

Gary Cook¹⁹ both agree that the four spaces of the staff should be used to indicate the small tom, snare drum, large tom, and bass drum (reading from the highest space to the lowest), but disagree on the topic of staff positions for cymbals. Pusz suggests using the top line of the staff to indicate the ride cymbal and the bottom line to indicate the high-hat. Cook suggests the spaces immediately above and below the staff for the ride and high-hat cymbals.

While the staff positions of the various instruments of the drumset are a cause of confusion and misunderstanding, additional notational obstacles are specific to the drumset, and come to the fore in the improvisational charts of popular music drumming.

Kenneth Krause recognizes the difficulty that student drummers face when changing from one musical organization to another. He writes:

Of all instrumentalists, the drummer probably has the most difficult time in transferring from the concert organization to the stage band. The nature of the concert percussionist's job is so far removed from his function in the dance- or jazz-oriented group, that there is little in his concert training to prepare him for stage band membership.²⁰

One of the primary reasons behind this difficult transition is the lack of a standardized notational system for the drumset. While Reginald Smith Brindle claims that the notation of drumset music

¹⁸Ryszard J. Pusz, *Percussion: A Comprehensive Approach* (Adelaide, South Australia: Silver Keys Music Center Pty. Ltd., 1983), 47.

¹⁹Gary D. Cook, *Teaching Percussion* (New York: Schirmer Books, 1988), 351-55.

²⁰Kenneth Krause, "The Stage Band Drummer" in *Percussion Anthology* (Evanston, IL: The Instrumentalist Company, 1980), 146.

is universal, nothing could be further from the truth. When discussing the notation of drumset on a five-line staff, he writes:

Perhaps its most successful application has been in the field of jazz. A jazz "set" is much the same all the world over, and drummers are accustomed to a notation which uses the fiveline staff and the bass clef.²¹

As evidenced by this paper, a standard notation for the drumset does not exist in practice. Dick Grove recognizes the difference between notation for the drumset and the notation for charts in popular music when he writes: "In practical application the drum parts are simplified a great deal in comparison to the detailed notation of the entire drum set." Jim Pierkarczyk believes that simplified drum charts work to the drummer's advantage, and rationalizes that any other system would prove too unwieldy.

The stage band drummer has more creative freedom than any other band member. The arranger's practice of writing drum set music as a guide instead of a precise part enhances the player's interpretive freedom, and if the drum chart were written too specifically, most players would have difficulty reading it.²³

While it may be true that players would have difficulty reading a drum chart that was too specific, most players would not have difficulty reading a chart that was more specific than a general guide. There will always be some drummers unable to read any chart. Several professional drummers never learned to

²¹Reginald Smith Brindle, *Contemporary Percussion* (London: Oxford University Press, 1978), 5.

²²Dick Grove, Arranging Concepts Complete (Sherman Oaks, CA: Alfred Publishing Co., Inc., 1972), 42.

²³James Pierkarczyk, "Drum Set Basics" in *Percussion Anthology*, 576.

read music of any type, including Chick Webb, Sonny Greer, and Buddy Rich. Rich was quoted as saying: "I read a little drum music, but an arranger can't write for a drummer. Only a drummer knows where the fills and accents go."24

Rich and Pierkarczyk seem to be defending the current notational confusion on grounds of the poor reading skills of drummers. And, they justify poor reading skills by saying that composers and arrangers don't know what a drummer should be playing. Even so, their statements are nothing more than rationalizations of why drumset notation is in such a confused state.

"It is important to note that it is the composer who defines the meaning of the marks in the score. It is the performer who interprets these marks." This statement from Michael Udow is perhaps the best reason for developing a standardized drumset notation. The composer can place any sign in the music, and he may define that sign to mean anything he wishes, but the final responsibility of interpretation rests on the shoulders of the performer. Kurt Stone discusses the relationship between composer and performer through musical notation. He writes:

The resulting profusion of new notational signs and methods has tended to impair composer-performer communication via notation, particularly when composers, unaware of each others'

²⁴Theodore Dennis Brown, "A History and Analysis of Jazz Drumming to 1942 Volume II" (Ph.D. diss., University of Michigan, 1976), 418.

²⁵ Michael W. Udow, "Visual Correspondence Between Notation Systems and Instrument Configurations," Percussive Notes 18 (Winter 1981): 19.

work, have used identical signs for different musical phenomena or different signs for identical effects.²⁶

The dream of a standardized percussion notation has long been the wish of performers and composers. Yet, the dream has not materialized. Twenty-five years have passed since Frank McCarty's questionnaire on percussion notation was published by the Percussive Arts Society. The results of the questionnaire proved that 87% of the respondents agreed with the statement that "...an international symbology should be adopted..." Donald Martino sums up the desire to clarify notation by saying "...the need to clarify and standardize the existing symbols of our notation must surely be evident." 28

An appeal for a standardized percussion notation is also expressed by Gardner Reed. When discussing the proliferation of various note head shapes, he writes:

In no other instrumental notation is there such a variety of note-heads as are used for the unpitched percussion instruments. Crosses, x's, diamonds, squares, triangles—all have been used at one time or another.

Unfortunately, whatever their merits, there exists no standardized system for their use, although one or two of the note-shapes are found universally for certain specific instruments—as the triangle-shaped note for the triangle.²⁹

²⁶John, Vinton, ed. *Dictionary of Contemporary Music* (New York: E. P. Dutton & Co., Inc., 1974), s.v. "Notation." by Kurt Stone.

²⁷ Frank McCarty, "Percussion Notation," *Percussionist* 15 (Winter 1978): 57-58.

²⁸John C. O'Neill, "Recent Trends in Percussion Notation," *Percussionist* 18 (Fall 1980) 51.

²⁹Gardner Read, *Music Notation: A Manual of Modern Practice*, 2d ed., (Boston: Crescendo Publishers, 1969), 164.

Erhard Karkoschka laments the increasing variety of symbols when he writes:

The *complication* of new notation forms is not as much a source of difficulty for the interpreter as is the varying meanings of similar symbols in different scores and, conversely, the same meaning of varying symbols.³⁰

And, Kurt Stone elaborates on problems concerning identical symbols carrying different meanings and unexplained signs. Stone writes:

Many musicians who had been greatly interested in new music began to resent the ever increasing profusion of notational ambiguities, identical notation for different effects in different compositions, and totally unexplained signs and procedures.³¹

Many authors state that musical notation must be consistent. Lasslo Boehm warns about percussion instruments migrating from place to place on the staff. He writes:

For each percussion instrument used, a specific space on the staff is assigned, and kept throughout the composition. For example, if the first space is chosen for the bass drum, each time the bass drum is used in the composition, it is always written in the first space. Its note stems are always drawn in the same direction.³²

This admonition is repeated by Stone when he writes: "There is, however, one principle which should never be ignored: No matter which kind of notation and score order has been chosen, it must be adhered to throughout a given composition or movement." 33

³⁰Erhard Karkoschka, *Notation in New Music*, trans. Ruth Koenig (New York: Praeger Publishers, 1972), 5.

³¹Kurt Stone, Music Notation in the Twentieth Century: A Practical Guidebook (New York: W.W. Norton & Co., 1980), xvii.

³²Lasslo, Boehm, Modern Music Notation: A Reference and Textbook (New York: G. Schirmer, 1961), 48-49.

³³Stone, Music Notation, 216.

Stone again stresses the importance of consistent notation in his foreword to *How To Write Music Manuscript (in Pencil)*, by Gerald Warfield.

Everyone involved with music today knows that our own musical era differs radically from eras past. One of these differences is the increasing importance of a clear, graphically accurate, practical manuscripts.³⁴

When a standard notation becomes a reality, performers will be better able to interpret the meaning of notational symbols in less time. O'Neill realizes that learning a standard set of uniform symbols is much preferred to learning unstandardized notation. He writes:

In the identification of elements within a series, subjects learn faster if the elements can be identified with reference to a norm. Learning proceeds most rapidly if there is some perceivable structure, particularly if that structure is developed (reinforced) through physical presence.³⁵

While there have been many attempts to produce a standardized musical notation, few have found acceptance. A large number of individual authors have proposed systems that are based largely on visual or pictorial symbols. About these symbols, Cope writes:

Visual or pictorial symbols are often very useful, though they as well can be overdone to the point of not only confusing the performer but filling the score with so many pictures that it becomes nearly unreadable. To hold steadfastly to either verbal or pictorial symbols as a basic plan is nonsense, as the situation can often demand one over the other for reasons of space,

³⁴ Kurt Stone, forward to *How To Write Music Manuscript (in Pencil)* by Gerald Warfield, McKay Music Series (New York: David McKay Company, Inc., 1977), vii.

^{350&#}x27;Neill, "Recent Trends," 28.

clarity, and/or quick and easy performance response. One has only to glance through the percussion section of the timbre portion of Part II to see very quickly how the adoption of both systems can be a healthy and viable resolution to the problem: use the one which is most quickly readable and understandable by the performer without cluttering the score or part in use.³⁶

Several other authors have expressed their views concerning the use of pictograms in music notation. McCarty writes:

Pictograms are most valuable in percussion scores or parts which include a large number of instruments and beaters, an aspect common to many contemporary compositions. As an alternative to the use of words (names of instruments, and descriptions of beaters such as "medium-soft marimba mallet") and/or specially-shaped note-heads or other graphics, they offer many advantages. Pictograms need not intrude upon any form of musical notation and thus can convey information beyond fixed notational contexts. Most important is the fact that their use facilitates sightreading.³⁷

McCarty's report concerning the actions of the Ghent Conference on musical notation, suggests the adoption of symbology for instrumentation. He writes: "The suggested symbols are in the form of pictograms, simple line-drawings used to represent the most common percussion instruments and beaters." McCarty goes on to write that during the conference, the group dealing with percussion notation spent about 75% of its time deciding about the symbols that should be used for instruments and beaters. 39

Since 1960, when Karlheinz Stockhausen's Zyklus was published in London, the concept of musical symbology has been

³⁶Cope, New Music Notation, 5.

³⁷Frank McCarty, "Symbols for Percussion Notation," *Percussionist* 18 (Fall 1980): 8.

³⁸Frank McCarty, "A Report", 54.

^{39&}lt;sub>Tbid.</sub>

under constant examination. The number of symbols appearing in publications covering new music notation is astounding.

Karkoschka's excellent work, Notation in New Music, is a wonderful compendium of information concerning what has been done in the past. He offers symbols for forty-one different percussion instruments used in the works of Becker, Kagel, Kotonski, Nono, Otte, and Stockhausen (among others) and symbols for an incredibly large variety of musical instructions. Karkoschka includes twenty-one different symbols for performance instructions, including playing a glissando on the snares of the snare drum. He offers symbols for twenty-eight different methods of performance, including the rim shot, playing at the edge, and playing in the center of the instrument. And, he gives symbols for twenty-three different types of mallets and beaters⁴⁰

But, what does this information tell composers currently looking to use a symbol to represent a particular instrument, beater, or performance technique? Should they use the symbol that was employed by Kotonski for the tom tom, knowing that Nono uses the same symbol for a wooden-headed drum (Holztrommel)? If composers wish to write a rim shot, do they use the symbol of Cerha (an x) or the one used by Kagel in *Sonant* (a circle with a vertical line through it).

In the years following Stockhausen's composition, and Karkoschka's book (first published in Germany in 1966) many

⁴⁰Erhard Karkoschka, *Notation in New Music* trans. Ruth Koenig (New York: Praeger Publishers, 1972), 50-77.

authors have jumped on the symbology bandwagon. Gerassimos Avgerinos' list includes symbols for nineteen percussion instruments and over eighty abbreviations for instruments, sticks, and performance instructions.⁴¹ Kotonski's publication offers twenty-two symbols for instruments including those used by Stockhausen in *Zyklus, Kontakte*, and *Carrè*.⁴²

Risatti's book, New Music Vocabulary: A Guide to Notational Signs for Contemporary Music, is perhaps the most exhaustive of the group. Risatti categorizes the notation used in 274 compositions by 131 composers. There are symbols for 137 different percussion instruments including nine different types of bells (hand bell, cowbell, jingle bell, sleighbell, and wind-up bell), five different types of chimes (encompassing ceramic, glass, wood, and hawk bells), six types of cymbals (including hi-hats, crotales, hand cymbals, suspended cymbals, and sizzle cymbals), and seventeen different types of drums. Also included are symbols for fifteen different types of glissandi, nineteen different durational symbols, sixty-five modes of attack, thirty-six different areas of attack, and 150 types of mallets.⁴³

Kurt Stone's Music Notation in the Twentieth Century gives pictograms for seventy-eight percussion instruments and thirty-four

⁴¹ Gerassimos Avgerinos, *Handuch der Schlag- und Effektinstrumente* (Frankfurt: Verlag Das Musikinstrument, 1967), 7-11.

⁴²Wlodzimier Kotonski, *Schlaginstrumente in Modernen Orchester* (Mainz: B. Schott's Söhne, 1968), 74.

⁴³ Howard Risatti, New Music Vocabulary: A Guide to Notational Signs for Contemporary Music (Urbana: University of Illinois Press, 1975), 95-119.

beaters.⁴⁴ Instrumentation in der Musik des 20. Jahrhunderts suggests fifty-six different symbols for various percussion instruments and sixteen symbols for beaters, sticks, and mallets.⁴⁵ Additional works by Reginald Smith Brindle, David Cope, and Alfred Blatter present supplementary symbols for percussion notation.⁴⁶

Despite so many authors devoting so much attention and time to the discussion of symbology, the problems involved in drumset notation have been ignored to the point where Michael Hutton writes:

Since scholarly stylistic and structural analysis of drum set performance is a new discipline, it was necessary to create a standardized system of notation for the purpose of this study. The notation system used in this study was developed with the intention of limiting the need for lengthy verbal description in the scores of the transcriptions.⁴⁷

This then, is the current problem in drumset notation:

"When we look at a piece of music and ask 'What does this notation mean?' we expect there to be only one correct answer."

When today's drumset performers see a particular musical symbol on the page, it can be expected to have numerous meanings. If a

⁴⁴ Kurt Stone, Music Notation in the Twentieth Century: A Practical Guidebook (New York: W.W. Norton & Co., 1980), 206-212.

⁴⁵Walter Gieseler, Luca Lombardi, and Rolf-Dieter Weyer, *Instrumentation* in der Musik des 20. Jahrhunderts (Celle: Moeck Verlag, 1985), 109-113.

⁴⁶Reginald Smith Brindle, Contemporary Percussion (London: Oxford University Press, 1970); David Cope, New Music Notation (Dubuque, Iowa: Kendall/Hunt Pub. Co., 1976); Alfred Blatter, Instrumentation/Orchestration (New York: Longman, 1980).

⁴⁷ Michael J. Hutton, "Sidney 'Big Sid' Catlett: The Development of Modern Jazz" (Nashville, TN: Percussive Arts Society, 1990), 164, Photocopied.

⁴⁸ Rastall, Notation, 11.

small circle (the same articulation symbol as a string harmonic) is placed above a note, a performer can expect up to six different performance meanings⁴⁹. Likewise, a common performance technique can be notated in a variety of different ways. The rim shot, for example, is notated by four different articulation symbols: the abbreviation "R.S.", the notational symbol commonly used for an upbow in string writing, a plus sign, or a small vertical line above the note.

Recently, there has been an explosion of drumset literature. An increase in the popularity of jazz, pop, and rock music (all which make strong use of the drumset) continues to produce more musicians who are interested in learning to play the drumset. These musicians are a potential market for publishers who produce books and materials for drumset instruction as well as written arrangements of recorded performances. The emergence of journals and popular magazines dedicated to a large extent toward drumset performance practices has produced additional exercises and transcriptions of recorded drumset performances. The increased influence of Latin, Caribbean, African, and Indian music upon the commercial music scene has spawned a variety of "style" guides for the drumset. The evolution of the home publishing industry has made it possible for anyone with a new idea to publish his own method book, arrangement, or musical composition.

⁴⁹Perform on the open high hat, play a high hat foot splash, play a closed cowbell sound, play near the center of head, play on the bell of the cymbal, or play on the edge of the drumhead.

In the present state of affairs, each method book, performance transcription, style study, magazine article, or musical composition requires a new and individual solution to the problem of drumset notation, and drumset notation falls into further disarray.