THE STUDY OF NOISE AND CHRONEMICS AS ASPECTS OF NONVERBAL COMMUNICATION IN CLASS: A CASE STUDY OF A FORM FOUR CLASS AT JAMHURI HIGH SCHOOL – NAIROBI.

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THIS DISSERTATION IS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN LINGUISTICS.

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DECLARATION

This dissertation is my original work and has not been submitted for examination in any other university.

A.	19TH OCT 2009
Nabangi Jane	Date

This dissertation has been submitted for examination with our approval as the university supervisors.

Prof. Okoth Okombo

Date

Dr. Jayn Mutiga

Date.

DEDICATION

To

My husband
Dr. John Wanangwe Wanjia

And

My Children
Frank, Davis, Grant, Steve and Jerry
Ryan.

For their unwavering support for and patience with me during my period of study.

ABSTRACT

The purpose of this research was to analyse the messages noise and chronemics communicate in classroom interaction. The study is divided into five chapters, each dealing with specific aims related to the study.

Chapter one gives the background to the study, statement of the problem, objectives and hypotheses of the study, rationale of the research, literature review, theoretical framework, scope and limitation and the methodology.

Chapter two examines the nonverbal cue; noise. It discusses the different kinds of noise present in classroom interaction and tries to interpret the messages such noise communicate.

Chapter three looks at chronemics as a behavioral nonverbal cue that can communicate in class. It describes the two predominant time patterns used in human interaction and discusses what messages the time patterns communicate when they are consistently used by teachers.

Chapter four deals with data analysis, findings and discussions. It analyses the data using the relevance theory of communication by Sperber and Wilson. Some of the research findings are summarized and presented in form of proportions, tables and charts.

Chapter five gives the summary, conclusion and recommendations of all the research findings.

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I can't forget my parents; the late Mzee Timothy Nabangi; may his soul rest in peace and mama Euphemia Nabangi for setting a very strong academic background for their children. This has inspired those children with ambition to pursue further studies.

My siblings deserve special recognition. I give my brother Cleophas, a warrior of the Golden Hearts medal for his selflessness. If it were not for him, I would not be writing this. My other siblings extended financial help, here and there. I can not possibly thank them enough but only ask God to bless the work of their hands. May He direct their walk and annoint every step they make in life.

Finally, I wish to appreciate all those whose names I may not have mentioned here because of human oversight, but they contributed to this research in one way or another. Know that your contribution is worth much more than words can express. I appreciate it from the bottom of my heart.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	v
CHAPTER ONE: INTRODUCTION TO THE STUDY	1
1.0 Introduction	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	4
1.4 Hypotheses	4
1.5 Rationale of the Study	5
1.6 Literature Review	5
1.7 Theoretical Framework	13
1.7.1 Relevance and Cognition	14
1.7.2 Relevance and Communication	17
1.7.3 Relevance and Comprehension	19
1.8 Scope and Limitations	20
1.9 Research Methodology	21
1.9.1 Primary Data Collection Procedure	21
1.9.2 Secondary Data Collection	21
1.9.3 Data Analysis	21
CHAPTER TWO: NOISE AS A NONVERBAL CUE IN CLASSROOM	И
INTERACTION	22
2.0 Introduction	22
2.1 Noise	22
2.2Psychological Noises	23
2.3 Physical Noise	
2.3.1 Physiological Noise	
CHAPTER THREE: CHRONEMICS AS A NONVERBAL CUE IN	
INTERACTION	

3.0 Introduction	30
3.1Chronemics	30
3.1.1 Monochronic Time Schedule (M- Time)	30
3.1.2 Polychronic Time Schedule (P-time)	32
4.0 Introduction	35
4.1 Forms of Noise in Classroom Interaction	35
4.1.1 Physical Noise	35
4.1.1.1 Messages Communicated by Physical Noise in Class	39
4.1.2 Psychological Noise	40
4.1.3 Physiological Noise	42
4.1.3.1 Messages Communicated by Teachers' Dressing Modes	43
4.1.3.1.1 Teachers Wearing Tight Clothing	43
4.1.3.1.2 Teachers Wearing too much Make-up	44
4.1.3.1.3 Teachers Wearing Worn-out Clothing/Teachers Wearing Unironed Clothing	ng44
4.2 Use of Chronemics to Communicate in Class	44
4.2.1 Regular/ Irregular Class Attendance by Teachers	45
4.2.2 Teachers Time Management in Class	46
4.2.3 Messages Communicated by Teachers' Use of Time	47
4.2.3.1 Irregular Teachers	47
4.2.3.2 Teachers Who Tell Irrelevant Stories	48
4.2.3.3 Teachers Who Dictate Notes	48
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	49
5.0 Introduction	49
5.1 Summary of the Research Findings	
5.2 Conclusion	
5.3. Recommendations	
References	
OUESTIONNAIRE	55

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.0 Introduction

This is a study of nonverbal communication in the classroom. The research focuses on the use of noise and chronemics as aspects of nonverbal communication. The interest of this study is to examine how noise and use of time communicate messages in classroom interaction. The study was carried out on a Form four class at Jamhuri Boys High School-Nairobi.

1.1 Background to the Study

Leathers (1997:11) defines nonverbal communication as "the use of interacting sets of visual, vocal and invisible communication systems and subsystems by communicators with the systematic encoding and decoding of nonverbal symbols and signs for the purpose(s) of exchanging consensual meanings in specific communicative contexts". Wiener, Devoe, Robinson and Geller, (1972) cited in Leathers (1997) define nonverbal communication as involving the sending and receiving of wordless messages. They say that this involves encoders and decoders using a socially shared signal system or code with intent.

Nonverbal communication just like verbal communication uses a linguistic sign to communicate meaning, in this case the nonverbal linguistic sign. According to Critchley (1975:174), the nonverbal linguistic sign communicates meaning between two parties who have a shared understanding of the sign used: that is to say mutual intelligibility is essential and the reference-function of the nonverbal counters must be shared by coder and decoder.

The interpretation of nonverbal cues just like the verbal ones is often arbitrary because most of the cues are based on arbitrary symbols. However, it is important to note that a large proportion of nonverbal cues are to some extent iconic (instinctive) and may be understood universally, for example cues like a smile or a frown (Critchley, 1975).

To understand a nonverbal stimulus, context is very important because such a stimulus only acquires meaning within that context (Sperber and Wilson 1995). If it is transferred to another context, the stimulus might acquire a completely different meaning. From the context, an audience can make contextual assumptions and draw conclusions based on the background knowledge they have about the stimulus in question.

Nonverbal communication can be conveyed through any sensory channel. This is according to Sperber and Wilson (1995). This can be a smell, a taste, a sight, a sound or a touch. This means, everytime we are engaged in any human interaction, we have to be alert to such silent cues because they keep telling us the inner truth of things which words help to conceal or may not express adequately.

Knapp and Hall (1997: 9) classify nonverbal behavior into three (3) primary units; the environmental structures and conditions within which the communication takes place; the physical characteristics of the communicators and the behavior manifested by communicators during the communication event. This classification has become the

yardstick by which nonverbal communication is looked at in whatever communication context.

Nonverbal communication can be used in different human interactions to either complement or substitute verbal communication. One such interaction is in the classroom. Classroom communication consists of the verbal and nonverbal transactions between teacher and learner and between or among learners (Cooper, 1984:3). Researchers indicate that 65% of the meaning we get from a given message is communicated nonverbally (Birdwhistell, 1970 cited in Cooper and Simonds, 2003). This shows just how important nonverbal communication is in any communication event. This research sets out to investigate how noise and use of time by classroom interactors communicate meaning. As Hall (1959:1) rightly puts it:

Time talks. It speaks more plainly than words. The message it conveys comes through loud and clear. Because it is manipulated less consciously, it is subject to less distortion than the spoken language. It can shout the truth where words lie.

These words by anthropologist Edward Hall, said so long ago, still hold true today. This research seeks to establish the fact that time doesn't just communicate meaning in a cultural context alone., it can also communicate meaning in other interaction contexts. The research also seeks to look at noise not just as a component of an interaction event but as a nonverbal cue that can communicate.

1.2 Statement of the Problem

From the literature I have so far looked at, noise has been treated as a component of a communication event besides other components such as the message itself, the channel, feedback and the interactants (Cooper, 1984:7). In Cooper and Simonds (2003), noise is mentioned as a form of environmental factor in a communication event. In wikipedia (15thJune, 2009) communication noise has been looked at in general human interaction. This research is limited to looking at noise in classroom interaction. Chronemics has also been listed as an environmental factor in a communication event in Knapp and Hall (1997:8). This study treats chronemics as a behavioral characteristic of the classroom teacher. The research therefore sets out to investigate the following:

- 1. Can the teacher's use of time reveal his or her attitude towards work?
- 2. Does noise in a classroom interaction communicate any interpersonal attitudes between the interactants?

1.3 Objectives of the Study

The study seeks to achieve the following objectives:

- 1. To determine if a teacher's use of time communicates the attitude they have toward their work.
- 2. To establish the interpersonal attitudes communicated by the different forms of noise in classroom interaction.

1.4 Hypotheses

The hypotheses tested in this study are:

- 1. A teacher's use of time communicates the attitude they have toward their work.
- 2. The different forms of noise manifested in classroom interaction reveal interpersonal attitudes between the interactants.

1.5 Rationale of the Study

This study seeks to establish if noise and chronemics can communicate messages in classroom interaction. From pre - research experiences, scholars tend to look at noise as a general component of a communication process. This study hopes to pin noise to classroom interaction and see what it communicates to interactants. In Knapp and Hall (1997:8) chronemics is treated as an aspect of the environment in a communication event. Other scholars like Hall (1959) have looked at chronemics as a sociological concept and not a linguistic concept. My contribution to the field of nonverbal communication in class will be to treat chronemics as a linguistic concept that communicates just like words do. The study also treats chronemics as a behavioral aspect of communication and not an environmental aspect.

1.6 Literature Review

A lot of literature has been written on nonverbal communication in the classroom. Cooper (1984) divided nonverbal communication in the class into various categories namely proxemics, environmental factors, chronemics, physical characteristics of communicators and paralanguage.

Cooper discusses each of the nonverbal cues listed above and shows how they affect classroom interaction.

According to Cooper, proxemics can be divided into two: territoriality and personal space. Territoriality refers to fixed space. She argues that participation in class is known to be greater for students in the front and centre rows. This trend is reported in the traditional classroom setting.

Cooper also looks at physical characteristics and artifacts and how they affect classroom interaction. She too discusses the various components that make up a communication event. She argues that every communication event has interactants, a message, a channel (s), feedback and noise. According to her, noise is a very important component of the communication process. She defines noise as any signal that disrupts the accuracy of messages being sent. The noise may be physical or psychological (Cooper, 1984:7). This literature is relevant to the study because as indicated, noise has only been looked at as a barrier in a communication event. It has not been looked at as a form of nonverbal cue in classroom interaction.

Neill and Caswell (1993:9-33) talk about body language for competent teachers. The authors discuss classroom layout and dress and how they communicate. They also discuss posture and use of space in the class. They argue that if a teacher approaches pupils more closely, they will be warmed. They also analyse the effects of classroom arrangement and argue that classroom arrangement can facilitate certain kinds of interaction. They too support Cooper's argument on seating arrangement and classroom participation. This information is relevant to the research because it reinforces what has already been said about classroom interaction.

Leathers (1997:11) defines nonverbal communication as "the use of interacting sets of visual, vocal and invisible communication systems and subsystems by communicators with the systematic encoding and decoding of nonverbal symbols and signs for the purpose (s) of exchanging consensual meanings in specific communicative contexts".

He categorizes nonverbal communication and goes a step further than Knapp and Hall (1997) and tries to explain the hemispheric processing of nonverbal information. He asserts that the right hemisphere of our brain is primarily concerned with nonverbal functions of communication. However, he argues that for effective communication to occur, interhemispheric co-operation is vitally important. This is according to studies by (Bowers, Bauer and Heelman, 1993). A communicator's left and right hemisphere must frequently communicate with each other through the connecting link of the corpus callosum.

Although this information may not be directly useful to the research at hand, it legitimizes the discussion on the interaction between verbal and nonverbal communication. This is to say, we can't completely divorce nonverbal communication from verbal communication. The two sometimes have to interact to convey the desired meaning.

Leathers (1997) also discusses the face as a major nonverbal cue. He says that people's quest for meaning in this world begins and ends with facial expressions.

He uses the categoric perspective to explain how the human face functions. This perspective maintains that at any given moment, the face transmits one dominant type of meaning. The meaning transmitted facially is believed to have a single referent that will stand out in the mind of the decoder. Although a given facial expression may combine two or more classes of meaning, the decoder will use a single categoric label to describe the dominant facial meaning that is displayed (Leathers, 1997:26-28). He classified

facial expressions into those of pain, pleasure, superiority, determination, surprise and bewilderment. This classification almost agrees with that of Ekman, et al (1982).

Cooper and Simonds (2003) give a detailed account of nonverbal communication in the classroom. They classify nonverbal communication into various categories: proxemics, spatial arrangements, environmental factors, physical characteristics, Kinesics, eye contact, facial expressions, touch and paralanguage.

The authors define proxemics as the study of how people use space which includes territoriality and personal space. Territoriality refers to fixed space while personal space refers to the bubble surrounding us that we carry wherever we go and that contracts or expands depending on the situation. They argue that when our personal space is invaded, we become very uncomfortable. The authors suggest that for classroom encounters, there should be enough distance between teachers and students for them to be comfortable.

The authors also look at spatial arrangement which they consider to be a form of territoriality. Most classrooms have the traditional row arrangement. Cooper and Simonds (2003) argue that arrangement can affect learner participation. They assert that in a traditional classroom setting, participation is greater for students in the front and center rows. Research shows that a student's preference for a particular seat is determined by personality characteristics. Studies carried out indicated that students who sat in seats of high participation in the traditional arrangement scored higher on measures of imagination than students who chose non-participation seats. This is according to

(Totusek, 1978, Totusek & Staton -Spicer, 1982) cited in Cooper and Simonds (2003). Students who are apprehensive about communicating will choose seats of low participation .Koneya (1976) in Cooper and Simonds (2003) found out that low verbalizers avoid seats that promote communication more often than high verbalizers.

Cooper and Simonds (2003) also discuss environmental factors that can affect classroom interaction. Environmental factors in the class include color, climate, temperature, lighting and noise. They discuss how each element of the environment can affect classroom communication. This literature is relevant to the study because noise has been mentioned as a component of the environment and there is no further discussion.

Cooper and Simonds (2003) also analyze characteristics of interactants which include physical attractiveness, body type and artifacts. Cooper argues that physical attractiveness can encourage classroom learning or completely inhibit it. She gives an example of her eighth grade English teacher whose appearance completely prohibited learning. However, research has shown that there is a positive relationship between attractiveness and achievement (Gibson, 1982, Richmond and McGroskey, Schlossen & Anglozzine, 1980) in Cooper and Simonds (2003). It has also been found by researchers that teachers react more favorably to students they perceive as attractive than those they perceive as un attractive. Research has also established that teachers who are formally dressed are perceived as more organized, more knowledgeable and better prepared.

Cooper and Simonds also look at Kinesics in the class. Ekman and Friesen (1969) in Cooper and Simonds (2003) classified Kinesic behaviour into five (5) categorizes.

- 1. Illustrators non verbal behaviour directly tied to speech
- 2. Affect displays facial expressions that communicate emotional states.
- 3. Adaptors behaviour developed to satisfy emotional or physical needs.
- 4. Regulators used to control and maintain verbal interaction.
- 5. Emblems nonverbal behaviour with direct verbal translations.

According to Wycoff (1973) cited in Cooper and Simonds (2003), teachers' kinesic behavior influences student achievement. Kinesic behaviour can also demonstrate that you like or dislike a student.

The authors also say that eye-contact in class enhances comprehension. It communicates interest and attention. It can also be used to monitor and regulate classroom interaction. According to Beebe (1980) in Cooper and Simonds (2003) eye-contact has an effect on student retention of information, attitude toward the teacher and classroom participation. However, Cooper and Simonds are quick to counter this argument and warn that constant eye-contact is discomforting to a student.

Cooper and Simonds (2003) suggest that facial expressions can be used to manage interactions, regulate communication, signal approval or disapproval and to reinforce.

The teacher can also get feedback from student facial expressions. A teacher who

displays positive facial affects will be perceived by students as approachable and immediate.

According to Cooper and Simonds (2003) touch can communicate emotional support, tenderness, encouragement etcetera. However, the authors argue that touch between student and teacher declines steadily from kindergarten. As students grow older, they equate touch with intimacy. The authors also discuss the effect of paralanguage on classroom learning. They say that our voice helps shape the image others have of us. It also communicates your feelings and creates the mood of the class. This literature is significant because it is an improvement on Cooper (1984).

Wikipedia (24th September, 2008) categorizes nonverbal communication into various forms; gestures, body language or posture, facial expressions and eye contact, object communication such as clothing, symbols and infographics, physical environment and paralanguage. This literature is significant in the sense that it introduces a new dimension to what we already know about the physical environment. They divide the physical environment into two: proxemics and chronemics. According to scholars in Wikipedia (24th Sept, 2008) proxemics is the study of how people use and perceive the physical space around them.

They observed that space between the sender and the receiver of a message influences the way the message is interpreted. According to Scott Mclean (1969) in Wikipedia (24th

September 2008) space in nonverbal communication may be divided into four main categories: social, personal, intimate and public space.

The other part of the environment is chronemics. Wikipedia (24th Sept, 2008) defines chronemics as the study of the use of time in nonverbal communication.

They argue that the way we perceive time, structure our time and react to time is a powerful communication tool that helps set the stage for communication. Time perceptions include punctuality and willingness to wait, the timing and frequency of our actions as well as the tempo and rhythm of communication within an interaction. Gudy Kunst & Ting – Toomey (1988) in Wikipedia (24th Sept, 2008) identified two dominant time patterns in human interaction.

- 1. The monochronic time schedule (M-time)
- 2. The polychronic time schedule (P-time)

In monochronic time schedule, time is seen as being very important and it is characterised by a linear pattern where the emphasis is on the use of time schedules and appointments. Time is viewed as something that can be controlled or wasted by individuals. In the polychronic time schedule, personal involvement is more important than schedules where the emphasis lies on personal relationships rather than keeping appointments on time. This literature is relevant to the study because it gives definitive knowledge on the topic of chronemics which is one of my areas of research. This knowledge will serve as the base for my arguments on chronemics.

Wikipedia scholars (15th June, 2009) define communication noise as influences that affect our interpretation of conversations. They argue that communication noise can have a profound impact both on our perception of interactions with others and our analysis of our own communication proficiency. The website (15th June 2009) identifies four forms of communication noise namely

- Psychological noise
- Physical noise
- Physiological noise
- Semantic noise.

It discusses what these noises are. This literature is an improvement on the classification of noise made by Cooper (1984). It is relevant to the study because it gives us the principles and foundations on which we shall discuss classroom noise.

From the literature I have covered so far, a lot has been written on various aspects of non verbal communication but very little knowledge exists on the aspects of noise and chronemics in classroom interaction. This research therefore hopes to reduce this knowledge gap.

1.7 Theoretical Framework

The analysis of the data obtained for this study was carried out solely within the relevance theory by (Sperber and Wilson 1995.2004). This is a theory of inferential pragmatics that tries to explain how communicators extract meaning from interactions. Sperber and Wilson (1995) founded this theory on the basis of Grice's theory of conversational implicature (Grice, 1975). The Oxford Dictionary (2005) cited in

(Mang'eni: unpublished Thesis: 2008) defines relevance as an activation of thought that is worthwhile thinking or talking about. Sperber and Wilson's theory of relevance sought to explain the communication between the speaker and the hearer and what happens in the mind of the speaker and hearer during this communication process. This framework tries to explain how the concepts of relevance applied to this study.

Relevance theory is based on three main concepts namely.

- 1. Cognition
- 2. Communication
- 3. Comprehension.

1.7.1 Relevance and Cognition

This concept operates on the principle that: human cognition in any interaction is geared towards maximal relevance (Sperber and Wilson, 2004) This is to say that human beings often pay attention to what is most relevant to them. In communication, we usually have what we call inputs/stimuli.

A stimulus is what is said, done or seen to spark off some thoughts. A stimulus is only relevant to an individual in a communication event if it connects with the background information available to the individual. Once an individual identifies an input as being relevant, they process it for meaning. They form contextual assumptions, eliminating those that are irrelevant and upholding those they think are relevant until they come to a conclusion.

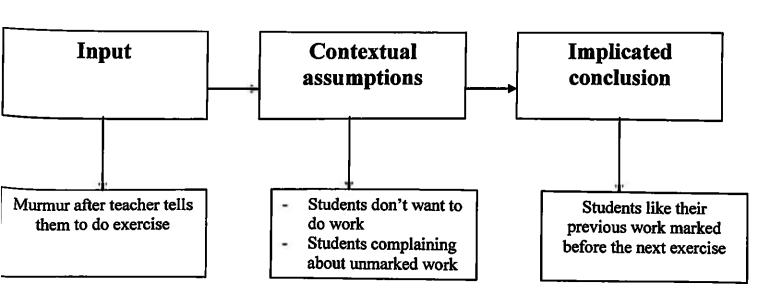
According to Sperber and Wilson (1995) the mind usually gets its assumptions from various sources such as our world knowledge, experience, context, intelligent guesses and informed hypotheses. The human mind has culture, norms, values and stereotypes of the society an individual lives in. These aspects of the mind form assumptions which are used to inform our understanding of things. The speaker's intention to inform the hearer of something is fulfilled when the intended assumptions are part of the hearer's cognitive environment.

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Sperber and Wilson (1995:1-2) argue that when a human mind is presented with a stimulus in a communication event, the memory retrieval mechanisms automatically activate potentially relevant assumptions. The inferential mechanisms then spontaneously process the assumptions in the most productive way. Simply put, every stimulus we encounter in communication triggers certain thoughts in our minds. We then process them and arrive at a conclusion. This is what is referred to as cognitive effects. There are three kinds of cognitive effects as indicated by Sperber and Wilson (2004).

- 1. Contextual implications where new information develops out of old assumptions
- 2. Strengthening of existing assumptions where information received confirms previously held assumptions.
- 3. Weakening or elimination of existing assumptions where information received contradicts previously held assumptions.

For example, in a classroom situation, a teacher may meet with the nonverbal cue of students murmuring in the course of the lesson. This action will activate the teacher's memory retrieval mechanisms. The teacher will try to remember what has transpired because the students never behave like that. Then the teacher will remember that she brought half of the exercise books unmarked from the previous exercise. Therefore, she concludes that the students who are murmuring could be those whose books are not marked. At this point, the teacher will be forced to explain why some exercise books are unmarked thereby justifying the need for the students to move on and do the next exercise. This means communication will have taken place. Diagrammatically put, this will look something like this.



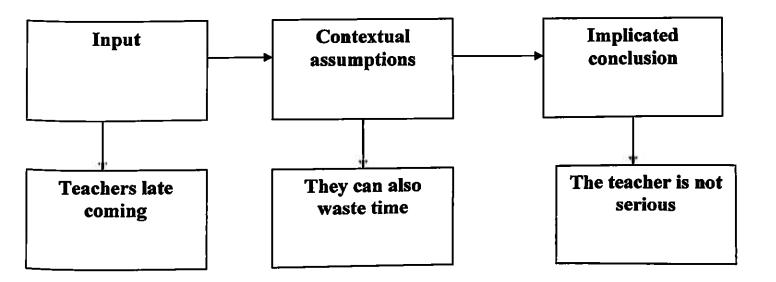
To confirm the assumptions, the teacher will ask the students why they are murmuring.

The answer they give will either form new contextual implications, will go to strengthen her old assumptions or will weaken the assumptions altogether.

Similarly, a teacher may form a habit of coming to class late every lesson. With time, learners will take her cue and leave class every time the bell rings for her lesson to start and come back later. The stimulus of late coming by the teacher has made the learners feel they can also waste a bit of time during her lesson.

This has led to the students concluding that the teacher is not serious.

In a diagram, the communication will look something like this.



1.7.2 Relevance and Communication.

This concept is engrained on the principle that: every ostensive stimulus conveys a presumption of its own optimal relevance (Sperber and Wilson, 2004; 612). Schroeder (2002/2008) in unpublished seminar notes on relevance theory argues that acts of communication and what we perceive from them will give us relevance.

For example, a teacher in class will perceive students' murmuring as communicative if the teacher considers it to be relevant. Otherwise if the teacher is used to such murmuring everyday then it is not a relevant stimulus to draw the teacher's attention. But if it is not an everyday occurrence, then it becomes relevant to the teacher because she immediately reads discontent in the murmurs. A follow – up by the teacher reveals that the learners are not happy with their unmarked work. The notion of ostensive – inferential communication is achieved by two intentions of communication.

- i. The informative intention the intention to inform an audience of something
- ii. The communicative intention -intention to inform the audience of one's informative intention. Understanding is usually achieved when the communicative intention is fulfilled that is when the audience recognizes the informative intention. In the example above, the students' informative intention is noticed in their murmuring. Their communicative intention is fulfilled when the teacher pays attention and explains why she didn't mark the books

According to Sperber and Wilson (2004:13) Optimal relevance in communication is possible when the following happens.

- 1. The hearer follows a path of least effort in computing cognitive effects
- The hearer stops processing when a conclusion which satisfies his or her
 expectations of relevance is reached that is the hearer comprehends the
 message. This leads us to the concept of comprehension.

1.7.3 Relevance and Comprehension

Comprehension means understanding or conception of an idea. Sperber and Wilson (2004) give an outline of the procedure to be followed in decoding meaning from a stimulus. They call this The Relevance – Theoretic Comprehension Procedure. In comprehension, the hearer should follow a path of least effort. The hearer should stop when expectations of relevance are met. To achieve this, the hearer has to break the overall task of comprehension into sub – tasks namely,

- a. Constructing an appropriate hypothesis about the stimulus.
- b. Forming an implicated premise- construction of an appropriate hypothesis about the intended contextual assumption.
- c. Forming an implicated conclusion construction of an appropriate hypothesis about the intended contextual implications. The contextual implications may be intended or unintended. The intended implication is deliberately implied by the communication while the unintended is drawn by the addressee on their own accord.

Relevance theory also has its claim on truth. This claim states that truth is only guaranteed when there is consistency of argumentation. This means that for a communicator to establish the truth of what they have comprehended from a communication event, there must be continuous follow-up questions to verify the facts or assumptions made. This can be exemplified through interrogation to establish if the assumptions and conclusions drawn in relation to a stimulus are true. Truth is therefore subject to relevance. In the case of students murmuring in class, the teacher can only

guarantee that what they are telling her is right by checking their books to confirm that indeed the ones she heard murmuring have their work unmarked. Anything contrary to this means there is some untruth and therefore communication has not taken place.

The concepts of relevance discussed above were adequate enough to analyse the nonverbal cues of noise and chronemics in class.

1.8 Scope and Limitations

This study looks at noise and chronemics as aspects of nonverbal communication in the The research treats noise as an aspect of the environment that can affect class. communication. It treats chronemics as a behavioral aspect of an interactant that can communicate meaning in class. The project investigates fourty (40) form four students of Jamhuri High School - Nairobi. The study picked on this school because it is near the researchers place of study (U.o.N) and can be accessed any time verification of facts is needed. The research used form four students because they have already done their three years in high school and can accurately judge their teachers. The selection of the class was also based on the understanding that most students in this class are at the prime of their adolescence and therefore very obstinate and judgmental about their teachers. Most of them are going through a tumultuous time with their emotions which is likely to affect their concentration in class. These are some of the psychological noises the research seeks to establish. Furthermore, students at form four level should be able to assess their teachers in terms of syllabus coverage and time usage in relation to performance in the various subjects. However, the biggest limitation of the research

was the unavailability of adequate funds. This limited the number of respondents included in the study.

1.9 Research Methodology

This section describes our approach to data collection, the instruments used and the procedure that was followed in carrying out the research.

1.9.1 Primary Data Collection Procedure

The study treated the whole group of students in the chosen school as the target population. There was a pilot study to see if the questions set were suitable for the variables under study. The prepared questionnaire schedule was administered to form four students.

1.9.2 Secondary Data Collection

- 1. The research used library books and internet search to reach available data on noise and chronemics.
- 2. The study also used introspection method. A number of examples were drawn by the researcher to suitably demonstrate the concepts under focus.

1.9.3 Data Analysis

The study used the relevance theory to analyse all the data collected. The findings were expected to reinforce the hypotheses, eliminate them or make us form new ideas about noise and chronemics in classroom communication.

CHAPTER TWO: NOISE AS A NONVERBAL CUE IN CLASSROOM INTERACTION

2.0 Introduction

This chapter looks at the concept of noise as a nonverbal cue that can communicate messages in class. It also defines the concept of noise and the messages it conveys. The

relevance theory of communication has been used to discuss the concept.

2.1 Noise

Claude Shannon in Emory (2000:36-37) defines noise as any interference of the message

from source to destination. This concept is based on the mathematical theory of signal

transmission. In this theory, Shannon sees the speaker as the information source. The

speaker speaks a message into the telephone mouthpiece. This information is then

transmitted through the wire and the message is received by the receiver on the other

side. Between the speaker and the receiver, there could be some interference so that the

message is not received the way the source intended it to. This interference is what

Shannon calls noise. Shannon asserts that noise is the enemy of information because it

cuts into the information carrying capacity.

A classroom interaction is predominantly an informative interaction between teacher and

learner or between learner and learner. In the process of classroom interaction, there may

be certain noises in the classroom environment that interfere with the communication

process. In the nonverbal system of communication, Cooper divides the noises into

physical and psychological (Cooper, 1984:7). Wikipedia (15th June, 2009) updates this

categorization and divides communication noise into four forms namely;

22

- Psychological noise
- Physical noise
- Physiological noise
- Semantic noise

All the four forms of noise can be found in classroom interaction. However, for purposes of nonverbal communication, we have not discussed semantic noise .Now let's look at how each of the three forms of noise listed above manifests itself in classroom interaction.

2.2Psychological Noises

According to Wikipedia (15th June, 2009), psychological noise results from preconceived notions that interactants bring to conversations such as racial stereotypes, reputations, biases and assumptions. The Wikipedia source observes that when we get into a conversation with a certain mindset, we can easily become blinded to the speaker's original message. In classroom interaction, psychological noises include interactants personal problems and attitudes.

For example, learners who have a stereotype that a particular teacher can't deliver will simply not pay attention to what such a teacher says. If they ever do, they will always follow up to confirm what they have heard with another teacher, the one they think is more competent. The stereotyping which informs the learners' minds has taught them that such a teacher is incapable of making them pass their exams. This thinking can be explained in terms of the principle of relevance in communication. This principle states

that the human mind only pays attention to that which it considers to be relevant. Therefore, such an incompetent teacher cannot be a carrier of relevant information hence the need to ignore them. This information may be reinforced by the poor results such a teacher posts in their subjects in national examinations.

Similarly, if a teacher is unable to answer simple questions related to the topic they are teaching, there will be some kind of psychological noise in the learners' minds. The learners will interpret the teacher's inability to answer their questions as a sign of incompetence. They know that people who don't answer questions either don't know the answers or they are simply being rude. Here, they rule out rudeness because they remember this teacher has behaved like this several times in the past. In relevance theory all this adds up to mean she doesn't know her content well. The implication of all this is that the teacher is incompetent and therefore not worth paying attention to. Such learners will be seen lying on their desks, others looking for excuses to leave class and many more just listening and writing nothing.

Wikipedia (15th June, 2009) observes that, psychological noise is not easy to free oneself of. However, for classroom interaction to be productive, interactants need to tone down on their stereotypes and biases.

2.3 Physical Noise

According to Rothwell (2004) cited in Wikipedia (15th June, 2009), physical noise refers to any external or environmental stimulus that distracts us from receiving the intended message by the communicator. He says that physical noise includes others talking in the

background, background music, a startling noise and acknowledging someone outside of the conversation. In classroom interaction, physical noises include students conversing among themselves, students banging desks, students walking in and out of class during a lesson etcetera. Some of the physical noise in class may be intended or unintended. For example, a student who wants to pick a book from the desk and ends up banging the desk may not have intended to do so. Therefore, sometimes, for physical noise to carry an informative intention, it has to be persistent and frequent enough to warrant the teacher's attention. Let us take the example of a student who comes to class late one day. Such a student has no intention of communicating any message to the teacher. He was simply late for class and that is it.

However, if this same student keeps coming to class late, let us say for four consecutive lessons, the frequency of his late coming has an informative intention. The student could be communicating his negative attitude towards the teacher or subject or the student could be having problems and is causing noise to the whole class to draw their attention.

The teacher will begin by drawing on the background knowledge about the student. This will help the teacher to form relevant assumptions to help explain the boy's behaviour. For example the teacher might remember that the boy is a top performer in class and in fact leads in the subject. Therefore, the boy cannot possibly be having an attitude about the subject. It has to be something else. The teacher will then form other assumptions like the student having personal problems. To achieve the communicative intention, the teacher will have to speak with the student in private. The teacher might then learn that

the student has problems with the prefects and that is why he is so unsettled. At this point, the communicative intention of the nonverbal cue will have been achieved.

Similarly, if a teacher hears students talking among themselves during a lesson, it may not necessarily be noise. The students could be consulting which is actually part of classroom interaction. However, if the same students keep conversing during the lesson, three to four consecutive times, this nonverbal cue becomes informative, what we would call an ostensive stimulus. The teacher will engage the memory retrieval mechanisms in an attempt to understand the stimulus. These are very serious, hardworking learners. Then why the lack of seriousness? The teacher has given the class three previous exercises in English which have been returned unmarked. Now she is asking them to go to the next exercise. The students' assumption here is that the teacher is not serious with her work. When the teacher asks the learners why they are making noise in class, one of them frankly explains that they don't see why they should do another exercise when the previous ones have not been marked yet. At this point, communication will have taken place. The teacher will know that the learners like to have their previous work marked and revised before they move to the next task.

2.3.1 Physiological Noise

According to Wikipedia (15th June, 2009), physiological noise refers to bodily factors which influence communication. This includes the way feelings and movements affect both the sender and the receiver of a message. The Wikipedia source (15th June 2009) observes that the noises affect the way the sender is able to effectively communicate as well as the way the receiver is able to effectively decode the message. For example, a

receiver may interpret a speaker's nervousness to mean being dishonest without there being any verbal clue to indicate that the speaker is actually lying.

In classroom interaction, physiological noise mainly emanates from the teacher (although sometimes learners may generate it) who is actually the centre of focus. The way a teacher delivers the lesson in terms of gestures can determine whether the learners believe their message or not. For example, a teacher who is teaching very well but seems to be sweating profusely in very cold weather could be sending the message to the learners that they are nervous; they are not sure of themselves or that they are scared of the learners. This becomes a noise because learners will not concentrate on the lesson message. They will pay more attention to what the teacher's body language seems to be telling them.

The teacher's grooming or lack of it which is part of their physiology can also be a form of noise. Cooper observes that a teacher's appearance can promote learning or completely prohibit it (Cooper and Simonds, 2003). Cooper gives a testimony about their eighth grade English teacher. She says that the teacher was very attractive and quite well – endowed physically. She also wore very tight skirts and sweaters. From the very beginning of the year, they learned little because they could not get beyond her appearance.

Chaos reigned in that classroom all year. She admits that they were a rowdy uncooperative, defiant group of students. In her opinion, the teacher had simply lost

control of the classroom. As she looks back, although, she is sure the teacher was quite knowledgeable in her subject area, she is not sure what exactly they thought of her. She does remember, however, that because of her manner, her dress and her general appearance, the teacher communicated something to them that made them feel they could get away with murder and they did (Cooper and Simonds 2003)

Cooper's testimony strongly suggests that students rate their teachers according to the way they present themselves in terms of appearance. The way students rate a teacher affects the way they receive that teacher's message. For example, the dressing of the teacher in Cooper's testimony was a form of noise. Cooper confesses that they could not go beyond her body. By this dressing, the teacher communicated to the learners that she was a go-easy — happy person they could play with. And play they did. It didn't matter what stuff she had in her head.

To the students, she wasn't just serious and they therefore didn't take her seriously. In the relevance theory of communication, the learners conclusion about their teacher was unintended but it was a conclusion all the same that affected the classroom interaction.

The teacher's exaggerated grooming was an ostensive stimulus for learners to process meaning from .The learners interpreted it to mean the teacher wanted them to see how beautiful she was. Their imagination told them she was trying to draw their attention and attention they did give her instead of the subject content. Some in disciplined male students can take this cue a level higher and even make passes at such a teacher.

According to Michael Argyle cited in Hinde (ed) (1972:248), appearance is only meaningful within a particular social setting, where the details of dress, hair or cosmetics are generally appreciated.

The three forms of noise discussed above can be very distractive in classroom interaction if the classroom interactants do not pay attention to them. Some of the noises send messages and classroom interactants should learn to decode such messages.

CHAPTER THREE: CHRONEMICS AS A NONVERBAL CUE IN CLASSROOM INTERACTION

3.0 Introduction

The chapter discusses the other nonverbal cue that is chronemics. It defines the term chronemics and analyses how the usage of different time patterns by teachers communicates messages to learners. The discussion makes use of relevance theory.

3.1Chronemics

Wikipedia (24th Sept, 2008) updated in (June, 2009) defines chronemics as the study of the use of time in nonverbal communication. This source says that the way we perceive time, structure our time and react to time is a powerful communication tool which helps to set the stage for communication. Time perceptions include punctuality and willingness to wait, the timing and frequency of our actions as well as the tempo and rhythm of communications within an interaction. According to Gudy Kunst & Ting - Toomey (1988) cited in Wikipedia (24th Sept, 2008), there are two dominant time patterns in human interaction.

- 1. The monochronic time schedule (M-Time)
- 2. The polychronic time schedule (P-Time)

3.1.1 Monochronic Time Schedule (M-Time)

As earlier mentioned, the monochronic time schedule sees time as being very important and it is characterised by a linear pattern where the emphasis is on the use of time schedules and appointments (24th Wikipedia 2008). Time is seen as something that can be controlled or wasted by individuals.

This pattern of time usage by teachers is evident in classroom interaction and often carries a message for the learners. Teachers who adhere to the monochronic time schedule never miss class unless they are away from school. They are usually punctual for their lessons and do their duties within the ministry's specified time. This monochronic time scheduling by a teacher communicates something to the learners.

Using the relevance theory, we can conclude that such a teacher is committed to her /his work. In line with the principle of relevance; learners will assess how the teacher's commitment has helped them in the subject. They will look at things like performance of the subject in national exams. If the performance is good, the learners will conclude that the teacher's presence in class is relevant. In their opinion, such a teacher cares for them and is preparing them for a bright future.

This feeling sets the stage for classroom interaction. Learners will be very receptive to such lessons and they will like the teacher. They will do everything within their power to reciprocate the teacher's concerned nature. This often manifests itself in good results.

However, if a teacher's mononchronic scheduling does not yield good results, it will communicate a message of incompetence to the learners. They will begin feeling the teacher's constant presence in their class is a waste of time. This means, in classroom

interaction, monochromic time scheduling does not in itself communicate competence. Such timing must be backed with good outcomes that tell the learners their time was not wasted. It was used well.

3.1.2 Polychronic Time Schedule (P-time)

In this schedule, personal involvement is more important than keeping appointments. The emphasis lies on personal relationships rather than keeping appointments Wikipedia, (24th Sept 2008).

In classroom interaction, we have teachers who follow the polychronic schedule. They are not regular in class; they are not punctual for lessons and sometimes while away lesson time in class. On the surface, such teachers may send the message of being lazy and incompetent. However, students form an attitude about such teachers basing on the performance of their subject in national exams. What is relevant is that the teachers should make learners excel and get into competitive careers. The amount of time a teacher uses to make them realize this goal is irrelevant. If a teacher's polychronic time scheduling posts good results in their subjects, then it means those teachers know how to teach (they are competent).

This means such a teacher is as good as any other. If the teacher posts poor results, it means he/she is not working, is not committed. This will help set the stage for subsequent classroom interactions. The teacher who performs is taken seriously by students. The one who does not is dismissed as incompetent.

Essentially, classroom interaction thrives on two concepts I would call <u>reciprocation</u> and <u>investment</u>.

The Harrap's English Mini Dictionary (1993) defines <u>reciprocation</u> as the act of doing the same thing in return. If a teacher is committed to students, the students will return the same act of commitment by dedicating a lot of time to the subject which will in turn be reflected in their good results. Similarly, a teacher who is uncommitted to his or her work will most likely reap uncommitment from the learners reflected in their poor grades. This means, the way teachers use time in class either communicates their commitment or lack of it which is reciprocated by the learners.

The concept of <u>investment</u> is purely economic. Wikipedia (24th Sept, 2008) sees time as something that can be utilized or wasted. A classroom interaction is like an investment in learners with expected outcomes. The input in this investment is time. The outcome is the performance of students in the various subjects. Time can be invested in terms of quantity or quality. If the quantity time input produces desired results, it will communicate a positive message to the learners. However, if the quantity time input does not yield the desired results, it will communicate some degree of incompetence on the part of the teacher.

The same principle applies to quality time input. A teacher may invest very little time in class, but the short while they are there; they deliver quality interaction that leaves the learners motivated and wanting some more. In classroom interaction, quality time investment should be preferred over quantity time investment. This then means that,

school administrators should not always look for quantity time input by teachers. Instead, they should look out for quality time input which reflects itself in the good performance of learners in the various subjects.

In summary, a teacher who uses time well and makes students do well in their subjects communicates a message of competence and being in control of everything. Those who are irregular but still perform well tell the learners that they know what they are doing. Learners love such teachers and have a lot of confidence in them. However, teachers who don't deliver are not liked by students whether they are regular or irregular in class.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter looks at the data collected from the field, analyses it and discusses the research findings. A set of forty (40) questionnaires was administered to form four boys of Jamhuri Boys High school out of which thirty seven were filled in and returned. This represents a 92.5% response rate which I consider satisfactory for the research.

Out of the number of questionnaires returned, several were incomplete and others were inaccurately filled-in in some sections. This obviously affected the numerical values that were used to compute the different variables under study. The data collected has been used to analyse (1) the three main variables of noise under study: physical noise, psychological noise and physiological noise. The analysis revealed some of the messages the various kinds of noise communicate in class. (2) The other variable under study: the use of time and what it communicates to learners. The data was summarized and presented in the form of tables and charts. The whole analysis was done within the framework of relevance theory.

4.1 Forms of Noise in Classroom Interaction

4.1.1 Physical Noise

Students were asked if they sometimes experienced noise in class and 100% said they did. The learners were then asked which kind of physical noise they experienced most in classroom interaction. 83.7% of the responses indicated that murmuring in class was the commonest kind of physical noise. This was followed by learners pushing desks at 8.1%. students walking in and out of class stood at 5.4% while banging desks was the least

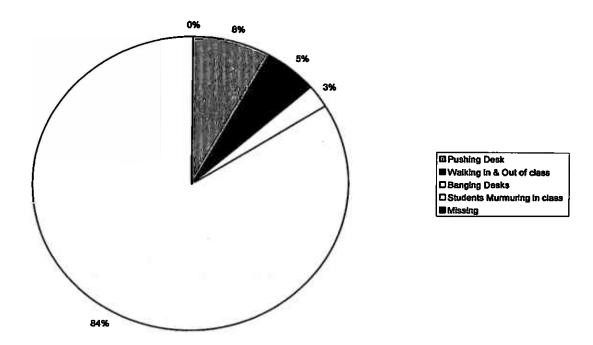
kind of physical noise with a mere 2.7%. Some students did not categorize banging of desks as a form of physical noise in class. It is possible that this was so because such a noise is not just acceptable in the classroom environment. The ranking can be statistically represented as shown below.

Table 1 Frequency table

Physical Noise in Classroom Interaction

	Kind of noise	Frequency	Percentage
1	Students murmuring in class	31	83.7%
2	Students pushing desks	3	8.1%
3	Students banging desks	1	2.7%
4	Students walking in and out of class	2	5.4%
		37	99.9%
_			Missing% 0.1%

Fig 1 (b) Pie Chart to Show Percentage



The trend of noise represented in the pie chart can be explained within the framework of relevance theory. Learners mostly use murmurs as a respectful way of hinting at their informative intention to the teacher – that is the intention to communicate something to the teacher. In a classroom, the teacher is boss and is always expected to receive respect from students at all times. Therefore, a learner who chooses to bang a desk or walk out of class during a lesson risks the wrath of the teacher. Through murmuring, the learners hope to draw the teacher's attention to their informative intention. Once the teacher pays attention, the learners will be able to communicate their message.

The murmurs become communicative and therefore a stimulus in the classroom interaction if the teacher considers them to be relevant. For example, in the classroom context, the murmurs only become relevant if the teacher has not asked the learners to discuss. Thus, any noise from the students will be seen as violating the classroom norms. This violation becomes a stimulus for the teacher to process for meaning. To arrive at any assumptions, the teacher will consider background information about the students. If the information retrieved reveals that the learners have formed a habit of murmuring during the lesson, then the murmurs become communicative. The teacher will form assumptions about the murmuring basing her judgement on the background knowledge they have retrieved about the stimulus.

To confirm their assumptions, the teacher can go ahead and interrogate the concerned students. If what the students tell the teacher confirms what the teacher thinks, then the revelations go to strengthen the teacher's convictions about the learners. If, however, it does not confirm what the teacher thinks, the information received weakens or eliminates the previous assumptions. Sometimes, the information gained might lead to new assumptions which may create new knowledge to add to the existing one. At this point then, students' murmuring, which is a nonverbal cue, will have succeeded in communicating the desired messages. This leads us to the messages physical noises communicate in class.

4.1.1.1 Messages Communicated by Physical Noise in Class

Learners were asked to say what they thought was communicated by the noise they had ticked as most common. 32 out of the 37 students understood the question and answered it correctly.

35.1% of the respondents said murmuring indicated that students had a problem which they would like to draw the teacher's attention to. Others said it was an indicator of boredom. Those who identified pushing of desks said it was a sign of disrespect for the teacher. The participants who identified students banging of desks said it showed disrespect for the teacher. Learners walking in and out of class showed two things: that the teacher was not in control and that the learners did not respect the teacher.

These findings show that learners often use physical noise to communicate their negative emotions or displeasure especially toward the teacher. This form of noise is used to communicate these emotions because the learners know that in a classroom context, they will be punished if they verbalise their negative sentiments. Therefore, they use the nonverbal stimulus of noise to get the teacher to notice their displeasure. This creates an opportunity for communication without any student getting victimized.

Any teacher hearing the murmurs will first and foremost conclude that the students are unhappy about something even before they get to know what it is. The teacher will also probably read boredom if they have not given the learners any work. If the noise persists for long, our notion of relevance will inform us that there is some level of disrespect for the teacher. Otherwise, learners wouldn't be making noise when the teacher is in class. This in essence means such a teacher is not in control.

The study therefore, demonstrates that indeed physical noise communicates several messages in classroom interaction. Teachers who experience such noise during their lessons should pay attention because the noise may be carrying very important messages which the teacher needs to know in order to make the interaction more productive.

4.1.2 Psychological Noise

Learners were asked if they sometimes lost concentration in class. 100% said, yes, they did. They were then asked to explain why they did so. Out of the students who responded to this question, 45.9% said they sometimes lost concentration in class because they were not following the lesson. 37.8% said they did so when they had personal problems. 16.2% said they lost concentration when they did not like a teacher. This can be summarized as shown below.

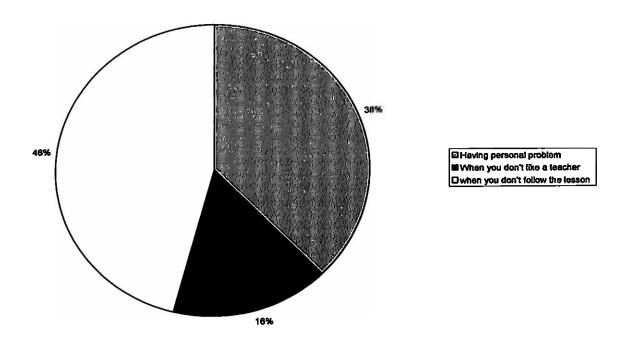
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Table 2: Frequency Table

Reasons for Learners Losing Concentration in Class

	Reason	Frequency	Percentage
1	When you don't like a teacher	6	16.2%
2	When you are not following a	17	45.9%
	lesson		
3	When you have personal problems	14	37.8%
		37	99.9%
		<u> </u>	Missing 0.1%
			Missing

Fig 2.



The findings above reveal that psychological noise is mostly generated by the teacher especially if they are not able to make learners understand what they are teaching. The findings can be supported by the notion of relevance which states that people only pay attention to what is relevant to them.

A classroom interaction is most times an informative interaction which aims at passing knowledge to the learners to help them change their world perspective or make them pass exams. A teacher who does not meet this goal does not have any relevant information worth listening to. The learners will find the interaction irrelevant if it can not add to

their knowledge value, hence the need to ignore it. The situation can only get worse if it is reinforced by any other factor like a student having personal problems.

Lack of concentration can manifest itself in learners' absent - mindedness, failure to answer questions, students looking out of the window and sometimes not writing anything. When a teacher notices such a student, they should know that the student has something disturbing them which could actually become a noise in the interaction process. Teachers should not just ignore such cases. They should try to penetrate their 'minds' and get to know what is disturbing them so as to bring them 'back to class'

4.1.3 Physiological Noise

Learners were asked to tick one kind of grooming that sometimes distracted them in class. The majority, at 70.9% said, teachers wearing very tight clothing is the major cause of distraction in class.

Teachers wearing worn-out clothing and teachers wearing unironed clothing were identified as the least distractive forms of dressing. In terms of relevance theory, learners see teachers wearing very tight clothing as distractive because they think classroom context is not a suitable context for such dressing.

As Argyle, cited in Hinde (ed.) (1972-248) puts it, appearance is only meaningful within a particular social setting where the details of dress, hair or cosmetics is generally appreciated. In the case of classroom interaction, a teacher wearing very tight clothing

or wearing too much make - up will be doing so for the wrong audience and therefore eliciting wrong emotions in the learners.

As earlier noted in the literature review, Cooper and Simonds (2003) argue that a teacher's appearance can promote learning or completely prohibit it. A teacher who overdoes their grooming, will unconsciously draw the learners' attention away from the lesson to their appearance.

This in itself is a kind of noise as it blocks the learners' minds from getting the message of the lesson.

The findings also reveal that teachers who dress moderately do not distract learners in any way. The learners seem to understand their situation and take them for who they are.

4.1.3.1 Messages Communicated by Teachers' Dressing Modes

Learners were asked to explain in their own words what messages they drew from each kind of dressing mode mentioned. The following were some of the responses:

4.1.3.1.1 Teachers Wearing Tight Clothing

Most students who responded to this question said that such teachers were usually after drawing the learners' attention. A few said such teachers aroused wrong emotions especially if they were teaching students of the opposite sex.

4.1.3.1.2 Teachers Wearing too much Make-up

Some learners felt such teachers were not beautiful and that is why they try to beautify themselves. Others felt such teachers were show - offs.

Obviously, these are negative messages that can easily affect the way a teacher's lesson is taken.

4.1.3.1.3 Teachers Wearing Worn-out Clothing/Teachers Wearing Unironed Clothing

The students felt that such teachers lacked financial capability and they didn't harbour any ill-feelings towards them. This attitude by learners can be explained in terms of relevance theory. Since the teachers' dressing is not exaggerated, it offers no stimulus for learners to begin looking for meaning. Moreover, the teacher's dressing is not relevant to them in class. What is relevant is what comes out of the teacher to benefit the lesson.

The findings therefore show that learners are distracted more by over grooming than they are by the lack of it.

4.2 Use of Chronemics to Communicate in Class

This section of the questionnaire was the most poorly answered. Most students left Q3 unanswered. Those who attempted it did not complete all the parts. Only 19 students out of the 37 responded fully and accurately to the questions. Therefore, statistics for this section will vary greatly between Q (1) and Q (2) and Q (3).

4.2.1 Regular/ Irregular Class Attendance by Teachers

The first question asked the learners to tick the kind of teacher they preferred. 83.8% of the students said they preferred a teacher who was regular and performed as well. 8.1 % said they preferred a teacher who was irregular but still performed while 5.4% said they preferred a teacher who was just regular in class. This can be shown on the frequency table as follows.

Table 3: How Teachers Use Time in Class

Time usage	Frequency	Percentage
Regular teachers	2	5.4%
Regular & Performing teachers	31	83.8%
Irregular & performing teachers	3	8.1%
	36	97.3%
		Missing 2.7%
-	Regular teachers Regular & Performing teachers	Regular teachers 2 Regular & Performing teachers 31 Irregular & performing teachers 3

From these findings, it is clear that time usage in classroom interaction is pegged to performance. Students prefer teachers who are not just regular but who perform as well. This is of course the ideal situation.

In the event that the situation is not ideal, students would prefer a teacher who is irregular but still performs to one who is just regular but has nothing to show for the time spent with students.

This kind of thinking by students can be explained using the principle of relevance in the relevance theory of communication. What is most relevant to learners is that the time they spent in class translates into good grades in national exams. It does not matter whether teachers use the whole time of the lesson or whether they miss lessons or not. What is important is that such teachers make them pass at the end of the day. If teachers can use their time well and make students pass, that is ideal. If they can misuse their time and still make the students pass, the better. However, a teacher who is just regular and does not add to their value is worse than one who is irregular but gives them good grades.

4.2.2 Teachers Time Management in Class

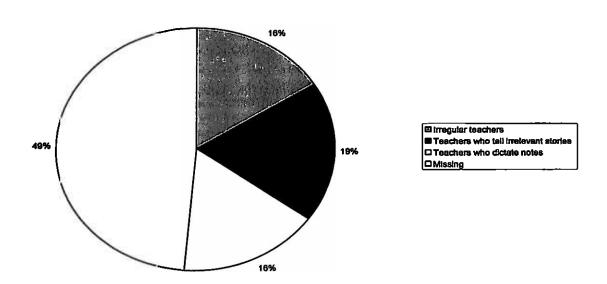
The second question asked learners to identify and rank teachers according to time usage. 18.9% of those who participated said, teachers who tell irrelevant stories in class are the biggest time wasters. Teachers who are irregular and those who dictate notes were ranked the same at 16.2% each. This is as shown below.

Table 4: The Biggest Time Wasters

<u> </u>	Kind of teacher	Frequency	Percentage
1	Irregular teachers	6	16.2%
2	Teachers who tell irrelevant stories	7	18.9%
3	Teachers who dictate notes	6	16.2%
		19/37	51.3%
		<u> </u>	48.7 %
		<u></u>	

Fig 3: Pie Chart to Show Percentages





The statistics above show that to learners, a teacher who dictates notes is as good as one who has not come to class but is definitely better than one who comes and tells irrelevant stories. In relevance theory, people only pay attention to what they think is relevant to them. If they consider what the teacher is saying to be irrelevant, then that is time wasted. Similarly, if they think the exercise of dictating notes does not add to their knowledge, to them the lesson time has been wasted.

4.2.3 Messages Communicated by Teachers' Use of Time

Learners were asked to say what they felt about each kind of teacher listed in the above question.

4.2.3.1 Irregular Teachers

Majority of learners said that such teachers were not committed to their work. A few respondents said the teachers could be having personal problems.

Others felt such teachers did not just care about the students.

4.2.3.2 Teachers Who Tell Irrelevant Stories

Most students who responded to this question said such teachers were usually not prepared for the lesson.

4.2.3.3 Teachers Who Dictate Notes

Some learners who responded to this question felt such teachers were not usually prepared for the lesson. A few others felt, they did not know the subject content and to avoid explaining anything, they resorted to dictating notes.

The research findings reveal that time usage on its own cannot communicate in classroom interaction. Time only assumes meaning when it is tied to performance.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This study set out to establish if noise and chronemics can communicate any messages in classroom interaction. If they do, the study also sought to establish what kind of messages are communicated by such nonverbal cues. A questionnaire schedule was successfully used to determine the specific messages communicated by the nonverbal cues. The relevance theory of communication was used to explain the various kinds of noise in class and the patterned use of time by teachers in class. The study was successful in establishing the fact that noise and chronemics communicate messages in class depending on the context of the interactions.

5.1 Summary of the Research Findings

Chapter two of this study dwelt on the nonverbal parameter under research: noise. The parameter was looked at as an aspect of nonverbal communication that can communicate a variety of messages in class. The study defined noise and subdivided it into three kinds: physical noise, psychological noise, and physiological noise.

Each kind of noise was defined and explained in terms of relevance theory. Examples of each noise relating to classroom interaction were given and the messages they communicated discussed.

Chapter three looked at the other nonverbal parameter under study: chronemics. The parameter was defined in terms of communication. The study identified the two

prominent time patterns in human interactions, that is the monochronic time patterning and the polychronic time patterning. Each time schedule was discussed in detail. This information was transferred to classroom interaction. Using the relevance theory, the study explained how the different time patterns can communicate messages in classroom interaction when they are adopted by the teacher.

Chapter four dealt with the real research findings. A questionnaire was administered to the target group, a form four class at Jamhuri Boys High School, Nairobi. The variables on the questionnaire included the kinds of noise in class and the messages they communicated. It also had a section on chronemics which hoped to establish if frequency of class attendance by a teacher and time management in class communicated anything in classroom interaction.

The data collected was used to analyse the variables under study and the analyzed data was computed and numerical figures representing certain findings tabulated.

The findings of the research confirmed that physical, psychological and physiological noises do exist in classroom interaction. These noises communicate several messages.

All the messages put together communicate the interpersonal attitudes that exist between classroom interactants.

The findings on chronemics also confirmed that time can communicate certain messages in class. However, the research emphatically shows that in classroom interaction,

unlike other interactions, time only communicates when it is pegged on performance. It shows that it does not matter how regular or irregular a teacher is in class. What matters is whether the teacher is able to perform or not. The students consider their time well used if it yields good results. However, a teacher who spends so much time in class yet does not perform is as good as one who does not come at all.

The findings of the research therefore show that indeed noise and chronemics can communicate in class. This means, teachers who are classroom controllers, should pay attention to the noises they hear in class and also pay attention to the way they use their time.

5.2 Conclusion

We can draw the following conclusions from the research findings:

- 1. That there are different kinds of noise in class.
- 2. That murmuring is the most prominent kind of physical noise in class.
- 3. That a teacher who does not deliver subject content is the main source of psychological noise in classroom interaction.
- 4. That learners mind teachers who over groom themselves more than they do those who do not.
- 5. That noise in totality communicates interpersonal attitudes among classroom interactants.
- 6. That chronemics in class communicates meaning only when it is tied to performance

- 7. That learners prefer teachers who perform whether they are regular or irregular in class.
- 8. That relevance theory adequately explains the messages classroom interactants get from such nonverbal cues as noise and chronemics.

5.3. Recommendations

From the findings of the research, the following may be recommended:

- 1. That teachers should pay attention to the various noises they hear in class especially murmuring among students. This is because such noise is communicative.
- 2. That teachers should dress decently enough to earn learners' respect but not so provocatively as to inhibit learning.
- 3. That teachers should use their time well to meet education goals and not just to occupy the learners.

Further research should be carried out to establish the following:

- 1. The effect of noise on classroom interaction.
- 2. Does student use of time communicate anything in classroom interaction?

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QUESTIONNAIRE

I am a Master of Arts student at the University of Nairobi, Department of Linguistics and African Languages, undertaking a study on the use of NOISE AND CHRONEMICS as aspects of nonverbal communication in the class. I kindly need your assistance to help fill in this questionnaire as instructed below. Be as honest as possible (your responses will be treated with utmost confidence)

PART A: GENERAL IN	FORAMTION OF I	NFORMANT
Name	(optional)	
Form		
Stream		
Sex	M	I/F (Tick as appropriate)
PART B: USE OF NOISI	E TO COMMUNICA	ATE IN CLASS
1. Do you sometimes experiment A. Yes B. No	erience noise during l	esson time?
2. If yes, which of the foll	uring during a lesson	experience most commonly?
	ng in and out of class	and least common after the box)
	marked most common	n, what do you think it tells you about the
A. The teacher is no B. The students are	ot in control	
C. The students do	on't respect teacher ave a problem	

4.	Are there times you lose concentration in class?
	A. Yes
	B. No
5.	If yes, why do you think you do so? (Pick only one reason)
	A. When you don't like a teacher.
	B. When you are not following the lesson.
	C. Personal problems.
6.	Are there times you have felt distracted in class by a teacher's grooming?
	A. Yes
	B. No
7.	If yes, specify which kind of grooming (Tick only one)
	A. Teachers wearing very tight clothing
	B. Teachers wearing too much make-up
	C. Teachers wearing worn-out clothing
	D. Teachers wearing unironed clothing
8.	What kind of message do you draw from each of the dressing modes mentioned in
	(7) above? (use own words)
	A
	В
	C
	n
	D

	PART C. USE OF CHRONEMICS TO COMMUICATE IN CLASS
1.	Which of the following kind of teachers do you prefer? (tick only one)
	A. Teachers who are regular in class
	B. Teachers who are regular and perform
	C. Teachers who are irregular but still perform
2.	Which of the following kinds of teacher do you think doesn't use their time well's
	(Rank them in order 1-3)
	A. teachers who are irregular in class
	B. teachers who tell irrelevant stories during lesson time
	C. teachers who dictate notes instead of teaching
3.	How do you feel about each kind of teacher listed in (3) above? (use own words to
	explain feeling)
	A
	В
	C
	D

THANKS FOR YOUR CO-OPERATION

UNIVERSITY OF NAIROL UNIVERSITY OF NAIROL EAST AFRICANA COLLECTION