THE IDIOLECT, CHAOS, AND LANGUAGE CUSTOM FAR FROM EQUILIBRIUM: CONVERSATIONS IN MOROCCO

by

JOSEPH W. KUHL

(Under the Direction of William A. Kretzschmar, Jr.)

ABSTRACT

This dissertation is a theoretical investigation into the concept of the idiolect and Language Custom and begins with an appraisal of the work of the German linguist Hermann Paul who is generally regarded as having developed these concepts in his work The Principles of the History of Language (1888). His concept of the idiolect was rediscovered by Weinreich, Labov, and Herzog (1968) and served as a central point of departure in their monograph Empirical Foundations for a Theory of Language Change. Weinreich et al. used Paul's ideas as a counterfoil to lend validity to their ideas which would soon after form the basis of sociolinguistics. They were highly critical of Paul's ideas as there was no place for the linguistic individual in their paradigm which posited social forces as the causal agent for language change and variation. Paul, on the other hand, believed that individuals changed their idiolects spontaneously and through contact with other idiolects.

With these recovered ideas, the work then examines the idiolect as an open system according to the principles of Natural Systems Theory. Defined as an open system, the idiolect is able to innovate and adapt to new linguistic input in an effort to establish Language Custom, which is itself an open and variable system with no fixed parameters or constraints. Having dispensed with the structuralist and generative approaches to language as a closed system, the idiolect and Language Custom are developed using the principles and ideas from Complexity and Chaos Theory. The driving force behind establishing Language Custom is called The Principle of Concord: the fundamental goal of all communication being the mutual understanding of speakers in discourse.

Following the work of Ilya Prigogine, language contact between idiolects is said to occur in either near-to-equilibrium situations or far-from-equilibrium settings. Near to equilibrium is generally one's native linguistic habitat and the setting in which we are able to derive grammars and define specific codes and languages. The fieldwork portion of this research was undertaken in a far-from-equilibrium setting: Morocco.

INDEX WORDS: Hermann Paul, Idiolect, Open Systems, Chaos Theory, Complexity, Language Contact.

THE IDIOLECT, CHAOS AND LANGUAGE CUSTOM FAR FROM EQUILIBRIUM: CONVERSATIONS IN MOROCCO

by

JOSEPH W. KUHL

BA, University of Georgia, 1981

MS, Georgia State University, 1988

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2003

THE IDIOLECT, CHAOS AND LANGUAGE CUSTOM FAR FROM EQUILIBRIUM:

CONVERSATIONS IN MOROCCO

by

JOSEPH W. KUHL

Major Professor:	Dr. William A. Kretzschmar, Jr.
Committee:	Dr. Ben Blount
	Dr. Don Mccrear

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
August 2003

DEDICATION

To
The Colonel at Home
and
Hamudan in Morocco

ACKNOWLEDGEMENTS

I would like to express thanks to my Major Professor Dr. William A. Kretzschmar, Jr. whose ideas and approaches to linguistics helped inspire and shape my own theoretical models. And to the rest of my committee Dr. Ben Blount and Dr. Don Mccreary for their time and patience with this work. Special thanks to my parents for their backing and support in this undertaking. Finally, I would like to thank my many friends and neighbors in Martil, Tetouan, Tangier and Fes who helped make my stay in Morocco both memorable and productive, especially my friend Mohammed Hamudan in Martil who facilitated everything from housing, border crossings, and introductions around town, not an easy tasks given the global political climate during that year of research.

TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS V

CHAPTER

1 THE IDIOLECT IN LINGUISTICS AND LANGUAGE CUSTOM 1

1.1 OVERVIEW 1

1.2 INTRODUCTION 4

1.3 BLOOMFIELD, BLOCH: HERMAN PAUL'S IDIOLECT DISMISSED 7

1.4 WEINREICH, LABOV, AND HERZOG: PAUL AND VARIATIONISM 12

1.5 PAUL'S LANGUAGE CUSTOM: A REAPPROPRIATION 20

1.6 SUMMARY: IDIOLECT AND LANGUAGE CUSTOM 25

2 THE IDIOLECT IN GENERAL LINGUISTIC THEORY 28

2.1 GENERATIVE LINGUISTICS 28

2.2 I AND E LANGUAGE 30

2.3 INTEGRATIONIST THEORIES 33

2.4 IDIOLECT AS SOCIOLINGUISTIC MYTH 37

2.5 MULTILINGUALISM 42

2.6 WITTGENSTEIN'S PRIVATE LANGUAGE ARGUMENT 49

3 LANGUAGE, NATURAL SYSTEMS, AND COMPLEXITY THEORY 57

3.1 INTRODUCTION 57
3.2 EMERGENCE OF NATURAL SYSTEMS THEORY 58
3.3 LASZLO AND NATURAL SYSTEMS 63
3.4 INVARIENCE OF NATURAL SYSTEMS 64
3.5 SELF CREATIVE SYSTEMS 73
3.6 IDIOLECT AS AUTONOMOUS ADAPTIVE ORGANISM 78
4 CHAOS, ENTROPY, AND FAR FROM EQUILIBRIUM SYSTEMS 91
4.1 PRIGOGINE AND DISSIPATIVE STRUCTURES 91
4.2 GRAMMAR AND EQUILIBRIUM 97
4.3 FAR FROM EQUILIBRIUM 101
4.4 IDIOLECTAL CONTACT AS DISSIPATIVE SYSTEMS 104
4.5 PRINCIPLES, TERMINOLOGY, AND DEFINITIONS 111
4.6 SUMMARY 126
5 CONVERSATIONS IN MOROCCO 129
5.1 SELF-REFERENTIAL INVESTIGATIONS 129
5.2 FIELDWORK RATIONALE 134
5.3 SETTING, APPROACHES AND AIMS 138
5.4 DATA ISSUES 139
5.5 MOROCCO, ANDALUS, THE RIF 144
5.6 LANGUAGE LANDSCAPES 148
5.7 CEUTA, TETOUAN, MARTIL 152
5.8 BIG AL 159
5.9 FRIENDS AND NEIGHBORS 164

5.10 SOCIOLOGUES 167
5.11 TRANSCRIPTION AND PRESENTATION.....168
6 DATA ANALYSIS, APPLICATION OF PRINCIPLES.....179
6.1 TOWARD AN ANALYTICAL MODEL OF DISCOURSE.....179
6.2 NOTES ON TRANSCRIPTION 182
6.3 DISCOURSE TRANSCRIPT: AL AND JOE.....185
6.4 DATA ANALYSIS.....198
6.5 CONCORD THROUGH CODE BREAKING.....200
6.6 PRODUCTIVE SIDE TRACKS AND BIFURCATIONS.....204
6.7 LARGE SCALE BIFURCATION.....208
6.8 TRANSCRIPT: CROSS TALK AND DISCORD 221
6.9 ANALYSIS OF CROSS TALK AND DISCORD 223
6.10 TRANSCRIPT OF SOCIOLOGUES 232
6.11 ANALYSIS OF SOCIOLOGUES.....239
7 CONCLUSIONS 258
7.1 SUMMATION.....258
REFERENCES 265

CHAPTER 1

THE IDIOLECT IN LINGUISTICS AND LANGUAGE CUSTOM

> *"We speak our language. How else can we be close to language except by speaking? Even so, our relation to language is vague, obscure, almost speechless. As we ponder this curious situation, it can scarcely be avoided that every observation on the subject will at first sound strange."* Martin Heidegger, *On the Way to Language.*[i]

1.1 OVERVIEW

This work is a theoretical investigation into the idiolect as conceived by Hermann Paul along with his notion of Language Custom as the transindividual entity that binds speakers of similar codes together in what sociolinguists refer to as a speech community. The idiolect and Language Custom will be explored as natural, open systems using the terminology and principles of Complexity Theory and Chaos theory. The fundamental process that guides idiolects in establishing Language Custom with other speakers will be called the Principle of Concord, the process of mutual comprehension between speakers that must hold in any discourse if Language Custom is to be realized. Concord is reached more easily by speakers whose idiolects are more similar, overlap, and most fully share such linguistic features as pragmatic and grammatical competence. Idiolects in such circumstances are considered to be in near-to-equilibrium discourse settings.

This work, however, investigates more distant idiolects, those in a far-from-equilibrium setting, in which Concord is reached only after the expenditure of a great deal more energy and effort. The language structures speakers create are more chaotic, less intelligible, and less predictable; moreover, in such situations, the importance of feedback loops, repetition, and redundancy in code and message are much more apparent. In this type of language contact environment, idiolects are challenged and taxed with respect to both comprehension and production. These challenging discourse scenarios force speakers to adapt through idiolectal innovation in order to achieve mutual comprehension. These innovations are spontaneous and unpredictable and are evidence that the linguistic individual does not possess a fixed, closed language system, but rather is an open, complex, and creative linguistic organism that responds to the pressures of the specific linguistic environment in which they find themselves.

The data supporting the research claims are drawn from fieldwork in Morocco. The discourse that was selected for transcription and analysis includes myself as an active participant as opposed to traditional participant-observer approaches which focus primarily on the language of informants rather than the dynamic interface of the observer and subject. This approach to speech data had the unintended—at the time—effect of creating a far-from-equilibrium discourse setting as my idiolect and that of the three other participants in the dialogues were dissimilar and distant enough to require a great effort and creativity in what would be considered routine conversational efforts in near-to-equilibrium discourse environments. The following example is provided to briefly illustrate the method of discerning Concord in the data analysis of chapter six.

Al: because for me…I am, am the man who is, you know (Unint.)

J: good with everybody

Al: what makes me, yes, I can, I'm uh, smoof, the way that makes me, uh, with Christians, with Juifs, with oriental people, no problem, with occidental no problem, I can (unint.) I am the man who you can put him everywhere you know…in the sikratari…(office, government building)

J: yes, a diplomat

Al: yes…I respect everybody, but I have my filsovi, my filsofi I say you, I told you before

While this is a very brief selection, it exhibits many aspects of the discourse data as a whole: chaotic structures, code-mixing, feedback loops; and most importantly, Concord. Al, a Moroccan, is describing an aspect of his personality and struggles in the opening lines to express himself in what he contends is the weakest code of his idiolect: English. I provide feedback for him in the form of "good with everybody," to which he responds with the long, somewhat rambling phrase that is replete with what is termed in the work, "attractors[ii]," such as "Christian, Juif, oriental, occidental, no problem." While the primary attractor is Concord, there are other "sub attractors" that move discourse toward Concord. The attractor draws the arc of discourse towards the final goal of Concord which we reach in the last two lines with my response "yes, a diplomat," to which Al responds affirmatively "yes…I respect everybody…" At this point in the discourse, we are both certain of specific topic agreement. This must be a two way, shared understanding or it is not considered Concord, and Concord, as we will see in the data analysis in chapter six, is also a point of departure for new threads of discourse.

Concord marks a point of equilibrium between speakers, but in far-from-equilibrium settings, is a temporary state and is often followed by chaotic fluctuations as speakers embark on the construction of more complex ideas.

1.2 INTRODUCTION

Idiolect, a compound from the Greek, idios, 'one's own,' and lektos 'chosen expression or word' is defined most generally as the language use that is characteristic of an individual speaker, which necessarily includes all aspects of an individual's particular speech habits, patterns, and mannerisms. In describing the speech of individuals, linguistic analysis typically employs various modes of analysis including the charting of pronunciation, active and passive lexicon, and syntax. The speech of individuals is, quite naturally, 'measured' and qualified by its proximity to various 'standards' or norms of the community or language group of which the individual is considered a member. Every speaker, it is granted, is somewhat and somehow a linguistically unique participant in and embodiment of human language. Such a broad definition does not pose any particular problem for linguists or lay people. It seems axiomatic. An intuitive bit of common sense. We are often able to identify someone by only their voice, or very quickly recall, over the phone say, the owner of a particular voice with whom we have not spoken for a very long time. Alongside physical features, it constitutes the central defining aspect of not only what it means to be a human being, but what it means to be a unique individual member of the species.

So unique is the human voice that computer software known as Voice Biometrics, in use primarily by private businesses and various government intelligence agencies, is able to verify the "voice print" of an individual speaker against a database of supplied language output. That is, using small databases, such as in a corporate environment, near exact matches of corresponding formants can be made, and are considered almost fraud proof. The science of acoustic phonology, long considered a "black art" by linguists, is one of the few devices that can measure and illustrate the degree of uniqueness of each speaker. So distinct, in fact, are each of our voices, that one of the primary means presently used to track the current "enemies of the state" such as Saddam Hussein and Osama bin Laden is through voice printing of intercepted communication by the NSA and military intelligence agencies.

Spyware aside, the concept of the idiolect has, over the last fifty years, become a central point of debate between various disciplines in the field, as well as among various practitioners of sociolinguistics, especially those studying language variation and change. It plays a central role in research on aspects linguistic identity: gender, ethnicity, socio-economic class and so on. And rightly so, as it provides all of the data for sociolinguists and those working outside the structuralist and post-structuralist paradigms of language study. Moreover, the field of contemporary sociolinguistics is somewhat at odds about the value and place of the idiolect in research, especially regarding questions of the role of individuals versus social groups with respect to language change and variation.

As a sociolinguistic construct, the idiolect is tightly connected to western modes of dualistic, or binary, thought as well as the European philosophical notions of the individual as a social, political, and spiritual being. One this western individual, Taylor

writes: "[The individual] is a self defined by the powers of disengaged reason—with its associated ideals of self-responsible freedom and dignity—of self-exploration, and of personal commitment (1989: 211). It is also reflective of the dualistic mode of western thought, inherited from the Greeks, who found it natural, reasonable and logical to view the natural world and human existence in a biplanar manner, as an entity composed of opposing, complementary poles that created and defined the wholes: *physis*/*nomos*, the natural and the conventional, the eternal and the transient, permanence and change, and anomaly/analogy in what is regarded as the first linguistic debate concerning language variation (Dinneen: 1995). The intellectual template of the Greeks is evident throughout the evolution of western thought from the schism between empiricism and rationalism and the emergence of competing and antithetical 'schools of thought' to the very division of human inquiry itself into the natural sciences (*physis*) and the social sciences (*nomos*).

In the general field of linguistics, dualistic, or in more current parlance, binary thinking has provided us with the opposing poles of synchrony/diachrony and *langue* and *parole* codified by de Saussure at the turn of the 20th century, and this mode of thought extended across structuralist domains positing: languages versus dialects, the grammatical and ungrammatical, the +/- distinctive feature system of phonology, also adapted to morphology with bound/free morphemes and so on. In generativism, the poles are between linguistic competence and performance, or more recently, I-language and E-language. However, it is interesting to note that such dynamic opposition between the idiolect and sociolect has not, until quite recently, served as a work point in contemporary American and European mainstream academic sociolinguistics. Instead, the emphasis, especially of sociolinguistics, pragmatics, and discourse analysis has been on the

individual as a member of a group, i.e., their speech as an instantiation of a pre-given sociolect, which is based on the assumption that language change and variation are propagated by societal or group forces (Johnstone, 1996).

Thus, it will be useful at this point to provide a brief history and development of the idiolect in linguistics in order to assess its importance and value to future research in the field. The following survey highlights the most central points and does not follow a linear time line for reasons of structural clarity as the central figure for the theoretical grounding of the idiolect, turn of the century German linguist, Hermann Paul, predates all the major American linguists who have, essentially, dismissed the idiolect as an either an inadmissible or unproductive source of research or relegated it, as in structuralism and generativism, to a place outside the communal system of *langue*, as in De Saussure, and as holding no interest at all for the biolinguistic approach of Chomsky.

1.3 BLOOMFIELD, BLOCH: HERMAN PAUL'S IDIOLECT DISMISSED

The idiolect first surfaces in American linguistics briefly in Leonard Bloomfield's seminal work, *Language*, and is treated as a self-evident fact as well as a troublesome concept:

> "The difficulty or impossibility of determining in each case exactly what people belong to the same speech community is not accidental, but arises from the very nature of speech communities. If we observed closely enough, we should find that no two persons—or rather, perhaps, no one person at different times—spoke exactly alike" (1933: 45).

The final and often quoted statement is amplified somewhat by declaring that while these individual differences in "accent" or "idiom," Bloomfield does not use the term idiolect, are important to the history of languages and deserve close scrutiny, they are in themselves not taken to reflect, in any creative sense, the individual's expression of self. He provides a brief list of the factors said to account for the differences between speakers which include the physical, or bodily make up and personal habit, as well as socialization through education or trade and a "talent for language." But the factor that figures most importantly is the particular nature and history of idiolectal contact: what he terms "density of communication." "Every speaker's language, except for personal factors, which we must here ignore, is the composite of what he has heard other people say" (1933: 46). That the infant learns to speak like those around him is a given, and Bloomfield goes so far as to admit that learning does not come to an end, yet he does not envisage this development as the growth and differentiation of a unique idiolect, but rather: "The speaker keeps on doing the very things that make up infantile language learning"[iii] (1933: 46).

An individual speaker's differences, or predicting the likeness of any two speaker's is, he declares, and rightly so, an impossibility. He provides the image of a huge chart containing all the members of a speech community with whom one has spoken. For each linguistic encounter, we connect the speakers and at the end of a life, the lines of density would emerge. While this is the general approach that social network analysts use to assess the relationship between speakers in a group and of language variation within and between speech communities, Bloomfield says of such a chart that it is "impossible of construction," thus effectively ruling out the detailed study of the

growth and development of an idiolect, while at the same time underscoring the importance of idiolectal contact in both the formation of individual speech habits as well as those of the speech community.

Although Bloomfield admits to massive variation within and across individual speakers, it was not in his program to investigate such variation in detail, nor to address Herman Paul's theory of the idiolect and Language Custom which will be discussed in the following section. Rather, much like the generation of sociolinguists who followed him, he leveled stringent criticisms at Paul's work in order to buttress his own ideas, and further his research agenda. Thus began the transformation of Hermann Paul from one of the truly towering intellects of 19th and early 20th century language studies, into something of a whipping boy for American linguists.

Early in his career, Bloomfield, in his 1914 work *Introduction to the Study of Language*, dismissed as absolutely inimical to scientific inquiry what was known then as "popular psychology" or mentalism, most widely associated at the time with the work of psychologist Wilhelm Wundt, an major influence on Paul's later thinking. Bloomfield, seeking to establish linguistics as an independent branch of inquiry in the great undertaking of "Unified Science" (Dinneen: 287-288) was an empirical positivist, a true believer in behavior over what would now be termed cognition. His descriptivist methodology had no room from the introspection and interior psychological states of Wundt or Paul, who, it may be said, were charting new and uncertain territory. By 1933 and the publication of his masterpiece, *Language*, Bloomfield was at the helm of American academic linguistic inquiry, and the theoretical foundations of Hermann Paul's work was dismissed as nothing more than idle speculation and discarded by American

linguists, until it was dusted off some thirty years later by Weinreich, Labov and Herzog to jump start the their new program of sociolinguistics.

However, it must be said that in rejecting Paul outright on methodological grounds, Bloomfield ignored or overlooked the communicative, albeit purely theoretical and empirically unverifiable bridge Paul was attempting to build between idiolects; and most importantly, how individual speakers affect one another and influence the course and progress linguistic change and variation. And in so doing, he passed over completely Paul's fundamental presupposition of the idiolect as the only empirically verifiable source of linguistic data.

The term "idiolect" and its more formalized conception is attributed to Bernard Bloch in his 1948 article on phonemic analysis, a post-Bloomfieldian attempt to clarify through scientific definition and postulations, the fundamental "social" concepts that for Bloch were the "intermediary stages" of Bloomfield's recognition of the meaning of phonemes. "The totality of possible utterances of one speaker at one time in using a language to interact with one other speaker is an idiolect" (1948: 7). As primitive as it is general, the definition does little to advance the understanding of individual speech and idiolectal variation. However, the article is notable on several accounts, first for its foreshadowing of the confusion, theoretical clashes, and logical and procedural contradictions that would face the yet unformed field of sociolinguistics, and secondly, in urging descriptive linguists to focus on idiolects. "In some speech communities, there are some speakers whose idiolects have the same phonological system" (1948: 8) And a "class of idiolects" that share a phonological system he terms a dialect and fleshes out his definition of the relationship between idiolects and dialects stating "…speakers who

differ in vocabulary and grammar may still speak idiolects belonging to the same dialect; while on the other hand, speakers who agree in all respects but some small detail of pronunciation will speak idiolects belonging to different dialects" (1948: 8). The obvious question that arises here is what exactly constitutes a phonological system, that is, how much phonological variation is permitted within the posited system. That issue aside, the idiolect itself consists of more than just phonic effects to include words; however, it is only the phonological aspects of speech that determine whether or not an idiolect is considered a member of a larger system (dialect). According to such a definition, dialects hold together so long as pronunciation falls within certain parameters. Such an approach is obviously open to criticism on a number of levels, one of which might be the problem of establishing phonological parameters of a dialect. Another difficulty, which we will return to, is the procedural problem of forming dialects: are dialect boundaries (here a phonological system) drawn in advance or are idiolects the source of discovering phonological systems. It would appear the latter for Bloch as he writes:

> "Phonological analysis of a given idiolect does not reveal the phonological system of any idiolect belonging to a different dialect. This, of course, is why the investigator finds it wise, in the early stages of his work with a new language, to concentrate on a single informant. The introduction of a second informant, before the phonological system of the first one's idiolect is known at least in part, is always a possible source of confusion" (1948: 9).

What is novel is the caveat for fieldworkers to concentrate on one individual speaker in an attempt to uncover a phonological system. Yet ultimately it would appear to ignore Bloomfield's dictum that no individual speaker can be expected to speak

exactly the same on any given occasion. Nor does it take into account at all the individual speaker's ability to shift phonological systems when necessary or appropriate. This is understandable given the enormous influence of Bloomfield on American linguists and the descriptive linguists' need and desire to fix the boundaries of phonemes to create closed phonological systems. Thus, while recognizing the individual as the only reliable source of data, the task of descriptivists was to delineate the boundaries of speech communities by "purely scientific" methods of phonological description to the exclusion of any psychological factors.[iv]

The central issue of the linguistic individual and idiosyncrasy has been passed over, as it would be again, in the second major dismissal of Hermann Paul's work. As well, the important questions of what happens between idiolects, whether they can belong to more than one dialect, and what role individuals play in creating, sustaining, and influencing linguistic systems has been ignored.

1.4 WEINREICH, LABOV, AND HERZOG: PAUL AND VARIATIONISM

At the time of my first investigations into the subject of the idiolect in 1995, there was little talk in the mainstream linguistic journals and conferences concerning the topic. There were on the other hand a number of philosophical treatments of the subject (Mercier, 1993; George, 1990). Since then, there has indeed been a renewed interest in the place of individual speakers' role in language change and variation (Milroy, 1995; Mufwene, 2001; Johnstone, 1996) among others. That their stance and conceptions of the idiolect are considered "new" or "in opposition" to the prevailing sociolinguistic

trends, is due in no small part to a single very powerful and influential document, which is generally considered to mark the inauguration of the sociolinguistic enterprise.

In the now much cited 1967 monograph by Weinreich, Labov and Herzog, *Empirical Foundations for a Theory of Language Change*, the authors square off with what they assert is one of the central theoretical conflicts of 20th century linguistic theory: the claims of post-de Saussurian structuralism and post-Neogrammarian historical approaches to the systematic study of language. The foundational work of Ferdinand De Saussure and Hermann Paul, and to a lesser extent, Bloomfield, distill the contradictions between the two approaches and serve the authors well, especially in the case of Paul, in their task of outlining a theory of language change that, whether approached from a synchronic or diachronic viewpoint, views language "as an object possessing orderly heterogeneity" (1967: 100).

In order to validate such a claim, they must confront the two antithetical arguments of, on one hand, Saussure's notion of a homogeneously structured *langue* while maintaining the husk of the concept as it relates to the socially constructed and systematic *langue* as an object of study, as the arena in which to plot language variation. And although there is still some disagreement on what Saussure meant by saying that langue was a "collective mental property" (Harris, 1983) the authors must also address the decidedly non-Durkheimian, non-Bloomfieldian 'mentalistic' or psycholinguistic stance towards individual language production and linguistic change and variation of Hermann Paul.

Weinreich et al's theoretical goal in the paper is to introduce and validate the notion of ordered heterogeneity and to relocate the primary source of linguistic change

from the individual—as Paul held it—to social forces conceived of as norms or constraints. They well-achieved their goals, as evinced from the great accumulation of sociolinguistic studies based on the paradigm they initiated nearly four decades ago; however, their aims were achieved, it will be argued, at the expense of rather than in light of, Paul's admittedly under-developed theories which served as an expendable backdrop against which to frame their ideas and put forward an agenda for the future of empirical studies of language variation and change. And in so doing, significantly marginalized in the decades to come any research into the linguistic individual in American linguistics

Before beginning an analysis of their argument, some background on Paul and the philosophical influences and the intellectual milieu in which he wrote are in order. Herman Paul (1846-1921) is considered one of the most outstanding turn of the century European language scholars. Aligned with the Young Grammarians (Jungrammatikers, also known as Neogrammarians) school, Paul's major work, *Principien der Sprachgeschichte*, *Principles of the History of Language* (PHL) published in 1880 and heavily revised in five later editions up to 1920, was considered one of the finest works of the period. Paul was among the first language scholars to attempt to bring the ideas of the newly emergent science of psychology into explanations of language change and variation. And it was this interest in psychology that led him to the first description in western linguistics of the linguistic individual.

It is evident that his epistemological foundations are heavily influenced by the philosophical idealism of the 18th century, the clearest articulation of which can be found in the *Principles of Human Knowledge* by the Irish philosopher and Anglican Bishop George Berkeley who, unlike Locke, did not challenge the existence of matter, but

instead challenged the belief that one could conclusively prove the "existence" of abstract ideas. Such reification, he claimed, could not ultimately be supported in so far as that no sensations or perceptions--the basis of empirical reasoning--can exist outside the mind; additionally, all 'universal concepts' are realized only as particulars, individual manifestations of the posited universal form, category, structure or what have you.

It is from such a standpoint that some of the central conceptions in the PHL can be most fruitfully interpreted. The primary, in fact the only empirically verifiable construct for Paul, is what is now generally called the idiolect, the rather loosely defined *sprachgefuhl*, the individual's "feeling for language,"[trans. Weinreich et al.] as well as his notion of *Sprachusus*, "Language Custom." His aim, duly noted by WLH, was to isolate the individual as the locus or "host" (Mufwene, 2001) for language, and thereby align the study of language more closely with that of the field of psychology.

Such a move should also be viewed in its socio-political context. The end of the 19th century marked a coalescence of psychology, philosophy, and natural science, the primary disciplines feeding linguistic research, which was breaking away from traditional historical/genealogical approaches and the various romantic conceptions of language as a "supra individual entity" (Robbins: 208), an organism with a life and growth of its own as conceptualized in the work of Schleicher and early von Humbolt. Even though the neogrammarians, such as Osthoff, viewed sound laws as proceeding on their own accord, independent of individuals, language itself existed in the individual and language change was coming to be regarded as changes in the speech of individuals.

This view found its clearest and fullest articulation in Paul's conception of the "individuelle psychologie" as opposed to Wundt's conception of "Volkerpsychologie"

and is considered by some (Jankowsky, 1975) as a very productive reaction to the more popular conceptions of the time which identified particular languages not with individuals or dialects but with national or ethnic "genius" and their concomitant political and cultural systems. These ideas from the romantic period were, in the guise of nationalism and colonialism, revived and used to argue for the notion of language superiority and its political corollary, linguistic and cultural inferiority, which found expression in the idea of the "savage" and underdeveloped languages, an issue overlooked or ignored by Bloomfield in his criticisms.

Weinreich et al. begin their analysis of Paul's work with a thin summary of the *psychischer Organismus*.[v] They write: "This organism is conceived by Paul as a psychologically internalized grammar which generates the utterances of speakers." (1967: 105). The writers, preferring not to attend to the rather complex details of Paul's description of the psychological activity which generates language, settle for the more accessible term taken from the generativist terminology "internalized grammar." The term 'grammar' carries with it implicit notions of structure, organization, and regularity; when in fact, Paul's opening statements about the ultimate source of language hint at what was, at the time of his writing, a fresh psychological concept that would with the later work of Jung take on near mystical connotations. "All the utterances of linguistic activity flow from the dark chamber of the unconscious in the mind" (1889: 3). Paul, foreshadowing the generativist conception of native speakers and grammaticality, was insistent that the first and most important 'training' a linguist should receive is the deep and continual reflection on his own speech.

Such a statement concerning the source of individual language was in keeping with the scientific trends emerging in Europe at the time, especially in the work of psychologists Sigmund Freud and Steinthal, the latter of whom Paul references. Thus he writes: "The organism of the group of ideas which depends on language takes a peculiar development in the case of each individual, and thus in each takes a peculiar form…" (1889: 6).

Working from within the Berkleyian idealist ontological footing in which all abstract ideas (universals) are only understood through the study of concrete particulars, and following the idealist epistemological stance that we can know the world only through our senses, Paul quite logically arrived at what Weinreich et al., Bloomfield (1933), and Bloch (1948) labeled the "idiolect." Contrary to Bloomfield's contention that Paul was purely a mentalist, a deeper look at his epistemology reveals the pure empiricism of Berkeley: all we can know is what we perceive, and one cannot have sensations of an abstracted language system. Thus his insistence on internal reflection, or "self observation," yet even then the organism of language is beyond understanding. "In no cases can it be observed directly. It is an unconscious something reposing in the mind" (1889: 9). Yet, even if the nature of the psychological language organ remains relatively inscrutable, it is nonetheless the starting point.

So, not only is the individual the bearer of language, but the individual's production of language becomes the object of study and the source of data for inquiry into linguistic variation: "The psychical organism here described are the true media of historical development. What has actually been spoken has no development. The word—as a product of physical organs—disappears, and leaves no trace" (1889: 7). It is

interesting to note that in two respects, Paul's ideas are central pillars of generative syntax: that the idiolect as he describes it more closely resembles I-Language (Chomsky: 1985, 2000) and that speech itself, which 'leaves no trace,' is not the proper object of language studies, but the "psychical organism" or generative capacity is.

We may capture a small piece of a "language state" at one moment and compare it to another at some later point, and change may indeed be visible; however, the teleological unfoldings of change are still as elusive and multiplex as ever. Although microprocessors and digital recording have afforded dialectologists and sociolinguists a much more time-efficient means of mapping language variation and change, such an approach, even with faster, more powerful computers, will always lag behind the phenomenon of language which is always out ahead of us in a state of constant transformation. This conception of language change is also found in earlier works of Humbolt who writes: "Properly conceived of, language is something persistent and in every instant transitory. Even its maintenance by writing is only an incomplete mummified preservation, necessary if one is again to render perceptible the living speech concerned" (1970: 27).

Furthermore, Paul takes a very dynamic, non-static approach to the growth and development of the idiolect. This view, very much informed by the observations of natural science, has each unique idiolect undergoing constant, undifferentiated change. That is to say that ultimately, changes within the idiolect are so complex, so gradual and so continual they cannot realistically be charted or mapped or bounded in any way. He writes: "The mere consideration of the boundless variability, and the peculiar conformation of each single organism, is sufficient to make us realize the necessity of

boundless variability of language as a whole, and of a growth of dialectic varieties not less vast" (1889: 6).

The widening theoretical circle of Paul's approach must arrive at the statement that:

> "If, then, we speak of the severing of an originally uniform language into different dialects, the phrases ill express the true nature of the process. The truth is that at any given moment within any given community there are as many dialects spoken as there are individuals to speak them; and, what is more, dialects each having its own historical development, and each being in a state of perpetual change. Severance into dialects means really nothing more than the growth of individual variations beyond a particular limit (1889: 21).

Here, Weinreich et al. perceive the basis of the twentieth-century paradox concerning language change. They write: "The isolation of the individual, Paul thought, had the advantage of attaching linguistics to a more general science of psychology. The price of such isolation, however, was the creation of an irreconcilable opposition between the individual and society" (1967: 105-106).

This "irreconcilable opposition" is, in fact, only one among many interpretations of Paul's work, for a closer inspection of Paul's writings reveal that there is, in reality, no a priori opposition between the individual and society vis-à-vis language. There are most certainly breaks or 'weaknesses,' to use Bloomfield's term, in lines of communication, realized as misunderstandings or language failure, but the individual's idiolect is in no way in "opposition" to that of another or the community (however this is defined). Idiolects are, in fact, in constant and continual intercourse with other idiolects in a

"society" made up of individual speakers all striving toward understanding and being understood.

Having established the central contradiction created by the idiolect, (and it is noted that there is no contradiction created for Chomsky and the generativists on the matter as "externalized" language, the data of sociolinguists, is of no interest) the focus of their argument moves on to a critique of the conceptual bridge Paul used to explain just how it is that we are able to communicate with one another at all and what we are to make of the spread and obvious similarity and uniformity found the speech of members of various dialects or sociolects.

1.5 PAUL'S LANGUAGE CUSTOM: A REAPPROPRIATION

One of the difficulties encountered when re-examining Paul's ideas, is there exists a lack specificity in much of his writing that concerns the exact nature of the theoretical constructs he handles, especially *Sprachusus*, Language Custom, but this absence of detail may enable us to appropriate more successfully some of his ideas into a contemporary framework for the study of idiolectal interaction. But before undertaking any type of wholesale appropriation of ideas, it is first necessary to understand as fully as possible both how Paul defined his concepts as well as on what grounds they were critiqued and rejected.

It is hoped the following pages, which detail Weinreich et al.'s central analysis of Paul's work on Language Custom, will not be seen as dated or redundant, for most of the objections they raised are central to the social constraint/motivation theories of language

change and variation still widely practiced by sociolinguists around the world; moreover, some of these objections have been addressed, in part, by other sociolinguists (Milroy, 1997; Johnstone, 1996) all of who have rejected the "Labovian Paradigm," which is not, it should be underscored, the intention or focus of this work. My aim is to re-appropriate Paul's notion of Language Custom as central to all communicative behavior, which is, for me, communication between idiolects, and in so doing, I must address the philosophical and linguistic arguments that have been previously lodged against it.

Paul's conception of *Sprachusus* is accurately translated as "Language Custom" (LC) and conceived of as a theoretical bridge connecting individual speakers. Weinreich et al. define it thus: "A comparison of individual languages…yields a certain 'average', which determines what is actually normal in language—the Language Custom (*Sprachusus*)" (1967: 106). For Paul this "certain average", or in more general linguistic terms "usage", is best grasped by as close a study of as many speakers as possible. However, it is not for him necessarily a theoretical bridge connecting the individual with society in the sense that Weinreich et al. would have it, in so far as it admits the speaker entrance into a speech community whose variable rules end up governing or influencing individual speech habits; for, as Paul states, usage (of the given community of speakers under study) "…governs the language of the individual to a certain degree only…(1889: 9).

Their argument attacks his Language Custom from various positions that are used to build their own theoretical foundations. There are four main points in their critique: 1) that no independent existence is claimed for it, 2) that is has no determinate bounds and grouping of idiolects is arbitrary and without theoretical motivation, 3) that it is

interpreted as an linguistic 'average', and 4) that there is no means of ranking idiolects on a scale of importance.

With respect to the first point, the argument is relegated to a footnote:

> "Paul draws an analogy with the fictional conception of the species prevalent at the time: 'nothing has real existence except the particular individuals…species, genera, classes are nothing but arbitrary summaries and distinctions of the human mind" (1967: 106, [13]).

To air out this philosophical argument is to stray from the task at hand. It is indeed true that for Paul, LC was an artefact of linguists; however, in defense of Paul, it can be said that this is certainly not a "fictional conception" any more so than any other ontological claim for mid-level abstractions or generalizations, such as "speech community," or a specific "language" for that matter, is a work of fiction.

The shift in thinking here is that between process and product. For Paul, LC was a momentary event, coming into and passing out of existence, and its nature--any description of it that might produce a corpus or a "product" to be studied--would not only be impossible, but would vary enormously, depending on the participants of that particular LC that was said to have existed at a given time and place. The impasse created for modern sociolinguistics is obvious, and is the same theoretical impasse that separates Chomsky's approach to language study as a natural science and for the former, as a social science.

"If we would press this parallel a little we must compare the language of the individual—in other words the entire materials of language of which he disposes—to the individual animal or plant; and the dialects, languages, families of languages, etc., with

the species, genera, classes, etc., of the animal and vegetable world" (1967: 20). Such a comparison, which goes unquestioned in the natural sciences, raises the hackles of sociolinguists, yet this naturalistic approach has met with great success by generativists and by other language theorists (Mufwene, 2001), who view language as species, and language change and divergence as the speciation process brought about by necessity through the pressures of natural selection, in which there are, essentially, only individual speakers and the following quote, I believe, would be perfectly acceptable to Chomsky, Mufwene, and others of their ilk:

> "The great revolution through which zoology has passed in modern times depends to a great extent upon the recognition of the fact that nothing has real existence except single individuals—that the families, genera and classes are nothing but comprehensions and divisions formed by human understanding, which may result according to individual caprice; that the divisions between species and those between individuals differ not in essence, but in degree" (1889: 21).

Paul's taxonomic analogy when applied to sociolinguistics is instructive, for when looking into the nature of speech communities or dialects, there is often more disagreement than concession on where to draw the social and/or geographic lines of demarcation; moreover, there are a number problems regarding how to assess membership and how to define such key terms as frequency and features, as well as distinguishing between technical dialect types (Kretzschmar: 1988, 1996).

His rejection of "essence" here is problematic for post-Saussurian sociolinguists as it robs them at the ontological level of the definable quality in the sufficient quantity which sets a language, dialect, speech community, or any other grouping apart as object

of study, a closed system which submits to testing and yields socially relevant, quantifiable results. Systems, not of individual speakers, but of variable rules, which are the result of social institutions and perceptions which are imposed upon speakers who respond in characteristic and predictable ways to them. It is not so much the language systems (idiolects) of individuals which are in contact, but individual speakers who are in contact with linguistic normative structures, however variously they may be perceived by both participant and observer.

Finally, it should be noted, that the "irreconcilable opposition," between individual speaker and speech community, posited by Weinreich et al., is in reality, a handy duality used to create a problem that they have solved in advance. For the idiolect, in Paul's view does not exist in some sort of 'asocial' context. "It is by intercourse, and nothing else, that the language of the individual is generated" (1889: 23). In more contemporary terms, all language activity for Paul was language contact, and all language contact is idiolectal contact (Milroy: 1997).

Thus we can see now the necessity for Weinreich et al. in attacking Paul's claim that Language Custom is, as they state, "derivative and unstructured," for unless there is some structured language system (a social fact) within which individuals interact, or partake of in the Saussurian sense, as say, a dialect, their claims of various geographically located, socially motivated, rule governed trends in variation would be without ontological footing. It was not enough for them that social intercourse generate individual language; specific aspects or structures of social interaction were needed to explain the phenomena of language variation.

Throughout the critique, the LC is treated as a product of interaction("a certain average") rather than the process of language contact. Their ultimate goal was to find that 'average' or standard and devise a means to measure variation from it, and finally attribute socio-economic or ethnic variables as the motivation for such variation. These arguments may be of some value to those interested in the origins of Labovian sociolinguists; however, here they serve only the purpose of helping to delineate my approach to the idiolect and Language Custom.

Paul does not do a very thorough job in describing the process of idiolectal interaction that makes up a LC, and these weaknesses are exploited by Weinreich et al. in order to help them construct a model of language study. My interest runs counter to Labovian sociolinguistics in that I believe social motivations and constraints, could they actually be identified and measured, would be of only marginal consequence to language variation and even less so to language change.

1.6 SUMMARY: IDIOLECT AND LANGUAGE CUSTOM

What I would like to appropriate from Paul is his insistence on that language resides in the idiolect; and in being individual, is idiosyncratic, creative, spontaneous, and undergoing a continuous process of variation and change. That the idiolect is indeed the seat of language and the locus of variation and change and that this change comes about through idiolectal contact. That there is a constant process of dual or multi directional (for more than two speakers in a discourse) accommodation at work on idiolects across the medium of Language Custom.

The second aspect of his work that I will appropriate is the notion of Language Custom. Counter to his belief that it is an artefact of linguists, and contrary to Weinreich et al.'s insistence on it as a language product that must be quantifiable, I will argue that it is the primary component of the cognitive language faculty that is concerned with communicative action. As such it is not product but a process we can observe. It is an ability, a universal aspect of the human language capacity, that has adapted to and continues to adapt itself to language contact, which is always reducible to idiolectal contact. As such, it is conceived of as a process that we can observe at any given time in language contact, and the LC of that moment is unique to the discourse participants. There is no interest as in the Labovian paradigm that emerged from WHL's monograph in "ranking idiolects in terms of dialect features, register and so on. Language Custom is seen as a momentary event that is unique to its participants and so there is no attempt made to fit the speakers into speech communities. In this view speech communities are continually coming into being, breaking up and reforming. Borders everywhere are porous and networks much to dense and multiplex to disentangle.

We are programmed, so to speak, to acquire a grammar or set of grammars, and just as importantly, we are programmed to use them throughout our lives, and it is often the case, especially in the more highly-mobile modern era, to use our language capacity in situations and settings where our idiolects do not or only partially overlap those with whom we are attempting to create a Language Custom. Freeing the individual from the bonds of sociolinguistic categories (socioeconomic class, gender, ethnicity) has the beneficial result of dispensing with questions of social identity and a dialect membership based on linguistic variables. This is a procedural move shifting focus away from social

identity/membership and emphasizes the language structures created by individuals in contact. It is at the same time a cognitive turn away towards the study of linguistic process, reflected in the language structures created by individuals. The "artifacts" as they might be called are embedded in the momentary Language Custom speakers are making. By recovering the notion of Language Custom, we have a new framework in which to allow the individual, the idiolect, to "speak for itself" so to speak, wherever we wish to observe it.

The concept of Language Custom will be addressed more fully in later sections of this work, and will be fleshed out and tested against a corpus of discourse in Chapter 6, but before doing so, a fuller review of literature on the idiolect will be undertaken to provided a better understanding of what we mean by idiolectal contact and Language Custom.

ENDNOTES[i]

(1971: 58).

[ii] This concept has been appropriated from Chaos theory and altered somewhat. Chaos theory defines an attractor as the preferred position for the system, such that if the system is started from another state it will evolve until it arrives at the attractor, and will stay there in the absence of other factors. an attractor can be a point (e.g. the center of a bowl containing a ball), a regular path (e.g. orbit of satellites or planets), or a complex series of states (e.g. metabolism of a cell). Here the preferred state if Full Concordance between idiolects.

[iii] This point will be investigated in more depth in later chapters; however, it is interesting to note that Bloomfield is making a tacit case for the existence of accommodation strategies that came to the fore in the 1970s. No doubt, any generativist would argue strenuously against such a broad statement and mark off distinctly different phases of language acquisition and language learning and between L_1, L_2, and so on.

[iv] An idea that has been thoroughly rejected since the 1980s and the rise of ethnography, perceptual dialectology, and the study language and social identity from a psychological standpoint. Major figures in these three areas include Gumperz and Le Page and Tabouret-Keller.

[v] It should be noted that the translations of Weinreich et al are their own, and are taken from what they refer to as the "standard" fifth edition, the final revision from 1920, and the quoted material I employ, are from the 1889, 2nd edition, English translation by H. Strong.[v] For the purposes of the work at hand, there is little discrepancy between editions concerning the major theoretical points under discussion.

CHAPTER 2:

THE IDIOLOECT IN GENERAL LINGUISTIC THEORY

> *"Linguistics, like other human sciences, is only just beginning to come to terms with a quite fundamental notion: that through communication, we create language as we go, both as individuals and as communities, just as we create our social structures, our forms of artistic expression, our moral values, and everything else in the great complex we call civilization"* Roy Harris. *Approaches to Language*.[i]

2.1 GENERATIVE LINGUISTICS

The latter half of 20th century Euro-American theoretical linguistics can be characterized by a growing divide between the ideas worked out by Noam Chomsky and the generativist scholars following his lead, and those of descriptive, socio, and historical linguists who have struggled to maintain their status as "scientific" practitioners of language study in the face of the rigorous theoretical challenges Chomsky has created. Before making any evaluative statements concerning the generativist movement, the difficulty faced by sociolinguists is formidable: clearly, deep and somewhat lengthy study is a prerequisite for coming to an adequate understanding of the philosophical foundations of generativism and the various stages of development it has undergone up to the present as "program" of study under the rubric of minimalism. It is not my intention to go into great detail on the history and evolution of generative theory, but only to point

out that any proposal of redefining the idiolect cannot afford to ignore or sidestep the hurdles it raises for research.

Moreover, if linguistics is to evolve into a unified field of 'scientific' inquiry, the aim of many linguists, the theoretical divisions and practical obstacles that have been created must be, as much as possible, resolved and a more integrated field of study brought into focus (Harris, 1996). Certainly one cannot hope to advance a theory of the individual's relationship to language, culture, and society however it may be parsed or presented—whether as knowledge, performance, or communicative practice—without addressing the competing claims and conflicting approaches of generativism and sociolinguistics.

In the following section we will look briefly and generally at how Chomsky's work views individual language, the issues created by the theoretical divide between individual language and a language system, and of the cleavage between linguistic competence and performance, and a look at some alternative approaches to these issues that may offer the hope of resolving the apparently incompatible claims on either side of the arguments.

Paul's early "cognitive" thrust of declaring an individual psychology as the driving force of language and his notions of a psychological organizing principle underlying speech was, as pointed out earlier, both a political move as a reaction against the Romanticists' dangerous reification of speech into dialects and languages bearing national identity, as well as a move to align the study of language with the natural sciences. Chomsky achieved the same result through bypassing descriptivist approaches

to language study in favor of investigations into the notion of grammaticality of language as projected through the syntax of the native speaker.

2.2. I AND E LANGUAGE

To begin we must look at one of the most central of all modern structuralist definitions of an individual's language, that of Noam Chomsky (1986: 2000) in which a distinction is made between I-Language (internal language) and E-Language (external language). I-Language for Chomsky is an individual's language system.

> "…the *generative procedure* that forms *structural descriptions* (SDs) each a complex of phonetic, semantic, and structural properties. Call this procedure an *I-language*, a term chosen to indicate that this conception of language is internal, individual, and intensional (so that distinct I-languages might, in principle, generate the same set of SDs…"[Itals. original] (2000: 26).

One is reminded of Bloch here, eager to associate idiolects on the basis of their shared phonological systems. Indeed, it is the principled social fact that we are able, among other linguistic achievements, to generate the same set of structural descriptions, and have a meaningful, if not moving, conversation. That grammaticality judgments, while being quite obviously universal and innate to every speaker, do not completely overlap even among members of what generally are considered to be "ideal speakers and hearers" of an ostensibly "homogenous" speech community. A number of studies (Johnstone: 1996), have uncovered significant individual variation and indeterminacy in

both phonological and grammatical judgments of very closely aligned native speakers of the same language variety, and she notes: "Syntacticians are aware of this, and many regularly exchange anecdotal evidence about their own idiosyncracies. But the issue is rarely dealt with" (1996: 11).

The lack of interest in such significant individual variation, she asserts, is rooted in the Saussurian structuralist rejection of *la parole* (interpreted here as an individual's speech production) as a legitimate object of scientific inquiry, a point we will return to in a more fully developed form by Harris and the integrationist theories of communication. Johnstone is quite succinct, though, in her framing of the problem:

> "Linguists who study *langue* study something that is by definition superindividual and self replicating. *Langue* is seen as the property of the community, not the individual. The object of study for structural linguistics is thus social: societies and social groups, dialects and languages" (1996: 11).

Much like his structural predecessors, Chomsky finds questions concerning individual speech and interidiolectal variation of no interest. He has managed to shift, or 'elevate' some would argue, the object of linguistic inquiry from the social system of *langue* to the human system of the language faculty. Moreover, given that the language faculty, which is genetically-determined, will allow only a limited number of I-languages, which may, he concedes, from one point of view (that of those who do not prescribe to the concepts of (UG) create enormous variation, but from another perspective, he writes, "…a rational Martian scientist studying humans might not find the difference between English and Navajo very impressive" (2000: 27). The study of the linguistic individual, Chomsky has reiterated time and again, would be much better served through the reading

poetry or novels, for what individuals "have to say," or the manner in which they express their thoughts will give little if any insight into the experience of being human. Thus, for Chomsky all speech is—in current generativist vocabulary—considered a product of E-language, defined as the set of sentences created by the speakers of a language. A broadened Blochian view of the idiolect at best, and as such, is not a very worthwhile concept, and it is not meant to be as it is of no interest to the generative program.

Mufwene most directly equates Chomsky's conception of I-language with the term idiolect: "An I-language is basically an idiolect, an individual speaker's system of a language. It is to a language what an individual is to a species in population genetics" (2001: 2). His concern with the idiolect is central to the tension the concept creates in sociolinguistics, namely that of the relationship of an individual's language system to a 'communal system' or sociolect. More specifically, how do we go about the process of 'extrapolating' the features of individual idiolects and declaring them to be representative of a shared language system, and to what degree does the individual's knowledge of language coincide with that of a given sociolect. There is quite clearly what can only be described as "idiolectal variation" within any 'communal system' to use Mufwene's term, which leads to one of the most crucial questions in variationist approaches to sociolinguistics, and one, many linguists, including Mufwene, believe has been generally ignored: what role, if any, does the idiolect, have in language change and variation.

There is little argument that the idiolect, other 'lects' and language itself is an abstraction, but, as Mufwene points out, of differing degrees. "[Idiolects] are first level abstractions from speech, and [communal languages] are extrapolations that can be characterized as ensembles of I-languages" (2001: 2). And it is the latter of the two, a

second or 'higher level' abstraction, that is the basis for any discussion of language change. In the broadest sense, the "ensemble of idiolects" or I-languages form what the linguist extrapolates to be a communal language when those "…speakers communicate successfully with each other most of the time" (2001: 2). However, the idiolect in this research is *not* an abstraction in this sense, but is considered the very real occurrence and existence of an individual's language behavior. What constitutes and makes possible 'successful communication' are two major questions for sociolinguists and will occupy the better part of this work; and in this regard, generative constructions of rule based grammars offer a tempting but difficult model for communication theories.

That Chomsky and generative linguists are not concerned or offer no 'help' as it were to the creation of rule-based performance models should not be, and indeed has not been, seen as a deterrent to the sociolinguistic enterprise concerned with communication; for, as Chomsky admits, the language faculty of the brain, the "brain state" of I-language, "is integrated into performance systems that play a role in articulation, interpretation, expression of beliefs and desires, referring, telling stories and so on" (2000: 27). We will turn now and take a look at how the problems of the performance/competence dichotomy impacts the idiolect in the work of Roy Harris and the integrationist school of thought.

2.3 INTEGRATIONIST THEORIES

We will look briefly at some of the more stringent criticisms that have been leveled at the idiolect, and aside from Weinreich et al's attack on Paul's ideas, there has been relatively very little critical attention paid to it, testifying to its backwater status in

language and philosophy. One of the more interesting, albeit quite brief, treatments comes from the new camp of integrational linguists, begun by Roy Harris some 20 years ago, and now gaining some adherents in western linguistics. The self-titled Integrationists, such as Harris, have taken to task the entire mode of "segregationist" thought that is claimed to underlie linguistic inquiry from Aristotle through Saussure, Chomsky and Labov. These efforts are designed to overcome the theoretical divisions between structuralist theories such as generativism and empirical based theories of sociolinguists by tackling old problems with a new approach. Harris and others level a concerted attack on the short comings of the generative models as well as the foundational concepts of sociolinguistics including the central concepts of dialect, speech community, and communicative competence. While many of the criticisms ring true and appear to open up new avenues of research, the idiolect is, unfortunately, treated as being on the very same footing as, for example, dialects and speech communities: they are all, according to integrationist theory, simply myths that result from the well known philosophical process of hypostatization, or reification: attributing real existence to abstract concepts.

His unfortunate (for my purposes) rejection of the idiolect as a "myth" alongside that of dialect, languages, and the native speaker belies an almost *de rigeur* approach, an out of hand dismissal of all ideas in sociolinguistics as second order constructs. What is somewhat surprising is that there is no mention of Paul's idea of the idiolect, as it could, given its broad nature, be used, as I will show, to support integrational theories. We will take a close look at Harris' argument to discover whether or not, in light of Paul's ideas, the idiolect should be viewed as constituting a "fixed code" in integrationist terminology,

possessing systematicity and therefore, more problematic than edifying. Before directly examining the short argument against the idiolect, we are well-served to make a brief review of integrationist theories in general, as they do offer a promising approach to further understanding of the nature and role of the idiolect and language custom.

At the base of integrationist critiques of western linguistics is the tendency towards segregation between systems and system users and the accusation of theoretical hypostatization: attributing real existence to a concept, otherwise known as reification. This, claims Harris, is a result of the western linguistic idea that communication presupposes language(s) rather than the inverse, that languages presuppose communication, which Harris posits as a more realistic and fruitful approach:

> The point of departure, in an integrationist perspective, is not the existence of complex cultural objects called 'languages' but, simply, the attempts by human beings to integrate whatever they are capable of doing into the various activity patterns we call 'communication.' That—if anything—is what is 'given' in experience to everyone of us, long before we have any grasp of the slippery and tortuous notion of what 'a language' is, or how many of them there are, or whether 'ours' is different from anyone else's (1998: 4).

There is nothing particularly novel in the claim that the native speaker, dialects, and language are slippery notions, but what is intriguing about the integrationist approach is as much about where it begins as where it lets off. According to Harris, we got off on the wrong foot, so to speak, beginning with Aristotle who began a philosophical approach that was inherently flawed in several respects: one, that language, is "telementational" in

Harris' term. That sound patterns correspond to a mental image, that speech is "thought transference." This is most clearly worked out, he maintains, in de Saussure's sender-receiver or 'talking heads' model of communication which brings together in the mind the signifier and signified[ii]. This presupposes a fixed code, *la langue*, which must be shared by both for communication to take place.

This move, coupled with the idea of the arbitrariness of the sign and the separation of *langue* and *parole*, was not so much a radical innovation as it was the evolution of the structuralist theories that had driven western thinking since Aristotle, and his system of classifications, which included the parsing of language into discrete, grammatical entities. From here, it is not so great a leap, following the process of individuation, to the creation of fixed codes: dialects, languages, and so on that must be considered part of larger systems. The key aspect at work here for Harris is that the language system, the fixed code that is necessary for successful communication, has been located in the mind. In a sense, he argues that the "cognitive revolution" in linguistics is far older than we like to think.

What is problematic in the notion of language as telementational is that it has the undesirable and unrealistic result of separating speakers from their situatedness in the world, stripping language use of its context, as well as reifying the idea of "systems," which are independent of their users. There is, he argues, simply no decontextualized communication process. Moreover, the reification of "user-independent" systems that exist in some stable form are illusions as well. Chomsky's homogenous speech community is, according to Harris "utopian linguistics," a social fiction that is essentially no different than Labov's system of "ordered heterogeneity." Both are concerned with

the rules governing usage: those delineating grammaticality for Chomsky and the variable rules of register for Labov. Both are user-independent and essentially ignore both the individual and the context of human communication completely. His argument is quoted at length:

> "What is in contention as between the two approaches [segregational and integrational] is whether, to what extent, linguistics is entitled to decontextualize human linguistic behavior in order to isolate, describe, and explain various aspects of it. For the integrationist, all decontextualization distorts and therefore the resultant linguistic description and explanations, to the extent that they rely on decontextualized 'data' are automatically suspect. For they are no more than methodological artifacts of the oversimplification from which they proceed. By presenting these artifacts as reliable accounts, on which further research may be based, the linguist succeeds only in diverting our attention from the actual conditions under which human beings have been able to develop their many and various language making enterprises" (1998: 13).

2.4 IDIOLECT AS A SOCIOLINGUISTIC MYTH

Segregational approaches result in, among other misconceptions and confusions, a great many mythical linguistic entities including the native speaker, dialects, speech communities and standard languages. Given the emphasis Harris places on the

contextualizing the individual and communication activities, it is, at first glance, surprising that the idiolect is included among the myths of western language; however, the idiolect, for Harris, is subject to the same treatment in western linguistics as the dialect or a standard language. Harris, while admitting that how the segregationalist defines the idiolect is a controversial affair, finds a number of problems with the concept, namely that it is nothing more than a dodge to get around the problems of subdialectal variation, and is constituted by a simple relocation of the "system" to the individual from larger conglomerates. But however it is defined:

> "The identification of the system with the individual resurrects the problem of explaining how *A* communicates with *B* if each is using *ex hypothesi* a different code. For successful communication would then seem to depend on good luck, i.e. the chance 'overlap' between *A's* system and *B's*, each being in principle independent. (This problem was evident to Saussure, who consequently makes a point of refusing to allow that the community's language system (*la langue*) could be complete in any one individual" (1998: 49).

First, this is indeed a valid argument if one identifies the idiolect *only* with an individual's language system; however, if a definition of the idiolect includes multiple codes and the ability to create and understand new codes, communication then is not *necessarily* the overlapping of shared and fixed systems, but an ongoing process of contextualized, code creation that is speaker/context-dependent rather than speaker/context independent, which should satisfy the integrationist views to some degree. The bulk of the argument is, at times, difficult to follow given its brevity, and

belies a lack of sustained reflection on or interest in the idiolect. It is taken as a "fact" by Harris that "…the very notion of the idiolect seems to imply that the individual constantly speaks in a characteristic and uniform way" (1998: 49). This is in direct contrast to the theory of the idiolect put forward in this work, and Harris notes, contradictorily, that this is in fact not the case as is shown by accommodation theory studies (Giles and Coupland, 1991).

Yet this interdialectal variation, accomplished through accommodation, is framed as yet another "dilemma" conjured up by segregationalist thinking. The dilemma as Harris states it is that of "how to draw a line on the slippery slope between the macrosocial and the circumstantial" (1998: 49). The solution, he decides, is that segregational theorists whose approaches vary (although none are cited specifically) will create arbitrary criteria in which one aspect of variation is considered linguistic, while other variation is written off as non-linguistic. A best guess at what theorists he might be referring to would be Labovian sociolinguists who employ social constraint/motivation theories to explain variation on the macrosocial level (as opposed to accommodation and discourse theory which generally explains variation on a situational level) and in the process do indeed ascribe a great deal of variation, and on quite arbitrary grounds, as non-linguistic, i.e., motivated and/or constrained by social factors.

> "What also has to be precluded," he continues, "is the possibility that the idiolect may change over time(which includes from one utterance to the next). In other words, there would be no point in shifting the linguistic object to be described from community to individual if it were assumed that individuals could depart from their own idiolects in practice. For then

> there would still be language not explicable to reference to the code. And that is exactly what the hypothesis of the completely homogenous community is also designed to preclude" (1998: 49-50).

This is a clear reference to generative concepts of the idiolect and the Chomskian notion of speakers reaching a "steady state" of language within a homogenous speech community, and as such is an accurate assessment of generative stances toward shifting object of study to individual speakers, whether their internalized grammar of the I-language, or their externalized speech. It should be clear by now that the conception of the idiolect that is developing here admits, and in fact posits as a central feature, its ability to change over time, indeed, from one utterance and context to the next precisely because it is evolutionary by nature and thus adaptable. For Harris, there is "no point" in shifting our focus from speech communities to individuals simply because the individual, the idiolect, develops in response to language contact. To counter his argument, it would appear absolutely necessary to shift our focus from the community to the individual in order to observe, record, and understand the processes underlying idiolectal growth and development and how individual speech is related to language differentiation.

Harris levels on final argument concerning language transmission and the idiolect as the separation point between synchronic and diachronic linguistics.

> "In other words, while it makes some kind of sense to say that languages or dialects can be passed on from one generation of speakers to the next, this makes no sense at all in the case of idiolects, since by definition the idiolect belongs to one individual only. It dies with that person. So if languages are in the final analysis idiolectal, they are dying out a

phenomenal rate; much faster than the most gloomy calculations" (1998: 49).

This final point has a strange ring on the first read, that Harris has not read his population growth statistics correctly, but it is, it would appear, based on an unclear conception of an idiolect, as entities so radically different that cannot be shared and therefore cannot be passed on. It appears that he concedes the point that idiolects may not, like languages and dialects, be "fixed codes," in his terminology, as they lack coherence, continuity through time and any structure. That if language change inheres in individuals and not social structures or fixed grammars, then transmission is impossible. This is clearly not the case and flies in the face of the very integrationist theories he proposes. That idiolects may develop and change over time overtly implies that a "synchronic" state or many states of multiple idiolects are passed on to a child during infancy.

What is not explicit here is that Harris appears to want to resort to the Chomskian notion of a steady language state and homogenous speech community as prerequisites for language transmission and acquisition. What is also transmitted/acquired, it could well be argued, is the "reality" of idiolectal variation: both on the intra and interidiolectal level, as well as a repertoire of what Chomsky would consider to fall under the heading of the "performance matrix," and what Harris and other integrational linguists would label the communicative activities open between adults and infants, which are themselves subject to intense variation through the years.

In one sense we could say that what is being transmitted/acquired is change and variation itself, and that the child is faced with the daunting task of grabbing hold of

constantly moving, multiple targets. It is quite true to claim that if language is idiolectal in nature then a language dies along with the individual, and in the same moment, new languages are evolving through the growth of the infant's idiolect. What is not true is that somehow the number of language deaths far outstrips the number of language births.

The length to which Harris has been quoted is a direct reflection of the dearth of current materials in western linguistics on the idiolect, especially those that assess it concerning its theoretical foundations. And it is also hoped that integrationist theories may come to embrace the idiolect, as did Hermann Paul, as the one linguistic entity we can lay claim to as, at the very least, a first level abstraction and at best, a foundational principle for sociolinguistic inquiry into communicative practices.

2.5 MULTILINGUALISM

In his article "The Neurolinguistic Aspects of the Native Speaker," Michael Paridis begins by stating:

> "In the simplest circumstances, children acquire the dialect spoken in their (unilingual) environment by parents, caretakers, relatives, and friends. They are then said to be native speakers of the language of which their dialect is a variety. Thus, properly speaking, one is not a native speaker of a language but of a given sociolect of a particular dialect" (Paradis: 205).

But, as he goes on to point out, it is typically the case that children grow up learning several sociolects of different dialects. He goes on to argue from a neurolinguistic standpoint that children, during the socialization process, especially

education, must learn to change in any number of ways, their idiolect to encompass, or more closely resemble the standard(s) being taught and used in wider social contexts, especially in literacy. If we accept this claim, the idiolect is, after initial acquisition stages, faced with the need to adapt and continue developing, i.e., enlarging the scope of what it can accomplish productively and receptively in all the different -lectal domain(s) it is socializing into throughout adolescence and adulthood.

An idiolect in unilingual environments can be composed of numerous sub-lects, registers and styles: at the minimum, formal, informal, baby talk, reduced speech to toddlers, then again much fuller communication with adolescents and teens whose own evolving idiolect may influence their parents or caregivers. Witness the rapid spread within modernized unilingual environments, aided by ubiquitous communications technology, of various lexical aspects of highly divergent sociolects, including slang and tech-speak. A native language, which we take to be a sociolect acquired before the critical period of neural development which is used automatically, with no conscious knowledge of the rules regulating its use, is by no means stable in many cultures. Children who are moved at a very young age, say five or six, out of the environment where their first, or native, sociolect was acquired, may have their native system replaced completely by the language of a new environment (Burling, 1959; Wong & Fillmore, 1991, Chambers, 1992).

The idealized, homogenous unilingual speech community, which, quite apart from being an idealization, born out of the monocultural atmosphere of modern nation states, is not a very accurate portrayal of the global linguistic situation where most languages

exist in diglossic or triglossic relationships alongside other dialects as evidenced by Nettle and Romaine.

> "Although as many as 250 languages are spoken by a million or more people, 83 percent of the world's languages do not even claim a territory as large as country. In fact, there are approximately 25 to 30 times more languages than there are countries, which means some degree of bilingualism or multilingualism is present to some degree in practically every country in the world" (2000: 29).

This has enormous consequences for the study of the idiolect and raises a number or salient issues concerning language systems and the status of the idiolect as a "unified" system itself. The first and most obvious question is whether bilingualism or multilingualism is a difference of kind or degree. Does a bilingual have then two idiolects, one for each independent language system, or do multiple systems constitute the idiolect? Evidence from neurolinguistics suggests that there are no psychological or neural processes at work in the bilingual that are not at work in the unilingual and that the difference is one of degree rather than kind. The linguistic competence of the unilingual extends to the use of at least two dialects and several registers of their sociolect. (Paradis, 1998: 216).

The notions of code borrowing, mixing/switching, and interference are terms usually reserved for analyzing the speech of bi or multilinguals; however, unilinguals may also be understood to switch/mix between dialects or subcodes and might be characterized as experiencing interference from one register to the next. The bilingual may be borrowing from a different language where the unilingual may be borrowing

from a different register, and it can be assumed that the psycholinguistic processes involved are the same, and to a degree the contextual and discursial motivations similar as well. The degree of difference then between the phonetic form, lexicon, and, logical forms of other idiolects becomes significant enough that they are considered to be using a variety of a different "language."

From the generative perspective, such a claim is, like much research into multilingualism, problematic. The I-language of multilinguals, they would argue, has acquired multiple systems, both of which must be claimed to produce 'pure' instances of UG. The multilingual's I-language is capable of intuitive, native-speaker grammaticality judgments about more than one language. Multilingual studies have raised some theoretical problems concerning both the relationship between I and E languages. Most recent studies on code-mixing (Poplack, 1980; Myers-Scotton, 1993; DiSciullo et al., 1996) employ what is called by Srindhar and Srindhar (1980) "The Dual Structure Hypothesis." At any one time, either one structure or another, but not both simultaneously, are operative. Thus intrasentential code switches and mixes in speech occur through the processes of alternation, insertion or congruent lexicalization and are "feature checked" (Myers-Scotton, 1993) to ensure grammaticality with the matrix node or constituent. In other words, only one grammar (I-language) is present at one time so that parameters or bounding nodes for either language are not violated. This is in keep with the linear nature of systems thought in western linguistics.

There is however, evidence from a number of different sources that there are cases in which both grammars are present in a nonlinear or simultaneous manner so that they can be seen to be interacting with one another. The cases appear to involve mainly

verbal compounds (complexes) and the phenomenon known as delayed lexification. (Muysken, 1998). Given the relatively new status of bilingual and multilingual research, such evidence point out that we certainly cannot state conclusively that separate "language systems," are, in the popular view, distinct, i.e., in an on/off relationship to one another at the sentence level. These systems, perceived as discrete entities, may indeed be interacting to create syntactic structures that 'violate' the grammatical constraints in either system. However, the creative nature of the language faculty, so central to the generative vision, does not necessarily preclude systemic interaction, and such evidence may help to explain the emergence of new forms through the process of 'grammaticalization' (Hopper, 1993).

It has been noted elsewhere with regard to phonology that "THE phonology of a language variety—the normal object of phonologists' study—is a composite of individual phonologies in which the shared structure inevitably has indeterminate boundaries, and both dialectal and idiosyncratic variation" (Ferguson, 1979). The indeterminacy of the boundaries drawn by linguists may indeed extend to system behavior and syntactic rules and might be attributed to idiolectal variation and linguistic innovation, but such thinking is a departure from standard structuralist approaches and is more closely in line with ideas current in Complexity Theory which approaches determinate systems as alinear and includes such notions as 'fuzzy sets,' 'punctuated equilibrium,' and randomness as typical system behaviors. These cases (Muysken, 1998) might be written off as 'mistakes' by speakers or 'errors' against the accepted view of separate systems; however, they might also be view as both creative and random behaviors that have the

unintended affect of profoundly altering the relationships within a system or between systems, resulting in something altogether new.

This type of thinking militates against the idea that the idiolect is divisible into an I-language and an E-language, and that individual speakers 'partake,' in the structuralist sense, of independent and discrete language systems; but rather, the idiolect is a central and integrated part of the process of system creation, maintenance and change. A language system comes into being only through the contact of speakers, and thus, it is only through speech, through the contact of idiolects, that a system exhibits any rules. The view that it is *not* languages that are in contact but rather speakers (Milroy, 1997; Mufwene, 2001) is a productive approach and in keeping with the centrality of the idiolect. Milroy makes a clear distinction between "speaker activity" and language. It is the idiolects, not the abstract systems or structural representations of language, that are making use, in a multitude of degrees, of their idiolectal resources to "get across," the semantic bridge and communicate with other idiolects. Milroy writes:

> "[…]traditional histories of languages appear to be unilinear and narrow, inheriting from the nineteenth century a dominating mystique about genetic relationships of languages envisioned as discrete entities independent of speakers , and giving relatively little attention to the manner in which contact phenomena have been implicated in actuating and diffusing structural changes. Changes in these languages have been by and large envisioned as arising in a spontaneous way internally within the monolingual linguistic system" (1997: 312).
>
> Such view, he points out, creates a number of methodological problems for the

structuralist view of language as an independent system, and the generally unchallenged axioms of generativism as well as sociolinguistics. This approach enables Milroy to meld 'speaker activity' to language change and innovation, thus attributing the "motivations" for language variation and innovation not to social forces but to the necessarily psychological and linguistic activity of idiolects as they go about the business of language contact. Much as in the integrationist approach, separating the language system, (user-independent for Harris) we deny the individual's role in bringing forth the languages we suppose to exist as steady state, homogenous structure.

And finally, it must be asked: what are we to do with the phenomenon of emergent varieties of standard or national languages that is so prevalent in the post-colonial era? There are far more "non-native" speakers of English now than there are "native speakers." For example the NVEs or New Varieties of English that have evolved in former British colonies, which have their counterparts as well in former French, Portuguese and Spanish colonies. Are they to be considered separate languages with separate systems because they are divergent with respect to phonology, lexicon and syntactic structure, so that one might be a native speaker of American and not British English or Indian English or Nigerian English. These are highly charged political as well as linguistic questions, that want to imply that if there are not as many languages as there are speakers, then perhaps there are as many language systems as there are perceived varieties of language, and that these language varieties, exert influence on one another through their realization via contact of their respective idiolectal speakers.

2.6 WITTGENSTEIN'S PRIVATE LANGUAGE ARGUMENT

One of the strongest arguments against the idiolect as an individualistic linguistic structure on par with those of "a language," dialects and speech communities is what is commonly referred to as the private language argument. This argument originated in the work of the Austrian-born, British philosopher Ludwig Wittgenstein (1889-1951) who first addressed the question of the privacy of language in the 1953 classic *Philosophical Investigations*.

This work, his second, constituted a rejection of logical positivism, the discipline in which he was schooled by his mentor Bertrand Russell and is said to mark the 'linguistic turn' in philosophy, which had typically taken as its object of study ideas. Central to this work is the now famous notion of language games which shifted the definition of truth from the logical positivist stance of correspondence to objective fact to the agreement reached between individuals. Truth was the result of a particular language game between interlocutors and thus was by nature conventional as well as contextualized. This linguistic turn, which drew the ire of many of his contemporaries, including Russell, was influential in the creation of Speech Act theory as well as various theories of interpretation including hermeneutics.

The concept of the 'language game' centered on Wittgenstein's denial of the possibility of private language. Language, in order for it to be a game, had an inherent teleos and rules. The teleos was truth, which was arrived at through understanding between speakers who, a priori, understood both the teleos and the rules, not only the grammatical rules governing intelligible speech, but the pragmatic rules governing

appropriate usage necessary to 'winning' the game, to reaching understanding. This realignment of truth with language had a number of repercussions for philosophy and social science, and among them was the idea of the public nature of language. This idea, generally referred to as contextualization or situatedness, would later be assimilated into linguistics as pragmatics and eventually discourse analysis. Of Wittgenstein's argument, the influential contemporary German hermeneutical philosopher George Hans Gadamer says:

> "[…] I am in full agreement with Wittgenstein's famous sentence: 'There is no private language.' Whoever speaks a "language" that nobody else understands is not really speaking. Language is not something assigned by individual human subjects. Language is a *we*, in that we are assigned our place in relation to each other, and in which the individual has no fixed borders. This means, however, that we all must overstep our own personal borders/limits of understanding in order to understand. This is what happens in the living exchange of conversation [Gesprach]. All living together in community is living together in language, and language exists only in conversation" (2001: 56).

The game metaphor also invokes the idea that language must be played, and games cannot be played alone, although this notion may seem initially strange today with the great abundance of electronic games that can be played by oneself, or even the possibility of, say, playing a game within a game, such a shooting baskets by oneself or even playing the game of HORSE on a basketball court by oneself. But these are analogous to delivering a monologue or soliloquy. In electronic games, one is interacting

with a game, the rules and aims of which are understood, obviously, by more than one person. The existence of rules, or norms in the case of language, implies they can be transgressed, and transgression implies that someone other than the speaker is, in principle, able to corroborate this. This illustrates the strict, narrowest sense, in which Wittgenstein understood the notion of 'private language,' as a language understandable only to one individual, which therefore cannot be communicated to another. Making truth a product of public language and mutual understanding was a direct attack on the radical relativism of philosophy prior to the cognitive revolution that held one's sensations could not ever be expressed to another person.

The idea of the language game and the impossibility of a private language has been applied to the idiolect by a philosopher of mathematics, Michael Dummett, and as it is one of the few philosophical treatments of the idiolect, is worth quoting at length.

> "An idiolect is not related to a language, or even to a dialect, as a dialect is related to a language. Of course, each individual speaker has his personal linguistic habits. Of the vocabulary which the dictionary lists, he will know and freely use some words, he will understand but hardly ever himself use certain other words, and he will be quite unfamiliar with yet other--probably many other--words. He is likely, moreover to misunderstand and misuse a certain range of words. And the extent of these four categories will vary from individual speaker to individual speaker. These personal peculiarities of individual speakers do not, however, make of idiolects structures that could subsist of themselves; rather, they are ways that an individual has of speaking the language that

> he shares with others, and have just been explained by reference to that common language. An individual's idiolect could not exist without there being a common language of which it was an idiolect: it could not be his private language, unrelated to any other, in which -- since by hypothesis he could not use it for communication -- he might frame his private thoughts and, perhaps, keep his diary" (Dummett, 2002).

There is little overall to disagree with in the assessment of what the idiolect *is not*, and it points up what might be for some a notion of the idiolect. Indeed, it is the non-existence of a private, natural language that give rise to the creation of ciphers, which is essentially a 'private language' in the sense it is not socially shared by a group of speakers and therefore unintelligible to those who lack the translation key. Any ciphering code necessarily exists in the spectrum of natural languages. Also, that any human language is acquired through the transmission by others is argument enough to settle the issue of language privacy. Could one develop a private language over time? We can only speculate what might happens to the language of a fully competent linguistic individual who is kept in absolute isolation for say 25 years or so. We imagine they would use the language system they have to communicate with themselves or out loud. With no language input, it is conceivable that there would ensue a degradation of the vocal organ along with the internalized grammar and social performance aspects until this individual's idiolect no longer resembled anything near the initial language state. But such a hypothetical only serves to point out that there is no point in having a language if what it can say cannot be communicated to others. The island castaway would more

likely lapse into complete and prolonged silence, communicating only with himself with interior speech. Or perhaps with a soccer ball a la castaway Tom Hanks!

However, it is strange that Dummett begins with the claim that an idiolect does not stand in the same relation to a language or dialect as a dialect stands to a language. This point is not further defined in the paper and one must assume that for Dummett, an idiolect is not a valid linguistic construct primarily because the definition he gives it is that of a private language in the Wittgensteinian sense. While admitting there are individual language habits, they in no way constitute a domain of inquiry, as they cannot "subsist of themselves," and they violate the performative, social nature of language and its communicative raison d'etre.

This argument is similar to the Saussurian idea of that individuals possess a partial and imperfect grasp of a given *langue*. The flaw in such an argument that excludes the possibility of individual language structures and systems, especially where there is a direct correlation between dialects and languages to which they belong, is that individual peculiarity and idiosyncrasy is given no role in the constitution of communal languages and therefore can play no role in change or variation of a system. *Langue* then exists independently of its users and system state changes must therefore be spontaneous. This runs counter to many current approaches to language change and variation and ecological approaches to language study. Again, it would appear that by admitting the idiolect into the same arena with dialects and languages, there is a certain fear that theoretical over-complexity and relativistic tendencies would muddle the approach to issues of truth and language.

This argument holds only if one attempts to define the idiolect in terms of a private language as understood by Wittgenstein. And such a definition is self-defeating. What we must seek is a definition that recognizes and empowers the linguistic individual as an entity that is not in a master-slave relationship to a system of langue while at the same time establishing the common and shared universalizing aspects and principles of the idiolect. Dummett's argument is at once overly narrow in framing the idiolect and overly general in the approach to language. It is axiomatic that natural language is communicable, and that even when there is only a single speaker of a language on the verge of extinction, that she was a speaker of a once shared, social tongue. That communication is the object or direction of language is also axiomatic. However, to refuse to recognize the idiolect as a legitimate object of inquiry is to ignore the entire question of variation, change and linguistic individuation, something philosophers may be comfortable with, but certainly not sociolinguists.

One would assume, on the basis of this article alone that Dummett sees the idiolect as, at best, an untenable fiction for linguists, and a dead end investigative portal for philosophers; however, he has written elsewhere and much earlier in his career:

> "A language, in the everyday sense, is something essentially social, a practice in which many people engage; and it is this notion, rather than that of an idiolect, which ought to be taken as primary. We cannot, indeed, dispense with the notion of an idiolect, representing an individual's always partial, and often in part, incorrect, understanding of his language; but it needs to be explained in terms of the notion of a shared language, and not conversely (1974: 135).

Dummett seems to have been concerned with the procedural aspects of linguistic explanatory theory, positing communality as primitive, as opposed to individuality. This is no longer a contested point in contemporary philosophy or social theory, or for that matter, linguistics up until quite recently (Milroy, 1993; Mufwene, 2001). What could be inferred from this point is that for almost thirty years this philosopher of mathematics found no reason to investigate the idiolect on his own and received no cross-disciplinary input from linguistics with respect to individual contributions to the communal-lect.

Finally, he is primarily concerned with the procedural aspects of linguistic theory and prefers—given his phenomenological leanings—to make the communal language prior to the idiolect in explanatory theory. He excludes a possible approach, that we will examine later, of explaining the idiolect and shared language as interactive systems: that to have language is at once to have it to oneself and to share it. It is only by making this relationship explicit, much as the social-contextual linguistic turn of philosophy did for situating and returning language to the sphere of human activity, that we can move forward with fresh analysis of both idiolect and sociolect.

ENDNOTES

[i] Harris, Roy. 1983.149

[ii] These are central ideas in the Modistae grammars of the middle ages. For more in depth discussion of the origins of modern syntax one is directed to Covington, 1984 and Dineen, 1995.

CHAPTER 3:

LANGUAGE, NATURAL SYSTEMS AND COMPLEXITY THEORY

"In this every single experience is related to the whole. The connectedness of life is not a sum or quintessence of successive moments but a unity constituted by relationships which link all the parts." Wilhelm Dilthey. *Patterns and Meaning in History.*[i]

3.1 INTRODUCTION

This chapter explores language, the idiolect, Language Custom and the open-ended, dynamic system created at Point of Language Contact (PLC) from the point of view of Natural Systems Theory (NST), and its offspring of research from physics, chemistry and computational computing in the context of the emerging paradigm of Complexity and Chaos Theory (CT). Natural systems theory, as reviewed in the work of Bertalanffy (1972) and Laszlo (1972), provides the foundation for proposing an alternative approach to reconfiguring language as system, and lays the foundational definitions and terms necessary to NST thinking. While the concepts and terminology, especially of CT, may be unfamiliar to linguists, it's hoped that a cross-disciplinary approach to the language and general concepts currently used to discuss theoretical linguistics will suggest new ways of thinking about language, language contact, change and variation.

Little has been written in linguistics that incorporates the concepts and vocabulary of NST and CT and so the theories, principles, terms and definitions will be explained as fully as possible under the constraints of this research. One of the goals of this work is stimulate innovative, unusual approaches to linguistic analysis and theoretical inquiry, so we freely appropriate a stock of metaphors of a newly emerging science that has been fueled by the quantum leaps in the accuracy and complexity of scientific measurement, and new modes of thinking about measurement itself as a result of quantum mechanics[ii]. Increase in computing power is finally enabling linguists to process large corpora of data and in much more sophisticated ways; and with this increase in 'information,' the field of linguistics becomes more complex, and as is often the case with dramatic technological breakthroughs, the philosophy and methods that gave rise to the technology eventually present challenges to more traditional theories and methods we have been operating under.

3.2 EMERGENCE OF NATURAL SYSTEMS THEORY

Although NST is by no means a new field in western academia[iii], it is a rare event to find useful applications (from the mathematical or physical science models) applied to linguistic analysis or ethnographic studies. It has been pointed out that "design evolution," is a much slower process in the social sciences that still rely on essentially Aristotelian approaches to system structure, which for many areas of the natural sciences have proven incapable of explaining or encompassing much of the newly observed phenomena.

The "protoscience" of antiquity that persisted through the Medieval period is associated primarily with Aristotle; its main features are the ideas of essences and causality. Actions were explained according to the essence, or internal nature of a thing, which was in turned explained according to the final causes of nature. Action was the result of the internal nature (teleos) of things moving towards their final goal. Nature was, in this sense, understood teleologically, an unfolding of pre-determined states. Aristotle held that knowledge of the internal states of things could be arrived at through the process of reason, and in so doing first stated the basic problem of 'ordering' the world; summarized by Bertalanffy[iv]:

> "One formulation of this cosmic order was the Aristotelian world view with its holistic and teleological notions. Aristotle's statement, "The whole is more than the sum of its parts," is a definition of the basic problem which is still valid. Aristotelian teleology was eliminated in the later development of western science, but the problems contained in it, such as the order and goal-directedness of living systems, were negated and by-passed rather than solved" (1972: 22).

This model was rejected during the scientific revolution of which Galileo, Newton, Copernicus and Descartes are the figureheads. Aristotelian beliefs about the nature of reality—the nature and behavior of the physical world of objects and actions—was seen as both circular and vague. Objects were held to be composed of primary and secondary properties, what came to be called the objective and subjective properties. The rule of scientific hypothesis was created to derive the fundamental properties of objects so as to discover the natural physical laws at work in the universe. This "revolution" in

thinking is characterized by atomism and determinism. All matter is reducible to identical atoms and all complex phenomena are reducible to elementary actions. The universe, for Newton, was mechanistic and completely determinate. The properties of atoms were explainable in terms of a finite set of formal mathematical properties that constituted objects, and all change and action in nature was attributable to efficient causality (force, or contact between atoms) or the formal nature of matter (gravity). Relations between objects are external only; therefore; a change in one atom or object is in no way intrinsically related to or caused by changes in another atom or object by way of internal relationships between their natures.[v] More formally stated by Bertalanffy:

> "One way to circumscribe the Scientific Revolution of the sixteenth-seventeenth centuries is to say that it replaces the descriptive-metaphysical conception of the universe epitomized in Aristotle's doctrine of the mathematical-positivistic or Galilean conception. That is, the vision of the world as a teleological cosmos was replaced by the description of events in causal, mathematical laws" (1972: 22).

Just as Aristotelian ideas were 'replaced' by the Scientific Revolution, the organized simplicity of the new scientific model of a uniformly constituted natural world of elementary actions driven by deterministic laws was overturned once more early in the 20th century: in physics by relativity theory, and later quantum mechanics. Einstein, Bohr, and Heisenberg[vi] among others had discovered that the atomic world bore no resemblance to perceived reality. Energy was not constant, matter was not uniform, and movement was not perfectly ordered and completely predictable. The very fabric of time

and space, the physical make up of matter and of measurement was appearing more fundamentally indeterminate.

The organized simplicity of the old scientific model was replaced with organized complexity. Nature is not one vast mechanism but an incredibly vast number of complex, interactive systems according to Bertalanffy:

> "We say "replace," not "eliminated," for the Aristotelian dictum of the whole that is more than its parts still remained. We must strongly emphasize that order or organization of a whole or system, transcending its parts when these are considered in isolation, is nothing metaphysical, not an anthropomorphic superstition or a philosophical speculation; it is a fact of observation encountered whenever we look at a living organism, a social group, or even an atom" (1972: 23).

This revolution in science and the concomitant explosive growth of mathematics based technology resulted in isolated field specialization. This trend in science and humanistic inquiry has evolved as a reaction to the demands of modernization as it is defined as the necessary and desirable compartmentalization of knowledge. Compartmentalization is viewed as necessary given the sheer volume of "information" that has increasingly come to reconstitute traditional western views of knowledge. The application of knowledge into the "uses" of science, which is demanded in the technological age, makes specialization necessary if one is to keep pace with the changes and take part in either the maintenance of increasingly detailed and multifaceted physical systems or to contribute to the innovation and creation of emerging technological

applications. Compartmentalization is desirable on both an individual and social (academic) level if the individual and society expects to progress.

There is simply no time for Renaissance, or cross-disciplinary research; however, is clearly of great benefit in inspiring new developments, and infusing a sort of 'hybrid vigor' into stagnant and struggling disciplines, especially those like the humanities which have not received the support and investment of the hard sciences since the end the WWII. On such holistic thinking Laszlo writes:

> "The specialist concentrates on detail and disregards the wider structure which gives it context. The new scientist, however, concentrates on structure on all levels of magnitude and complexity, and fits detail into its general framework. He discerns relationships and situation, not atomistic facts and events. By this method he can understand a lot more about a great many more things that the specialists, although his understanding is somewhat more general and approximate. Yet some knowledge of connected complexity is preferable even to a more detailed knowledge of atomized simplicity, if it is connected complexity with which we are surrounded in nature and of which we ourselves are a part" (1972, 3-4).

It is typically the case that science seeks its moral and ethical guides from humanists, and humanists seek theoretical innovation and technical tools from science. Yet, the depth and breadth of specialization on either side often create insurmountable hurdles for those wishing to become more informed across disciplines. The theoretical physicist may have as much difficulty deciphering Kant, Heidegger or Chomsky as a the linguist, philosopher or anthropologist has in making any headway with Einstein,

Heisenberg, and Bohr. Our knowledge of the world from a collective standpoint, as Laszlo points out, is highly fragmented and exclusionary: science has no room for the humanist and the humanist none for the scientist. The two groups are often placed in adversarial roles or in competition for limited resources.

3.3 LAZLO AND NATURAL SYSTEMS

One possible bridge across this trend in divergent specialization can be found in contemporary models within the larger field of NST. I take Laszlo's (1972) approach to the fundamentals here as it is often cited as a highly accessible introductory work for those seeking an overview of basic theory and methodology underlying the more mathematically saturated and theoretically esoteric reaches of computational complexity and chaos.

Laszlo's approach, like many others in a variety of scientific fields, is based on the hypothetico-deductive method.[vii.]

> "It is the "hypothetico-deductive" method: that, namely, of setting up a hypothesis as a working tool and then tracking it down to see whether it works in experience. This means that instead of asking, 'What are the common observed characteristics of all things we call natural systems?' we ask, 'What are the characteristics any observed thing must have if it is to be considered a natural system?' We formulate the properties of natural systems in abstraction, and then proceed to find out if they are actually exemplified in some observed setting. The great advantage to this method

> is its efficiency. We may not be right, but we know what we are looking for" (1972: 26).

So, it will be necessary then to investigate natural language—as it exists both as communal and individual communicative systems—to discover whether either one or both possess any of the qualities of a natural system. This approach to analyzing the idiolect in relation to tradition collective language groupings will, it is hoped, shed some light on the relationships between individuals and the vast, multi-person web of diverse speakers that constitute, at one time or another, their lifelong linguistic community.

3.4 INVARIANCE OF NATURAL SYSTEMS

Contemporary science, Laszlo points out, is not, like traditional reductionism, interested in shared *substance*, or properties, but of the shared aspects and invariance,[viii] of organization as a basis for theory.

> "Contemporary science tends increasingly to concentrate on organization: not what a thing is *per se*, nor how one thing produces an effect on one other thing, but rather how sets of events are structured and how they function in relation to their "environment," other sets of things, likewise structured in space and time. These are invariances of process related to systems. We may call them invariances of organization" (Laszlo: 20-21).

There are four fundamental, organizational invariances shared by all natural systems: 1) the whole is comprised of irreducible properties, 2) the system maintains itself in a changing environment, 3) systems create themselves in response to the

challenges of the environment, and 4) systems are coordinating interfaces in nature's hierarchy, i.e., "They are wholes in regard to their parts and parts with respect to higher level wholes" (1972: 67).

It will be advantageous to begin each point with a full explanatory definition so as to avoid terminological confusion that is one of the dangers inherent in appropriating concepts from the natural sciences for application in the social sciences. First, To say that one is observing an irreducible whole is not to say that the whole is a sum of its elements. The whole, or system, is, as Aristotle first observed, greater than its parts; however, a distinction holds between wholes and 'heaps'. In the former, there exists an observable formal structure that is constructed through the integrational relationship of its parts. The latter, a heap or pile, has no 'formal' structure. Laszlo uses a pile of bricks as an example: the addition or subtraction of more bricks simply creates additive, not substantive alterations.

Language is typically seen as a system of interrelated parts, levels, or systems: variously, phonetic, morphological, and syntactic; and the interfaces between each level, i.e. morphosyntactic. The current generative model speaks in terms of phonetic form and logical form which are mediated by linguistic structure. The Saussurian structuralist approach is a well known parts-to-whole view of language as a system. This raises the question of whether or not traditional linguistic analysis is atomistic, and if the elements of language—phonemes, morphemes, words, phrases, and syntactic structure—are generally treated as uniform elements comprised of the same substance, and seen as parts of a mechanism which behave uniformly and are affected by basic laws.

These traditional approaches to language can be seen as failing to embody completely this first criteria. Although there is some interaction between subsystems through interface modules, atomistic reductionism is typically applied to the analysis of larger systems of language: we can remove or add phonological variants, increase and decrease lexicon, adjust syntactical parameters and still have what can be called a language. Thus, it would seem initially that language, qua language—the thing we speak of when we use such and such a language—is not really something greater than the sum of its elements; in fact, it is difficult to say what it is by traditional standards, other than a non-natural, closed system, and therefore a reification, albeit a useful one, that exists outside of natural processes as, say, a legal or political instrument or educational standard. This, I believe, is what Harris and the integrationists have in mind when attacking the sociolinguistic "myths" of language, dialect and so on. It is also what Chomsky means when he claims to find no reason to suppose that "languages" exist in any sense independently of their speakers.

Similarly, traditional sociolinguistic approaches to dialects and speech communities typically do not use such organizational invariance, which may explain why there is such a lack of definitional consensus on key terms, especially in sociolinguistics. NST holds that the property of a group, say a dialect, is irreducible to the properties of its members (idiolects), but it is *not*, Laszlo points out, irreducible to its members *and* their relationship with one another. One does better to study the group qua group.

> "Psychologists study the character of small and large groups, *as groups*. Since people behave differently in small intimate groups than in large public ones, there are some things we can say about the behavior of people

> in groups that refer to the structure of the group rather than the individuality of its members. The properties of the group are irreducible to the properties of its individual members although not, of course, to the properties of its individual members plus their relations with each other (1972: 29).

We cannot, Laszlo maintains, compute the character of a group by computing the individual properties and relationships of each member. The nature of the group is, as he states, a result of the very fact of its 'groupness' and will maintain these characteristics even if all the members are replaced. To proceed any differently would lead us nowhere, just as the analysis of the interrelationship of the millions of integrated parts of an jet plane will not get us to the nature of aircraft as a means of transport. To do so creates, in a practical sense, an impossibly complex situation of trying to ascertain the character of a group by computing the individual properties and relations of each member, much like Bloomfield's "connect-the-dots" version of an individual's history of language contact. This calls into question much of sociolinguistic survey research which uses linguistic data from various groups as exemplified in the speech of individual informants who are by necessity in contact with other speakers, at the very least, the researcher.[ix] To take the language produced in contact as "empirical" evidence for qualities of the group or speech community is a procedural error so far as NST is concerned. In opposition to such research, generativism draws a great deal of explanatory strength from eliminating "language in contact," or performance, from its data base and in doing so loses that which characterizes language as human.

Most linguists would agree that language is certainly something qualitatively more than a simple sum of its parts; yet the field has generally concerned itself with the analysis of those parts, while poets, philosophers, and artists are often better able to express what the 'greater sum' of those parts might be. There is little agreement, for example, on a universally acceptable definition of such linguistic entities as phonemes, morphemes and words, which stems from the difficulties of agreeing on—not so much how language is structured—but how it is cognitively organized, performed, and received. Questions of perception dog the search for clear cut lines along phoneme, word, phrase, and collocate boundaries.

However, if we talk about empirical language as a natural system, it must necessarily exist only through idiolectal contact. Through the language produced in contact, models are deduced from extracted data and tested, but these models are, in the case of dead languages, constructed systems, subject to entropy[x] and decay in the face of the emergent natural system of human language from whence they are derived.

As a natural system embodied in its speakers who are embedded in the social matrix, "language" is idiolectal, arising and coming into being only with contact. Stripped finally of "the system" of which it partakes (de Saussure), describable through rule application (Labov), or as a universal grammar (Chomsky), the idiolect, as a natural system, is irreducible to its relations with other idiolects. It cannot, therefore, be confined or reduced further to particular grammar systems, or cognitive or social systems within the individuals. In other words, if language is an open, natural system there is no need for *langue*, there is only *parole.* Including social relationships or network theory between speakers hopelessly muddles the investigation as Laszlo points out. Speakers do not

partake of a system as the structuralists would have it; rather, language systems are created through idiolectal contact, and this is a prime reason for replacing the term "language system," with "Language Custom." As such, the systems are necessarily open, evolving and dependent upon contact for their existence, just as social customs are. The idiolect, framed in such a way to meet Laszlo's first criteria, lends itself more easily to the remaining three.

The solution to the many riddles of language variation may lie in the concept of open-ended, self-maintaining systems, the second aspect of Laszlo's organizational invariance which posits that systems maintain and self-organize in a changing environment. As noted, a great many closed "language systems" fail to do just that, primarily on account of the complete loss of their speakers or through diachronic variation so that language X can no longer be said to be language X from a grammatical or structuralist standpoint.

> "The technical definition," writes Laszlo, "of a natural system is an open system in a steady-state. Openness refers to the import-export activities of the system, which it needs to "stay in the same place," that is, to maintain its own dynamic steady state [e.g., man, cells, ecologies and societies]" (1972: 37).

Natural systems, unlike mechanical systems, are able to adapt and draw energy from their environment and are thus self-sustaining natural system, whereas Closed systems are subject to the Second Law of thermodynamics.[xi] Human language sustains itself on the most elemental level through transmission, replicating itself in offspring of speakers, whereas the closed systems of

structured languages, dissipate, become more disorganized and undefined over time until they can no longer be considered to exist at all.

The idiolect of individual speakers maintains itself robustly, in the terms of neuroscience, in a changing environment. For the idiolect, language contact is concurrent with the understanding of the environment (setting, context, topic) in which speech unfolds. There is an integrated process (Language Custom) which mediates input-output so that all levels of context (micro and macro) are integrated into the performative aspects of speech and are processed along with/or just prior to the necessary psycholinguistic, grammatical, phonetic and cognitive factors. The individual maintains his/her language system through the input-output process which is much more than the mere loading off and loading up that the technical terms imply. The transfer is both means and ends. In the natural system of a human being, the idiolect is in physical, biological contact with the environment, and like all biological entities, it is both autonomous and adaptive[xii].

Given the goal directedness of discourse (speech, idiolect contact), a constant negative and positive set of feedback loops is presenting information that implements error correction and facilitate movement towards cognitively represented goals. These cybernetic correctives are common in natural systems that are in contact with their environment, and language interaction is nothing if it is not a contact sport. Interidiolectal contact provides the necessary intake and output of energies that enable us to survive and maneuver in our social and biological environment as both individuals and members of groups. The contact of individuals is the bonding element of groups, and the adhesive, or attractive energy of idiolects within the larger system of language.

> "The individual now becomes like the ripple on the surface of a larger wave in the sea: the individual, like the ripple, is local and temporal, while the species, like the wave, is vast and ongoing. Yet all the ripples together define the curvature of the wave itself" (Laszlo, 1972: 43).

Other questions concerning 'boundaries' in the general sociolinguistics sense are bound to arise when the idiolect 'merges' as it were with a communal language, as well as when the idiolect itself is deconstructed in search of its primitive elements, and clean breaks between the cognitive, cultural, and performative facets of speech are few.

Traditional sociolinguistics has a preoccupation with spatial boundaries beginning in dialectology and areal linguistic studies, and these geographic coordinates were translated, or found their correlates, in the social and psychological boundaries of language variation studies in phonology and discourse analysis from age and gender into the realm of ethnography and ethnicity. This is, essentially, a weak statistical version of folk linguistics which accounts for its popularity with students and scholars. It is colorful and it is meaningful to folk notions of language and all important self-identity, without which there would be little else to write about in sociolinguistics.

However, in sociolinguistics there is something unsatisfying, cumbersome in a mechanistic way, to many analytical approaches which wed language and social factors (ethnicity, gender, economic class). If these conceptual categories are the only way we have to relate language to its speakers, we will not progress, as linguists, either in our understanding of language contact or in the social relevance of language use. The social factors so popular in Labovian models are not only ill-defined, but the paradigm itself is a closed, static model of language analysis that aims primarily at replicating itself rather

than searching for linguistic and social understanding. It is necessary, then, to move outside the paradigm and begin by appropriating new terms, definitions and metaphors to stimulate new insights. Bertalanffy writes elegantly of boundaries in the language of molecular biology

> "The spatial boundaries of even what appears to be an obvious object or "thing" actually are indistinct. From a crystal consisting of molecules, valences stick out, as it were, into the surrounding space; the spatial boundaries of a cell or an organism are equally vague because it maintains itself in a flow of molecules entering and leaving, and it is difficult to tell just what belongs to the "living system" and what does not. Ultimately all boundaries are dynamic rather than spatial" (1972: 36-37).

The same difficulties beset sociolinguistic boundaries of dialects and social norms, of locating language change and variation, in deciding whether linguistic variables belong to a group or to the individual. And what we find is that these boundaries and variables are vague as the individual language system maintains itself in a constant flow of interlocutors and in constant contact with a flow of language that we know intuitively to be wildly divergent. When we abandon the traditional social and linguistic boundaries, we arrive at the most primary of all boundaries: the individual organism, the linguistic individual who coexists and co-evolves with other speakers that come together to create living, interactive systems, and as Bertalanffy describes this activity, it is dynamic, and unstable as we will see in the fieldwork data.

> "Hence an object (and in particular a system) is definable only by its cohesion in a broad sense, that is, the interactions of the component

> elements. In this sense, an ecosystem or social system is just as "real" as an individual plant, animal or human being, and indeed problems like pollution as a disturbance of the ecosystem, or social problems strikingly demonstrate their "reality" (1972: 37).

3.5 SELF CREATIVE SYSTEMS

The third aspect of Laszlo's natural systems theory is self creation in response to the challenges of the environment. It has been discussed to some degree in Chapter 1 (Mufwene: 2000) and is perhaps one of the more accessible concepts from the physical sciences for social application.

> "Self-creativity in the sense suggested here is not a mysterious quality, innate to entities with "spirit" or "soul. It is a response to changing conditions which cannot be offset by adjustments based on the existing structure. In this more modest sense, self-creativity is a precondition of evolution. If natural systems were merely to maintain the status quo throughout the range of circumstances they encounter, there would be no evolution, no patterns of development, and nothing we could call progress" (1972: 46).

There is much of interest here. First, that self-creating—the perpetuating of idiolectal language—is a response to an environmental challenge, at the extreme of clueless traveler in an unfamiliar or partially familiar idiolectal space. The system is unable to 'offset' or manage the changes based on existing system structure. The idiolect

in such an environment is far from equilibrium, i.e., unable to cope with linguistic demands, so it must innovate.

Echoes of Hermann Paul return here as we locate a source of language change as a spontaneous, internal change of the idiolect as a response to intercourse with other idiolects—the demands of environment.[xiii] Thus language maintenance, in the sociolinguistic sense, would *be* language change. The process itself, the "structure" we identify in language, is an innovation. The idiolect self creates in any number of forms depending on two fundamental variables: initial states and input. The problems that linguists run up against in trying to describe *en toto* any one idiolect (save, perhaps, for one's own, are the very same problems physicists encounter when trying to determine the initial states of systems, equilibrium points, and so on. Initial states will be explored in much more detail in Chapter 4.

Language acquisition for the first ten years or so is an extended period of very rapid, intense, and concentrated self-creation, the creation of individual grammar in the species. It is also visible in adolescents who are able to adapt more quickly and efficiently to environmental stressors and changes as a result of relocation to distant, unfamiliar language communities. And in more stable language environments teenagers exhibit signs of highly focused self-creation of their idiolects (Le Page and Tabouret-Keller: 1985, Eckert: 1989).

Some signs of this are the marked expansion of lexicon, dramatic phonological shifts within general systems equilibrium, and a heightened ability of mimicry, as individuals try new forms and seek out appropriate prosodics and registers in changing social contexts while discerning the underlying pragmatic functions and semiotic

variation across increasingly broad cultural contexts. And throughout these innumerable acts of self-creation, idiolects maintain themselves as open, steady state systems between and among themselves; contributing, through endless acts of self creation to the greater maintenance of the supraindividual, open, steady state natural system of language (Language Custom) that can be described as having organized complexity. Laszlo writes:

> "Now, as each natural system (for these are the "objects") we are interested in, receives and responds to inputs from its fellows, it provides new inputs for the others. And so each system constantly challenges the others by responding itself to such challenges. There is interdependence among the systems—[and] in virtue of the connectedness of all points, there is a coordination in the behavior of all systems, and an overall pattern with sooner or later emerge" (1972: 48).

This resonates with variationist approaches, such as Milroy, Mufwene, Kretzschmar, and Le-Page and Tabouret-Keller who argue that the individual is the locus of language variation, and the scope of their arguments can be broadened to include language change if we agree with Laszlo that these individuals (points in the larger system) do not simply mimic or repeat linguistic behavior, but are actively engaged in creating new forms in response to environmental pressures. "We get a progressive modification of behaviors: one invention poses challenges as its effects reach other systems, and these respond by their own matching inventions" (1972: 49).

Laszlo's fourth and final aspect is natural systems as coordinating interfaces in nature's hierarchy.

> "Organization in nature comes to resemble a complex, multilevel pyramid, with many relatively simple systems at the bottom and a few (and ultimately one) complex system(s) at top. Between these limits all natural systems take intermediate positions; they link the levels below and above them. They are wholes in regard to their parts, and parts with respect to higher level wholes" (1972: 67).

The idiolect in such a cosmology, would apparently occupy the lowest striation in the pyramid of a natural language system. At the highest point, we might posit Human Language: the innate, species-shared system that is the stuff of generative aspirations. The intermediary stages can be occupied by any number of variously constituted language systems ranging from communal languages, dialects, codified standards, and the many sub-varieties that might be found within them. If we posit the idiolect at the base, then there exists only one possible interface 'below' it, that of the infant, to which adult idiolects pass on a language system. The process of interface, however, is indeed a process, an activity of energy exchange through input and output, feedback and so on as described above. Here individuals are seen as subsystems in a bidirectional relationship involved in a necessary function with other system components.

> "They assume the liaison between those (lower-level) components of the system which they control, and those (higher-level) components of the system which exercise control over them. Their function is to pull together the behavior of their own parts, and to integrate this joint effort with the behavior of other components in the system" (1972: 68).

Integration is the critical term here. Accommodation reflects this integrational movement of individuals idiolects in making Language Custom. Focusing and diffusion of linguistic forms as dynamic systems interact via contact, and idiolects self create together. Implicit is also the idea that these "systems,' our idiolects, have a crucial cognitive, perceptual component which is product of its initial states and its trajectory, i.e., the result of its history of interaction with other idiolects. The social pragmatics of idiolectal intercourse are key indicators and potent variables in what will be called 'phase state change' of idiolects during language contact.

Considering what 'lower and higher level' components in "control" relationships might mean for sociolinguistics for individuals interacting with perceived sub groups and their respective systems (speech communities, social norms, nation states, and other ecological conditions) which act not so much as strict determiners (in Labov's sense) but as stabilizing pressures within a larger system that itself encourages shape, pattern, and growth. Language Custom can be seen as the housing, or in Heideggerian terms, "a clearing" within which systems meet by way of idiolects and the generative nature of it is found in the Principle of Concord that acts as the primary attractor guiding discourses towards, but not always to, a center of understanding, a point or phase state of relative, often temporary, equilibrium between idiolectal codes. The energy of the system "wants" (much as physicists might say that isolated systems "want" to run down) to move in that direction, towards convergence and focus in a state of Concordance, which might be visualized as bottom of a bowl towards which marbles are rolling. Laszlo points up the dynamics in saying that:

> "The systems view of nature is one of harmony and balance. Progress is triggered from below without determination from above, and is thus both definite and open-ended. To be "with it" one must adapt, and that means moving along. There is a freedom in choosing one's paths of progress, yet this freedom is bounded by the limits of compatibility with the dynamic structure of the whole (1972: 75).

What this implies for empiricists is that patterned language change and variation is a unitary phenomena, emerging from below in the idiolect and above in the sociolect and is buffered and guided by forces and pressures as it finds its own way across the arc of its trajectory.

3.6 IDIOLECT AS AN AUTONOMOUS ADAPTIVE ORGANISM

Idiolects are considered here to be complex adaptive organisms moving within and co-evolving[xiv] with encompassing ecologies of language. The ecological habitat is always a highly diverse, complex, natural system of individuals engaging in a dense, multiplex web of contacts. Each idiolect is a unique, idiosyncratic, and emergent lived language system that changes itself through adaptation and replication in the course of a lifetime.

All unimpaired speakers can be said to possess, or be in an initial language state, that while particular to the individual, has much in common with other idiolects cognitively and performatively. Both grammatical and pragmatic competence[xv] are equal across speakers, but given the raped emergent and evolutionary nature of spoken

language itself and the variation inherent in the transmission of language and the uniqueness of its idiolectal expression, groupings of idiolects by their process of converging are at the same time diverging from other groupings of idiolects. Language habitats (Mufwene, 2000) are formed, and through frequency of contact carry on the process of localization of "a language system" as it is understood by structuralists. Localization implies decentralization, divergence, variegation, and the emergence of multiple systems. These multiple shared systems as they are interpreted and expressed through their different speakers when in contact, are often so divergent as to be called other languages.

For accommodation theory, convergence and divergence may be initially actuated by cognitive-based perceptual structures, but the development of these speech forms across the projection of a given discourse are wholly dependent on feedback, most critically in situations where speakers are relatively unfamiliar with the shape of one another's idiolects. With the addition of the feedback loop, the process of projection and accommodation is transformed into a more complex process, and each idiolect may be moved great distances from its center of equilibrium, and we will be interested in these 'far from equilibrium' scenarios and their effect on Language Custom. Yet even the seemingly simplest of conversations between localized idiolects is still a highly integrated, dynamic, and complex series of interactive system processes. Within the larger pattern of discourse, the idiolect can be thought of in terms of an autonomous adaptive agent described in Complexity Theory as:

> An entity that, by sensing and acting upon its environment, tries to fulfill a set of goals[xvi] in a complex, dynamic environment. Properties: 1. it can sense the

> environment through its sensors and act on the environment through its actuators; 2. it has an internal information processing and decision making capability; 3. it can anticipate future states and possibilities, based on internal models which are often incomplete and/or incorrect; 4. this anticipatory ability often significantly alters the aggregate behavior of the system of which an agent is part. (Heylighen: 2002)

A number of correlations need to be set out here if this definition is to be useful. First, we take environment to represent one's habitat which is shared by other speakers and has its own particular physical and social structure. The individual embodying his/her idiolect is in intersubjective relationship to other individuals and can exist in a number of different types of cognitive awareness of the physical and socially structured habitat. All sensation, reflection, and action including scientifically objectified reality is grounded in the lifeworld, everyday experience, which is socially interactive. [xvii]

Sensors and actuators can be taken as the receptive and productive aspects of communicative behavior. Internal information processing and decision making are the tools of cognition and enactment of knowledge through selective response. It is clear that we possess predictive, or anticipatory abilities as both production and reception of language make clear. The internal models are the 'stable' or 'core' states that encompass the grammar of language and social context and contribute to appropriateness of response and disambiguation in shifting and evolving contexts. These internal models which enable us to anticipate intention and meaning make possible the creative nature of discourse, freeing our cognitive and linguistic abilities from the labors of translation and

interpretation. It is the creative nature of communicative behavior that affects change on the greater system, the communal system of which the idiolect is a part.

The danger here is of simply swapping a term from one discipline for another of a different discipline without making progress towards a fresh definition and way of seeing a subject. The immediate aim here is to open the possibility of imagining the idiolect as operative on two distinct levels: one, as the ongoing, multi-layered interaction between its own phonology, and morphosyntactic inner models which are in turn in constant contact via the feedback loop with the second level, that of its environment. The idiolect is inseparable from, and in an interactive relationship with, a communal language as it is defined by Mufwene (2001) as an "ensemble of idiolects."

The internal models, which are often incomplete and/or incorrect, undergo change and modification from encounter to encounter as well as across the trajectory of a lifetime. Were these internal models complete and correct, this would necessarily mean that the environment had ceased to evolve, which from an ecological perspective, entails death. Moreover, a completed internal model, a fixed langue, would exhibit no variation in its productive capacity, and perfect predictability would obviate all misunderstanding because what holds for one idiolect must hold for all. The image would be of a single, unified end state for all natural language speakers or perfect reduplication of idiolects from generation to generation and individual to individual. The ideal homogenous speech community would cease to be an 'ideal.'

The fourth point concerns the effect of the predictive abilities of idiolects as autonomous, adaptive agents on the aggregate system they interact with. These predictive abilities are based on internal models, we recall, which are themselves

temporary cognitive states based on all previous experience. It is, to recall Wittgenstein, experience that has universal regularity if not the language used to point it out. We can take the ecology of the speech communities of sociolinguistics to be in a state of near-to-equilibrium, where behavior is more regular and system modifications more gradual. Predictive judgments are reinforced more often and with more clarity in such environments. High levels of accommodation are a by-product of mutually reinforced predictive cognition that enable idiolects to test input against a wide array of possible language states and make a selection while simultaneously assessing social, pragmatic and code structure aspects of message.

Near-to-equilibrium settings that produce the homogenous speech community for Chomsky and ordered heterogeneity for Labov do not necessarily reflect language contact in the broader context of the world. It is often the case that a speaker's predictive expectations are caught off guard, foiled, and so completely stumped so as to leave her at a loss for words. And this is the point where linguists would state that the idiolects are 'at their weakest;' however, complexity theory states that in far-from-equilibrium settings systems are at their highest functioning level, with all systems hyper vigilant and active. It is here, at the edge of chaos, where the pressures for innovation are greatest, not in near-to-equilibrium situations. It is these periods following internal or external perturbations in the system, in what we can call stressed communicative environments, that the adaptive, self-creating abilities of idiolects are taxed and respond most strongly by creating a 'new' behavior, and thus being in a 'new' phase state as a result of the contact.

It is in these far from equilibrium phases that Language Custom as well is functioning at its highest level, stressed and over-amped; it can be an anxious and confusing sensation, one feels oneself to be lost and disadvantaged and struggling with language, and we are reminded just how much energy talking to people can require. In these states, the primitives of communication are accessed, much more attention is given to the situational, the pragmatic, and the structure of the code form. Elements such as style, register, and social marking will be difficult to assess in such a state. Larger, more encompassing and universalizing patterns of behavior become visible beneath the discourse, and primary one is understanding, not just the code, but the 'meaning' and import of the message, for without that, we are severed from a crucial feedback loop from language to cognitive states, and the internal system becomes highly agitated; doubt and panic set in; frustration, anger, and despair. Yet we all manage to communicate our way throughout a life filled with many turbulent and explosive changes in surroundings. Everyone eventually gets across the bridge. This is achieved through the species-shared ability of Language Custom in which different idiolectal systems merge, clash, adapt, and self create. That said we will move now to a more in depth look at Complexity and Chaos theory and terminology in Chapter 4.

ENDNOTES

[i] Pg. 103.

[ii] "There are five main ideas represented in Quantum Theory:

1. Energy is not continuous, but comes in small but discrete units.
2. The elementary particles behave both like particles *and* like waves.
3. The movement of these particles is inherently random.

4. It is *physically impossible* to know both the position and the momentum of a particle at the same time. The more precisely one is known, the less precise the measurement of the other is.
5. The atomic world is *nothing* like the world we live in.

While at a glance this may seem like just another strange theory, it contains many clues as to the fundamental nature of the universe and is more important then even relativity in the grand scheme of things (if any one thing at that level could be said to be more important then anything else). Furthermore, it describes the nature of the universe as being much different then the world we see" (www.library.thinkquest.org. 2002).

[iii] Natural Systems Theory, Bertalanffy surmises, was not born yesterday and enumerates a number of thinkers beginning with Aristotle who contributed to the intellectual development of this concept, including Christian mystics Dionysus the Aeropagite and Nicholas of Cusa (*coincidentia oppositorum*) as the struggle between parts which move toward a higher order of a 'whole," as well as Leibnizian monads and *matheis universalis*; and in the modern era, the work of Hegel, Marx and Gustav Fechner, author of 'supraindividual organizations,' perhaps the first sociologist or ecologist.

[iv] Ludwig Bertalanffy is considered the founder of General Systems Theory in the 1920s and 30s. His aim was to break with the traditional reductionist and mechanistic interpretations that he viewed as a dehumanizing tool for the analysis of human beings. His work was influential to later NST as well as CT.

[v] "This mode of explanation was seen to be circular or empty because the only explanation that could be given of an object's essential form or internal nature was in terms of the object's actions. There appeared to be no way to get independent access to a thing's internal nature, as Aristotle had thought reason could do. Hence, the internal nature of the thing was described in terms of its actions. For example, Glass has a brittle internal nature (which means it breaks) or gasoline is inflammable (which means it catches on fire). Since the action was explained by the internal nature and the internal nature was described in terms of the action, the explanation was circular. Saying that glass breaks because it has a brittle internal nature really just says that glass breaks because it breaks. This caused Galileo to reject the ideas of a secret internal nature as the cause of a things actions. Since it was impossible to perceive and served no explanatory function the idea of an internal nature was rejected. Instead it was seen that only some of the external properties of the object really objectively characterize the object and that these can be used to explain the other external properties"(Bertalanffy, 1972: 23).

[vi] Uncertainty Principle: "If we are going to destroy the wave pattern by observing the experiment, then we should at least be able to determine exactly where the electron goes. Newton figured that much out back in the early eighteenth century; just observe the position and momentum of the electron as it leaves the electron gun and we can determine exactly where it goes.

Well, fine. But how exactly are we to determine the position and the momentum of the electron? If we disturb the electrons just in seeing if they are there or not, how are

we possibly going to determine both their position and momentum? Still, a clever enough person, say Albert Einstein, should be able to come up with something, right?

Unfortunately not. Einstein did actually spend a good deal of his life trying to do just that and failed. Furthermore, it turns out that if it were possible to determine both the position and the momentum at the same time, Quantum Physics would collapse. Because of the latter, Werner Heisenberg proposed in 1925 that it is in fact *physically impossible* to do so. As he stated it in what now is called the Heisenberg Uncertainty Principle, if you determine an object's position with uncertainty x, there must be an uncertainty in momentum, p, such that xp > *h*/4pi, where *h* is Planck's constant (which we will discuss shortly). In other words, you can determine *either* the position *or* the momentum of an object as accurately as you like, but the act of doing so makes your measurement of the other property that much less. Human beings may someday build a device capable of transporting objects across the galaxy, but no one will *ever* be able to measure both the momentum and the position of an object at the same time. This applies not only to electrons but also to objects such as tennis balls and toasters, though for these objects the amount of uncertainty is so small compared to there size that it can safely be ignored under most circumstances" (www.library.thinkquest.org. 2002).

[vii] "Thought to be preferable to the method of enumerative induction, whose limitations had been decisively demonstrated by Hume, the hypothetico-deductive(H-D)method has been viewed my many as the ideal scientific method. It is applied by introducing an explanatory hypothesis resulting from earlier inductions, a guess, or an act of creative imagination. They hypothesis is logically conjoined with a statement of initial

conditions. The purely deductive consequences of this conjunction are derived as predictions, and the statements asserting them are subjected to experimental or observational tests(Cambridge Dictionary of Philosophy, 1995, 1999: 409). See full entry for validity issues and formal logical presentation.

[viii] Laszlo: "The more general a concept, the more widespread the invariance which it grasps; it tell us less about the individual peculiarities of a thing and more about what it shares with other things. In the systems view, if you want to know what is truly fundamental about a human being, you define him as a natural phenomena of organized complexity—a natural system. If you then inquire what sets off man from his fellow natural systems, you specify the many criteria which apply, first to organic systems as such, and then to man as one species of organis. This is the method of definition by specification, and it shows that detail and generality are inversely related. More importantly, it shows that detail is a specification of some more general trait and must be comprehended with the latter as the relevant context"(1972: 24).

[ix] The work of Labov comes to mind here given his fondness for dealing with language variation trends or 'shifts' as being confined to a region, say Birmingham, Alabama. Within a specific group, he selects various members as being more highly illustrative of the linguistic shift, and yet other as being 'leaders' of linguistic change. Isolating individual members from within a group is, it would appear, methodologically inconsistent.

[x] Entropy is defined as the dissipation or loss of energy within a system. When a system is isolated from interaction with other systems, the lack of input is manifest in a 'backwards growth,' or "decay." Here it is used to describe the fate of languages and individual speakers that are isolated, create no more of their specific species, and eventually die off.

[xi] The 2nd Law of Thermodynamics states that a quantity, entropy increases in time in an isolated system. Entropy or its opposite is the measure of energy available to a system according to how its components are organized. The energy in batteries, or fuel in a tank, for example, are closed systems that succumb to entropy and expire if they are not maintained or replaced.

[xii] Adaptive Autonomous Agents refers to the nature of individual members of a species. All living organisms are in a continual process of adaptation in response to environmental pressures. At they same time they are considered autonomous in that they always have a number of choices in how they respond to the environment.

[xiii] For Paul, the mechanisms of change for the idiolect are spontaneous change, which we can view in biological terms as evolutionary development, and the adaptation to other idiolects.

[xiv] Co-evolution is a common term in biological science which refers to the simultaneous evolution of species and habitat, each exerting conditioning and selection pressures one one antother.

[xv] Habermas, following the approach of Wunderlich (1970) does not adhere to the theoretical distinction between performance and competence. He distinguishes the two as grammatical competence and pragmatic competence:

> "The former is a property of strings of symbols that are produced as sentences by a grammar; the latter is a property of symbols that occur in contexts and, when uttered, can be evaluated differently by different speakers. Both properties can be theoretically explicated; the former in the grammatical and the latter in the pragmatic part of one's account of language"(2001: 72).

[xvi] "An agent's goals can take on diverse forms: (i) desired local states;(ii) desired end goals;(iii) selective rewards to be maximized; (iv) internal needs (or motivations) that need to be kept within desired bounds. Since a major component of an agent's environment consists of other agents, agents spend a great deal of their time adapting to the adaptation patterns of other agents (http://www.cna.org/isaac/Glossb.htm#Universality)."

[xvii] The term is used here as it is it was developed by Habermas from Husserl's term. It indicates socially grounded communicative action. **"**The lifeworld as a background to everyday processes of communication also functions as a resource. It provides a reservoir of intuitively certain interpretations upon which participants in communication can draw. As a resource, the lifeworld is one of the conditions that enable

communication, specifically the kind of communication that is characteristic of communicative action. The relationship is a dialectical one. Habermas claims that the lifeworld, as an enabling condition of communicative action, is itself reproduced by the integrative mechanisms of communicative action. In coming to an understanding with one another, participants stand in a cultural tradition which they simultaneously use and renew; furthermore, as members of social groups they reinforce existing bounds of solidarity while at the same time creating new bonds; finally, they internalize the value orientation of the social group while acquiring competencies that are essential to the development of their personal identities. The three domains of the lifeworld identified by Habermas thus the domains of cultural reproduction, social integration, and socialization, which correspond to the three functional aspects of communicative action: reaching consensus, coordinating action, and socialization(the formation of personal identities" (Cooke, M. 1994: 14)

CHAPTER 4:

CHAOS, ENTROPY AND FAR FROM EQUILIBRIUM SYSTEMS

"*Beneath the uniformity that unites us in communication there is a chaotic personal diversity of connections, and, for each of us, the connections continue to evolve. No two of us learn our language alike, nor, in a sense, does any finish learning it while he lives*." Willard Quine. *Word and Object*.

4.1. PRIGOGINE AND DISSIPATIVE STRUCTURES

Early 19th century advances in the chemical and physical sciences revolutionized all the related sciences with breakthroughs in the study of electricity and heat conversion. The first chemical batteries were invented and heat was found to create electricity and electricity could also be used to cool matter (Prigogine: 1984). And it was assumed that there was a universal tendency in the world towards the degradation of mechanical energy.[i] This remained the state of 20th century sciences of energy until Ilya Prigogine's breakthrough and the development of technology capable of study it some 20 years later. His work has not only changed the way physical scientists conceived of matter and energy, but is having a similar effect on the way social scientists view human systems such as social organizations and language. In this chapter we will examine in some detail how the work of Prigogine and others theorists of Complexity and Chaos might be applicable to the analysis of speech data, language contact, and idiolectal variation.

Complexity and Chaos Theory evolved primarily through the work of Ilya Prigogine, winner of the 1977 Nobel Prize in chemistry for his research into linear and nonlinear thermodynamics, which directly led to the development of Chaos Theory (CT). His research into open 'dissipative structures' called into question traditional interpretations of the Second Law of Thermodynamics used to describe system states near equilibrium and furthered research into entropy. He showed that these dissipative structures when held 'far from equilibrium,' the term he coined, by a matter-energy flow can become self-organizing, and he defines complexity as "the ability to switch between different modes of behavior as the environmental conditions are varied" (1998: 218). This breakthrough, calling into question the foundations of scientific observation of systems, led him to the realization of emergent behaviors, system states that were not attributable to the collective properties of the components of the initial systems. These emergent states, as something wholly new, required a new vocabulary; and the conceptual vocabulary he began developing has found its way into a number of other disciplines, including the social sciences.

His work describes the dissipative systems, those in which there is an exchange of energy and matter with the outside world and which achieve ordered, temporary states interacting with their environment. A true closed system, even those in science, a steam engine for example, are only approximations, for a true closed system cannot exist in nature and is thus like our homogenous speech communities and grammars, an idealization. A 'true' closed system of grammar is just as unlikely as the perpetual motion machine. One of Prigogine's many insights was regarding the realization of the 'absence of time' in the study of chemistry and physics in the processes that we

experience in the world around us. The Nobel committee described his work as having "Fundamentally transformed and revised the science of irreversible thermodynamics. He has given it new relevance and created theories to bridge the gap that exists between the biological and the social scientific fields of inquiry" (1977: 1).

While a basis in the fundamental workings of thermodynamics is helpful in making analogies and suggesting new modes of reference for language, the primary goal here is to consider what it might entail to frame language contact in terms of energy exchange used in the transference of the information encoded in the messages we send and receive. Certain metaphors may be confusing at first, for instance to say that the signal of language is undergoing increased entropy through a rise in the signal to noise ratio, or that a language system can be said to running down towards entropy, or 'sound death,' just as in classical thermodynamics all physical systems are thought to be moving always towards heat death. Often though, the importance of new metaphors does not lie in their scientific verifiability or even that they are an 'exact fit' for the new relationships to which they refer; but rather, much of their power lies in their suggestive nature and what they insinuate as a result of their novel reconfigurings of the language we use to talk about the objects and events that we want to understand in a new way. As such, metaphors possess a quality similar to that of a type of symbolism that Sapir termed condensation.

> "The second type of symbolism is equally economical and may be termed condensation symbol, for it is a highly condensed form of substitutive behavior for direct expression, allowing for the ready release of emotional tension in conscious or unconscious form" (Sapir: 1934).

This type of symbolism is a mainstay of rhetoric and propaganda in speaking of, say, "War." The symbol brings with it a vast array of ideological constructs and culture-bound schemata: morality, justice, enemies, heroes, prisoners, sacrifice and so on. A metaphor such as "Chaos," although less socially concrete and consciously evocative as "War" might be for most, it operates as a condensation symbol insinuating disorder, dissipation, breakdown of structure and the blurring of comprehension.

Prigogine noted that the living systems we create and interact with—a town, city, traffic patterns, marketplaces, and to this I add language—"are of a different functional order," he wrote in his Nobel Prize Paper on 'dissipative' structures,' "To obtain a thermodynamic theory for this type of structure we have to show that non-equilibrium may be a source of order. Irreversible process[ii] may lead to a new type of dynamic states of matter which I have called "dissipative structures" (1977: 1). The question he wanted to answer was how do such coherent structures appear as the result of reactive collisions. This entailed a closer study of the concepts of reversible and irreversible processes of the second law of thermodynamics.

Entropy is defined as the energy that is unavailable for work. It is at its highest when molecules and gasses are at the same energy level. When the energy level of one system rises, it uses energy to cross boundaries, such as energy crossing the boundary of metal to heat a pot of water. The entropy created in that process is said to be reversible, the energy used to heat the water can transfer back into the metal, and does so as that boiling pot begins to cool and the temperature of the two systems, the water and the metal, begin to converge towards equilibrium. But the second law states that there is the 'creation' of entropy, energy must be lost, used up, in the process of heating the water.

This is an irreversible process; we can never recover the energy used to create that particular molecular arrangement and state; even by trapping the steam, still there is entropy and it is highest when the pot reaches room temperature. The two systems have stabilized and are near to equilibrium.

This is the 'creation of entropy' as the loss of available energy into the black hole of time. The energy that was burned up in the work is no longer available, just as every machine consumes more energy than it creates. This is the study of 'open dissipative systems' that when harnessed enable us to predict the fluctuations of the energy states of various molecular systems—the water, the heat source, the metal pot—and with this structural understanding of basic elements we are able to create steam and run a turbine or desalinate drinking water. Entropy is the study of what happens to the energy that is used in process, the constant winding down of the pot of water back to room temperature. Thermodynamics before Prigogine was primarily concerned with states of equilibrium, and the mechanism of homeostasis in which the second law is always fulfilled, at least until perpetual motion or antigravity machines are created.

This 'dissipation' that was just considered 'lost energy', he theorized, is not simply gone, it is still energy and so it has a structure and that structure may not be of the same type as those systems physicists study in equilibrium states where the production of entropy moves towards zero under inertial forces of our room temperature pot of water. The natural world, which is an open system, is characterized by growth and diversification, and not a winding down toward uniformity. What then was this other state known as "far from equilibrium" that physicists and chemists knew but had never

bothered to theorize about? The point of contact where the energy and matter were firing in exchange.

> "Only irreversible processes lead to entropy production. Obviously, the second law expresses the fact that irreversible processes lead to one-sidedness of time. The positive time direction is associated with the increase of entropy. Let us emphasize the strong and very specific way in which the one-sidedness of time appears in the second law. According to its formulation it leads to the existence of a function having quite specific properties as expressed by the fact that for an isolated system it can only increase in time" (1997: 2).

Minimum entropy production is characterized by steady state systems near to equilibrium where entropy production reaches its minimum. However, as Prigogine discovered, the second law is valid only in the neighborhood of equilibrium.

> "Minimum entropy production expresses a kind of "inertial' property of nonequilbrium systems. When given boundary conditions to prevent the system from reaching thermodynamic equilibrium(that is, zero entropy production) the system settles down to the state of "least dissipation" (1997: 4).

It was a great surprise to chemists and physicists alike that the laws that hold for near to equilibrium systems did not apply in far from equilibrium systems; and in fact, they were contrary to what was observed in them. So as not to belabor the complex details of thermodynamic systems or attempt to describe theoretical and mathematical concepts outside my range of understanding, it is enough now to say that exploring the

work of such scientists as Prigogine, Bertalanffy, Laszlo, and others raised for me the possibility of framing a discussion of language in much different terms than are available and accepted by contemporary linguists. What follows is an attempt at reconfiguring the discussion of grammaticality and grammar systems. The traditional conceptions and uses of these terms are well entrenched in linguistics, and as such, offer significant resistance to change.

4.2 GRAMMAR AND EQUILIBRIUM

What I wish to suggest here is that the idiolect can be seen as critically interacting with other idiolects in a variety of system states ranging from near to equilibrium states in a language habitat where a predominance of speakers share most deeply and broadly one another's codes; this might be as close as we come to the idealized speech communities of generative and structuralist linguistic schools. We will talk about language contact between these 'native speakers' as marked by relatively low noise with an elevated signal function. There is less discord between idiolects. The listener is able through familiarity of code, context, and situationalized identities to almost automatically extract intended messages from the everyday noise that accompanies linguistic performance in the Chomskian sense. It is safe to assume that this near to equilibrium state is the direction in which individual and collective language systems move; it is the state speakers prefer and to which language moves and settles. Even the most catastrophic examples of language displacements and system fluctuations—the slave trade, colonization, and refugee migration—have resulted in new and distinguishable systems: pidgins, creoles, and new

varieties. Nature, it might be said, abhors silence and noise, striving to fill one and eradicate the other.

And further, in such a habitat, where idiolects are in regular and frequent contact we can suggest that less energy for "the work" of communication is required in the cognitive processes of manipulating and adjusting idiolectal systems and its many subsystems so that Concord is reached more quickly and more often and with a larger number of individuals. The energy of communication can move more freely along the more deeply established communicative pathways where there is a very low signal to noise ratio. In the creation and maintenance of equilibrious systems of language, speakers have been making and reinforcing mutually similar predictions in the choices and directions they take with language. The activity of language contact, and an intrinsic property of language itself, is that of conservation of energy. As the generativists seek to prove, all natural languages possess a universal grammar that is well-adapted to its transmission and subsequent acquisition by infants and children. The grammars are passed on readily and acquired perfectly in relatively short period of time. There is a limited supply of energy available to carry out the process of biological growth and development; and language acquisition, while being key to survival, is but one of many complex processes and systems that must be fueled.

While we typically do not think of speech as consuming much of our energy—perhaps one of the lowest caloric burning activities in which humans engage—most would agree it can be quite taxing to listen to a boring lecture and even draining to process the onslaught of language from a compulsive talker, and of course, it is exhausting to learn a foreign language at an advanced age. A number of aspects of

language and communication would appear to be a result of the process of energy conservation of which grammar is the most well-studied and obvious. Others might be found in pragmatic and discourse phenomena such as Grice's Maxims, the referentiality of pronouns and other macro-level discourse markers, and perhaps even the relatively limited number of language functions, e.g., questions, declarations, promises, and so forth. There is the overall sense that the structure and nature of language promotes rapid and widespread homogeneity and is bound by the gravity of its grammar which ensures its successfulness in use.

In near to equilibrium systems, discourse becomes more "complex" and meaning is dispersed more widely throughout the system in shared and familiar encodings as metaphor, interconnected narratives, the structures of humor and the many other socialized forms we frame in language behavior. This sense of gravity created by shared or overlapping grammars, frequent contact, and social stability allows speakers to give much less conscious consideration to speech forms as speakers expect their utterances to be fully understood. In such systems entropy is said to be very low and there is more available energy for other communicative aspects of language contact. Where, or towards what end, this energy is expended might be found in the subject matter of sociolinguists where these steady state systems are discussed in terms of vernaculars, native grammars, style, register and so on. Identity maintenance, rhetoric, and spontaneous creativity and innovation are good candidates as well. But most important is that we understand that all of these aspects of language contact emerge most clearly in equilibrious systems.

Grammar, then, must be distinguished from "the grammars" of languages. Grammars, those fixed structures we extract from the flow of language and for which we

can write phrase structure rules can be said to exert a gravitational pull on idiolects, as Chomsky has pointed out so clearly in distinguishing the grammaticality judgments of native speakers. Grammars are often viewed in this way, as a system of constraints or parameters within which particular languages order and arrange their phonetic forms. Whether or not one agrees with Chomsky in part or in full, nowhere do we speak of language or languages without grammars, either ideally or individually. Thus, in linguistics, grammar has become an all purpose term implying both a cognitive state or ability as well as the set of linguistic structures it creates, partially or fully, through language contact. It is not my interest to reinvent the wheel so to speak when a perfectly good one already exists, but to suggest that Grammar is what "we see" language always converging towards, like equilibrium in thermodynamic systems where energy is conserved. This is, I argue, a result of the dual nature of language as a cognitively based behavior: it is at once unique to individuals but depends for its existence on groups. This is along the lines of the competition model of which Mufwene speaks; however, I am not concerned with language variation with respect to how various features are passed on, but rather, that the tendency of idiolects is, like all natural systems, to divergence and bifurcation, change and growth. Grammar is, then, what we recognize as a Language Custom between idiolects that have, through frequent contact and shared experience, arrived at a state near-to-equilibrium. In this sense, the establishment over time of equilibrious Language Custom, is a universal tendency, for if we speak of language as being self-organizing then surely it must organize into something recognizable. These patterns we extract from such ongoing organization we call grammars.

4.3 FAR FROM EQUILIBRIUM

Thus far we have looked at language with respect to equilibrium in ideal speech communities; however, it is often the case that contact is between distant, unfamiliar idiolects and that a system that worked perfectly and with little effort before the eight hour plane flight is suddenly unable to function properly: input makes little to no sense and output is failing to generate desired responses in the interlocutor; and thus, predicted returns from one's input diminish, incoming and outgoing signals are degraded in such exchanges in which the feedback loop produces more noise than meaning. If the systems do not change at this point, they quickly wind down into torpor and lassitude. The sullen Peace Corps Volunteer comes to mind, locked away in his mud hut spiraling into complete systems shutdown. It is not a pleasant sight, nor is the relocated refugee denied the operation of basic linguistic survival systems. But these are the results of such overwhelming disturbances that systems are not able, at least for a time, to adapt at all, though we think the refugee would fare better in the long run, as there is a long run, rather than the temporary traveler able to return to her language habitat where the idiolectal system moves back towards equilibrium, a place where one is understood and thus 'known.' For not to be understood, as we all know, is to be an idiot, a drunkard, or a fool. And only the dead can't talk back. In these far from equilibrium conditions, full of chaos and noise, there are two fundamental choices: adapt and learn or retreat into isolation. Learning then, in this situation, requires bringing order out of chaos and the creation of new grammars to facilitate reaching Concord.

The energy exchange between these individual systems in such far from equilibrium conditions becomes so complex that contact causes fluctuations too great for the systems to absorb, thus forcing it to reorganize, and the reorganization process creates even greater complexity as the systems adapt and change. The increase in complexity increases the chances of still more random fluctuations which in turn result in ever increasing instability. This is the realm of complexity and the site of chaos; the space where new choices and predictions are made resulting in new structures that bring about order from the chaos and guide us to Concord.

The realm of language far from equilibrium has been explored in a number of different ways under the heading 'languages in contact' and the study of Creoles, code switching and multilingualism. Scholars describe features as they cross boundaries from one language system to another, typically in one direction, that of the Creolizing populace. The effort of these studies has been directed primarily at validating the Creoles as unique language systems through the creation of lexicons, phonologies, and grammars which invariably share features with their superstrate languages. These historically based investigations are sociolinguistic and thus structuralist in nature as they go about the descriptive and analytic work of delineating a new language system; consequently, they do not concern themselves with idiolects except as sources of evidence for the data they which to analyze or qualify. This creates what might be called a competitive model of grammars, in which ineluctably the grammar with the biggest army wins, but never completely, as evidenced by the new varieties that emerge.

A similar approach to far from equilibrium conditions is found in second language acquisition studies where the production or use of a new grammar or language is

evaluated in relationship to its structural parent as it is modeled by individual speakers. Individuals are said to be using 'interlanguage' at some point, a somewhat deficient hybrid or partial version of the code which they are in the process of learning. Others are said to be 'fossilized' in certain states of second language learning, their speech embedded with errors. When these 'errors' become widespread enough, they are often attributed to first language interference from phonological systems for example. In second language acquisition studies, however, there is a great deal less talk of the 'innovation' of Creole speakers in adapting the new system. Partial use of a structured code is not considered creative until it reaches dialect feature status, and even then sometimes the features are stigmatized: the identity markers are turned against the language user in this case and serve only to highlight linguistic, intellectual, or social deficiencies of some kind. But most importantly for this research paper is that both of these disciplines take either a generative or a structuralist approach to language contact, with or without the attendant sociolinguistic and political issues and as such are instructive within those paradigms; however, they are less than instructive concerning the idiolect and what sorts of processes speakers employ and what sort of language structures they produce when far from equilibrium.

The competition model of separate grammar systems does not appear adequate to explain the variation we hear around us as we move across the earth. There is simply too much and it is too diverse and yet everywhere language holds together as stable systems that we can talk about everyone still having up until their death, just as they have any other human, biological capacity. While we may "grow a language" as Chomsky would have it like we grow arms and legs, language and language contact is not such a simple

and uniform affair across the species. We do not rely on another's arms to swing a bat; and while one might walk like an Egyptian, to talk like one, is something altogether different. One of the criticisms aimed at such approaches has been the removal of human agency from the restructuring and evolution of language systems. For generativists it is more enlightening to talk about what *can* be said rather than what *is* said, and for much of sociolinguistics, what is said is instructive in how it is said, which is interesting only in so far as it is an indicator of the speakers' abstract group identity. It all adds up to a very dry science, with little bearing on what we experience far from home. And to recall the ideas of Hermann Paul from Chapter 1, sociolinguistics has no truck with notions of spontaneous language behavior as a source of language variation and change, an idea that is central to natural systems theory.

4.4 IDIOLECTAL CONTACT AS DISSIPATIVE SYSTEMS

In his introduction to the Prigogine and Stengers international best-seller *Order Out of Chaos*, Alvin Toffler writes of the Brussels school and the Prigoginian paradigm:

> "Summed up and simplified, they hold that while some parts of the universe may operate like machines, these are closed systems, and closed systems, at best, form only a small part of the physical universe. Most phenomena of interest to us are, in fact, *open* systems exchanging energy or matter (and, one might add, information) with their environment. Surely biological and social systems are open, which means that the

attempt to understand them in mechanistic terms is doomed to failure" (1984: xv).

In opposition to the idealized or closed systems model upon which UG and structuralist approaches are respectively based, there stands the dissipative system that we find far from equilibrium. In science these system states exist during energy and matter transfers, whether a boiling pot, nuclear warheads, or conversation with the transfer of information (matter) and the expenditure of energy required to articulate the ideas. As we have seen, systems can be in equilibrium, such as Chomsky's UG, or near equilibrium like the speech communities in Variationist sociolinguistics, or far from equilibrium as I am positing as the system structure for language contact when one or more idiolects is considered to be far from the equilibrious grammar of the immediate environment in which the contact takes place. What is different about such far from equilibrium environments, as we noted earlier, is that the systems in these states require more energy to sustain them. The manipulation of energy to create work through heat or some sort of chemical reaction; or in language the increased effort channeled into the many subsystems of the language faculty to reach as state of Concord and all the are considered dissipative structures in that in addition to the work created energy was expended, dissipated during the process, a state we call entropy. The creation of entropy is what delineates these system states from equilibrium states where energy is conserved and entropy is low. More energy is required to sustain the system state as entropy increases as the new structures that replace those of near to equilibrium states are more complex and thus require more energy as well.

What this means for language contact is that when individuals are outside of their language habitat of near to equilibrium, familiar sociolinguistic grammars, the structures produced during language contact are more complex, which accounts for the sense of "difficulty" experienced by speakers in handling the new structures. What might be termed the folk perceptions of Westerners that Chinese or Arabic say are "hard" languages and more near to equilibrium systems, perhaps Romance languages, as being "easier." We talk of a "failure" to communicate and tourists complaints of the exhausting and frustrating nature of communication in exotic locales. What these indicate is a state of chaos for some participant, typically both to varying degrees. The new structures that the idiolect produces require much more attention, concentration, and effort, and as we will see, very small fluctuations can produce very large, unexpected results as the idiolects adapt to one another searching for Concord. If we are content with the static models of clashing grammars and the discourse product of language contact as "poor" attempts at reproducing idealized grammatical models, then we need not really study them in any depth unless we are interested in pedagogy of languages. The other approach is to view the product of such discourse as new structures attempting to bring order out of the linguistic chaos, and as such are worthy of analysis as to their shapes, functions, and meaning.

One of the most controversial claims Prigogine makes about dissipative structures is that the order and organization arise spontaneously out of disorder and chaos in a process called self-organization and self-reorganization. This claim is supported by the astonishing findings of scientific experiments of "chemical clocks" and studies of heat convection where at a certain threshold heat which had been moving evenly through a

liquid turns abruptly into a convection current that suddenly results in a drastic re-organization millions of molecules into different states such as hexagonal cells, or in chemical clocks, regular intervals of fixed colors, back and forth like a ticking clock. The example Toffler provides in his introduction envisions a huge tank filled with a million white and a million black ping pong balls bouncing in a random and chaotic way. The window in the tank would appear gray, but at regular intervals the window goes all white, then all black then all white and so on. This is the basic process found in certain chemical reactions that should by classical laws, remain random, or gray, in the ping pong tank. Recent studies in molecular biology have found certain chemical reactions produce certain enzymes which then produce more of that same enzyme in what is called a positive feedback loop or autocatalysis.[iii]

These are the very processes that are involved in the growth of life itself and very heady theories that might leave one wondering how such thinking may bear upon language contact. Several interesting approaches to language contact present themselves as we appropriate new metaphors, terminology and systems theory. We have described idiolects as operating in far-from-equilibrium discourse situations and framed them in terms of dissipative structures exchanging energy and matter with one another and no longer simply switching closed structural codes or mixing elements from them in an effort to understand and be understood, they are dynamic, open living systems that while bringing to bear what is traditionally called "their repertoires" (analyzable into discrete rule-governed phonological and syntactic systems) they are also very actively involved in pouring all their pragmatic competence and world knowledge to bear on the new horizon of discourse they face in unfamiliar terrain, having been pushed into a chaotic state where

they must adapt and change immediately and continually or face confusion, disorder, and the sociolinguistic despair and frustration of the mute stranger.

While, yes, we can say that here Joe is speaking English and there Al is speaking French and there is all this Arabic, there is much more than that going on inside the idiolectal universe. With the increase in energy and concentration as the struggle to bring order commences, we must go through the often psychologically trying, even painful process of what is most generally called "learning," which more specifically means innovation with regard to our language ability (and knowledge, if one wishes to perform the generative dichotomy, yet even so both I and E systems are engaged and running as parallel processes). Such adaptive learning, while natural to language, can be said to 'diminish' as a biological or neurological capacity in adults. Much has been learned about language acquisition and the brain in recent years that points up the simple and rather obvious explanation that the brain typically redirects growth and psychological energy towards the exploitation of the matured idiolect within social contexts. However, it is a mistake to assume that the brain state or language brain state does not continue to retain the ability to carry out adaptive language learning behavior as it moves through groups and larger networks.

This adaptive ability of the idiolect has not been considered a site for language innovation or language change in sociolinguistics. At best we recall structuralist studies from multilingualism that attempt to show new syntactic structures between codes violating parameters of certain grammars as evidence large scale structural changes and innovations. Following Prigogine's discovery of the new structures that evolve out of chaos and confusion, we can also surmise that for a human system like language, there

must also be new structures emerging in far from equilibrium discourse, and that these new structures are indeed part of the "history" of language change and examples of variation rather than simply mistakes and errors, what I call "the noise of bad grammar." Indeed, I hope to show they are useful, intrinsic markers along the way to Concord.

Finally, if what we have is an argument stating that sociolinguistic variation and language change result from idiolects in contact, as Hermann Paul claimed, then we must recognize the fact that innovation and change on an idiolectal level take place outside the equilibrious or homogenous speech community. The ordered heterogeneity of Labovian studies is merely one very large template, as are those folk linguistic perceptions of accent, placed over a much more complex web of human locution. If one continues to learn by innovating with new structures (whether within a "fixed code," say modifying one's native code for better reception and transmission or mixing it or switching in and out of it) then language contact at the edges must also play a role in language change and variation. If so, then how does this come about? It is here we must recover the idea of spontaneous change if we are to get beyond structuralist approaches that hem in our thinking about communication. We can now couple innovation with individual spontaneous language "change," just as Paul claimed. We are more apt to do something new and innovative as an adaptive response when we are most taxed, furthest from our own idiolectal equilibrium; and these changes we make to our idiolect, we then carry with us into the next conversation. One of the most satisfying aspects of Chaos Theory is the evidence that small changes in individual initial states can drastically effect the outcome of the larger systems in which they are embedded. This 'web-of-individuals' approach offers some relief from the stuffy confines of the "social constraints" of the

post-Durkheimian institutions of socio-economics and the western straightjacket of identity. The individual is given back the freedom to create herself through language proactively by bringing new and emergent idiolects into new groups and discourse settings. This is not to relegate individuals to some sort of anarchic state or shed completely the deterministic approach of sociolinguistics, but to introduce spontaneous change as well as chance into the deterministic systems of language. We must try to see idiolectal contact as occurring between "active" and open systems as they were first described by Bertalanffy where:

> "Activity is a consequence of the fact that the organism is an open system, able to maintain a state distant from equilibrium and to spend existing potentials. Therefore it can "act" upon releasing stimuli or in spontaneous movements. Biological, neurophysiological, ethological, and psychological evidence all indicate that spontaneous activity is primary, and stimulus-response (the reflex arc in a simple case) is a regulative mechanism superimposed on it" (1967: 89).

Essentially, our response to the "instantiation" or "actuation riddle" of the Labovian paradigm. Change occurs spontaneously and the structures may be the result of chance as the language system of the individual self-organizes in response to the language environment. Thus we have outlined the general framework for the idiolect and Language Custom and investigated some questions and objections raised by sociolinguistics and must test these ideas against the data; and we must do so using potentially unfamiliar concepts through terminology that is easily misunderstood or

interpreted differently than it is within the Prigoginian paradigm and the larger field of Chaos Theory.

4.5 PRINCIPLES, TERMINOLOGY AND DEFINITIONS

Before beginning this section on terminology, it will be necessary to briefly map out the three major phase states of idiolectal development. Language, it is agreed, is acquired, rather than learned, and in full across the species in general. The design of language as a system is transmissible and encourages rapid, full integration of all its fundamental aspects at a very early age. We recognize three broad phases of language corresponding with biological growth and development and sociological change.

Critical Phases in Acquisition process are infancy, childhood, and adolescence. By childhood-ages 7-12, a particular variety of an idiolect is acquired, and unless there are radical perturbations in the environment of the child which require dramatic alterations to the variety, general parameters inherent in the variety are fully manifest, so that it enables the fullest communication with neighboring idiolects within a varying 'distances,' that must eventually break down at certain points from the centers of equilibrium for that code. The functionality of language is highlighted.

Adolescence is marked by a shift away from acquisition and parametric closure to a period of second stage evolution wherein speakers expand their idiolects in the concerted move towards complex self-individuation through the appropriation and creation of socially marked forms. Language use during this period is part of the higher level emergent properties of language such as identity marking in which idiolects create

the systems through which they can individuate themselves within and between groups. Psychological process of social awareness and the nature of language as a social tool are pronounced. The instrumental nature of language, especially in literate environments, becomes a critically interactive aspect of idiolectal systems. With typically wider, more distant idiolectal contact, predictive cognition of idiolectal systems is refined through expansion and the growth of problem solving, field recognition, and decoding abilities. A deeper store of linguistic markers and behavioral responses emerges to manage the increasing environmental complexities of encroaching adulthood. A period of much bifurcation and rapid swings between attractors. Code can appear highly unstable given over to aperiodic changes in shape.

Adulthood: The Applicational Stage drives towards expanding code breaking abilities are external, resulting from environmental stresses or attractors. With the refining of codes in adolescence in near to equilibrium states, the distance between idiolectal communal systems increases. Changes in environment require the applicational abilities, or learning, of speakers. There exists a complete 'worldview' inherent in speakers which is now brought to bear on language contact. Language contact becomes more negotiated and complex as individuals integrate as autonomous members of social groups, who relocate, are dispersed and live out the trajectory of their linguistic lives. It is the heightened abilities of geopolitical and social mobility that come with adulthood that is one of the great forces of language drift, dislocation, and decentering, and the increase in the possibility of encounter distant, unfamiliar idiolects.

Initial States: This is one of the most important concepts in complexity and Chaos. The term itself refers to the point at which we begin to study the interactions of

systems, and the more we know about a systems structure and make up (initial state) the better we are able to predict how it will react in contact with other systems. For the purposes of this study, is the third major phase of an idiolect, that of the adult, in which we will be interested. We approach the data and our speakers by understanding as much as possible about the structural properties of their idiolects, something more easily done in one's own language variety. We begin by accepting as a starting point an idealized speaker in the generativist sense who we know to be like us with respect to language, but quite possibly very different from us in the particular code.

Really, to say we "know" someone's language is to speak it or at least read and understand it to some degree. The more we know about their particular code we suppose they typically use in communication the better. That a man is said to speak Arabic and French is very helpful indeed, especially if we have a working knowledge of these codes. Everything else in language contact among such distant strangers is revealed in situ. Very little can be added apart from very broad notions of personal background: that they are educated, Berber, 30, a fisherman, is all very interesting but means nothing until we have a corpus of language to analyze with respect to what we know and what they have revealed about themselves to . Recall Bloomfield's map of language connections, each marking a particular individual or group contact: the deep and dense pattern that would emerge from such a template could be said, in an idealized closed system, to be the initial state of an idiolect.

Each idiolect can said to be in a certain 'phases space,' or its relationship with its linguistic environment at a particular moment. When we put together a corpus of data, we are faced with the linearity of language and its time-bound nature. What we record,

transcribe, and analyze is never anything more than a small slice of a data stream we may or may not have been participants in. We then look at the data as a collection of discourses with beginnings and endings, as sentences or phrases with beginnings and endings, and so on. This cognitive ordering is a process of uncovering initial states within a larger discourse framework. The more information we have concerning initial states, the better our ability to make predictions about the outcome of a given exchange, how each system will react as separate organisms, with separate boundaries, and what sort of forms and patterns they might produce which can be traced back to initial states. Much in the same way one traces underlying, intended meanings through native grammatical transformations, or traces the larger discourse elements of meaning, such as sarcasm, innuendo, and lies underlying a connected string of phrases.

And when we don't have enough information about initial states of agents, then our predictive abilities weaken and threaten to collapse under the weight of change brought about by contact with a different system. This is chaos threatening, entropy increasing. Linguistically, it means one's performative ability to decode and manipulate unfamiliar input, or surface structure data. At the extreme of complete non comprehension, entropy is at its maximum and the arrangements of the symbolic elements in which the message is encoded is random—at least for the clueless recipient. In other environments there is enough mutual comprehension to maintain discourse at some length and with some depth. Yet still, in this sort of chaotic language system, it is difficult to predict the future course of a discourse thread, and even after fixing it through recording, it is sometimes impossible to tell with any degree of certainty what is being said and/or meant. This is not simply the result of surface noise; for if this were the case,

native speakers would rarely misunderstand one another. There is also a struggle going on with contextualization. In essence, we don't know where the story started and are rapidly trying to fill in large stretches of pragmatic and semantic canvas. From a sociolinguistic standpoint, we cannot hope to know the base initial state, other than very generally of an idiolect, especially far from equilibrium. What we perceive instead is a negotiated conception of a speaker's initial state during contact, and this is on one hand the process of inference backwards in time rather than forward in talk, language history projecting itself into discourse which we are always catching up with to study. It may be the case that we are making inferences about a known system state, such as English; however, it may also be the case that we are making inferences about a new system state, such as Arabic. Speech mediates in both directions simultaneously in far from equilibrium settings.

Initial states provide a basic schematic of the pathways and choices we predict are "open" or available to a particular idiolect. Even at the most fundamental level the linguistic choices we make leave traces that we use as evidence that a particular behavior signified a particular intention and/or meaning within a particular system. But when the choices made in speaking, decoding, interpreting, or contextualizing fail to produce the expected outcome, then we know we are lacking important information on the initial states of the agents in contact. In these situations, anything can happen: mutual or non mutual changes in systems, discord or concord, shapes and structures only partially understood. Referents grow dim and vague and accommodation strategies and mimicry skills are severely tested and given over more often than not to system failure.

When we don't know enough about the initial systems, we see chaotic behavior, breaks in communication, misunderstandings, incoherence. What might be considered an initial state by more traditional terms such as, languages, dialects, sub dialects, native varieties and so on, are all well and good and can be coupled, as in sociolinguistics, with what we know about individual aspects of personal histories related to their larger speech community, their trade, gender, ethnicity and so on. But when can we say that we know how well a person speaks or reflects any of these facets of existence? Surely, I can't expect to know just how well Absalem, my landlord, speaks Spanish, French or English until he has done so with me. Only after language contact can any predictions be made as to "how well" the grammar of these languages is being performed by this individual; moreover, these predictions are based on personal judgments that will vary perceptually from person to person. Thus, moving about the earth, we find ourselves "thrown-into-the-language-world" in Heideggerarian terms, without the benefit of illuminating histories and ready-at-hand knowledge of linguistic or social grammars.

Prigogine's far-from-equilibrium systems can be more chaotic than at other times depending on the initial states of the agents involved in the transfer of energy and matter. If we understand language contact as a complex interactive system, which most would agree it is, but we do not have a near complete assessment of the initial state of the agents involved in the process, then, as Prigogine demonstrated, there is a spike in the potentiality for a chaotic system exhibiting indeterminate qualities. Future states are difficult to predict. The trajectory of the interactive systems—for linguists, the 'what happens when strange grammars meet,' is uncertain along with the shape of the structures they will produce and the direction discourse will follow en route to Concord. When

potentially chaotic systems are perturbed, internally or externally, they will exhibit chaotic behavior. If we follow Prigogine's theory of chaos, then we should be able to discern if and when order emerges from/by way of the strange, unfamiliar, chaotic linguistic structures we expect to find far from equilibrium.

Bifurcation: In far-from-equilibrium scenarios that hold for my Moroccan data, linguistic energy and conceptual resources are said to be 'taxed' and the internal system of the idiolect 'perturbed,' and in physical systems, CT holds that such situations are ripe for the emergence of self-organizing structures emerging from chaos. The structures that order the chaos of such systems to keep them from randomly dissipating into meaninglessness may be unlike the linguistic structures we observe in more orderly near to equilibrium language contact. The analytical alternative to the "clashing grammars" model in discussion of Language Custom is the self-organization of idiolectal grammars, phonologies and cognitive-based encoding-decoding abilities as occurring through the process of bifurcation: the spontaneous creation of new choices and pathways that become available to far-from-equilibrium chaotic systems. In such a setting, the 'options' are pre-wired, (in the sense there are cognitive and code limitations for every idiolect) but freewill determines the choices, for even within a forced, new, or pre-given set of grammatical choices, there still exist many, many options. In traditional terminology, multilinguals are afforded a richer set of parameters to violate and innovate with than monolinguals.

To put this in closer perspective for the general state of western academic linguistics which has created a somewhat crippling set of paradoxes towards linguist and other and between Chomsky's rationalist program of UG and empirically-based

sociolinguistics, we may be able to resolve or bypass the paradoxes using Prigogine's theoretical innovations that ushered in Chaos Theory. But a cautionary note is necessary concerning the pitfalls that one invariably faces in completely denouncing reductionism, which equates in our case to closed systems of grammar and the subsequent rejection of empirical data. So the challenge is productively apply Prigogine's controversial idea of the interplay of chance and determinism in far-from-equilibrium systems along with the idea of bifurcations. One interesting crossover for linguistics recalls Hermann Paul's two mechanisms of language change and variation: spontaneous individual change and accommodation or imitation of others idiolects. Prigogine writes:

> "A system far from equilibrium may be described as organized not because it realizes a plan alien to the elementary activities, or transcending them, but on the contrary, because the amplification of a microscopic fluctuation occurring at the "right moment" resulted in favoring one reaction path over a number of other equally possible paths, Under certain circumstances, therefore, the role played by individual behavior can be decisive. More generally, the "overall" behavior cannot in general be taken as dominating in any way the elementary processes constituting it. Self organizing processes in far-from-equilibrium conditions correspond to a delicate interplay between chance and necessity, between fluctuations and deterministic laws" (1984:176).

This can be interpreted in one sense to imply the interplay between performative speech, the spontaneous flow of inventive discourse as at times becoming the source of change through bifurcation, while at other times, the

"elementary processes" of deterministic grammar may be more in evidence. This also has the potential of returning some of the power and importance of descriptive language variation studies that has been hijacked in a sense by Chomsky's movement. At the same time, we are able to relate this to another level of language systems, that of the idiolect and larger speech communities. Individual innovation coexists with the synchronic and diachronic variation identified by socio and historical linguistics. The two systems form the dynamic that drives language towards bifurcations and new pathways that everywhere diverge so radically as to be called different dialects or languages, to mutual unintelligibility. Individuals support a greater system and move with it through the evolution of the many supraindividual language systems and the individuals who constitute them. It is a satisfying, if not elegant alignment towards a unification of closed and open systems, of idealized grammars and lived grammars co-evolving. However, some may argue, that all supraindividual language systems are not "actual" as they are in physics, but only perceptual, the product of a point of view. Le Page and Tabouret-Keller (1985) support such and argument.

While one can agree with the principles and parameters approach to grammar, many of us still desire to explore the edges of parameter and the point where principles may shift, and eventually evolve to form the historically recognizable variations and changes in grammars, lexicons, and phonological systems; and additionally, for those language Variationist who wish to exclude the idiolect from the study of speech communities and the like, or seek only to

explain individual variation in terms of idealized community norms, recent discoveries in physical sciences would indicate that when it comes to talking about system stability and regularity of distribution, the picture is much more complex than previously thought. Prigogine addresses this saying

> "Be it in biological, ecological, or social evolution, we cannot take as given either a definite set of interacting units, or a definite set of transformations of these units. The definition of the system is thus liable to be modified by its evolution" (1984: 189).

This has important implications for approaches to language variation study and the most fundamental terms of describing stable language systems, especially those described as possessing "ordered heterogeneity.[iv]" There are implications for corpus linguistics and statistical approaches to sociolinguistic research which will be only briefly mentioned here. Prigogine's chemical research found that with near-to-equilibrium systems the Poisson distribution and the law of large numbers holds true for any quantifiable variable. Here it is possible to deduce grammars, even search for universal parameters and systematic speech variation in a spoken corpus and between spoken language and idealized grammars. However in far-from-equilibrium conditions the law of large numbers fails and the Poisson distribution no longer holds as an adequate description of events.[v]

When a complex dynamical chaotic system becomes unstable in its environment because of what Prigogine calls "fluctuations" in a system, perturbations, disturbances or stress, an attractor draws the trajectories of the stress, and at the point of phase transition, the system bifurcates and it is propelled either to a new order through self-organization or

to disintegration. Bifurcation is the point at which a system is and a system is becoming, showing order coming out of chaos in heat systems, chemical systems, and living systems. The deterministic laws no longer hold, and it is the small fluctuations that spread change to other parts of the system until a spontaneous state change occurs. This could well be the case in pidgins and Creoles forming under intense and prolonged states of stressed contact between language systems. Laszlo considers bifurcation as potentially one of the most important concepts to emerge from chaos theory.

> "In fact, of all the terms that form the lingua franca of chaos theory and the general theory of systems, bifurcation may turn out to be the most important, first because it aptly describes the single most important kind of experience shared by nearly all people in today's world, and second because it accurately describes the single most decisive event shaping the future of contemporary societies"(1991: 4).

Laszlo (1991) describes three types of bifurcation: *Subtle*, the transition is smooth. *Catastrophic*, the transition is abrupt and the result of excessive perturbation. *Explosive*, the transition is sudden and has discontinuous factors that wrench the system out of one order and into another. The implications for language contact should be obvious and these watermarks are distinct enough to provide working frames for sociolinguists. The data in Chapter 6 is firmly within the bounds of Catastrophic bifurcation. There was enough regular feedback from the locals with whom I engaged to convince me that the linguistic "catastrophe" was a two way street in my neighborhood. Talking to me was as stressful and perturbing as it was for me talking to them. Bifurcation involves a number of other concepts of importance which we turn to now.

Stress, Perturbation and Attractors: In far from equilibrium states, idiolects are subject to stress through the perturbations caused from lack of concord in codes. The attractor draws the idiolectal system towards it. The study of chaotic systems is often described as primarily the study of the organization of attractor structures. This stress that results from the overall perturbations of far-from-equilibrium idiolects reaches critical points and forces changes to ready-at-hand performative abilities and social and intellectual discourse knowledge. As a fundamental process of pattern recognition and matching, idiolectal contact when faced with unusual input also focuses more tightly on message and setting and all those imply linguistically. Knowledge of setting and participants and current understanding of the ongoing discourse are marshaled to the task of interpretation. Repetition of the message and the sharpening of the phonological delivery is solicited by pointing out misunderstandings. Simplifications and re-orderings of grammar and lexicon may ensue. The feedback loop can often become so complex that one may often times not get back the exact phrase or grammatical structure or lexical items the individual desires to recheck in a more vigilant and refocused state.

The search is at such a point for the new attractors that serve to pull the system through the chaotic phase into order. One must also create new attractors in one's idiolect, often innovating to accommodate or to expand one's affective repertoire. This is a critical point where one can be said to be 'learning.' But learning what? Some element of a 'new language?' Yes, from a structuralist point of view or the comparative grammar approach, but more importantly, learning language itself anew in a more concerted manner. Learning language cannot be separated, most would agree, from learning how to use it. And just as one can be said to be 'learning' Arabic, one is learning how not only

to use Arabic, but how to use one's entire language, the idiolect, in a stressful and chaotic environment.

There are a number of candidates for attractors in the code of others as well as within the larger frame of discourse, and these are handled through the parallel processing ability of the brain in handling the many psycholinguistic tasks involved in discourse. Attractors might be as large as distinct codes, such as French or English, or they might be different linguistic structures or lexical items in a number of codes. The primary attractor structure that makes possible Language Custom is the Principle of Concord. Thus we can say that Concord is the "Basin of Attraction" for discourse. Like the pull of gravity drawing a marble towards the bottom of a large, convex bowl, so Concord draws speakers toward it.

We view mutual understanding as the goal of talk itself and thus the arc, or trajectory of any discourse will be aimed at this phase space. Idiolects then, when they are far from equilibrium, must create new attractors for other speakers as they reorganize, self create, and seek to establish ordered meaning through reinforcement of these new attractor structures, a modeling process that moves relentlessly towards comprehension, following blind alleys and dead ends, and making intuitive leaps. While it is posited that Concord is the primary attractor for discourse, there exists what might be called "sub-attractors," that serve to move speakers towards Concord. When there are insufficient sub-attractors, systems move towards dissipation, and new attractors must be created on the spot. This form of innovation is the means whereby speakers propel discourse towards understanding and distant codes towards concordance. Innovations in systems

are by necessity hard to recognize because of their awkward newness, or perhaps their incorrectness as violations of grammatical or phonological parameters.

The goal then is to discover the attractor structure in the corpus of data and speculate on how successfully the various language structures contribute towards concordance. Unsuccessful language structures may be just as indicative of the trajectory of idiolects making Language Custom. Breaks in systems, or the error approach, used in grammar attempts to isolate separate systems to find switches, mixes and ungrammaticality. So following Prigogine, we might ask, if language contact is where language is evolving, then perhaps these breaks or instabilities are something more than simply "incorrect" attempts at apprehending different language systems "instead of" using another, more familiar system, but perhaps these points of language contact help push along the flagging conversation of two strangers with radically distant idiolects. They must be part of the process of language contact that results not only in grammar but in social knowledge, that the "dissipative" aspect of such contact must have structure as well, unless one simply looks at all such language contact as the "failed" attempts to correctly express oneself rather than having expressed fully new meanings, using a wider linguistic space to operate in. Whether these innovations, these adequate, and meaningful mistakes, become "accepted" and grafted onto the usage of that habitat is another question all together. More likely, distant idiolects in regular contact over a period will develop rather quickly innovative structures while building context and expanding performative knowledge that may or may not be taken up or passed on, but constitute innovations in their particular Language Custom that will invariably aide the both in interacting with members of their respective linguistics habitats.

Critical Points, Phase Change: This is the name given to the critical point of the system, where a small change can either push the system into chaotic behavior or lock the system into a fixed behavior. It is regarded as a phase change. It is at this point where all the really interesting behavior occurs in a 'complex' system, and it is where systems tend to gravitate give the chance to do so.

Transient Perturbations and Power Law: At this boundary a system has a correlation length (connection between distant parts) that just spans the entire system, with a power law distribution of shorter lengths. Transient perturbations (disturbances) can last for very long times (infinity in the limit) and/or cover the entire system, yet more frequently effects will be local or short lived - the system is dynamically unstable to some perturbations, yet stable to others.

Iteration and Trajectory: If a system is iterated (stepped in time) and moves from state x to state y, then state x is a pre-image of state y. In other words it is on the trajectory that leads into state y. A pre-image that itself has no pre-image is called a Garden of Eden state, and is the starting point for a trajectory. It is usual to exclude states on the attractor itself from the pre-image list, to avoid circularity, since these are all pre-images of each other.

Autopoiesis: the process whereby an organization produces itself. An autopoietic organization is an autonomous and self-maintaining unity which contains component-producing processes. The components, through their interaction, generate recursively the same network of processes which produced them. An autopoietic system is operationally closed and structurally state determined with no apparent inputs and outputs. A cell, an organism, and perhaps a corporation are examples of autopoietic systems.

Literally, self-production. The property of systems whose components (1) participate recursively in the same network of productions that produced them, and (2) realize the network of productions as a unity in the space in which the components exist. Autopoiesis is a process whereby a system produces its own organization and maintains and constitutes itself in a space. E.g., a biological cell, a living organism and to some extend a corporation and a society as a whole. (Heylighen: 2002)

4.6 SUMMARY

The concepts presented, while in a truncated explanatory form, will serve a template in which to place the data and provides a fresh vocabulary and conceptual schema with which to describe and think about language change and variation and to analyze the various cognitive and linguistic strategies at work in far from equilibrium conversations, such as in the data in the following chapter. These ideas and terms will be expanded and focused as they occur in the data analysis. It is hope that the experimental approach to standard data and discourse analysis will enable us to discover how far-from-equilibrium idiolects cope, how interlocutors innovate in the process of bringing order out of fluctuation that has reached the point of chaotic language behavior. In so doing, we also hope to shed light on the nature and structure of the idiolect and how it evolves in relationship to the many speech groups and language habitats it moves through.

We have introduced as well what are believed to be central cognitive linguistic processes operative in idiolects, namely: accommodation, spontaneous change, and self-

organization. These are the fundamental processes that create and sustain the dynamic and open systems of language contact. The "initial state" of this work at hand was to clarify the general philosophic and linguistic conception of the idiolect—similar to the metaphysical question of identity and individuation—in hopes of better understanding how individual speakers adhere to and help make up communal language varieties with which they are associated. It was my intention to either discover, construct, or reconstruct a "bridge" to span the chasm between individual language systems and social language systems: a void filled with paradoxes, conflicting approaches, and bad statistics. In contemporary western linguistics, this gap can be seen in the broadest of terms as a playing out of the rationalist-empiricists debates of the Continental philosophers; Berkley, Hume and Descartes squaring off in the incarnations of Noam Chomsky and the sociolinguistic Empiricists. Most, if not all, would eventually find their way into one philosophical camp or another, and there keep an uneasy distance from the enemy.

While it is believed that the theoretical bridge is well under construction in the previous chapters—and passable, if on shaky ropes—it remains to be seen whether an analysis of physical speech data can be discovered or constructed; and, whether speech data is even amenable to the ideas of Chaos Theory.

ENDOTES

[i] An excellent account of the breakthroughs in the science of energy can be found in Prigogine's *1984 Order Out of Chaos* in Chapter 4: "From Technology to Cosmology. "

[ii] Irreversible processes are here considered to be the entropy produced in the system rather than the entropy transferred across the boundaries of two interacting systems.

[iii] Autocatylitic: referring to something whose occurrence at one point increases the probability that it will occur again at another point. If a property of a system is autocatalytic, then such a system is, so far as that property is concerned, essentially unstable in its absence. (Ashby, 1956, p. 196) Examples: life on the planet Earth, guarantees of civil liberties in one nation among many, a product for which there is a demand. (Heylighen, F. 2002).

[iv] P.189-190 in *Order Out of Chaos* discusses structural stability and the reaction of new elements to previously stable systems and how "innovation" survives and replicates within a system. This might hold interest for the study of social psychology in language variation as well.

[v] See Prigogine's 1894 *Order out of Chaos* Chapter VI: "Order Through Fluctuations" for more detailed explanation and evidence from chemical reactions and living systems such as the self-aggregation of larvae. It is an excellent discussion, especially for those with good knowledge of statistical probabilities as they are applied to social systems.

CHAPTER 5

CONVERSATIONS IN MOROCCO

> "*Far beyond we saw, like a strip of brightness, the Straits of Gibraltar, bounded by a not very lofty, jagged mountain range, deepened into darkest violet and surrounded with a reddish-yellow outline—Africa*." Bernd Terhorst, *With the Riff Kabyles*.[i]

5.1 SELF-REFERENTIAL INVESTIGATIONS

Although little mention has been made of my fieldwork collecting data in Morocco from November 2001 to August 2002, I have come to regard my general conception of the idiolect as having been shaped to a large degree by my particular linguistic experiences in that country, as well as other multilingual countries in which I have worked as an English teacher; and as my idiolect is an integral part of the empirical data, it will be necessary to discuss in some detail my background and approach to participant-observer data collection with respect to philosophy, methods, and aims as well as with respect to the phenomena called "the observer's paradox."

I was raised in a monolingual home English speaking home by 3rd generation offspring of German and Irish immigrants from the northeastern United States. What is peculiar I believe about my upbringing was the abrupt and often dramatic series of relocations for the first ten years of my life as the son of a military officer. From Texas

to Germany as an infant where I spent the first three years of my life, as the youngest of four in the mutual care of my mother and the German speaking maid, and if family accounts are to be believed, my first words were German though I cannot speak more than a few words of it today. We relocated to rural Alabama, then Mclean, Virginia followed by three years in three different cities in New York, including Queens where I attended PS109 picking up such a pronounced New York accent that I and the rest of my family were branded as Yankees when we arrived in Augusta, Georgia, our last place of residence. I quickly shed that accent and within a year was affecting a heavy southern drawl, which I lost by high school. Today would be considered an unmarked variety of Standard English, with only a few regional features that might indicate any sort of geographic location.

I was a poor student of French in high school and two more years as an undergraduate, and at 27 arrived in Morocco as a Peace Corps Volunteer TEFL teacher. I studied and used Arabic, expanded my French and acquired a working knowledge of Spanish during those three years. Another four years was spent teaching in the Persian Gulf, which is a notoriously eclectic linguistic mix of world languages and a unique variety of English as a lingua franca between the dozens of nationalities and ethnic groups working there alongside the Arabs and westerners. I had the good fortune to befriend a group of North Africans and was able to continue the use of Darija[ii], Moroccan Arabic, and learned the rudiments of Standard Arabic.

All of this points to a lifelong exposure to a variety of regional dialects and some experience with extremely distant idiolects in many cases, and the necessity to alter and to reinvent my own code, especially as a child, may have contributed to my interest in

language contact of adult speakers. This is the plight of monolingual adults, especially contemporary Americans who for the most part have not been forced to adopt colonial languages, nor have had the intense language contact of Europeans. We are a uniquely monolingual bunch and are thus at somewhat of a disadvantage; nevertheless, many of us find ourselves in such situations, at the extreme edge of our language capacities when we travel or live outside the US.

Traditional sociolinguistic does not typically involve the linguist who 'hides,' some would say, behind the language tasks designed to elicit certain variables, registers, and so on. This has always seemed somewhat sterile to me, a useful method within its paradigm, but lacking the sort of human side of language interaction that ethnographers and anthropologists are more interested in. Being of an interactionist, or connectionist mindset, I was led to consider the ramifications of self-inclusion of speech data in a sociolinguistic study. The observer's paradox in sociolinguistics states that one will never truly get a speaker's 'vernacular' and various methods are used such as the danger of death stories to encourage absorption into the narrative and thus pay less conscious attention to style. I am obviously not concerned with vernaculars and micro register shifts within a bounded dialect, but cognitive and linguistic strategies outside of one's speech community, and thus the paradox fails to materialize for me in that form. What is concerned is more in keeping with Heisenberg's Uncertainty Principle as it applies to the social science observer. The principle states that both observer and observed are changed by observation, and the more one probes the less one can tell about the initial states of what is under observation and the more 'contaminated' the investigation becomes by one's involvement.

This is a very abstract concept that has made its way into the social sciences from the physical sciences, where it has to do with energy exchange[iii] and is more quantifiable than our contaminated abstractions of initial states that can be used to help explain behavior. The behaviors, linguistic and otherwise, become then causally attributable to the investigator's behavior, and the discourse settings framed by their perceptions of one another, yet two more initial states we have to try and generalize about. Then what can be gained from such self-referential investigations? Plenty, is my claim.

One of the hallmarks of language as a human system is its self-referentiality on many levels[iv]. We are concerned here with the notion that the interaction itself has the power to modify our description of it, which challenges the validity of our evaluative statements. Much has been written about this and especially valuable and insightful responses to this quandary are found in the work of Clifford Geertz and a host of other anthropologists. My approach is to accept the circularity of the interaction as part of the dynamic of social intercourse that, as systems theory would have it, constitutes a unity of its own. The initial states of the participants in these conversations are not completely unknown to me, but having already foregone comparative grammar approaches, initial states are not as crucial as what is produced during the event; and, as I have stated, language may be unique in that the contact of these systems may actually amplify predictions about initial states of a speaker as we witness the fuller and fuller range of their idiolects. I do not wish to appear to be side stepping this philosophical question, but as I am forgoing standard approaches to speech communities and language varieties, it is in keeping with these methods, that my presence, my idiolect, must then be as integral a

part of the language data as my informants' and must be included to complete the unified circularity of the "system" or "features" that form the corpus.

Finally, linguists are afforded the unique opportunity as social scientists to produce the object of study. We recall Hermann Paul's injunction to linguists to reflect deeply on their own language organ; however, western philosophical traditions of objectivity and empirical verifiability have helped created these apparent paradoxes, whereas, eastern traditions value personal insight and involvement as both fundamental and critical to all scientific understanding of social interaction. The eastern approaches do have corollaries in contemporary western philosophy in the work of Heidegger and those who furthered his thought, such as Gadamer and Habermas. The application of this line of thought has also been taken up by others as well in various disciplines: Bourdieu, Maturana and Varela[v] are of particular interest in sociology and cognitive science. Yet it is CT where the most emphasis in on integration of individuals into systems, no matter how temporary, and treating the observer's presence as a natural, and indeed, necessary component of a social system. There is the view that whatever can be said about language is said by a participant-observer. Everywhere in language we find self-referentiality: to itself in message and text, to its speakers and their demands and as markers of their social identity. In terms of Natural Systems Theory, we view language as a self-organizing system and of discourse as being self-regulated. We talk about language copying, replicating, and transmitting its "self" among speakers. Why then should we attempt to remove the 'self' of the investigator and his language from our studies? Are we only interested in the language of the 'other' and not of our own?

This final question has occupied a great deal of critical theory in Orientalist discourse, discussed in more detail in the following section, which claims that the western intellectual tradition has operated under the assumption that others, their cultures, languages and beliefs, are somehow intrinsically different, and it has often been the case that the results were confined to these differences and with no particular regard to what they might mean to our own system of values and our own involvement in the process of such Occidental-centric ethnographies. So, here, it is hoped I can learn as much about any underlying processes in far-from-equilibrium conversations as well as myself and the impact of my idiolect on those with whom I was fortunate enough to meet, talk with and eventually record for analysis.

5.2 FIELDWORK RATIONALE

Fieldwork in Morocco was the natural choice for me given that I had spent three years teaching there from 1984-1987, had returned to visit several times, and had maintained my command of spoken Arabic over the years as a result of teaching in other Arabic speaking countries. I initially intended a much more lengthy and complex work centering around the idiolect and its relation to individual acts of identity among the inhabitants of the frontier cities of Ceuta, Spain, and Tetouan, Morocco; however, I was unable, two years running, to secure outside funding for such research. Across the board, it is safe to say there was scant interest in linguistic ethnography in North Africa prior to September 11th, 2001; consequently, I decided to fund the project privately but realized that the scope of the research needed to be narrowed as I would not be able to afford the

18-24 months required for the initial project. Thus, I decided to visit the area for nine months and let the data I was able to gather shape the research question. While on the surface it appeared a feasible approach, I realized that I would be operating without the benefit of support from a stateside organization or the Moroccan government, the former a result of the lack of grant rewards and the latter a result of practicality. The Moroccan government in such respects moves with great torpor and generally requires some sort of official US organization to vouch for the researcher.

Nevertheless, I still had a few contacts in the area from my Peace Corps days in Morocco, as well as on the Spanish side of the frontier through various stateside friends, and I was confident that the hospitality and friendliness of the Moroccan people would win out and I would be able to gather, on a shoestring, enough data to say something about the idiolect and language use and contact in the area. I had set a September 25th departure date, moved my belongings into storage and was feeling quite confident and excited about the trip right up until 9-11. The events of that day will undoubtedly mark the beginning of an increasingly ugly and widening schism between the Arab world and the West, one no less significant in modern history than the fall of Granada in 1492, which signaled the final collapse of the Moorish Empire, the last great stronghold of Islam in the west; a date which marked the separation of the modern boundaries of European and North African states, and of the Islamic and Christian world in that region.

As an American researcher and self-taught 'Arabist,' 9-11 was a particularly distressing event in that it appeared, to me at least, to mark the nadir of American and Arab relations, and the global entities and ties that implies. These relations have been increasingly strained, some would say since the inception of the State of Israel, and more

recently, during the last fifteen years, which marks my involvement with the Arab world, through three antagonist Republican Presidencies and a non-responsive Democratic regime. The Reagan administration's bombing of Libya, the Bush I administration's Gulf War, and the increased frequency and size of isolated attacks against American concerns abroad culminating on the September 11th were all factors in the steady erosion of world peace and the escalation violence and armed conflict in the Middle East, Persian Gulf, and neighboring nation states in all directions.

What this means for western researchers is an increasingly hostile environment in which to build trust. I witnessed firsthand the fallout from the Reagan administration's bombing which targeted Colonel Omar Qaddeffi. A detachment of Moroccan soldiers was posted guard around the American Language Center in Tetouan where I was the director in 1986-7. I was evacuated from Saudi Arabia where I was teaching on a Saudi Naval Base following the invasion of Kuwait in 1990, and worked for three years following the Gulf War from 1992-1995 in The United Arab Emirates. One becomes keenly aware on a daily basis of what it means to be held somehow responsible for the actions of the American government. Most friends and family thought it irrational to conduct research in Morocco following the attacks on the US, and I was, for a spell, quite worried myself until I remembered the general nature of the Moroccan people. They are not, on the whole, antagonistic in any way to foreigners, American or otherwise. They are a kind, gregarious, hospitable, and intellectually astute people who and more are aware than most Americans of the difference between individuals and their respective governments. Finally, religious fundamentalism and political extremism are minority activities and highly dangerous occupations in this Kingdom and are dealt with harshly

by the authorities, who refuse to allow their country to be taken up in the brutal, sectarian violence so prevalent in neighboring Algeria.

Such was the geopolitical weather when I left in early November 2001, determined but fully aware of the new challenges I would faced as a fieldworker. I accepted the risk that I might not be able to carry out the project, even in its extremely generalized and loosened framework. If I could get anyone to talk to me on tape, I thought, I would be very lucky. Moroccans, renowned for their hospitality and friendliness, are nonetheless quite apprehensive generally about having their thoughts recorded, a situation not helped in anyway by the long-shadow cast by the CIA over American "teachers" abroad. It was and is a very complex game made all the messier by the events of September 11th. I felt confident that the "good old days" of Clifford Geertz and company roaming and taping freely were gone for good. I felt intuitively before every crossing the border that my Arabic language skills would be cause for suspicion, rather than the key to opening up the homes and hearts of Moroccans as they did 15 years ago. It would be a new deal altogether, and accordingly, I set my sites low. The political nature of the experience is the subject for another book; but nevertheless, politics—that of America and Islam, of Israel and Palestine—were both conditioning factors and topics of discussion throughout my visit and therefore cannot be ignored for "scientific" or "linguistic" purposes. So, what follows, or does not follow, from November of 2001 to August of 2002, is as much a result of post 9-11 global politics as it is the natural and expected unpredictability of fieldwork.

5.3 SETTING, APPROACHES, AND AIMS

The research was conducted between November 2001 and July of 2002 primarily in the Mediterranean costal town of Martil and one of the major cities of Northern Morocco, nearby Tetouan. The linguistic data used in the study was culled from sources in Martil and Tetouan. The fact that the data was drawn from sources in a distinct region of the country has little 'linguistic effect'[vi] on my study, and was primarily the result of necessity and happenstance rather than planning. As the focus of the research is on the operation of idiolects, i.e., case studies, as opposed to more traditional sociolinguistic approaches engaged in survey research, there is no attempt to relate the identity of the speakers to larger social constructs such as economic class and gender. The speakers do not represent any group, except in the broadest sense of being Moroccans, Arabs, and Muslims. It would be pointless to address what speech communities they might belong to as these are hypothetical 'initial state' claims that cannot and need not be investigated for the purposes of this study. That they are speakers whose idiolects include a number of language varieties, including Darija, Moroccan Arabic, Standard Arabic, French, Spanish, English, and so on is of interest only where we encounter these language varieties in the data. It is not the point either to assess their relative 'fluency' in these varieties, but only to observe how these varieties interact with other idiolects during discourse.

My approach is not based on the articles of faith with which Labovian sociolinguists approach language variation and change: the received postulates of ordered heterogeneity, speech communities, and statistical procedures designed to

capture and interrogate informants who will eventually give up their secret vernaculars in the guise of linguistic variables. Rather, it is based on my intuitive certainty that language use is, at its root, is a creative process that while being universal to its speakers, takes idiosyncratic, realizable, and thus analyzable forms in each individual through the many acts of their language as it is lived, not through formalized sociolinguistic prompts, but in 'natural. settings' I say 'natural,' meaning there were no pre-designed linguistic tasks, questionnaires or other prompts, only a willingness to be tape recorded in casual conversation that also was spontaneous and unstructured in all respects; and, having addressed the issue of participant-observer issues, suffice it to say that the data collection was in keeping with the overall heuristic comportment to this research project. This is to say that the idea for a far-from-equilibrium framework for the discourses emerged post data collection; moreover, the nature of the usable data was itself suggestive of such an approach.

5.4 DATA ISSUES

There are a number of issues surrounding data collection that are salient to project design, goals and constraints and which shaped the corpus of recorded speech, some of which, approximately 150 pages, has been transcribed for analysis. The sub corpus, which forms the empirical data, must also be understood in terms of the larger system processes that gave rise to it. These issues are discussed in the following sections.

There were a number of mitigating factors aside from the larger geopolitical forces impinging on the project and its participants. That there are no women speakers is

significant. While I had contact with both Moroccan and Spanish women at various points, it did not come about that the relationships formed in those encounters lent themselves to participation in the research. Moreover, it should be emphasized that the nature of the social constraints at work in Moroccan culture, especially for a *nasrani*, or Christian, are much different than they are in the US, Europe, or even for Moroccans among themselves, and to discuss these constraints involves claiming ethnographic narrative license to create rather freely what has become my view on Moroccan culture and its history as a thing apart from me, yet interpreted through the behavior of its participants from a personalistic point of view.

All that said, there is an unavoidable "fact" of their Moroccanness and my Americanness and how that impacts us linguistically and culturally and what it means for the research questions. These are, after all, part of the initial state of the agents who create the systems interaction I wish to study; but most importantly, they are human beings, people who were kind to me, consented under pressures and constraints I could never fully imagine or comprehend to have their language, their very identities and thoughts, put onto tape, not knowing, but trusting that no there would be no foul play involved and that no harm would come to them as a result of my research.

First, there is the increasingly problematic (from traditional Euro-American academic standpoint) situation of what can be termed the "reluctant informant." Like so many of the former European colonial possessions, Morocco has been under the always curious, probing and often, avaricious gaze of western eyes. When one travels to Morocco for fieldwork, one is proceeded by a long, somewhat unsavory and quarrelsome line of travelers who out of either self-interest or the interest of higher powers, share the

common goal of reaching the ill-defined goal of "scientific understanding" of a people who are, a priori, thought to be essentially different than oneself or the interests one represents, and this insight is nowhere more clearly argued than in Edward Said's monumental work *Orientalism*, which lays bare the fundamental Us and Them dichotomy which so much of western anthropology has concerned itself.[vii]

The result of such an ontological and epistemological approach that has been in force for centuries is to sustain the creation of a highly subjective portrait of exotic peoples, and with respect to Morocco, one of the most accessible of Arab countries to the west, there exists a veritable mountain of such information ranging from the deep scholarly works of academics to the precious and trite memoirs of brave and adventurous travelers, most of whom happily divorce themselves from political history, a move that a recently conquered, colonized and exploited people is unable or unwilling to make when they are once more transformed into "subjects."

One consequence of the growth of western anthropology, ethnography, and documentarianism, that can just as easily be seen as a sustained 'prying' into lives and social groups, is the growing weariness and reluctance, if not outright antipathy towards ethnographers, travelers and the like. When does the prying become spying? When is the 'data' and knowledge derived from western disciplines become the tools of further exploitation? It is not my intention to discuss the issue in any detail, for others have done so with greater insight.[viii] Suffice it to say that these questions of ontological bearing and ethical or social alignment are not simply academic constructs, but are very real issues facing both researcher and informant in the politically loaded and historically charged locales such as Morocco.

To add to my rather tenuous and suspect presence for which I had no official clearance, the United States' began in earnest its international War on Terrorism and the concomitant disintegration of relations between Palestine and Israel and the initial rumblings of yet another Gulf War in Iraq, which as I write, on Saint Patrick's Day, 2003 is to be announced this evening by the President. That a number of suspected Al Qaida operatives planning an attack in the Straits of Gibraltar some 25 miles from my location was arrested a few hundred kilometers east of me did little to build trust between myself and the locals. In fact, the global political conditions created something of a running joke between my primary contact and his many friends in the town, who would invariably ask what we were doing or where we were going he would reply "kenšufu bin Laden," "We're looking for bin Laden." We could all use 25 million dollars it was agreed. Eventually, the locals simply had to ask me "šuftu wa la?" "Have you seen him yet or not?" And on it went, an uncomfortable, inescapable reminder of what countries and ideologies we represented.

I had been prepared for this to some degree, having lived in the region before and witnessed firsthand the suspicions of inhabitants towards outsiders, and the general Arab consensus concerning the US support of Israel. Normal reservations and suspicions that were heightened in a region that has survived; and for a small elite, grown very wealthy, for the last three decades on the extremely lucrative manufacture and export of hashish and the smuggling and distribution European contraband across the two Spanish enclaves on the coast of northern Morocco, Ceuta and Melillia.

Given these conditions, I felt satisfied, if not lucky, to have gathered what data I did from among those friends, neighbors, and acquaintances. These social and

geopolitical constraints were compounded by other limitations on the data which I did manage to squeeze out of the experience. My long time Moroccan friend, Al, was eager to see my project come to fruition and was extremely helpful in melding his social world with my research needs. He arranged a number of evening soireés, or *teqsirat*, at my flat, and towards the end of my stay, when I was lamenting over the paucity of data, the frequency of these parties increased and through his pressures and adamancy, I made what I can only call quasi-surreptitious recordings. Quasi in the sense that everyone involved had been informed of the nature and purpose of my stay in the country, most specifically, to study language use. There was a very thin ethical line running through these evenings as the tape recorder was not put on the center of the table, nor the recording announced, and I could not be sure that all the participants involved were fully aware they were being recorded: some were, and perhaps some weren't, and for this reason, I have elected not to admit such sessions, regardless of their value to the study, in the data pool.

The data collected, for the reasons cited previously, is a somewhat limited pool; however, there are valid practical and theoretical reasons for using the data. Speaking practically, the raw data was extractable: the bulk of it is in English or French, with smaller proportion of Arabic. This is obviously a benefit to me, given my linguistic background. Secondly, the segments were recorded with full knowledge of all participants and no ethical issues can be raised. Thirdly, and very importantly, the nature of the discourse used can be seen as representative of a

what I am calling Far-From-Equilibrium contact situations. For the most part, the participants share, to varying degrees, a number of mutually recognizable features in their

idiolects so that communication is possible across a number of points on along a hypothetical spectrum spanning the poles of incomprehensibility, to the challenge of basic code breaking, to full, mutually recognized understanding, or Concord, the state at which idiolects overlap completely and reach a temporary point of equilibrium within the framework of the discourse.

5.5 MOROCCO, ANDALUS, THE RIF

The *maghreb al aksa*, Morocco, the land farthest west of Mecca plays a central role in world history over the last two millennia as the gateway between the European and African Continents at the mouth of the Mediterranean Sea along the Straights of Gibraltar. It is, as they say, 'loaded' with history. The hundreds of caves in Gibraltar helped to preserve the remains of Neanderthal man 40,000 years ago and the tools, glass, and beadwork of Neolithic civilization. Tetouan, Martil, and Ceuta are some of the oldest Mediterranean trading posts in ancient history whose beaches moored the ships of the earliest Phoenician sailors. The Greek legend puts Pillars of Hercules at the mouth of the ancient sea with the austere and imposing peaks of the Rif mountains to the south and the Rock of Gibraltar to the north of the often turbulent straits. The armies of Carthage and Rome and the hordes of Visigoths and Vandals made their stands among the native inhabitants of the peninsula. These people who we know as part of the ancient Berber tribes of North Africa absorbed wave after wave of invaders.

Tetouan dates to the 3rd century BC, then a Berber settlement called Tamouda which was destroyed by the Roman army in 42 AD. The *medina kadima*, or old city, of

which the original walls and some dwellings still remain, was constructed at the height of the Moorish Empire in 1307 by the Merinid Sultan Abu Thabit and served as a base for staging attacks against Ceuta and home to pirates plying the coast. It was once more raised by King Henry III of Castille in 1399 in an effort to cripple piracy along the Straits of Gibraltar and Barbary Coast and refounded c.1492 by Muslim refugees fleeing Spain after the Reconquista and the Fall of Granada as a base for attacks against Ceuta. During the 1859-1862 war with Morocco, Tetouan was occupied by a Spanish army, but the Spanish evacuated it under pressure from the British.

Today, much of its ancient Andalusian heritage can be found in the old walled medina architecture, as well as the music, and traditional crafts of leather, pottery, metal working, and weaving owe much to its Andalusian ancestors. In modern times Morocco was the seat of power for the great Berber and Arab Caliphates of the north and considered a land an people unto themselves and allowed self rule apart from the greater, *bled al makhazen* the governed lands under the Sultan first in Fes and later Marrakech, from whence the country derives its name. While the neighboring port of Ceuta only 20 miles to the north was seized by the Portuguese in 1450 (ceded to Spain in 1550) Tetouan, with its mountain fortification maintained its independence until it was captured by the Spanish in 1860, briefly serving as a capital to the ill-fated Spanish Protectorate in Morocco from 1912 until independence in 1956. Tetouan and the interior towns and villages of the Rif earned their reputation for rebelliousness and independence after the Rif Revolt, brilliantly chronicled by David Woolman in his portrait of the Riffian legend Abd el Krim who became a symbol of the Riffian defiance and courage by leading a small, armed militia into the bloody and humiliating defeat of a Spanish army of some

20,000 men at Anwal. The Rif resistance was broken some five years later with a combined Franco-Spanish army of close to half a million troops. A concise and insightful history of the region is Temsamani's "The Jebala Region" which explores the harsh natural environs of Morocco's north that has been visited regularly by famine, disease and drought, and political and social battles that formed the insular and independent mentality and rugged, fighting spirit of the region's people, a temperament which drew the ire of the second ruler of post-independent Morocco, King Hassan II, who expressed his displeasure with the region's rebellious factions during his nearly 40 year reign through heavy-handed economic sanctions and notoriously brutal police state measures, forcing the primarily agricultural and fishing region to seek its growth and stability in the underground economy which began to flourish just as the rains dried up during late 1970s and early 1980s. Today, reparations have been made by Hassan's successor, his son, Mohammed VI, who spends his summers on the cool shores on the coast near Tetouan, a region his father did not visit for almost 20 years.

Nevertheless, regional resentment lingers, and the region once known collectively as *bilad el siba*, the ungoverned territories, has been hit hard socially and economically. While the explosion in European demand for Moroccan hashish fueled 'the boom of the nineties in Tetouan, Tangier, and surrounding towns, the illegal economy, like most such black market profits, for example that of Columbia's cocaine business, is highly concentrated in the hands of a very few and brings with it grease to keep the wheels of a thoroughly corrupt political-economic infrastructure turning and trickling down dirhams. America's stepped up war on drugs in the 1990s found the north being used as a transshipment destination for hard drugs from South American and Asia and some of the

more high profile arrests during these years revealed. In a failed bid for candidacy to the EU and in a gesture of support for America's International War on Drugs, King Hassan II, engineered a number of high profile arrests and was said to have severely curtailed the illegal transship of hard narcotics from his ports, but the hashish trade has continued to flourish, and is likely to do so until another, equally lucrative source of regional income is created. Sources cite an increase over the last 15 years on the order of 100 fold in the number of hectares devoted to raising the cannabis that is worked into hashish.[ix]

The region's inhabitants are also particularly susceptible to the lures of immigrant labor in the EU. Many of the first generation Moroccan immigrants in the 1960s when the country struggled to establish itself as a modern nation were from the north, and the trend has continued unabated ever since as the economic imbalance between Europe and Morocco continues to grow. A good account of the devastating effects of migration on the region is McMurray's recent account of smuggling and migration in the frontier town of Nador. Chattou, 1998; Ouariachi 1980 and Seddon, 1979 provide solid accounts of the harsh economic realities of this region in the pre and post-colonial era.

Apart from the larger geopolitical and economic crisis facing many other Arab and Islamic nations today, Morocco, Europe's 'southern border' is beset by a daunting set of problems, all of which come to a head and stand in greatest clarity in Tetouan, Ceuta, and the small towns along the coast. As McMurray's title—*In and Out of Morocco*--suggests, there are currents flowing both ways. Coming into Morocco are the smuggled contraband items through the Spanish enclaves, and more importantly, the wages of migrant Moroccan laborers which keep their families just above the water line. While this social economy has ramifications for both Europe and Morocco, a growing concern

on the European side is not so much the hashish trade, virtually impossible to police given the size and proximity of the coastlines, but the increasing flow of illegal immigrants from sub-Sahara Africa. In recent years, the frequent drownings in the Straits of Gibraltar of these desperate men and women are finding their way with disturbing frequency into the headlines in the region and highlight the growing economic plight of the African content on the whole. One must, to even hope to fathom the meaning of such an act, view the Straits on a windy day from on high boiling with waves that once led seamen to invoke the aid of mighty Gods for safe passage and today the clash of cross currents in the constrained channel are so violent as to close the Straits to even the deepest cargo vessels half a dozen times a year for several days running.[x] It is a staggering thought, that ten mile swim, even on a clear day with Gibraltar and Algeciras in view from the terrace on Boulevard Pasteur in Tangier. Europe is a very long swim indeed.

5.6 LANGUAGE LANDSCAPES

In writing about Arabs and Arabic in today's negatively charged political climate, I will try to avoid the trap western ethnographic studies fall into of either deliberately disregarding the identity of others as irrelevant or making evaluative statements that serve to support, even unwittingly, one's own *weltanschaun.* Travel guides are the crassest example of this monocultural, or Occidental-centric approach. Although linguists, more so than many other scholars and certainly politicians, are much more sensitive in this era to the ramifications of multilingualism and multiculturalism on ethnicity and social

organization. This is primarily a top-down generated and transmitted ideological bent that serves the purposes of the free-market capitalism and nation building.

On afternoon talking with Al about his language background he said something to the effect of "Spanish I learn from the TV and music, by force almost." The real politik of colonization and the language and cultural structures it leaves behind is met with ambivalence and conflicting emotions. It creates an almost schizophrenic attitude towards the language and culture of the oppressor: it is at once a violation of one's freedom to have another code forced upon one; however, at the same time it is often the only means of freeing oneself from oppression by integrating with the language community of the oppressor and all that culture offers. This situation is still very much a reality in the post-independent Arab and Asian nations and must be recognized as such. One goes, if one must, with one's hat in hand, aware of this disquietude among billions of the world's speakers with grateful acknowledgement that they are able and willing to communicate at all in English, French, Spanish and so on. The other major criticism is that we are primarily interested in what people are, our fixation with identity, over and above understanding who they are, which is exactly who they "say" they are, which usually involves learning "their" language.

In Morocco, and north Africa as a whole, this struggle for linguistic recognition operates internally and externally. Externally with respect to the languages primarily of Europe and America and internally with the struggle of the Berber people in establishing their language as a national language. While they constitute 40% of the population in three major dialect groups, Berber was actively suppressed under the late Monarch and is not taught in schools or used in any written form and survives on its own socially and is

spread primarily through music and a small body of literature. Berber is spoken in the Rif and High Atlas mountain ranges and in the anti-Atlas hills of the deep south beginning the Sahara Desert.

The official language of Morocco is Arabic which includes both Classical Arabic (CA) associated with Koran and Haddith[xi] and Modern Standard Arabic (MSA) used in most print and broadcast media throughout the Arab world. The lingua franca of Moroccan citizens is *Darija*, Moroccan Arabic.[xii] Children in urban areas throughout the country will grow up speaking a regional variety of Darija that will mark them to other speakers as being a from the north—Tetouan, Tangier, and the Rif mountains or the eastern region of Berrkane around the Algerian border, or the south which includes all the other major urban areas in the country. However, is often a second language to Berbers, or is acquired alongside Darija in some ethnic families. CA and MSA are acquired respectively through early childhood religious training and formal education, the latter of which also is comprised of early childhood education in French, and three five years of middle school and high school courses in another non-Arabic language, usually English, Spanish or German. In addition to these, Said Fariq (Suliyman, 1999) adds to the list of language varieties ‘Aransiyya, a blended form of MSA, French, and Moroccan Arabic, and Hassaniya used by inhabitants of the western Sahara, neither of which I have had any personal exposure to.

What exactly is Darija[xiii] amounts to asking what exactly is English or any other national spoken variety and much variation exists across the spectrum of its speakers. It is for the most part intelligible from north to south, from rural to urban areas. Even a non native speaker is able to communicate effectively to their level of ability in “strictly”

Darija, that is with only minimal switches and borrowings[xiv] to French, Spanish, English or other languages. In Morocco, like all the former Western colonies throughout the world, diglossia, multilingualism, and polyethnic cultures were already in place, unlike between the typically monolingual Colonial nations. These 'Imperial Languages were then integrated into an already multilingual Berber-Arab-Iberian language ecology.

And finally, add to that the close cultural ties the US and Morocco shared since WWII. Tangier was an international zone during the war and attracted a lot of now high profile artists, writers, and travelers from Europe and America and English became "the first second language" in that city. A very large Peace Corps and USAID program in the 1960s was begun and expanded up until the 1990s with hundreds of Americans of all ages coming through every year had a marked effect on the country as English, and American English rather than the British variety was being taught in the Lycees and villages and Moroccans were learning a foreign language which they could practice outside the classroom as the classroom with native speakers in the heavy influx of Americans in the "Marrakech Express" ear of the 1960s which continued throughout the eighties and early nineties. There were several very large Air Force Bases in Morocco for over 30 years as well as the American Schools in Tangier, Rabat and Casablanca and a thriving American Language Center system that has spread to a dozen major cities over thirty years, is also a part of the contemporary, large scale language contact history.

If geography is destiny, then Moroccans were fated to be among the modern world's most facile polyglots and cultural translators. Trilingualism is the norm; facility with four to five codes is not unusual. Moroccans are very well aware of their history and the necessity and usefulness of multilingualism in an increasingly monolingual

world; consequently, they are highly effective and persuasive business people and gracious hosts when given the opportunity, and as the guidebooks say, always willing to help you with your Arabic and practice their many languages.

5.7 CEUTA, TETOUAN, MARTIL

There is really only one proper way to reach Morocco and that is by ferry from Algeciras to either Tangier or Ceuta. One needs the sense of 'voyage' to Africa that travel by jet does not provide; a chance to gaze at the dark peaks of the Rif and take in the Atlantic winds and Mediterranean breezes whipping through the straights. And to take a breath, for I've yet to meet a traveler who was not winded and full of talk after crossing those straights. For Americans and most Europeans it may be as far as they ever get into Africa or any other underdeveloped quarter of the globe, and many miss the harsh economic realities of life for Moroccans who bear it with patience, strength, good cheer and hospitality. The divide is nowhere more evident that crossing the frontier itself, leaving the clean, bright, shop lined streets of Ceuta[xv], business is steady always, growth, consumer and luxury goods sold duty free. During the first three quarters of 2002 ushering in the Euro, life only got better for most Spaniards as the European Union grew strong against the dollar and yen.

A majestic two mile road hugs the jagged coastline winding above the waves of the Mediterranean crashing against the large boulders and rock jetties. The wheels of western free market economy grind to a shuddering halt at the end of the this panoramic coastline road at the concrete and barbwire border post between Morocco and Spain: la

frontera, *Bab Sebta*, 'door to Ceuta' in Arabic. Across that line purchasing power parity drops from $18,000 to $3,500 per capita. What this means is young Moroccan boys and girls, men and women, of all ages cueing on either side of the border everyday of the year using whatever means they have to get across, buy juice, yogurt, cheese, and every other imaginable consumer goods at duty free prices and smuggle them back into a country where they one can earn ten or twenty cents on a dollar for them in Rabat, Casa, Fes, Marrakech, and beyond. Only legal residents of Tetouan, Martil, Tangier and surrounding towns are allowed access, and they must have proper papers. The rest of the goods are distributed throughout the country in an elaborate system of small entrepreneur *contrabandistas* who negotiate the rough and tumble road blocks with bribes from the border all the way along the highways out of the northern cities. No one ever travels south without bringing as much as possible to family, friends, or clients.[xvi]

I took up residence in Martil in December of 2001 in a spacious apartment a block from the sea in a four story building owned by Al's friend, who became my *mul dar*, landlord. I had dallied in Spain with Dr. Zeke and his wife, and dawdled in Ceuta, with an Army Captain, named Fon, a Galacian married to a Ceuti-born Spanish women named Luz, who was distantly related to a Cuban-American friend of mine and the welcomed me to the small, sun soaked city of 30,000, within ten days I had become 'famous' for having stayed longer than any other tourist in recent memory. I quickly realized that any sort of comparative study between Ceuta and Tetouan would require a great deal more time and money than I had available, and I felt the nagging reluctance at leaving behind the west and facing the real task of living in a post-9-11 Arab country and conducting research.

Martil, like the rest of the world, had grown a great deal since I last lived there in 1987, although the flat I rented was only a few blocks from the beach house I had lived in before. The population had more than tripled from 8,000 to 30,000 year round residents. The growth, like everywhere in Morocco is mostly unplanned, and houses sprout up, and tracks emerge turning eventually into roads and the neighborhoods grow almost organically, much like the old medinas, ancient quarters, throughout the country, each with its own labyrinthine logic. Only the two main roads are paved: one coming into from Tetouan and the other headed out of town along the coast to Ceuta, henceforth, Sebta. It is a small and lazy seaside town with a sandy beach, fishermen, and two university departments, which bring in 500-700 transient students each year. There is a Municipal building, The Beladia, where my friend Al works, a very nice mosque, a scaled down model of the 1100 year-old Kutubia Mosque in Marrakech. There are shops, two small markets, a very nice bar and restaurant. Serious shopping is done in Tetouan where there is a better, wider selection of fruits, vegetables, meat, and consumer goods.

The rutted dirt tracks through the neighborhoods are strewn with litter and ubiquitous scraps of torn and decaying plastic bags. Here and there are piles of rubbish, some smoking, others just accumulating. Feral cats and dogs roam and feed on garbage scraps. Only a few small trucks and men with shovels are all the city has to haul its garbage away. Infrastructure is weak and inconsistent.[xvii]The sidewalks are badly cracked and pitted with bits of stubbed out pipe extruding here and there. The whitewashed, angular modern apartment buildings are drab, dirty, and faded; iron burglar bars rusting, half finished construction, and more than half of them empty. It is the off season in Martil. Like it is 10 months of the year. It has become an increasingly popular

summer spot for the wealthier Moroccans escaping the higher temperatures in the south. A great many immigrants own or rent apartments when they return during the six week European holiday to Tetouan and Martil to visit family and friends. The population in July and August reaches maximal capacity for transport, service, and simply physical space on the beach and sidewalks. A space capable of supporting 60-75,000 people somehow manages three times that number. The people of the town survive off these earnings for the next 46 weeks of the year as rents go through the ceiling.

All in all, it was not much changed over 15 years, and the only business that I could find that had survived all those years was Bar Playa, the beachfront bar and seafood restaurant, now remodeled and expanded. Their lives had gone on; wives, children, and work, and even given the uncomfortable political circumstances many were happy to see me, and for others, I provided and interesting diversion, a chance to speak English, and still to others, I learned, I was not so much 'unwelcome' as welcome with reservations. These were, I imagined, the same people who thought I was up to no good 15 years ago as a Peace Corps Volunteer, but never once during my stay was I ever questioned or harassed by police or officials of any kind, save for the border guards who called me, and rightly so, on my expired visa.[xviii]

I spent the next nine months living out the days and nights to the relaxed rhythm of my neighbors, their children, students, shop owners, café waiters, and the butcher and baker. I broke up stay with frequent trips to Tetouan, across the frontier for a day or two, and pleasant train rides to Rabat, Fes, and Marrakech. It was in many ways what I had been wanting to do since I left the town: live there without having to work. But this in itself was as problematic as it was a luxury. On the one hand, it cast doubt on just what I

did for a living, and on the other hand, indicated that I might possibly be very wealthy, although I did not have a car, and more importantly, a wife and children, which are the most important signs of wealth in that culture, but this would not dissuade the resolute conspiracy types. Being on a grant, 'unemployed' really, also limited the number and type of contacts I would end up making I the course of my research.[xix]Yet, I had the great good fortune to have become friends during my Peace Corps days with a young man four years younger than me who went on to become the type of individual who is every ethnographer's dream informant: a well-liked, highly respected hometown civil servant connected to everyone in the area.

5.8 BIG AL

Al and I met in 1985 when I moved from Tetouan to Martil in order to escape the cramped confines on *derb ben abut*, a short dead end alley deep into one of the oldest quarters of the ancient medina, *blad*, the 16th century suburb built by the Moorish refugees fleeing Granada in 1492. It was a very exciting and intense experience to live elbow to elbow in the densely populated medina that served both as marketplace and living quarters to inhabitants who had occupied the dwellings for many generations. That year left me longing for the fresh sea air and open spaces of Martil where I was at greater liberty to assume a lifestyle more natural to me, and there I remained for the next two years. Neither Al nor I can remember exactly where or how we met, but we became fast friends; he introduced me into his circle of friends, and he was soon a regular companion

of mine and thus welcomed into the sizable group of young Peace Corps volunteers in the area at the time.

The last time I had seen Al was in the spring of 1990. I was on my way to an ill-fated job in Jubail, Saudi Arabia and stopped over for several weeks to visit Al as well as Paul Bowles in Tangier. He was very happy at that time as he and his fiancé had finally convinced both parents to allow them to marry. They had been high school sweethearts, until her father demanded that she marry a suitor the family had in mind. It had been going on for more than five years, his battle to win her hand, and her contest of wills with her parents, refusing suitor after suitor as the years went on. Having moved, he did not receive any of the letters announcing my arrival and I asked about on the main avenue until a man led me to his home. It was quite a surprise indeed. The wiry young man I remembered was a well fed, gray and balding middle-aged man, but his dark, dancing eyes, Cheshire grin and booming laughed had hardly aged at all and within ten minutes I felt as if I had never left Martil, fully at home with his wife, two children, and beautiful maid.

He had done well for himself given what he had started with. His ageing father had been a successful businessman exporting fish to Spain and eventually opened a restaurant in nearby Capo Negro. It was a very nice place and did well in the summer, but sat idle all the rest of the year and was not generating any capital at all. The problem was easily resolved by turning it into a bar. This is not nearly as easy as it sounds, for even putting aside the baksheesh needed to obtain the alcohol license, his father refused to allow alcohol to be served in his restaurant. It is a cause of much sorrow and shame among certain circles; and, as Al put it quite simply: "We can't go against the father."

Not 'we shouldn't', but that one is unable to do so. It is something impossible. And while this a very tough break for Al who would otherwise had a much easier time providing for his family from the earnings of a "respectable" restaurant and bar, and might have easily become wealthy given its location; there was for me, however, something strangely reassuring in his comment, that there were indeed very clear cut boundaries to one's behavior, appealed to my fragmented and jaded modern spirit.

As fate would have it instead, Al earned only 3000 dirhams per month, about three hundred dollars from his work at the Municipality. This is only slightly more than I earned in Morocco as a Peace Corps Volunteer 20 years ago, a third of what a school teacher there earns. As it was, he scrambled from day to day drawing up freelance blueprints here and there, borrowing here and there, and playing out his social capital by putting people together in deals, much like he had done for me and *mul dar*, the owner of the building. He had many deals working, was always owed and owing money; his cell phone never ceased chirping, vibrating, or spinning in a silent circle on the table. And now, to add to his daily concerns was me, the once *moudir*, director of the American Language Center turning up a few months after September 11th. I, however, was the least of his worries and provided a much welcome second home for him in Martil, a place to relax and drink and eat and meet with friends and clients and take his mind off his two greatest worries his wife and two young daughters.

His beloved wife had fallen ill the previous year with a strange fatigue that grew so severe she was forced to quit her office job, another 3000 dirhams a month the family sorely missed. They visited a number of doctors and tried both modern and traditional cures. Finally, after exhaustive tests it was determined that she had Muscular Sclerosis.

She was not yet forty with girls 4 and 6. Her deteriorating health compounded his worries about his children's future in an uncertain and bleak economic landscape. Through it all though, Al managed to lift his spirits above the hardships that would break a lesser man; he never failed to express his gratitude for the life he led, for his family and friends, and for me, he had turned the occasion of my presence—something other's might have found a bother or worry—into a cause for celebration. We learned much from each other in those months, I more from him as well it should be.

Al's language skills are typical of an educated and socially connected man of that region, and probably somewhat more diverse given his personality and the nature of his work.[xx] He is a genial, generous spirit; an astute observer, and the natural center of attraction in the many social and family circles he moved through. He polished his French in school and learned Spanish as a child working with his father's export business and spoke it with what any Spaniard would recognize as an Andalusian accent. He studied three years of English in high school, which he was able to practice extensively during our friendship from 1985-1987 and among the other American Peace Corps Volunteers and British teachers I introduced him to. He had picked up a smattering of German and Swedish through contact with friends abroad and made frequent shopping forays to Sebta and visited his Spanish friend in Madrid several times a year.

As a young man growing up in Martil, Al was more fortunate than the present generation with respect to language contact. Martil and Tetoun, like the rest of Morocco, drew a steady stream of tourists from the late 1960s until the 1990s, and Martil was a popular beach resort. 1987 was the tail end of Peace Corps in Tetouan as the region was prone to riots and the drug traffic tended to draw an unsavory lot into the region. In the

1980s, there were upwards of a dozen volunteers in Tetouan and Martil at any one time, woman mostly, working at the Jamiette Hannen center for disabled children. By the mid 1990s, there were no Peace Corps volunteers and only the stray British or American traveler or itinerant teacher who might stay on for six months or a year working at the American Language Center in Tetouan.

For the locals, Peace Corps provided a more stable economic, social, and linguistic input into what otherwise was a brief stopover for tourists. All the Moroccans I spoke with during my stay had only fond memories of the days when there were a lot of Americans about. American travelers and Peace Corps Volunteers spent money quite freely, unlike a lot of what is now pejoratively referred to as Eurohippie trash: shoestring western travelers exploiting the cheap cost of living and inexpensive hashish who set up residence and are not considered a source of business revenue, as they tend to end up competing for scant resources. They are anathema to street guides and residents alike. Al was never a street guide, but rather ended up befriending many Europeans and Americans over the years as a result of his love for foreign cultures and of socializing in general, a practice which becomes so much more frequent and important in economically struggling cultures. He maintains to this day a keen desire to learn and an interest in understanding other people and the rest of the world he cannot afford to see, or is afraid to take his wife and children to visit fearing for their safety in an Arabaphobic era.

In Morocco he would be considered *le deuxième génération*,[xxi] of modern Moroccan men. The second generation to come of age in the newly independent nation of Morocco under the harsh, authoritarian regime of Hassan II whose exiled father was returned to the throne in 1956, reestablishing the rule of the centuries old Alawite

dynasty[xxii]. An American cultural equivalent of Al's generation might be the baby boomers both chronologically and demographically speaking. They have watched their country grow and develop in response to the arrival of economic, social, and political modernism from the west and lurch from within under the weight and power of traditional values, beliefs, and methods. This group is differentiated by the *première génération* in that they were the firstborn into an independence their parents and relatives fought for. They have more formal schooling and have come of age during the rapid proliferation of western globalization. While their parents may adhere to traditional values and beliefs, they have been bombarded through travel, media, and personal contact with the secular, modernist material values and democratic capitalist beliefs of western nations.

Like most Arabs, Al's first answer to any question concerning his identity would be that he is a Muslim, then a Moroccan, then a Tetouani or *šemeli*, a northerner. He is proud of being a Moroccan, and like many of his generation, is conflicted spiritually and torn between the competing forces of modernism and traditionalism. This is expressed in his savoir-faire of the modern world and an eagerness to embrace it, to do whatever is necessary in order to realize his material ambitions for himself and his family—anything, I should add, except immigrate to Europe and leave behind his wife and children for 11 months each year.

Contrary to what most Europeans or Americans might surmise, he is, like most Moroccans, proud of the Jewish heritage of his country and their important contribution to the nation of Israel after their departure. He regularly pointed out to me and others, how, in Moroccan history, especially in the northern region, Muslims, Jews, and

Christians learned to live together and did so productively and peacefully for centuries after their expulsion from Spain; and in more recent times, how Moroccan Muslims live harmoniously alongside European Christians. Like most Tetouanis and Tangierinos, he considers himself a sophisticate in the ways of *nasranis* and *ajnebin*, Darija for Christians and foreigners respectively. I would say that his overall tendency is towards modernism which implies a rejection of certain traditional value, and given the resources, he would likely send his children to the French, Spanish or American schools in the region. Al and some of his friends and acquaintances enjoyed alcoholic beverages, some hashish or kif,[xxiii] and still others were keen to partake of the tasty Spanish pork sausage, *salchichun*, I brought from Sebta.

Al can be seen in such a light as to be "archetypical," in what I personally have come to view as "the Moroccan character" which for me is fundamentally based in experiences in Tetouan and the north. More so than any other part of the country, the tendency of Tetouanis is, like their ancestors in Andalusia, to adapt to historical forces through a turning inward and a refinement of their own characters. The *gitanos*, or gypsies of Spain are considered the epitome of this in Europe with the refined aspects of what most have come to associate with the term "Andalusia," such as flamenco music and dance and the culture of the *feria* (festival). Few know that Andalusian culture continued to develop on the other side of the Straits in Tetouan, who also have a highly evolved and ancient musical form called Andalusian, as singular, intricate and complex as its Spanish sister. The adaptive character is expressed through language, art and lifestyle, and is a response to the frequent occupation by foreign powers. The maintenance of identity through adaptation to new, imposed social forms of life. Among

Moroccans, Tetouanis are considered very unique and special and the source of much artistic and cultural inspiration. Living so close to frontiers, these people were not able to retreat to the mountains, like the Berbers and Riffis.

Al, like the overwhelming majority of Moroccans, laments the fallout from the global political conflicts that have soured Arab-American relations and cast a shadow over Moroccan-American relations by way of having the country, along with the rest of the Islamic world, thrown in among murderers and terrorists and what most Arabs consider raving fundamentalist maniacs. The result of this on the linguistic landscape is obvious, for while there are excellent language centers throughout the country, the cost is prohibitive for most; moreover, adults are typically motivated to expand their idiolects only in response to social changes, i.e., by necessity and language contact. Without the influx of tourists and international business and political concerns, the linguistic diversity of individuals is not as challenged as in the past, and the primary source becomes media, a poor substitute for walking talking humans. It is also the case that can say that the opportunity for far-from-equilibrium situations is diminished.

By his own admission, Al's English had deteriorated, and we primarily employed codes of English and Darija with tertiary access to French and Spanish when we were struggling to reach concord at any particular time. It is quite a natural state of events really, mirroring essentially the same linguistic relationship we had 15 years earlier, as student-teachers to one another with respect to one another's native codes. Expanding the idiolect is not necessarily generated by a desire to be one's most expressive self, but to express one'self in a particular mode; there is a certain willingness on both parts to embark on the adventure of learning each others native code so that aspect of one's

idiolect can be exploited among a larger speech community. The internal motivation is obvious for the outsider, to learn as much as possible of the new code via one's native code, and is reinforced if one's perceived code is appealing or 'attractive' to others. These perceptual codes have macro attractor features we will look at in the data.[xxiv] These features essentially influenced the balance of overall discourse between us revealed a higher frequency of English coded items and structures than Darija when we were alone together. Codes shifted accordingly with changes in situation and social contacts we shared that typically involved fluctuations in the four main codes of the region: Arabic, Spanish, French, and English.

5.9 FRIENDS AND NEIGHBORS

Much of my social life revolved around the neighborhood *hanute*, a general store just across the street, run by the ebullient Hamid, a thirty year-old Berber from the Rif coastal city of Al Hoceima. His brother, some four years younger, helped out occasionally, but Hamid, a short, wiry, intense polyglot ruled the roost. It was a small business selling basic necessities: water, candy, soda, macaroni, and dried beans, yogurt, tuna, eggs, milk, and juice, *confiture*, diapers and so on. Many of the consumables were from Sebta which he bought wholesale from a local supplier. It was the hub of our short block and for me was my introduction to dozens of people, mostly young men, and the pack of children, *drari*, as they are called in Darija, who hung about in the evenings after school and on weekends kicking soccer balls and listening to the older boys and men talk.

Hamid was an accomplished *al 'oud* player, the fat bellied Andalusian, fretless double-stringed instrument upon which the European Lute is modeled. He played six string guitar as well and was enamored with Cat Stevens, aka Youseff Islam whose early songs, along with those of Bob Marley, continue to strike a resonant chord among Moroccan youth. I spent a great many hours hanging around the store day and night, talking, playing guitars, studying languages, and doing as much of my shopping as he could provide me with.

Like the rest of Martil, Hamid's store depended on the two summer months to survive the entire year, and I imagine I was a welcomed client in spending as I did throughout the economically dead winter and spring months. My relationship with Hamid, his brother Abdullah—who'd graduated from the Faculté of Law in Fes some years earlier and was unemployed and preparing his application to a graduate school in France, but he would require either a bourse, grant, from the Moroccan Ministry of Education, which was unlikely, or one from France, the likelihood of which I cannot comment on—was very intense for all of us. I would like to think I was a welcome diversion in the 'hood', given their love of gossip and avid passion of Moroccans for local, national, and global politics.

Hamid's hanute was important for me, and would excite most linguistic ethnography as it was a meeting place of many different people, some staying for hours, some only a few minutes; some stopping by everyday, others a few times a week. I was thrilled with the linguistic diversity ongoing between Hamid the neighborhood and myself. We spent hours everyday with fat Arabic, French, Spanish, and, the 1984 Georgetown Press English-Darija dictionary, exploring topic after topic. The language

was so immediate and demandingly creative I could not keep up my energy and attention for more than a few hours at a time. I would leave, avail myself of a cocktail in the evening, perhaps a pipe or two of kif, and return to continue what at times felt like a cross between intensive language class and a sort of cultural ambassadorship where I was being asked to explain myself and the world they believed I was from, and just getting to the bottom of their questions was a rigorous task in itself.

I practiced being linguistically aware on two levels, that of content and linguistic code using what I knew about how code-switching and mixing, making after the fact notes of particular collocations or topic driven switches or innovative random mixes; however, I sensed something else going on beneath these more visible encodings, there was a direction, or a current operating under the chaotic surface movement of speech, stronger between those I had more regular contact with. Here I began to see that my presence itself was creating new linguistic possibilities for others with my knowledge of English first, and then the other codes. As is typical in many parts of the world, people are eager to learn or practice English more so than most other language and more so now than ever before, thus I often found the English code of my idiolect being sought out by interlocutors; this resulted in an immediate modification of my idiolect, as one unconsciously reacts, as we will see, to aspects of that particular idiolectal variety of English. What is important here from a fieldwork perspective, is that the most quotidian, even mundane activity of my time spent in the field became what I most desired to record; unfortunately, Hamid was very reluctant to go on tape. When I finally got up the nerve to discuss it and bring over the tape recorder, I had the dishonor of clearing the store of normal hangeroners in record time and an unpleasant, very emotional discussion

on both our parts, about who I *really* was and what I *really* wanted. If I had had the proper papers, documents, stamps, and certificates from the Moroccan government in Arabic or French for him to read, I do believe he would have let me tape our exchanges; however, as I had only my word and a few local references was not enough for him. It left a sour taste in both of our mouths, but by the end of my stay we had brought ourselves back into balance.

5.10 SOCIOLOGUES

In addition to shaping the experience of language contact itself, Hamid's hanute also served as an introduction to two young men who were willing to go on tape and whom I call the Sociologues: two Tetouani intellectuals in their early twenties studying at the university in Martil. The afternoon I recorded with them was in many senses much different, I think, than the conversations in the hanute, but the hanute became for me a sort of "vernacular" something I knew I could not every get down, somehow capturing the paradox of the observer in action. At the risk of sounded solipsistic, data is what it is, and the transcription of the Sociologues, some 90 pages, also strongly influenced my "recollected in tranquility" understanding of language contact there and provides the bulk of the data presented here along with the transcriptions of Al and myself.

I did not get to know the Sociologues very well, as they did not frequent Hamid's store a great deal and our meetings were usually limited to walks along the corniche or bumping into them in town, but they were very keen to talk with me and the session I did record over a lunch in my apartment was a very nice afternoon. I recorded 90 minutes of

our three hour discussion, and I was so pleased at their frankness and spirited talk that I called them to meet again, with some beer which I unfortunately lacked during our luncheon. However, they never answered my calls and I came to think that somehow they regretted talking to me, that they had heard some pernicious gossip about "the American" perhaps. My paranoid delusions were borne out late in my stay when I walked out of a café a few feet behind the Sociologue who will be "green" in the transcripts. He was speaking to someone in the street detaining him, and I called several time, quite loudly, but he strode quickly away, head down. Al understood it immediately, that they were students—considered a source of trouble by the government—had talked freely, and now worried perhaps what others might think of them for having talked with me.

There were a number of other events and interactions that were recorded under what I came to consider quasi-surreptitious circumstances and were thus excluded. They were evenings spent with Al and his many friends in my flat drinking and eating and talking. Not all of the participants were always aware of the tape recorder I came to decide. Other data still remains to be transcribed at some future date, but for present purposes, the data is restricted to four speakers: Al, the two Sociologues and myself.

5.11 TRANSCRIPTION AND PRESENTATION

Speech transcription is a challenge, especially in multilingual environments, and Morocco presents the additional task of transliteration of Arabic and Darija for non-Arabic speaking/reading audiences. In the data which I have transcribed, the use of IPA

is limited to Arabic and English, French and Spanish are transcribed in the standardized orthographic conventions used to represent them in their own respective alphabets. Given the focus of the analysis, no real effort is made at narrow transcription. It is not deemed relevant, other than for purposes of intelligibility, that a speaker might be uttering the sound [dU] or [di] for the definite article /the/ in English. The emphasis is on finding the best approximate word or phrase value for a sound or group of sounds in one of the four codes. the phonetic level peculiarities of idiolects among these speakers and among Moroccans more generally are a much different and more linguistically complex and taxing study best left to others, for while I might be in a position to comment on phonological variation of "English" spoken by my informants, I am in no position to comment on it with respect to any other code, including French or Spanish except with regard to the grossest acoustic features. An effort was, however, made to make the finest possible analysis of acoustic features on a word level, which gives rise to occasional transliteration of what might be French, Spanish, or English words in which the phonetic shapes were unusual enough to remark upon, or the phonetic transcription was used in order to arrive at a shape that most resembled a word ore phrase in one of those codes.

The IPA is augmented with the Arabic letter ع "ein" representing the voiced pharyngeal fricative. The other pharyngealized consonants corresponding roughly to /s, t, d/ are transliterated in a number of ways by different scholars, often with a dot beneath them; however, the simpler method is to capitalize them. These pharyngealised consonants, are pronounced with the tongue pressed against the back of the teeth and more constriction in the jaw than their Latinate counterparts. and appear in Arabic as ص, ض, and ط. The more common emphatic consonants are represented by doubling

fricative. /e/ represents the schwa, and all other letters have the value assigned to them in the IPA.

Another guiding factor in the decoding process was simplicity and readability. The presentation style varies at times to fit the nature of the dialogue with the goal of making clear content. In most cases, however, a simplified dramaturgical system is used. Overlapping is designated by use of square brackets, and the ellipsis indicates hesitation, pauses and the like. Interruptions that are deemed relevant to the process of Language Custom are marked with a dash at line's end. There is little attempt to describe suprasegmental features and style markers except where it is evidently and obviously employed. The main thrust is to reduce reader- text interference and leads to the final issue concerning the use of color coding.

Color coding, while not to my knowledge used in transcription, is employed here in an effort to further simplify an already complex symbolized exchange of meaning. I am hoping through this technique to improve the sense of the flow of language. Each of the four speakers has been assigned a color and normal black text color is reserved for narrative or contextual information and translations of words and phrases that might be unfamiliar to some readers.

ENDOTES

[i] Pg. 26.

[ii] While proper nouns in Arabic are not capitalized, Darija will be capitalized throughout for stylistic purposes.

[iii] Heisenberg's Uncertainty Principle. A principle in quantum physics, formulated by Heisenberg that posits that tt is impossible to simultaneously measure the position and the momentum of atomic particles with an arbitrary degree of accuracy. The principle recognizes the fact that, on the atomic level, any measuring process involves energy which by necessity interferes with the energy measured. Bremermann's limit on the amount of information a material system can process is an outgrowth of this principle. A less quantifiable uncertainty principle exists in the social sciences:

[iv] Self-Referential: "In the context of language, a statement that refers to itself or contains its own referent. Self-referential statements may be redundant, e.g., "this is an English sentence", in the sense that the statement informs what a speaker of the English language already presumes in order to interpret it. They may also be manifestly false or contradictory, e.g., "this is a French sentence" or "this sentence contains four words". Self-referential statements may also be e.g., "this sentence is false". Paradoxical self-reference is said to exhibit a vicious cycle. In the more general sense, self-reference is involved in a description which refers to something that affects, controls or has the power to modify the form or the validity of that description. The circularity which the statement implies involves non-linguistic contexts as well. E.g., a self-fulfilling prophesy, double bind, the description of a system by an observer who is part of the system observed, the cognitive organization of biological organisms. In this general sense, self-reference establishes a circularity that may involve not only referential but also causal, interpersonal or instrumental relations and thereby constitute a unity of its own" (Heylighen, F. 2002).

[v] Maturana and Varela are credited with creating what is known as autopoietic systems. Maturana's early work in systems theory formed the foundation for much of current Natural Systems Theory and the duo have published a number of influential works on neurophysiology, including *The Tree of Knowledge*, 1987.

[vi] I say 'linguistic effect' meaning that the nature of the data and variables are not to be described regionally. The region itself, northern Morocco, did though, I believe, have an affect on the data gathering process as the area derives much of its income from the illegal activities of hashish production and distribution as well as contraband smuggling of European goods across the porous borders of the Spanish enclaves of Ceuta and Melillia. Given this economic infrastructure and the large number of local inhabitants engaged in these economic activities, the cities of Tetouan, Tangier, and the mountainous areas of the Anjera region are somewhat more suspicious of foreigners who are blatantly not tourists, especially foreigners with tape recorders. On top of this, the Andalusian character of Tetouan and the Tetouanis who live there, are considered the most Andalusian city in the country as its modern origins, post 1492, are traced to he expulsion of the Jews and Moors from Grenada and the rest of southern Spain and their Diaspora, many of whom relocation in Tetouan. They are regarded by other Moroccans as well as outsiders as highly insular people who have, sought to preserve their unique heritage through closed family lineage and socially protective approaches to outsiders. Outsiders for the traditional Tetouani who consider themselves the aristocratic sophisticates of the multicultural north, include the Riffi mountain dwellers, known as djebli, and considered

somewhat uncultured, as well as foreigners from Spain, Europe and beyond. This topic is discussed briefly in the conversation with the Sociologues. A concise history of the region can be found in Tétouan: Ville andaluse morocaine, by Miegre, Benaboud, and Erini. Other notable works on the Riff mountains are David Hart's excellent five year study The Aith Waryaghar of the Moroccan Rif, and the classic political and military history Rebels in the Rif: Abdel Karim and the Rif Rebellion, by David Woolman.

[vii] Said has argued in Orientalism and other works that the very notion of the Orient, which can for our purposes be narrowed to encompass the Arab-Islamic world, is almost entirely a western construct, and that the very texts that present this construct, are to be taken as apolitical investigations with western scientific notions of neutrality at their core, and thus, both believable and valid. "In the system of knowledge about the Orient, the Orient is less a place than a set of references, a congeries of characteristics, that seems to have its origin in a quotation, a fragment of a text, or a citation from someone's work on the Orient, or some bit of previous imagining, or an amalgamation of all of these"(Said: Orientalism, 18)

[viii] Kevin Dwyer's Moroccan Dialogues: Anthropology in question, aside from including one of the longest and most detailed Darija transcription efforts by a westerner to date, includes a cogent discussion on the topic of the anthropological enterprise. James Clifford as well has devoted much energy to the topic in such works as Predicament of Culture and Writing Culture, and Stanley Diamond's In Search of the Primitive.

[ix] See Ketterer, J. in Middle East Report. 30-33.

[x] See White, G. in Middle East Report. 30-33.

[xi] The collected sayings and pronouncements of the Prophet Mohammed which are the source of much of the law, social customs, and worldview of Arabs.

[xii] Darija is one of the numerous supradialects that is generally distinguished Arabic speakers as unique to Morocco, differing significantly from even it's North African neighbors in Algeria, Tunisia, and Libya. It is a highly divergent code when compared with other collogquial varieties: Masri, Egyptian; Suri, Syrian; Khaleej, Gulf Arabic are some of the larger varieties, of which Egyptian Arabic is usually the most familiar to all speakers as it has been the traditional center of Arab broadcast news and television drama.

[xiii] Darija itself is a fascinating code that has not received the attention it deserves as a unique response to what in the big picture amounts to a very turbulent settlement history which was shaped as much by geography as by politics. Arabs typically think of Darija as being the farthest extreme, like the country of itself, from the center of linguistic and cultural gravity of the Arab world, the Middle East in Egypt, Lebanon and Syria, and ultimately, Mecca from whence the language and the religion it carried arrived in the Arab invasion at the end of the fifth century in the Berbers lands and their and their neighbors in Iberia. The historical confluence of languages around the Straits of

Gibraltar, especially the interactions of Berber and Arabic and Berber-Arabic-Spanish contact situations have been given very little attention. These language systems and by extension their cultural systems have been in regular and sustained contact for over a thousand years.

[xiv] This is not to say that Moroccan Arabic, Darija itself, does not contain French, Spanish, English or other marked items and structures from other codes; it does: Many Moroccans regularly and freely incorporate 'other languages' into their idiolects, some with great flair and creativity and the phenomena has been investigated by a number of Moroccan scholars, among them Bentahila and Davies, including their work on Rai, Algerian, Eastern Moroccan music that has been extremely popular with young people throughout the Arab world which blends French, English, and Spanish language as well as rhythms to create a very unique and infectious style.

[xv]Although there has been little written about the enclaves specifically, Rezette's *Les Enclaves Espangnoles au Maroc* written in 1971 combined with the more current, 2000 *Europe or Africa* by Peter Gold provide a decent, unbiased introduction to the history and economic status of the enclaves.

[xvi] McMurray (2001) does a good job at describing the incredible hassles involved in transporting contraband out of the frontier in the other Spanish enclave of Melillia further down the coast and deeper into the Rif. The borders are ugly places full of dramatic, ritualized displays of power and anger by border guards, themselves struggling to put

food on the table for their families, and the ritualized displays of subservience by the daily migrants, human box cars shuttling back and forth, begging and pleading and feigning absolute subservience. Al and Mul dar both commented to me how they hated to cross that border and would always come in directly via Tangier. It made them ill, they claimed, and Al would never cross on foot; he refused to walk, as I did, through the razor wire fortified tunnel.

[xvii] In Spain, with a population roughly equal to Morocco there are 17 million phone lines in Morocco one million phone lines. "Teleboutiques" with banks of pay phone's, and cyber cafes at 50 cents an hour service the nations telecommunications needs.

[xviii] Morocco has a three month tourist visa for nearly everyone, after which time one must be employed to receive a green card, or temporary residency visa. I missed the beginning of courses at the American Language Center where I could have taught and gotten such papers and after 6 months, and dozens of crossings into Ceuta and back, I began to have to explain myself. Ultimately, as Al reassured me, they were powerless, and what power they had they would not want to use on me, only to make me sweat, and get my blood pressure up if they could.

[xix] Even given my highly personable manner and facility with Arabic, I believe in retrospect that ethnography and sociolinguistics is much improved when the ethnographer or linguist is a 'productive' member of society rather than only a consumer, no matter how wealthy and welcome one is

[xx] As mentioned, Al worked in the Municipalité in the town and was in contact with every conceivable type of idiolect ranging from mountain dwelling Riffis to sophisticated government officials from all over the country. He spoke everyday with men and women of all ages, and especially handled the immigrants who returned to the town and sought him out for help with plans and permits for building their homes.

[xxi] For an better insight into the social and political changes in Morocco affecting the relationship of men and women to each other and their society and the evolution of traditional norms of labor, gender, and family Fatima Mernissi, PH.D. in sociology and longtime women's rights activist offers the most in-depth and compelling critique in Beyond the Veil, (1975, 1987) that should be considered essential reading for anyone attempting to understand the dynamic of gender, sexuality and social norms issues in modern Islamic cultures. Waterbury's 1970 Commander of the Faithful is a well-researched account of the political elite and the political reign of Hassan II.

[xxii] There are a number of good, English language accounts of the Alawite dynasty and the history of the Maghreb and Morocco and the more notable are Abu Nasr's History of the Maghreb, Douglas Porch's *Conquest of the Morocco*, and C.R. Pennell's *Morocco since 1830*.

[xxiii] It should be noted that while alcohol and pork products are prohibited, or *ħaram*, according to the Qur'an, there is not mention of cannibas or any of its byproducts including hashish, kif, or majoun.

[xxiv] Macro Attractor features of a perceptual code might be its usefulness not particularly at the present but in imagined future states, such as travel, work, computer interaction such as the internet making the code of Standard English more attractive than French, Spanish, Berber and so on.

CHAPTER 6:

DATA ANALYSIS, APPLICATION OF PRINCIPLES

"*Language is not a supplement of understanding. Understanding and interpretation are always intertwined with each other. Explication in language brings understanding to explicitness; it makes concrete the meaning that comes to be understood in the encounter with what has been handed down to us*" Hans Gadamer, *Gadamer in Conversation*.

6.1 TOWARDS AN ANALYTICAL MODEL OF DISCOURSE

Given the experimental nature of the theoretical portion of this work, it is logical to assume that the data analysis would as well be experimental in its goals and procedures. Typical social science models of data analysis do not generally derive from the theoretical assumptions they intend to support. In most cases researchers with "new" or unproven theories are more comfortable applying accepted modes of empirical analysis to their data so that the conclusions of the analysis cannot be "called into question" or faulted in any way on analytical grounds; that is to say, it is the data, rather than the analysis of it, that is either sufficient or insufficient to prove the working hypothesis. The procedure of weighing evidence is never considered to have a bearing on the results. This would constitute bad scientific methods and spoil the entire research project.

However, traditional approaches to discourse analysis in sociolinguistics are, like the theories they address, operating out of an accepted stock of assumptions using a

repertoire of axiomatic relations and metaphors which the academic community consider to be "true," "valid," or "useful" when applied to data of any sort. Here, however, we endeavor to apply the new metaphors and set of relationships developed in the theory to the data itself, rather than seeking "outside" confirmation using an accepted method of discourse analysis. It is incumbent, in fact, upon scholars wishing to introduce new theories that the language and constructs they create can be tested using the new language of the theory. One danger in this is that one might be accused of a sort of circularity within the overall argument, but it is a necessary risk one must run in order to discover whether the theory is able to generate a new method.

This chapter intends just that: to take the terms that represent the new conceptual configurations of language, language systems, and language interaction and attempt to discover whether these entities and processes offer any value when meeting the real and actual empirical data of speech, as it exists in the form of transcribed discourse. The goal then is as much to support the research questions as it is attempting to have the theoretical constructs stand beside a supporting methodology. This is essentially an attempt to sketch out a new paradigmatic loop. Does not a new theory of language or life or particle behavior require new means of analyzing the very subject of the theory? Prigogine answered emphatically yes, that new chemical structures and behaviors required new means of measurement. He, of course, waited two decades before technology was able to achieve the measurement of the phenomena he theorized about.

This will be strictly an qualitative approach to data. The entire "text" of transcribed data approaches 150 pages, roughly one third of which has been analyzed. All of this data will, it is claimed, submit to this particular mode of analysis. One

limiting consideration was the nature of the audience/presentation of the data: primarily English reading and speaking. So, I chose selections that exhibited a preponderance of English coding.

Using the new metaphors incorporated from natural/open systems theory, complexity and chaos, we will discuss first and foremost how far-from-equilibrium idiolects achieve Language Custom. Language Custom, we claim, is grounded in the movement towards Concord, and these points of Concord will be the central focus of the analysis: when is concord realized and how do we know, both as speakers and language analyzers. The complement to isolating discrete points of Concord in a string of discourse is the analysis of the linguistic moves and turns enacted in the movement towards it. We will utilize the terminology of "attractors" to talk about codes, morphosyntactic structures, lexical items, phonological targets and para, extra, and sociolinguistic factors. Much of the study of chaos theory is concerned with "attractor structures," and for sociolinguists it can take the form of socio-economic status, gender, or psychological factors the researcher deems relevant. Attractors describe the "arc" or trajectory of a system, and we will look at the notion of system as an emergent property of discourse, something we must discover for ourselves through a close reading of the words our "others" are saying. While we can rely on our perceptions, knowledge, and performance abilities in different language systems and their encodings, we cannot predict any systematicity in the discourse when idiolects are far from equilibrium with respect to one another during language contact. We have recourse to such metaphors as French, Arabic, and so on, but how any of these or any other codes or systems may interact is difficult to predict. Why? Because we do not know the initial states of our

interlocutor's idiolects in any depth or with any precision. We are, as has been said, far from equilibrium as linguistic researchers. More is unknown than is known in the complex living algebra of language contact. This puts the discourse into the phase state we have labeled far-from-equilibrium where a great deal more energy is being expended by relatively unstable suprasystems (idiolects) resulting in what we expect will be more chaotic structures. It is a challenging space for idiolects to interact, and much is happening in the effort to create Language Custom with strangers.

6.2 NOTES ON TRANSCRIPTION

The overriding factor in determining conventions for transcriptions of speech is the multilingual nature of the environment. The first issue is the representation of Darija, Moroccan Arabic, which for most of its speakers, is not considered a written language, although for practical purposes it can be and has been transcribed into the Arabic alphabet, much as the Berber languages of North Africa have been. The multilingual nature of the Moroccan linguistic landscape has led to the inclusion of the bilabial plosive /p/ into the Arabic alphabet. The data requires transcription of four distinct codes: Arabic, by which we refer to spoken dialects, such as Darija as well as Modern Standard or Classical Arabic as it is beyond the scope of this project to distinguish between the three given that there are three more codes to which we must refer, those being French, Spanish and English.

I will use the most easily understood (by linguists) and accessible transliteration symbols. The emphatic consonants in Arabic are not represented in the IPA and are

transliterated in a number of ways by different scholars, often with a dot beneath them; however, the simpler method is to capitalize them. The following table lists the various conventions employed in this work to mark discourse and transliteration

Discourse Conventions and Transliteration	
[ ]	translation
{ }	overlapping speech
( )	parenthetical information
--	speaker interruption
…	speaker pause
/	indicates two possible phones or lexical items
unint.	unintelligible language
U, U:	low back vowel in Darija indicating agreement
ع	Arabic voiced pharyngeal fricative
ɣ	Arabic voiced velar fricative
S, T, D	pharyngealised fricatives with no Latin counterparts

The guiding factor in transcription convention was simplicity and readability. One is faced with the troubling question of what orthographic system to employ in conversations that may include the distinctly different morphophonemic instances from Arabic, English, Spanish and French. An ideal approach would be to treat the flow of utterances as one code and transcribe it all using the IPA; however, this is a daunting task for any linguist and ultimately limits overall reader intelligibility and restricts the possible

audience. For those reasons, I have used standard orthography (spelling, accents, etc.) for English, French, and Spanish words and phrases; and, if a decidedly French or Spanish pronunciation is discernible in the utterance of a shared Latin cognate, for example, 'mentality,' the word might be transcribed as 'mentalité' Given the complexity of idiolects and the number of divergent codes in Morocco, to attempt highly narrow transcription to account, say, for the phonological bleed between Arabic, French, Spanish and American English phonological habits is another task altogether, but one that would lend itself well to an important aspect of speech which goes for the most part unexplored: accommodation. This would require declaring a broad range of fixed and recognized phonological parameters[i] that distinguish these codes, a messy task at best.

Occasionally, words in French, Spanish, or English may be transcribed in the IPA to reflect more accurately idiosyncratic pronunciation which at times served as impediments to comprehension and put exchanges into the mode of phonological code breaking. This, and morphological code breaking, were often the necessary steps toward Concordance. In the interest of readability, when there are longish phrases by a speaker, punctuated by occasional one or two word interjections that do not constitute a turn but are generally deemed to be back-channel communication, these are indicated using the dramaturgical style, or musical clef notation. This will hopefully reflect the flow of language than giving a full line break to the ever present yeses, m hms, and uh huhs that form an integral part of communication as part of the basic feedback loop that participants need and rely on to gauge levels of Concordance.

6.3. DISCOURSE TRANSCRIPT: AL AND JOE

This transcribed segment occupies approximately ten minutes of taped conversation. The discourse, as in much of the taping, is dominated by my informant(s). This particular exchange builds around the concept and terms of social integration and relates topics concerning Al's self-perception of his social character, Moroccan immigrants to Spain, the racist attitudes of the Spanish towards Moroccan immigrants, and the Moroccan social norms of hšuma[ii] (shame, propriety) and haram (forbidden, sinful) with respect to their application to politics. This roughly 15 pages of script, given the predominance of English language is presented in what I call a "clean" mode, that is with very little parenthetical information, such as translations, stage directions, or interpretive comments.

The macro structure of this selection is interesting for its overall coherence and thematic unity. Al, as described in the previous section on informants, can be considered something of a cosmopolitan, progressive Moroccan who has and does travel to Europe with some frequency, strives to maintain a "European mentalité," and prides himself on the ethnic diversity of his many friends and his ability to get along with people from many different walks of life. He often made the distinction between himself and many other Moroccans, those who did not "know" how to travel, to blend in, which leads to his explanation of "integration" and then of racism on the part of the Spanish.

The selection concludes with a discussion around Al's feelings concerning Israel's January bombing of the Palestinian Center for Information, part of the larger post 9-11 rise in violence in that region which witnessed the Christmas house arrest of PLA President Yassar Arafat, and the bombing of PLO headquarters. This discussion turns on

one of the central social normative concepts of Moroccan (and most Mediterranean cultures) shame, as well as one of the guiding principles of Islamic culture, haram, what is forbidden by the Koran.

Al: because for me…I am, am the man who is, you know (Unint.)
J: good with everybody
Al: what makes me, yes, I can, I'm uh, smoof, the way that makes me, uh, with Christians, with Juifs; with oriental people, no problem, with occidental no problem, I can (unint.) I am the man who you can put him everywhere you know…in the sikratari…(office, government building)
J: yes, a diplomat
Al: ye:s…I respect everybody, but I have my filsovi, my filsofi I say you, I told you before
J: maybe you should be not, not a politician, not like the president
Al: Yes yes
J: but diplomat du corps, eh?
Al: Yes! Yes! Maybe, I don't know.
J: like me, I get along. I can go to an Arab country…
Al: {yes with American people}
J: and you know
Al: so I can, me too. I have no problem, eh? Mandek tmushkil ana. (lit. one will have no problems with me) but the problem which I have, I respect other people must respect me you know, and I (unint. ar.) Tef she blasa…

J: iyeh (yes)

Al: I am not, I am sure that I can't never do some problem for not everywhere

J: everywhere?

Al: everywhere

J: kul blasa [in every place]

Al: I do not no problem everywhere, so I do not like to receive any problem for other people

J: you don't make problems {for} other people

Al: {no} no no. I assume, I assume

J: yes

Al: I can't, I can, I can, uh-uh, u::h, šnoo kaygulu? [what do we say?] patrin, batrin, patrin…b'ul luɣa, [in Spanish] the, the Spanish one.'

J: atun?

Al: akl! tha'kelema!

J: the speaking?

Al: no

J: no….aklema? sounds like uh…

Al: (thumbing dictionary) No wait, wait wait wait wait…ana gul spanyola…šnu ana a'lesh…(slams closed the dictionary) I can, I can *integrate* everywhere!

J: ah integrate, there's a good one…aklama

Al: tha'eklema.

J: ta'klema? Huh

Al: it's difficult for me to, to integrate in my country, but I can integrate in your country, that's my…my…fawrz, my strong, you know?

J: strength

Al: my…

J: strong point

Al: yes, yes, my strong point, yes

J: {strong point}

Al: I can't, I can…

J: taklema…this is taklema

Al: tha'klema…to integrate in the society

J: taklema…taklema (repeating the word to myself)

Al: to to to to to to be, to be, for example

J: {taklema}

Al: be American but I am Muslim, you know, no problem for me because my religion, my, my, my ablution I do it in my house, you know; I prayer at home. I belief in the God in my, my heart, not in my mind, nobody can, can say/see that but everybody can see my comportment.

J: {uh huh}

Al: I, how I—

J: your comportment

Al: yes, comportment. Everybody can…žaou, [see how I act] I work, of how I speak you know, but nobody can, can…

J: can make a…

Al: what, what I have in my mind

J: U:

Al: nobody can enter if you have a (unint.) every technology in the world nobody can understand what I think, you know?

J: uh huh

Al: Ah! I speak too much.

J: No, but I want to ask one thing, taklema is related to kelm…kelma?

Al: Kilma, Thaklu, integration, integration.

Al: Th-ka-lema…Thaklist, come from 'ekli' is rižon.

J: region?

Al: yes, to be the, region, the same region

J: to be from the same region

Al: yes!

J: which means, which is, but its…same speaking?

Al: yes

J: oh!

Al: no, not same speaking, same…tradition, everything the same

J: u::

Al: for example when you come to Martil you have the same tradition to Martil people…Tha'klema

J: taklema

88 Al: all to be like the aklib, like the same tradition, religion, say ‘aklem, same

89 to me to be, to be the same tradition for the region

90 J: oh, similar traditions

91 Al: yes, yes, we…in Spanish what we say

92 J: I uh…

93 Al: integración

94 J: integración

95 Al: waah! luɣa! [damn! language!]

96 J: compartir los custumbres [share customs]

97 Al: yes! The same

98 J: ha! yo hablo espagnol ahora…

99 Al: for example…for example—

100 J: {compartir…compartemos los custombres}

101 Al: one time when I go to E’spain, I take my barbe, [beard] you know

102 J: yeah

103 Al: I shave my barbe

104 J: you shave your beard

105 Al: (mimics deep-voice in Spanish) that’s Spanish, I speak the same language

106 J: uh huh

107 Al: I go to bar, I do everything like them, but when I go at home I can pray, I

108 can speak with my God you know, I can, you know

109 J: {uh huh}

I can practice my religion…eh, mezziyen, [good] eh? but not for eh….phew!

J: mezziyen [good]

Al: yes, it's good …you understand integration? To make the same custom for the city…for the country which you live. for example, when you was in…

J: Emirates?

Al: when you want to be integrate {you have} to put the same thing

J: {uh huh}

…in clothes, the tebira/tabura,

J: {uh huh}

Al: you know (unint.) sebɛ, we say you are integrate, but even why you are American, when you go at home, you can do everything, but le, la mshat, [where you go] it is your life you can do everything!

J: anything you want, eh

Al: …society of Spain, so that is why people make racisme, I respect this person, some (unint.) a lot of Spanish people which he make racisme, but sometimes I say why? They, they, they must understand; the Spanish people need the help…hand…yiddebiya…what we say?

J: take by the hand--

Al: no the hand…no, the people in, in farm, some handy man, you know?

J: labor, laborer

Al: yes labor, for working the…so we must understand the situation, we must, uh, maɛrfš [I don't know]

J: no, I know, they must understand the situation, they need their labor, but the Moroccan--

Al: So we must help them, we must…

J: treat them with respect

Al: yes, must respect him, must help him to integrate into they society, their society, you know--

J: yes, no, you know, in um, ši klma khaib bezzaf f amerika-- (there is a very bad word in America)

Al: In America they have no problem; he can integrate quickly…why because its American people is different that's why; one of the country which you have a lot of liberty: Holland and America, nobody other, safi, [that's all] America u Hollandia understand, you have a lot of liberty--

J: but the problem now is liberties changing…

Al: yeah, of course.

J: the government is taking them away from us

Al: yes yes

J: but it's not--

Al: but it's not…it's the question for the time, you know, maybe five years, ten years, the (unint.) same time, I think, eh?

J: I think the next hundred years

Al: no too much

J: terrorism, terrorism is the business--

Al: no, I speak, no no

J: until you know--

Al: no, no I think--

J: no?

Al: I think eh, eh, no…too much

J: maybe, maybe

Al: no no, less less

J: terrorism

Al: no maybe 20 years

J: they build their, get their money from terrorism, the arms people, and they stop terrorism

Al: no no…to open trade from China, from Asia because a lot of people…

(Break for New Topic)

Al: what did they do, what did they do the Is-rayel?

J: no…

Al: they bombard-ed the uh the…the ida ع in, the center of information from Palestinian; hšuma, hšuma, hšuma, hšuma. It's forbidden, hšuma.

J: no, no they're not going to stop

Al: ah! they do everything, bah-bah-bah-bah (imitating gun shots) say me Sharon is crazy, eh?

J: uh huh

177 Al: makes me, uh….hšuma, hašem (unint.) he can kill, he can do everything,
178 but bombarded the center of information is, is, ah! I don't know…
179 J: cuz they, they, they gave, they gave up…
180 Al: my, I have, I have, you know, uh, uh, half the Moroccan Juif maybe, you
181 know, my brother is, you know…
182 (Silence)
183 Al: but hšuma, is forbidden to do that…why in Spanish before I say you
184 J: yeah
185 Al: when the Moroccan want to do, want to build a consul in Almeria, people
186 come to…cha! pa! (gesture of throwing)
187 J: The {protests in Almeria}
188 Al: {hšuma hšuma} they threw rocks
189 J: the Spanish people
190 Al: yeah
191 J: threw {rocks}
192 Al: {hšuma}
193 J: at the
194 Al: hšuma hšuma
195 J: Moroccan consulate
196 Al: yeah, yeah
197 J: in Almeria?
198 Al: yeah, yeah, hšuma; I think it's, it's, it's…
199 J: what year was it? Was it last year?

Al: it's, I don't know; what I say in English, uh, I mean žahliya

J: žahaliya

Al: žahaliya is ancient; before, before (unint.)

J: no it's, it's, it's, medieval

Al: mid uh yeah

J: {medieval} like 2000 years {ago}

Al: {medieval} {hšuma} hšuma hšuma, hšuma, hšuma…Spanish in this time is yani, twenty sikle yeah? We can say siècle?

J: century, we say century, 100 years, yeah?

Al: no, one hundred, no I don't…

J: sècle

Al: No, we are in the twenty-one sikel, you know

J: yeah, yeah, century, siglo (sp.)

Al: siglo yes? We are in twenty-one siglo, you know

J: {siglo}

J: siècle en francaise, siècle

Al: siècle

J: oui

Al: est en train vingt-et-un siècle lui partions (unint.) c'est en trains de nos, de nos, comme on dit, comme on dit en francaise, de nos de (unint.) protester, c'est horrible, horrible you know je ne me comfit pas

J: oui

Al: c'est horrible, j'ai rendu (unint.) c'est para….decent (unint.) on puet protester on ma bru proteste, we are, we have…uh, uh, what we say in English, tenemos el derecho…we have the law

J: we have the right, derecho.

Al: yes, we have the right to protest, but not, ce n'est pas de (unint.) trés fasol/violence; we have other ways

J: yeah

Al: by, by

J: (unint.)

Al: no, by prensa, {a partie} d', d', du journalisme, a partie de media information

J: {prensa}

Al: but not, uh--

J: throwing rocks

Al: de tené la pierre par une personne qu'il on (unint.) retard, you don't understand me.

J: yeah, no.

Al: (unint.)

J: the representation of the other--

Al: others…is-is-is forbidden, is-is-is more than haram, is more haram, is your life!

J: it's haram and hšuma

Al: no, it's better than haram…for example, I drink the wine; the wine is haram, but is my life!

J: yeah

Al: nobody can stop me, is my life when I go to fire or to the heaven, is my life, fhemti wala mfhemtishi? [you understand me or not?] hšuma for everywhere, is forbidden for everyone

J: yes, {so because}

Al: {pardon}

J: these are people representing their countries, but they are throwing {rocks}

Al: {ah!}

J: at an {embassy, no like going into your house and drinking a bottle of wine

Al: {aah!} {no….no} {nooo}

J: which may be a {sin--

Al: {no, fuck off who say it, is my life, but without my (unint.)

J: you are making a statement--

Al: you make fire for my house, dyel…(unint.) bindira…you say me before

J: dar dyelna

Al: bendira…the symbol of…

J: flag flag, drapeau

Al: drapeau

J: hemdoulah francaise! drapeau [thanks to Allah for French!]

268 Al: hšuma hšuma

269 J: ah, I know…safi, you want go…sorry

270 Al: beleti [wait] (telephone ringing) my wife call me

271 J: you are thinking about your wife and she calls

272 Al: she send me a message

273 J: you can send me a message but I can't send one back

274 Al: no, you can

275 J: no, I tried with the phone, it won't work… (end of tape).

6.4 DATA ANALYSIS

This selection begins in a relatively near to equilibrium phase space in so far as a new theme and topic is being broached by Al, and at such times, the topic initiator (Al) and the passive participant (myself) are in what might be considered a brief state of suspended judgment. More concretely, I passively accept the initial information that goes towards establishing the topic/theme and do not expect to have to make immediate judgments on a global discourse level and am concerned with micro-level decision making; and at this level, Al's examples in lines 3-6 are adequate attractors that guide my comprehension of his initial description of the aspect of his personality that he is describing. This is the simplest level of complexity for a given discourse as it serves as the basis for the development of much more complex ideas, as we will see in this selection. Most of what Al is saying in these lines is already known to me as background information on his personality; therefore, I need not reach too far outside the actual structures for help in decoding; moreover, the phonological and morphosyntactic

components of the message are quite closely aligned, as he hopes they will be, with my "core" idiolect code, English. What noise there is in the signal in such lexical items as "smoof" and "sikritari" and the stumbling and tangled syntactic structure of line 3, which shifts four times, virtually negating any possibility of prediction on either semantic and syntactic category levels. One does not know whether to predict a noun or qualifying adjective as with "what makes me," a verbal phrase as in "I can" and so forth. However, given that this is the initial stage of the discourse, the random state of prediction can be by-passed, one can simply wait for more information to overcome this noise, and this is exactly the case, as Al finds more powerful attractors in heavily resonant and content rich nouns rather than the more complex grammatical structures he attempts at first.

The attractor nouns (Christian, Juifs, oriental, occidental, no problem) and simplified grammatical structures "I am the man, you can put him everywhere" achieve his goal of describing himself to me which is evidenced by my response in line 7: "yes, a diplomat." This marks the first point of concord in this section, and a necessary one as Al indicates the need for feedback by trailing off and allowing me the opportunity to respond to his rather lengthy set up. In lines 7-20, Al introduces the term "respect" as a critical component of this personal ability of his, and in lines 17-20, we can see the level of complexity increasing as the concepts begin to build on one another. The discourse is beginning to self-organize here as Al pushes the boundaries of the discourse. We are no longer simply talking only about his personality, but rather that his ability to get along with other people of different ethnic, religious, or cultural orientations is based on a universal quality of mutual self-respect. Somewhat buried in these lines is yet another concept in line 18 "but the problem I have" which is not directly addressed, but will be

throughout the rest of the 10 minutes of dialogue, and, in fact, is one of the central themes of Al's discourse. The emergence of Darija here is not so much classical code switching or mixing, but rather, indicates that the ideas forming in his mind at this point are beginning to outstrip the encoding abilities of the English component of his idiolect; nevertheless, he decided to continue in this direction and we find the talk veering away from equilibrium.

6.5 CONCORD THROUGH CODE BREAKING

Line 21 Is quite chaotic; there is a high ratio of noise to the signal to the point of near incomprehensibility. There are two predicating structures with the second ending in the head of the complementizer phrase where the signal becomes corrupt with the double negation that occludes the action that is predicated in the complement, the doing of "some problem." It is unclear whether the final string "for not everywhere" is serving as a prepositional phrase; and if so, the string is meaningless and a sign that Al's idiolect is creating highly chaotic structures implying that the discourse has moved far from equilibrium. The entire utterance echoes the overall "negative" attractor structure of the phrase as a whole, 16 words, and a quarter of those are negative markers; however, the lack of information in the verb, "do" has heavily degraded an already noisy signal. It relays only the bare bones of a more complex thought Al would be able to say easily in a number of other codes, but he is intent, like many Moroccans, to practice speaking English with a native speaker and so he persists, able at this point to relay only the sketchiest outline of an action on or about a problem of some sort. The negative structure

implies that he is exclaiming about an ability he professes definitely "not" to do or create some problem everywhere.

The question then is why I seize on the final lexical item in the string? Convenience, proximity to conscious memory? There are any number of approaches one might take to clarify the meaning of this phrase, or to reach concord. We say here that, while limited, there are still a number of avenues open to me at this point, yet only one is taken. Such a state of affairs reflects what Prigogine describes in a system as free will or choice within a deterministic set of options, and not knowing everything about the initial state of the interactive subsystems, to ask "why" one path is taken and not another, is pointless.

For example, I do not ask about what he means by "problem," nor do I repeat the unfinished phrase, "I am not" with "You are not what?" or "You can never do what?" Instead I repeat the phrase final word 'everywhere' as a question. Why should this word, however, serve as the attractor of that phrase for me? One answer might be that it is really the only "meaningful' piece of information I have received. While yes, I "understand" each lexical item in the phrase just as I do 'everywhere,' in context they are nothing more than noise. "Problem" could serve as an attractor as it is the only other content noun in the phrase, but I rejected it. At times, our choices may be quite random in such situations. Random actions can, in some cases, serve one as well as more predictable choices in reaching goals.

The other option available to me was to seize an attractor and either make a statement or ask a question, and clearly, with so little information, even with the preceding discourse of lines 1-20, I am at a loss to make any sort of declarative response.

Al repeats the term with emphasis and I repeat it back to him in Darija. (23-24) This is a clear example of the feedback loop that may on the surface appear to have no real meaning or serve any immediate goal in clarifying line 22, as no additional information is given, but only the clarification of an already mutually understood term in two distinct codes, a cross-referencing with my addition of the Darija term. What this feedback loop accomplishes is that, precisely because it is meaningless or purposeless, it adds nothing and leads us nowhere thus forcing Al to a reformulation of a new structure to express the meaning we both know exists perfectly and clearly in a cognitive space we have yet to reach. My limited response and unwillingness to comment or rearticulate back to Al a meaningful string about his intended meaning leaves him in position to try once more in line 25. Politeness and face saving may even be read into my response.

Using the familiar shape of the last string, Al (25-26) condenses and greatly simplifies it rendering it much more meaningful while expanding the message with a conjunctive clause that helps flesh out the complex thought with which he began in line 21. My response in line 28 is modified feedback, a corrected version, rather teacher-like, but at the same time I have completed understanding of the first part of his thought; however, he jumps onto the feedback even before I finish the string and echoes again after I finish. At this point we have reached concord with respect to the initial thought of line 21 but not yet of the second half of the expanded string in 25-26. In line 28, the final 'no' Al utters is marked with a full stop to signify the end of that particular event of concordance. And in keeping with our initial theory of concord, we know that it refers both to specific points along the arc of discourse, as well as to discourse as a whole, and at this point, we have only begun to follow the path of this particular conversation.

One would think Al might repeat the second half of the string about not expecting to receive problems from other people, or even that I might seize on it as an attractor to continue the discourse. At this point, after we have reached concord, the system bifurcates, Al's idiolect seizes on a different structure, one we might say could be novel for him at this juncture, "I assume," is repeated twice in an attempt to generate the complementizer phrase and possibly a subjunctive, a familiar form in many of the codes that constitute his repertoire, but it crashes on him, rather, that form is chaotic in that it does not move towards order, but rather towards lack of order, and he immediately shifts tracts again, back to a more familiar structure "I can't" (31), and this too proves a chaotic structure that leads to a completely chaotic string composed of three false starts, embarkments on another pathway, from "I can't" to "I can, I can, uh uh, u::h" and finally the break in code to Darija, "šnu kaygulu?" "what do we say?" into the unintelligible triplet I interpret only the grossest phonological feature of, and returning to Darija to ask for the dictionary, amending in English, 'the Spanish one' as there were a number of language dictionaries laying about the salon. In line 33, I respond with a very bizarre form that appears to be the word 'tuna' in Spanish.

At this point, we are in complete discord, far enough from where we started and cognizant of the breakdown to seek out a primer. We now must begin the work of code breaking, which he starts by looking up the term in the English-Arabic dictionary. I seized on the phonological concatenation /k, l, m/ missing or ignoring the initial /ظ/ [dud], the emphatic consonant, and arrive at a best guess of something relating to the root of "klm," "word, speech," or "tklm," "talking" and this is not even remotely related. I attempt feedback in line 37 by repeating a variant on the Arabic which has no life, and he

buys time telling me to wait as he looks up the word, saying that using Darija, he will tell me in Spanish. He then begins mumbling to himself as he skims the dictionary page, and finally slams the book closed and completes the thought in lines 38-40 "I can, I can integrate everywhere." And in line 41 we have reached concord and I attempt to learn the term in Arabic and we move before discourse moves on. My attempt to learn the Arabic term in lines 42 and 43 is something of an interruption for Al, and he resumes his discourse propelled now in a new direction, in the proper direction from Al's point of view, we can imagine, by the acquisition of the fundamental concept, 'integration' which has become the new attractor for macro level discourse, and it fits nicely for this particular string and it proves to increase the complexity of the structures that he produced in lines 44 and 45. Al begins by stating a binary distinction relating to himself, that while he cannot integrate in his own society, he can integrate in mine, and seems to resolve this new issue by declaring this state of affairs to be his 'force' one of the powers of his personality, as we discover in lines 45-50 when we reach another point of concord relating to this concept and term.

6.6 PRODUCTIVE SIDE TRACKS AND BIFURCATIONS

In 52-57 I am attempting to find the correct pronunciation in Arabic and doing so in such a way as to avoiding steering the conversation or initiating a new topic, focusing only on lexical items and basic structures; and here, it has the unfortunate effect of detracting from Al's main points, yet at the same time it elicits a rich and lengthy example by Al in lines 58-61 in which we arrive very quickly at concord marked by my

overlapping positive feedback. These lines, while they may appear stumbling and halting, imperfect and ungrammatical half thoughts, they are in fact the most complex structures yet. The metaphorical contrast he employed before to illustrate integration—the contrast of his inability to integrate into his own society and into mine—is expanded here with an implied secular-religious comparison of 'American and Muslim," and that as a Muslim he is able to pray to his God in his house, in his heart (which are two good metaphors for Heideggerian analysis[iii]) and yet another distinction between house, heart and now his mind, which is something different than the other two and is a place that would appear to be connected to comportment (another common Heideggerian term). It is clear that he is saying his religious convictions are a private affair of his 'dwelling' and his 'heart,' (a point which we return later in this conversation) and the image of the persecuted Muslims and Jews after the Reconquista of Spain comes to mind during this textual reconstruction and commentary, people who were forced to hide away in the labyrinthine Moorish villages where they secretly performed the same ablutions and rituals they practice today.

Integration is tied then to comportment, to behavior, and this is not surprising at all given that in the Moroccan and Islamic cultures (and Mediterranean cultures in general) there is what westerners often like to term a "preoccupation" with public behavior. Later in this transcript we will encounter the well-known term, hšuma, that has lead western ethnographers and sociologists to identify it as a so called "culture of shame," when in fact the issue goes much deeper than that.

It is obvious from the string between 57 and 71, during which Al attempts to explain this distinction, that a very interesting metaphor arises, that of the invasiveness of

technology and its utter inability to read his mind, to know what is in his mind, which we now see is something quite different from his comportment. My contribution is in positive feedback, trying to provide a new attractor with the "can make a…" construction in 66 and then a very 'Darija' affirmative, a slang variant common in informal settings in line 68, my own attempt to accommodate him with affirmation in his native code. Perhaps I know at some level how hard he is struggling to make clear to me his thoughts in structures that will adequately express his very complex ideas that have been limited by his almost exclusive use of the code he professes to be weakest in. Al ends in line 72 with a self-effacing comment, chastising himself for talking so passionately. We are both aware that we are unsatisfied with the results thus far, Al certainly, as he is only receiving minimal feedback from me and I am not picking up the ball so to speak and once again return to the central discourse attractor, the original Arabic term for integration in line 73. I know enough of Arabic to realize that such terms will have a great number of meanings that may help us both. My instinct, one might say, in such a situation is to return, like some pedantic philosopher to the 'original terms of the argument.'

It is a fruitful strategy and clarifies the term from lines 73-89 in which my mistaken notion that it might be related to the root of 'to talk or speak' serves to push Al to other terms and examples and finally to 'of the same region, and of the same 'tradition' and the term I mistook, even during transcription as "akl" or 'mind' in line 32 was Al saying the word "aklib" out loud to himself as he went in search of the English gloss, integracion. It is repeated in line 88. Aklib, then, is to be 'an insider, a native, to know the lay of the land,' how to behave. In lines 90-97 we have once again reached concord on an expanded lexical categories and notion of thaklema (the verb 'to integrate') and

aklib, the noun, integration. There are a few odd lines of my own. Proud of having come up with "compartir los custumbres" (to share customs) I throw in the nonsensical "Ha! I am speaking Spanish now." Something others would probably find very humorous, but Al takes no heed of it and we can see clearly by line 99 that Al is vigorously pursuing a line of thought and he searches for an example.

101 to 115 are yet another example via narrative and dramatic enactment by Al to further his narrative and at 115 he has completed the largest loop of concordance since the beginning of the string, inquiring whether or not I understood integration, and one can say by now he is exploiting a new structure he has discovered with these English structures and continues with a further extension of examples of my having been in the Emirates. I did not get hung up on the strange lexical item in line 119, of a "tebira" or "tabura", which I associate with some piece of clothing, as in the previous line Al has said as much, so it is possible to not know what a particular type of object is in discourse so long as one knows generally what category it will fall in and its particular nature. What he had hoped would be explicit to me, is not, but that does not inhibit me from agreeing, in order, I claim, to "pump" my subject for more information in a rough linguistic and ethnographic sense. One is always, when in a comprehension mode in a far-from-equilibrium setting, wanting more information and 'phatic' positive feedback is a particularly useful behavior. "Agree until you understand or are made a fool of" was a lesson I learned the hard way as a green Peace Corps Volunteer in 1984 during a bus ride between Tetouan and Rabat in which I agreed eventually to marry a woman's daughter, convert to Islam and take care of her for the rest of her life until it became clear to the great amusement of everyone seated around us that I was completely in the dark.

Thus far we have evidence of the applicability of the some of the new vocabulary developed in the theoretical portions of this work with respect to concord, which will be a recurring point of analysis throughout this section. We can also posit that there is evidence of the unpredictable nature of the exact course of the arc of discourse with the excursions into code breaking, which led to further divergence into new examples and linguistic structures surrounding the term integration. This may be viewed as part of the self-organizing, creative nature of language and discourse that is pushed along new pathways and linguistic channels as speakers move towards concord. Throughout this movement, some pathways are seen as less divergent than others; and the section that follows, illustrates what we have discussed as 'bifurcation,' which appears as a sudden, or radical break in the lines of communication.

6.7 LARGE SCALE BIFURCATION

The seemingly abrupt transition of line 125 into racisme in Spain marks the first macro level bifurcation in the discourse. It also represents a higher level or emergent property of the language flow at this point, from basic concepts to more socially-loaded terminology and arguments. However, this bifurcation, or new theme, is prefigured in lines 119-123 with an invocation of personal freedom and, it should be noted that I remained consistent in my discourse role as ethnographer by repeating terms, echoing questions, and seeking clarification: basically "lying low" with respect to participation, so the discourse, at Al's direction, bifurcates from the concept of social integration to personal freedom and finally racism.

There is no satisfactory account looking at the previous data as to why talk would move to the topic racisme, and here is where we understand that the data stream we have captured is but a sliver of an individual's life of language and that the only plausible explanation is the simplest: Al wants to tell me this, and wants to do so in as proximal a code as possible between our idiolects. In making Language Custom, especially when it moves to the complex ideas that define one's worldview, what is most important is to know that one, no matter the code or structures used, is being understood in the intentional meaning residing in the abstraction of cognitive space that is made manifest through language and clarified through discourse with another.

In 121 to 128 Al's message is clear enough and there is a very general sense of concord present indicated by my comment in line 146 which marks the first time in this section that I initiate direction in discourse rather than rechecking statements for clarity or terms for meaning.

Concord is reached at two separate points, first concerning the role of Moroccans in Spain, over which there is some confusion which is resolved through the term 'labor,' and again, in line 136 and 137 when we arrive at mutual understanding over the term 'respect.' Implied here is background knowledge that Spain, as a dynamic first world economy and member of the EU[iv], is dependent, as are all capitalist economies, on cheap and plentiful labor. The notion of dependency is what drives this understanding. The Spanish economy, it should noted, can no longer entice its own citizens into difficult, low-paying, and often dangerous jobs in agriculture and factory production. My attempt at taking the floor following Concord in lines 140-141 results in a chaotic structure in Darija and is interrupted by Al who proceeds with the business of continuing to develop

his thought (142-145) in making a comparison of the US and Holland, countries where Moroccan immigrants have no problem "integrating," (incorporation of the new and central discourse term) because these nations are known for their large degree of liberty. These lines mark the full completion of this complex thought concerning integration, personal freedom, racism, and liberty; and while the route was by no means direct, our idiolects have succeeded in the difficult task bridging a great linguistic chasm and uniting us in Concord as we strive to create a viable Language Custom. We can say that this point marks a macro level point of Concord on this topic. Concord, as we will see throughout, is rarely a stopping point, but only the necessary gateway through which we must pass on the way to Language Custom. If we see Language Custom as the shared, transindividual artifact that speakers create over time, then it cannot exists without a high degree of Concord in discourse. The more often speakers reach
Concord, the closer their idiolects become, and the nearer to equilibrium their discourse.

Line 146, just after this Concord, marks the first bifurcation of discourse which I initiate concerning the topic of liberty. The section 146-168 will serve here only as a point of transition to the final major theme in this selection.

It should be stressed here that any given string of speech can be viewed as fluctuating between the poles of equilibrium. As we have seen previously, discourse can move quite rapidly from, for example, complete chaos and unintelligibility to a temporary stable state of concord. While overall we are placing all of the analyzed discourse in the far-from-equilibrium state given what we know about the speaker's idiolects and the linguistic habitat, discourse is said to "move" or swing between equilibrium states and this following transcribed section of discourse is a good example of this state of affairs.

Lines 169-176 exhibits a very near-to-equilibrium state between the two idiolects with proper and expected feedback delivered in 176. Al is creating more coherent, well-understood, non-chaotic structures and reformulating the kernel of his message several times to express his outrage; however, by lines 180-181 both my and Al's talk swings out of equilibrium. My attempt to bifurcate the discourse into a direction of my choosing fails (181), and the trailing pause at the end of my aborted statement indicates some sort of cognitive block inhibiting the free expression of thought, or I chose the wrong grammatical structures to express the idea, or I simply don't know what it is I wish to say. Al's response to this veers towards chaotic structures. It is impossible to find any contextual link between my aborted phrase and Al's string in line 178-183.

A literal translation of this string reveals little about the intended message. The primary attractors in the string with which we can begin an interpretation are 'my' and 'I have' which tells us possibly that Al is attempting to make some claim about himself, but this fails as the string swings towards chaos when Al attempts to regain his footing with the stutter-stepping interjections 'you know, uh, uh' and restarts with the phrase "half the Moroccan juif maybe, you know, my brother is, you know" which bears no syntactic or semantic relation to the beginning of the string. The new attractors at this point are 'half the Moroccan juif' and the noun 'brother.' Given my silence, Al abandons this line of talk and returns to the topic of hšuma on which we already have established a position of concord (175-176). This abandonment leaves us with a chaotic structure that is not explicitly resolved in the following discourse strings and thus we must dig out the meaning on our own. My silence in the following line is indicative of my confusion and the overall lack of concord at this point. It is only through reconstruction that I am able

to bring meaning to Al's statements; my reconstruction here is aided by my cultural communicative competence, i.e., knowledge of Moroccan culture as well as by other dialogues I would have with Al at a later date. What Al is saying, I believe, is that either half of Moroccans are Jewish or that he may have Jewish blood: a startling statement for any Arab to make; however, given that northern Morocco has over a thousand year history of intermingling bloodlines between the Arabs and Jews, it is indeed likely. More generally, he is referring to this long history of close relations between the Moroccan Arabs of the north and their Jewish neighbors, many of whom fled southern Spain together after the fall of Granada at the end of the fifteenth century. Until the establishment of the State of Israel in 1948 and the subsequent migration of Jews from around the world in the next several decades, Morocco boasted the highest percentage of Jewish peoples in the Arab world.

However, the main focus of the overall discourse string, or what we can call the central attractor, is the concept of hšuma. It is the central attractor in that it guides the discourse through a number of different but related topics, and serves to pull the discourse back towards equilibrium in line 183. It is interesting to note that Al has expanded the concept of hšuma to include what non native speakers of Darija or Arabic in general would conceptualize as haram, forbidden. It is impossible to say whether this expansion of the term is a result of his own idiolectal restriction in English code or whether he is simply 'heaping' scorn upon the actions of the Israeli government by compounding the term shame with the notion of sin and illegality.

The latter half of the string in 183 veers into a chaotic structure again with the phrase 'why in Spanish before I say you,' which is followed *not* by positive feedback

'yeah' (182) that in another context would indicate concord on my part, but rather in request feedback: the request is for more information. In the reconstruction, this chaotic structure at the end of line 183 is best understood as a discourse marker that refers the both of us back to a previous point in our discourse as a whole, rather than to any point in this text.

The string from 200-229 would be of interest to those concerned with code-switching (discussed in the following paragraphs) as we find all four codes in use that are typical of this region among the more educated Moroccans: Arabic, Spanish, French and English. There is an elegant exchange from 183-196 that does well to illustrate the complexity of language and discourse in general while exemplifying the importance of feedback in the process of concord. The overlapping of simultaneous talk in no way interferes with the message, and in fact, is critical to the feedback process of concord. What is so complex about this exchange is that dual processes are involved here during the feedback loop, for while Al is responding to my queries which are aimed at ascertaining the facts of the string (that he is speaking about the protests in Almeria at the Moroccan consulate in that Spanish city) he is at the same time repeating his value judgments of the immoral aspects of the event and at the same time preparing a new direction for this discourse. We have reached full concord by line 198; and, as we have seen before, points of concord are at the same time points of departure for new thoughts. There is barely a pause between his positive feedback in 196 to my question "in Almeria" and initiating the new thought in the second half of the string: "it's, it's, it's" which is interrupted by my question concerning the date of the protests. He rapidly answers that he doesn't know and continues his thought, shifting codes with the term from Standard

Arabic "žahaliya." An interesting side note is the pattern accommodation in lines 198 and 203 with the triplets of "it's" on both of our parts. My translation of the term, while technically correct, is an unfamiliar term to Al and from 200-214, further negotiation of the term is embarked upon as Al accesses other ranges of his idiolect to make certain that I understand him. This negotiation at the same time furthers his point concerning the barbarity of those Spanish protesters who saw fit to throw rocks at the Moroccan consulate. This is a highly complex exchange with respect to both code and content and is an apt illustration of the self-organizing nature of language and discourse: the attractor terms and structures serve as centers of gravity for the emerging discourse structure and themes. The negotiation of the term medieval is subsumed into yet another negotiation around the term 'century' 'siècle' and "siglo" which serves as yet another attractor and propellant for Al's point and by line 215 we have reached another point of concord having established our terms and sharing a mutual understanding that throwing stones at a consulate is barbaric, a medieval act that is shocking to us both given that we are living in the 21st century.

Again, with respect to code-switching, the transition from English to Spanish and then to French in lines 210-214 is of interest in that through a series of translations the primary code of discourse has shifted from English, via Spanish into French which is the primary code for Al in lines 216-218. From a complexity theory standpoint, we view this as a very natural shift that is evidence of the self-organization of language and discourse. There is nothing "deliberate" or habitual in these code-switches; rather, we have a situation that is described in complexity theory as stochastic: from one state (code) we are not able to determine the next state (code). The common example of stochastic

processes is that of flipping a coin: it is impossible to predict with certainty the outcome of the next flip, just as it is impossible to predict with any certainty whether the next code-shift will be to English, Spanish, Arabic or French. We can only make post-facto inferences and weak connections between lines 209 and 215 which move from English to Spanish to English again and back to Spanish then to French; and, from lines 216-225 the codes move from French to English to Spanish and then to English once again then back to English-French-English with Spanish again entering as a negotiating code between French and English. The switches between codes are quite random at this point which should be clear from Al's switches between English-French-English in lines 224-225. One would expect, following the literature of code-switching, to find some grammatical node between the two in line 224-225, yet there is no bounding node: "we have the right to protest, but not, ce n'est pas…" This is not to say that code-switching and code-mixing are not, in many cases, rule-governed either grammatically or topically, but that such governance and binding that may hold in near-to-equilibrium discourse settings (for example, if Al were speaking with one of his friends with whom he shared a stable, multilingual grammar; however, this is not the case, so what seems more plausible an explanation is that in far-from equilibrium discourse settings, the idiolect runs on in one direction (or code) until it reaches an impasse, (as in lines 224-225) regardless of grammatical constraints or topic and will access immediately—without regard to grammatical structures—whatever other code seems most likely to resolve the impasse; and of course, this depends entirely on the speaker's perception of his interlocutor's idiolectal range as well as the particular make up of their own idiolect with respect to the limits of lexicon and grammar in various codes. It is, however, interesting to note that

grammatical structure is obtained, or holds, across three code switches in 232-233: "no, by prensa, a partir, de, de, du journalisme, a partir de media information." The initial negative marker is a response to my unintelligible (for reconstruction purposes, but clearly intelligible to Al at the time) response to his statement that "we have other ways" (of expressing our political dissatisfactions rather than throwing rocks at consulates) and is followed by the English preposition "by" configuring the Spanish noun "prensa" which he expands on in French saying what I translate and interpret as 'through' or 'by way of the media.' Whether a native French speaker would agree with this translation is open to question, but the phrase taken as a whole begins with the English preposition "by" substituted for the Spanish preposition "para prensa," meaning "by way of the press." This is immediately followed by yet another switch into English, the code he began this particular thought in and is most intent on exploiting: "but not, uh—" which initiates the conclusion of the compound thought begun with his utterance in 224-225, that we have the right to protest, but not through violence; there are other ways: through the press, for example, but not "throwing rocks" I insert in 236. My response, completing his phrase in 233 with "throwing rocks" can be seen as the completion of the feedback loop which assures Al and myself, by its appropriateness and accuracy, that we have once again reached concord across those many codes.

The preferred explanation in the terminology of complexity theory is that out of the chaotic structures and the chaotic switching and mixing of codes (part of the overall chaotic shape of the discourse structure here) emerges a mutually intelligible linguistic structure that is particular to these idiolects in a far-from-equilibrium conversation. As we've seen, it is impossible to predict accurately when or where, grammatically speaking,

code switches or mixes may occur and that it is just as difficult to predict what code may accomplish the communicative task. In complexity terms, because we do not know in complete detail the initial state of our interlocutors we cannot predict what course their speech will take; and remembering that the less we know of initial states, the more likely we will discover chaos and chaotic structures as the arc of discourse moves towards its ultimate basin of attraction: Concord. The same can be said for the content aspects, or topics of any given discourse. The less we are able (as speakers) to fill in background information on the topic the more difficult it is too comprehend—on the fly without the aid of transcription and reconstruction—the intended meaning. In terms of classical discourse analysis our lack of background schemata makes prediction more difficult, and prediction is critical to the comprehension process as input is measured, when possible, against a vast set of expectations and predictions on every linguistic level.

This, perhaps, accounts for the topical redundancy that we observe in much of the discourse between Al and myself in which statements and lexical items are repeated or presented in a synonymous fashion, and central points are reiterated from different directions. The importance of prediction is seen in my response in line 236 “throwing rocks” that completes Al’s restatement of the theme that there are other ways to protest “but not—uh.” In this instance, a prediction has been successfully met, signaling an end to the discord and cacophony of the many codes and structures making up the complex linguistic interaction required to arrive at this very simple thought.

The interconnectedness of both code and message and of discourse itself is evident in line 236. Having reached concord on the “point of rocks” so to speak, the stones, as a lexical item belonging to a specific sub code of Al’s idiolect serve at the same

time as the metaphorical hinge upon which his next thought pivots and the discourse turns in Al's next utterance in 237-238. The most accurate transcription of Al's utterance, which I did not understand at the time, is reconstructed to reveal enough recognizable items within the string to support a rough paraphrase concerning the "backwardness" (retard) of such an act, of throwing stones at people. The stones and the act of throwing them were earlier described as medieval, and here as backward, a point we have agreed on; however, at this juncture, Al is not certain that I understand him in 239 and we swing out into discord once again. I respond in what appears to be a contradictory fashion "yeah, no," but given the structure of the English coded question tagged onto the French coded statement "you don't understand me," as a negative question, my first response is to affirm this negative question, and then to amend, or repair the response with no, meaning "no, I don't understand you." This overcompensation can be viewed as a form of redundancy and maximal coverage to ensure that Al knows I mean, "yes, I don't understand you."

Line 240-241 (the first unintelligible, and the second, my response) marks the discourse as far from equilibrium, and Al in 244 returns us to one of the central attractors of this string: hšuma. The term acts as a strong attractor pulling us back towards equilibrium as well as a catalyst propelling the discourse into a new representation of the central message which can be visualized here as the hub and the various approaches on the theme play out as spokes from the center of this concept of shame. The spoke radiating here is the concept of haram as a defining notion for social behavior. We have two of the central social concepts by which western ethnographers view Moroccan culture, and much of Arab-Islamic culture and as well. And we have a specific, socially

enacted referent: the Almeria protest in which local Spaniards threw stones at the building and the Moroccans gathered there. This constitutes the broad scope narrative of this string. Western ethnographers would tend to take a Black and white view of these terms, perhaps agreeing that yes, it is hšuma and haram, both shameful and "forbidden" to throw stones at a consulate. Forbidden might be construed as "illegal," something punishable in the secular sense, just as engaging in haram activity is sinful and thus punishable by Allah. However, from a western perspective, one would not think to make any further distinction or elaboration on this summation, but Al sees fit to do so when he says in this line "it's more than haram, is more haram, is your life." A gloss would render: "it's something different than haram, it's worse than haram." What is of questionable interpretation is the last phrase of this line "is your life," which is repeated in line 246 Even after reconstruction and analysis, I, the ethnographer at this point, am left with inexact understandings of what I should be able to call "the truth" of this exchange, what Al *really* meant.

The best gloss is that in response to my contention that it is both socially prohibited and religiously forbidden, somehow compounding this perceived disgraceful and evil act by subsuming it under two cultural norms, Al is "getting existential" here, invoking a universal secular law that is distinct from these two concepts: there is what is publicly shameful, hšuma, and there is what is spiritually forbidden, haram; however here, we are in a third state of being-in-violation to phrase it in a Heideggerian way. What is clear from the example of wine drinking in line 245 is that he is speaking of personal responsibility which resonates with Islam with its emphasis on the

individualistic nature of enacting one's faith, the individual-to-Allah relationship that holds in the faith with regard to spiritual accountability.

Unfortunately, this segment of tape ends abruptly just when, one might say, the going gets insightful. There is a great deal of simultaneous speech that structures itself in a seemingly coherent pattern. What we can be sure of in the simultaneous talk of 257-261 is that for the first time in this particular stretch of language, I have taken the floor decisively in what was previously a one way discourse. This, of course shifts the perspective of analysis as Al can be seen as being in a more receptive than productive mode. The attractors for Al, given the timing of his interjections in line 258 would appear to be the structures: "throwing rocks," "embassy," "house and drinking," "bottle of wine," and "sin." The entire phrase evokes a powerful response in line 261 ("fuck off who say this!) We could interpret this to mean that he rejects the idea of these things being sins. That sinning in one's own existential existence is a private matter, for it is the sinner who must "go to the fire or the heaven," but that is a private matter, unlike attacking a person's home or country representatives. A new attractor, the concept of a "flag" which is negotiated in lines 263-268 by way of Arabic and French enters the fray as it were and can be seen as a supporting example of the difference between personal and public/political acts. That beyond the shame and sin is an act that is unacceptable by all human standards. Alas, just on the verge of working out a new place of concord a phone rings, his wife calling. It is late and he must be going. Such is the nature of discourse, always unfinished, ever on the verge of a new understanding, but what should be evident from the analysis of this string as I have presented it is that concord is always only an buoy marking the larger channels of thought we travel on the currents of our

language. Between swells, there are clear moments of blue sky and from the chaos of misunderstanding emerges the coherent structures of concord, agreement, and the knowledge that one is being understood.

6.8 TRANSCRIPT: CROSS TALK AND DISCORD

1	J:	No it's Moroccan, dariža
2	G:	Moroccan?
3	J:	uh, dariža
4	G:	ah šnu ah hadek heda? [so what's this here?]
5	J:	mezziyan [it's good, meaning the dictionary.]
6	G:	šhlhawIn? [Berber?]
7	J:	la, dariža [no, Moroccan Arabic]
8	G:	dariža
9	J:	the problem is the…how to write Arabic
10	B:	mm
11	J:	with Roman alphabet
12	B:	uh huh
13	J:	mekaynš, mekaynš [ein] (there is no letter /ع/)
14	G:	[ein]
15	B:	uh huh
16	G:	[dud] (Arabic letter dad ض)
17	J:	makaynš, makaynš, six letters, yeah [there's not six letters]
18	G:	yes

J: {[ħ]} (voiceless pharyngeal consonant ح)

G: {dza} (pharyngealised, voiced dental fricative /ض/)

G: you don't have

J: we don't have these in English

B: I have uh, I have seen some uh, conciéges, jazir amerikan, Washington [American news from Washington]

J: uh huh

B: Washington, il parle l'arabe, ǰaza'ira, il parle l'arabe [he spoke Arabic in the news]

J: m hm, use un accent ou no? In uh

B: American, American people

J: American, American…akbar [the news] the old man…

B: old man, yeah…speaks uh

J: maybe he grew up in, uh--

B: I don't think so, hed gulik…[lit. this I tell you] have uh…Texas accent

J: conseiller, yeah? concierge

B: conseiller…conseiller

G: Bush

B: in my, in my opinion, it's, it's, it's, it's problem of e-ffort…if you have prepared well, and effort

J: m hm…motivation

B: you are weak system, why I, why I will be near dependent, why learn, have to learn, I learn all these {languages}

42 J: {you must have a reason}

43 B: exactly

44 J: because if you cannot use the language…you can't learn it…for example

45 in America, you can't speak French or Arabic, maybe one person, safi

46 [that's all]

47 B: aha!

48 J: but you need a so—society, to use the language, in the social situations…

6.9 ANALYSIS OF CROSS TALK AND DISCORD

This short section of transcribed speech was selected for its difficulty, both in transcription and in analysis. It illustrates how conversation can move forward, hovering on the verge of intelligibility and complete communicative breakdown while forcing participants to expend great energy in attempting to reach concord, even if it be partial. As a particularly difficult two minutes of talk for transcription purposes, it was rather painstakingly reconstructed here and is being presented as a prime example of discord. While a very short selection, discord as an end result of talk is as important to our understanding of Language Custom as concord. The selection begins as we are discussing the Moroccan Arabic-English/English-Moroccan Arabic dictionary, which neither of the two young men have ever seen before.

The first 20 lines or so proceed easily enough. The Arabic translations are included in this sample in parenthesis to facilitate reading comprehension. Line 12 is of interest in that it would seem that Black, whose idiolect is not as broad with respect to

English codes as Green, is responding to the concatenation of the words “Roman,” and “alphabet”

Line 23 is an interesting and repetitive structure, especially for Black, and occurs in a number of places in other transcripts in which basic syntactic structures are expanded upon in stages as they move towards completion, at times, as in this example, while searching for complements and completing arguments, tense and aspect is altered as well. In such cases, what can be called “filler” plays an important role as both a grammatical slot filler as well as a ‘time buying’ discourse tactic because it lacks any “meaning” or referent relating to the content of the expression, it can hold the grammatical slot that wants filling while signaling an incomplete expression that is en train, so to speak, indicating to the interlocutor not to interrupt. Here the structure is : S+V+filler, S+V(tense/aspect)+ Det+ Filler. The structure builds organically from a NP+VP+filler, then the original verb becomes an AUX with the addition of another verb making it a two place predicate with the DET, and finally a selection of not one but three NPs: the first in French , the second in Arabic and the third in English, or what we would consider an English content noun in the name of a city. I am able to comprehend “American news,” and “Washington,” and signal with affirmative feedback soliciting more information.

Line 23 marks the beginning of the swing out of equilibrium that held between myself and Green. It is apparent that he has been following something of our exchange about language differences between Arabic and English as his comment is related to language in that he is referring, as best as can be reconstructed, to a news broadcaster in Washington who spoke Arabic: this, at least, is how I began to understand his thought. The structure of Black’s phrase in line 26 is typical of the kind of evidence that is useful

to those studying code-switching. A French VP with the Arabic nominative case NP, and it is a very useful structure for Black with me after he has successfully set up the background of "news, American, Washington" as the main attractors that enable me to make an accurate enough guess at the possibly French-based term for broadcaster, although upon reconstruction, I can not say with much reliability that the shape of the word I have transcribed fits any such word in French. Nevertheless, I have understood enough to ask in line 28 whether or not he used an accent, but I have no way of telling if this string is understood.

What is interesting to note about line 28 is that I am engaged in a form of accommodation just as he is through what is generally referred to as code mixing. While he has been mixing lexical, phonetic, and syntactic features of Arabic-French-English, I am mixing many of these same features with English and French in the grammatically simplified structure of "use un accent ou no?" The string begins with English phonetic realization of the verb 'use,' with no rounding on the vowel or voicing on the final consonant [yuz] that would qualify it as a "French" item. the tag question "ou no," 'or not,' approximates an expression occupying a very broad phonetic base that would be understandable to speakers of any number of codes: Arabic, French, Spanish, English, and so on. Black responds by emphasizing that the man was American. Never having heard such a broadcaster, I clarify the present string of discourse before us with repetitious feedback "American, American…" (line 30) and then make sure we are talking about the news using an alternate term 'akbar' for news, this lexical item more familiar to me than "ǰasa'ira." I trace this to my years in the Emirates where this is a common variant on the term.

Finally, inquiring if he was an old man, which proves correct, it would appear I am attempting to discern the identity of this newscaster by continuing my line of conjecture in line 32 by starting into saying that perhaps he grew up in the Arab world; however, this thought is telegraphed apparently by Black and he says "No, I don't think so," (line 33) before the Arabic thread of 'hed gulik,' which is difficult to translate accurately in this context but appears to be used as a phatic marker from Darija the equivalent of "no, I'm telling you…" or "let me tell you." By the end of this string it is clear he has indeed understood my French question in line 28 as he comments "Have uh…Texas accent. Thus, while aspects of the discourse are nearer equilibrium, concord eludes us. Concord here is lacking as the semantic, or thematic import of his thought remains unrealized. All I have is that there was an American "broadcaster" (I think) in Washington who spoke Arabic with a Texas accent. All very bizarre sounding to me.

Line 33 is provides a good example of how language and discourse self organize. From among all the attractors that "float" in the realm of possible choices for pathways to move a conversation along, the choices cannot be predicted with certainty, nor in fact can the possibilities that are open to our interlocutor be known completely to us. That Black should be able to recognize a Texas accent, or what he perceives one to be, is—while being more information about the identity of this speaker of Arabic on the news—is at the same time destabilizing to me as I ran through all the possible broadcasters or news anchors I can think of unable to find a fit. This desire to know the identity of the speaker he is referring to is odd in and of itself in that for Black it does not matter if this person has a name really, only the fact that he was speaking Arabic and was an American. My persistence in discovering his identity in line 33 is a result of my miscomprehension of

the French term he used to describe this individual, so I return to it. I could have just as easily let it go and moved in another direction having learned enough to provoke some other comment on this state of affairs of an American man speaking Arabic on the news; however, I chose to repeat back the lexical item as I remembered it in line 33 looking for more feedback. Black's feedback, uncovered with the benefit of textual reconstruction and some very speculative interpretation, implies that he was describing someone who was being interviewed on television rather than a broadcaster as I had understood. The two repetitions of "conseiller" should have been enough to indicate he was some sort of "inspector" or government official; however, the item in this particular context did not register as such to me.

Matters are not helped any by Green's interjection of "Bush" in line 36. My best guess is that he is referring to the Texas accent, by way of the current President. The bifurcation that dead ends into cross talk begins in line 37. Black is determined to come closest to my native code to express the full thought to which the Arabic speaking American on television served as an introduction. As mentioned, I had understood him to be talking of a specific individual, evidenced by my identity discerning questions, when what the reconstruction indicates is that he was using this individual as an example to illustrate the "problem" that he introduces in line 36. His insistence on addressing me only in English pushes his idiolect into a chaotic state, moving us further from one another increasing the disequilibrium that we have been fluctuating near.

Lines 37 and 38 are chaotic on many levels. It is very weak in content and does not hinge well with the prior train of thought; and as such, reads as a very "broken" phrase in both what it references back to and in the claim it makes. I simply do not

understand exactly what the dummy expletive "it" refers to; and thus, I take hold of the most obvious and general attractor of this entire thread: language itself, or language learning. His initial "e-ffort" is thus transcribed to indicate the shift in emphasis and pronunciation of the term "effort" which is repeated at the end of the string and to which I respond as an attractor, not having understood it the second time. My remark "motivation" in line 39 indicates I assume he is talking about the difficulty of learning language, which he is at one level, at least at this point; however, I don't make the cognitive connection here that he is not making the point that language learning itself is problematic. It is difficult, yes, and takes preparation and effort, to which I add motivation. I would not really understand what he was saying until the reconstruction of the transcribe text.

The conditional structure Black begins with in line 37-38 "if you have prepared well," is too complex for him in this region of his idiolect, and he is unable to fill the slot he has created with a full clause clarifying the meaning of the utterance he has begun and creates the chaotic structure "If you have prepared well, and effort," that simply compounds the initial clause of the conditional phrase, however, the repetition of the lexical item "effort" with a repaired phonetic presentation closer to an English pronunciation helps, in a small way, to carry us forward as I respond to his faltering, chaotic structure with a similar noun "motivation." It appears as almost a reflex action designed to provide positive feedback towards concord, to indicate that I understand we are still talking about learning a foreign language, Arabic perhaps.

Lines 40-42 mark the point at which our idiolectal systems fail us in reaching Concord, and we begin to talk a cross purposes which leads me to a dead end and an abrupt end of this discourse thread.

B: you are weak system, why I , why I will be near dependent, why learn, have to learn, I learn all these {languages}

J: {you must have a reason}

B: exactly

Analysis of this highly chaotic structure indicates, from my response, which is simply a repetition of the term "motivation" with which I responded to his last utterance that I understood only the last part of this thread: his question as to why he had to learn all these languages. His affirmative response to my claim in 43 about the reasons we all have for learning languages indicates to me that we are at least in the vicinity of concord, when in fact, we are moving away from it. I am reading his question literally, as if a student were asking me why should I learn languages. This initiates my explication that one must have the opportunity to speak a foreign language as well as the motivation (44-45).

I believe what he had in mind in line 43 with "exactly" and again in the final line, 47 "aha!" was something quite different in retrospect. He was not agreeing "in principle" to what I was saying about learning language in the pedagogical sense, but rather a socio-political sense. The key to this reading of the reconstruction resides in two main attractors: "weak system" and "near dependent," which did not resonate with any meaning at all at the time. The phrase was so full of noise on the phonetic and morphosyntactic levels that it could not be comprehended, leaving me to restructure the

string “why learn, have to learn, all these languages.” I have turned a very personal question from him into the abstract question “Why does one have to learn a foreign language?” To which I answer him: one must be motivated, and motivation comes from reason and opportunity.

Backing up we find the personal nature of his talk at odds from my more abstracted understanding. When he says “you are a weak system” he means me specifically as well as all Americans, and perhaps Europeans with respect to languages. He is not talking about pedagogy, but rather politics, in asking why he should be dependent on learning all the other languages. Why doesn’t the rest of the world learn them as well or instead of him. I elaborate on the “opportunity” theme claiming in line 48 that one needs a society to use the language with to learn and use it. I have completely missed his intended point that the reason he speaks the many languages he and his people do is that they “must” learn them. They are “near dependent,” on the languages of the outsiders, colonial oppressors, economic and cultural oppressors, or what have you. This phrase itself is worthy of closer scrutiny and can be interpreted literally as ‘nearly dependent’ on foreign languages. Or one can take “near” to be an intensifier, such as “almost” or “so” dependent on non-native languages.

The most telling line, once it is transcribed and analyzed, is 47. “aha!” he exclaims when I innocently enough state that you must be able to use the language to learn it and that one cannot talk to many French or Arabic speakers in America. I take his “aha!” to mark concord when it does not, at least under my analysis, although perhaps he thought he had made his intended point clearly, when I had completely misread the remark. What is more likely, given the context of this segment in light of the entire 3

hours of our discussion which was heavily political in content, is that his point was that it was precisely because all of these non-Arabic speakers were in his country and that they were forcing him, as it were, to learn their language(s). This state of affairs I have called cross-talk. Without the benefit of transcription and analysis, one might leave such a situation with the false assumption of mutual concord, when in fact, the opposite is true. Misunderstandings of this sort must be quite common in language interaction; however, one expects them to be even more frequent in far-from-equilibrium contexts where both code and context are open to great fluctuations and vastly different initial states between idiolects.

For my part, I felt we understood one another, and perhaps from his perspective, he was assured I understood his intended meaning; either way, I took the opportunity to change the topic after no one attempted to take the floor in the pause following my last line. Neither did either of them try to revive the topic in that particular form during the rest of the discussion. While some of the misunderstanding can be attributed to code variances, it is plausible that much more macroscopic communicative differences may account for some of the confusion, such as the different uses of rhetorical questions or the use of example in an argument. Interacting outside one's linguistic habitat, one is continually aware of the many ways in which communication can go wrong, from structural code to situational context and cultural habits of thought and speech. Often, it is hours or days later that a certain comment or line of reasoning or a metaphor or aphorism makes sense to us as outsiders. This is one very good example of such moments when cultural and linguistic forces conspire to put speakers at cross-purposes. While Moroccans are nimble polyglots on the whole and can be said to be "proud" of this

aspect of their culture and individual personalities, there is also the hard knowledge of the historical forces and *realpolitik* that has made of them such facile code-switchers and mixers. Much of this is lost on tourists and travelers; and, it can be argued, westerners—especially Americans—where the basic emotion is one of respect and even envy towards multilinguals, the vast majority of whom live in the underdeveloped, former colonial possessions of the western imperial powers. This, one might argue, is the "sociolinguistic" reality for most multilinguals with whom westerners attempt contact, and linguists and ethnographers, most acutely of all, must recognize these facets of language and culture and remain sensitive to them as often as possible.

6.10 TRANSCRIPTION OF SOCIOLOGUES

J: are you both from Tetouan?

B: m hm

G: yes

J: Tetouan ou Martil?

B: {Tetouan}

G: {Tetouan}

J: Tetouanis

G: I am from Tetouan, but I live in Martil (long ause)

J: what is the difference between Tetouani and someone from Tanǰa [Tangier], or someone from the south or Atlas…do you think Tetouan has a unique personality?

B: no, I don't…Tetouani…because Tetouan…Tetouan and Fes and Salé-Rabat…bilad (unint.) [the area of ?]

J: Tetouan, Fes and…?

B: Salé, Salé de Rabat (small Andalusian town outside capital of Rabat)

J: Ah! Salé

B: there are some families

J uh huh,

B these families are diffuse cultural

J: this Andalusian?

B: exactement

G: from the Andalusi…

J: yeah

B: un diffuse cultural, this culture

J: uh huh

B: is can be, look it in cooking, in, uh, musique Andalus…united station of this cultural…

J: in the music

B: in the music, in the, in poésie

J: but in the personality and customs

B: ya, ya

G: but approximate, approximately the same habits

J: as other Moroccans or--

B: {no no…} don't think so, don't think so, no, no, no

G: {no no}

J: what uh--

G: no, the sud, sud, sUrtIns [southerners] are a little bit different not like the nord-un [northerners]

J: for example, what are some of the customs of the Andalus culture

G: the difference appears in in ideas

J: speech ideas?

G: it depends idea

B: not de vie, not de vie, not de vie

J: not the vie, the way of life

G: style of life

J: style of life

G: yeah (reach concord here regarding the new concept)

B: but for example…the Tetouani, the Tetouani, the, the vrai…

J: uh huh

B: who must, he who want to be rich, his is rational than other one, he is rational

J: rational?

B: I can give you an example…

J: okay

B: If he will, will come here, Martil, he will be very rational, café, économie (unint.) lui cel kartu…

G: thrifty

58 B: un uh [no]

59 J: thrifty, yes, is thrifty?

60 G: thrifty, {yeah}

61 B: {ya}

62 J: yes okay

63 G: l'économe, économie, yeah

64 B: {why…why}

65 J: {economize}

66 G: economize (final concord, we have nailed the term, Black moves on0

67 B: why, because he has, he have, he educates by his family in this way

68 J: m hm

69 G: but not, not here, he give all his life to living like that

70 J: yeah (unsure)

71 G: it's not so, only a period

72 J: huh?

73 G: but he give all his life living like that

74 J: so when he has as much money, he still…

75 B: {like, like, like Protestants}

76 G: {but he will}

77 J: the Protestants…I see

78 G: {puritainisme, puritaine}

79 J: puritan yes

80 B: yes, yeah

G: the Puritans

J: yes, the origin of capitalism

B: capitalisme, that's right

J: U:

G: they are not, uh, generous; they are…

B: no

(unint. simultaneous talk of all three)

J: yes they um, we say they…

G: panteur, huh?

B: šnu gulti? [what did you say?]

G: mezziyun (about the food)

J: no, they do…we say they can get blood from a stone

G: yeah (unsure)

B: (laughter)

J: yeah? (checking comprehension)

B: ha! exactly

J: dim men hažar [blood from a stone] (incorrect pron. of hažar, stone, rock)

B: U:, exactly, proverb, that's proverb

G: was American, uh, proverb?

B: yeah

J: they say…squeeze uh, you šufti…[you see?] (squeezing my hand together)

G: to exact blood from skin? (Arabic želd sounds similar to my pron. of stone)

J: la, from uh…

B: stone…hežra

G: stone, ah yeah-yeah-yeah

J: hažar, hažra, yes

G: skin I hear….

J: where there is no money, they will find some; tight, we way tight…mezir

G: mezira, mean taiyt, tight

(Concord)

J: what about the habitudes of men and women from Andalus and Rabat say: it's different?

G: but uh, this is uh, I think uh…'uman phenomenon (fr. pron.). We can find people of different country who live uh, very tight (new term integrated)

J: I think so because people told me the Berbers, yeah? (checking term recognition)

B: yeah

G: yes

J: were very tight with money

B: Agadir, from Agadir

J: from Agadir?

G: suwissa, suwissa [southerners, pl. form]

J: suw…sus…suwissa

126 B: sus

127 G: the mentality of suwissa is very tight

128 J: tight, yeah? (laughter)

129 G: you spend your money

130 B: no, because I think…Andalus family…

131 J: uh huh

132 B: when they are come from Andalusi which very, were very prosper[v] you

133 know?

134 J: yes, yes

135 B: we born a first in Morocco

136 G: the contrary

137 B: no, when he come back here, he, he, la…la trouver?

138 J: found

139 B: he found the people very, very…simple (fr.)

140 G: {uh huh} very simple

141 B: about the commerce and, and le (unint.)

142 J: U: (don't understand but agreeing and looking for more information)

143 B: and until now they are in the summit…mfhemš had al fiqra (unint.) gultini

144 [he doesn't understand the idea…explain it to him]

145 G: the people are very simple

146 B: mli žaow, mli žaou men Andalus [when they came from Andalus]

147 J: U:

148 B: jebal ma mbsalt (unint. ar.) huma šanti (unint. ar.) tižara.

149 J: ah, people from the mountains…

150 G: ɛrfti tižara? They don't have, they don't have, know how to trade

151 B: no, no, not they don't know how to commerce, but the technique, because

152 they are live in the high civilization, Andalus

153 J: yes

154 B: {Babble of three}

155 G: { }

156 J: { }

157 G: very simple in trading, in making trade

158 B: the culture

6.11 ANALYSIS OF SOCIOLOGUES

This section begins some 10 minutes into the actual taping of our conversation; however, we have been talking steadily for an hour or so during lunch. The discourse covers a range of topics and is distinct from the sections with Al in that I only taped one session with the sociologues; and prior to the taping of this session, I had only spoken briefly with the two of them at the hanute, small shop, next door and occasionally on the cornice, the half mile stretch of boardwalk along Martil beach. One general trend in this stretch of talk is that within a relatively short time speakers of distant idiolects are able to tap into schematic background as well as accommodate the many aspects of code searching for a better fit between one another. In this scenario, with three speakers—a more complex level of Language Custom—this is accomplished through negotiations that

evolve in a highly unpredictable manner. Idiolectally speaking, I have substantially less information about the initial states of not just one, but two agents, what technically constitutes the minimal requirements of a "speech group" or community in the ethnographic and sociolinguistic sense.

Linguistic interaction reaches new levels of complexity and the number and type of pathways that are open to individual speakers and discourse itself dramatically increases at this point where dialogue becomes group discourse. Communicative complexity, or what might be called, the productive and receptive circuitry between idiolects doubles with the addition of the third party as well as having to monitor the new point of language contact between the other two speakers in my case, Black and Green. Yet discourse does not suffer in any way as the increase in complexity with multiple idiolects is accompanied by an increased "pool," so to speak of linguistic resources to arrive at Concord. While there are more choices, or channels for language to take, there are at the same time, more interpreters of the message.

Line 1-8 mark the most general of introductions as I inquire about where they are from. This simplistic line of questioning allows for a very near to equilibrium start to our discussion. In Line 7, I use the Arabic nisba[vi], or naming system, in an attempt to show I understand something of the importance of geographical origins in Moroccan culture. In line 9, I attempt to move the discourse to a deeper level by inquiring about the regional differences between the Moroccan people. This works well for me as a topic because I am quite familiar with the "local knowledge," or the more generalized popular, or folk attitudes of Moroccans towards other Moroccans from different regions, especially the north. This is something learned in the field rather than through texts. Additionally, I

have no small understanding of the history of the Moorish Empire, the exodus from Andalusia and the repopulating of the northern region as well as more contemporary histories of the Rif in general and its place in the other broad mosaic of such a diverse ethnic and geographic land. Stylistically, I make a small effort at accommodation by using this Arabic form in 'Tetouani," one from Tetouan and again in the Arabic phonetic modeling I attempt in tanǰa, for Tangier.

While the phrase in lines 9 and 11 is simple enough that I could have asked in Darija, French or Spanish at this point in our discussion, the Sociologues, much like Al, exploit the opportunity to engage the English regions of their idiolects. While Green is clearly the more fluent of the two in this code, Black makes many concerted attempts to explain his ideas in my native code, relying on French when he feels he has failed.

The phrase in lines 9-11 is both general while remaining information rich with easily recognizable semantic attractors. These are the place names and simple cognates—"difference, south, Atlas, unique, personality;" and so on that, we can assume the attractor structure of the phrase is broad enough to be accessible to both of their idiolects. My question marks the point of departure for the discourse as it evolves. Black, the more aggressive, most strongly opinionated of the two, is the first to respond and takes the floor with a somewhat confusing response that we must look at from several different structural angles, as something with "enough grammar" to hold together the highly complex thought he holds in his mind and wishes to express in response to the question. The structure of the question demands a necessarily complex explanatory declaration of an opinion with some sort of supporting details; the comparison of personality types and the cultural factors shaping such a concept. What is confusing for

the analyst here is whether we assume he understands with certainty the question I have asked, which upon closer examination is too information rich and exhibits a degree of ambiguity. What is confusing in the question is that there are a number of different queries buried in this thread being asked: are Tetouanis different from Tanǰaouis; or are they different from southerners or folks from the Atlas, but implied here as well, are southerners different from those who live in the Atlas mountains, a vast region much different than the southern towns and cities along the coast and in the plains. And are Tetouanis unique in all of this? More information perhaps than isreally expedient; nevertheless, it provides a virtually "open table" for response in many directions.

Black begins with certainty, "no, I don't" and pauses to compose the next phrase and begins with what appears to be a direct address to my question as he prepares to say something about inhabitants of Tetouan which is evidenced by his use of the singular masculine form of the noun, Tetoun plus the nisba, the third occurrence of this term in a relatively short space. This form is quite common when speaking of collectives or groups. The following clause seems to introduce his reasons for "no, I don't" and whatever part of the question he might be referring to, "because Tetouan…" At this point we have to realize that we have no way of predicting which direction the discourse will take when looked at in terms of the question it is in response to. We can certainly expect him to address something coherent in our minds related to similar ideas we have about the question we have put to our interlocutors, but prediction is strained concerning discourse direction, structure, and encoding. We are at the mercy of discourse itself and the processes of self-organization, the creation of meaning where none exists, and the struggle to create these meanings within the space of the linguistic world we inhabit at

that moment. This is the most fundamental point at which Language Custom begins, the posing and response to questions about the world inside each of our heads.

Black does not "finish" the phrase as one might think, say for example, "because Tetouan is X/-X." We don't get an immediate decision tree type response or expected grammatical structure, bur rather a cluster of nouns creating a compound subject, the latter part of which I recheck with him. I had forgotten, or never knew, that this was the official name of the city, "Salé de Rabat," and not simply, Salé; I provide the positive feedback of line 16, and he continues with the somewhat chaotic "these families are diffuse cultural."

Here it is clear how much importance we must put on the overlapping of world knowledge, both general and local. I was accurately able to interpret this vague phrase which, taken out of context, is meaningless. Lines 17 through 21 mark the first point of concord in this section. Black unequivocally confirms that he is indeed referring to my guess of "Andalusian" with "exactement" and Green follows by reiteration, a revocalization as it were, of the operative semantic attractor for all three of us in "Andalusian," and my "yeah" in line 23 completes the circuit of understanding between the three of us. I must, it could be said, for the sake of pragmatics alone, respond to Green's reiteration. Repetition, or redundancy in feedback is as critical as redundancy within and across code(s) to establishing the communicative circuit that must come into existence for "successful communication," or Language Custom, to come into being between multiple idiolects in contact *en masse*. It is logical to assume that redundancy undergoes an increased on all levels when discourse is moving away from equilibrium and acts to decrease, or filter, potential and actual noise in and across codes.

The theme of "diffuse cultural" reoccurs from Black in line 24 which is a referent now for the certain population or concept he is addressing as Andalusian culture in the three cities mentioned previously, and we find more redundancy in the signal as Black reuses "culture" as the head of the following phrase "this culture is can be look it in cooking, in musique Andalus…the united stations of this culture…" while grammatically scrambled around the predicate, his meaning is clear through the use of the category nouns of music, cooking, and poésie in lines 26, 27, and 29. The last phrase in 26-27 "united stations of this cultural" is certainly a chaotic structure; and unable to process it as one might a summative statement which often come at the end of a complex utterance, my response is to reiterate the non-chaotic phrase just prior to this, "in the music." This is a case of repetition as both feedback and questioning technique: the questioning aspect that such repetition accomplishes is to provoke the interlocutor into expanding upon the repeated concept in some way, which is what Black does, repeating back the term with the addition of poésie. Line 29 marks a repetition of a segment of my initial question regarding personality differences and the more refined notion of customs, and Black's interjected agreement in line 29 serves as the entry point for Green.

The new attractor for the discourse in the proceeding lines becomes this notion of customs or "habits" as Green calls them in 32, stating that the diffusion of Andalusian culture in these cities today amounts roughly to the same habits: "approximately the same" and once again, with Black's disagreement with Green's statement the discourse reorganizes itself as Green admits the northerners and southerners are a bit different; this reorganization is one of increasing complexity as we now have a triad of speakers which sets up an apparent disagreement (34) between my two informants, which is for me, an

added element that must be processed: I must also keep in mind the counter argument now. Attempting to maintain some control, I ask for examples of Andalusian customs to which Green replies, "ideas." We have moved from the concrete—music, food, poetry—to the abstract level of ideas, more evidence of increased complexity of abstract thought from concrete referential talk.

Lines 40 to 47 move towards an understanding of the difference between "ideas," "vie" and "style of life." The negotiation is rapid from Green's introduction of the term with the statement "it depends the idea," followed immediately by Black's triplet repetition of "not de vie," which I decode "way of life," to which Green modifies in line 45 to "style of life." I repeat the term and Green responds with positive feedback marking another point of concord surround this phrase and the concept it implies.

Concord in line 45-46 also marks a new bifurcation as Black seizes the floor once more pushing his idiolect and the following threads of talk further from equilibrium as he attends to the creation of an example of this abstract concept we have been dealing with about his countrymen. The disequilibriating forces created by Black's chaotic English-coded structures and interspersed French are quickly overcome again through code breaking and translation of key terms from 50 up to the next point of concord in line 66 where with Green's help we settle on the terms "rational," as being 'rational with money': "thrifty," and "économie" as 'economize.' We begin to see a pattern emerging at this point, of the participants reorganizing themselves in relation to one another: Green begins to assume the role of interpreter, setting up his idiolect between those of Black and myself, translating or reinterpreting nouns and phrases until we reach, through conceptual

accommodation, accord on terminology in line 47. At this point, Black continues his explication.

Yet, the center of discourse is fluid and full of movement and resists linear description.[vii] Lines 68 to 75 resemble a dissembling as the conversation moves away from equilibrium as both Black and Green "struggle" as it were to create meaningful and complex structures of thought they hope I will understand. We must remember, also, these are not two rural farm hands or old men from a dusty village, or high officials as Moroccan anthropologists are wont to interview, but rather are part of the elite segment of young people in the country as graduate students and were my idiolect of a different shape, with fluency in French or Darija, the nature of the discourse would be of another shape altogether. In an effort to expand on Black's thought in 67, which is from my point of view chaotic and noisy, Green takes the floor in lines 69, 71, and 73 with three language strings that elicit the first sign thus far of complete communicative breakdown with my puzzled "huh?" in line 72. My response in line 74 to Green's previous statement indicates I have only the most general notion of what he is saying. I trail off the phrase looking for feedback, any type at all, and it comes in the form of an innovation on Black's part in line 75: "{like, like, like Protestants}" which is overlapping with Green's "{but he will} as he attempts to extend his train of thought which has led us all astray and "Protestants" becomes the attractor, winning out over Green's overlapped phrase. It is resonant with my idiolect, obviously, as I repeat the term "the Protestants, I see" understanding now a "personality" trait which he has ascribed to what could be considered to be more *my* cultural models than his. He is tapping into a more "scientific" pool of world knowledge here. The term is an attractor for Green as well indicated by his

repetition of the term in line 78, reshaping the noun it into the abstract cultural attributes "puritainisme, puritaine." This recoding, and lexical amplification through manipulating morphological categories helps expand the scope of our terms and the fluency of syntactic structures.

Here we see the expansion of lexicon as a natural "profusion," (a more satisfying term than "complexity" with its overtones of "the difficult") within an open system of discourse. While the various underlying grammatical forms of the various "codes" we recognize as operative in the emerging systems of different speakers, such as French or Arabic, might be considered the basic tool kit that helps us define the limits of one's idiolect, these tools are constrained in their creative capacity by the "materials" of lexicon and different modes of conceptual, of "culturally determined" thought with Sapir and Whorf would include.

Here, with the introduction of the terms Puritans and Protestants, we are sharing a new body of knowledge that we indubitably understand in diverging senses. When we speak of these lexical items as attractors, we see them as radiating from a conceptual, or semantic center outward into the discourse, and one spoke is the world view knowledge of the term implies in its varying shape. We can say it "attracts" this world view and introduces it into the discourse while at the same time serving as further explanation to the topic at hand which is how the economic habits of Tetouanis are different from others. We have moved from the attractor of "economize" and "l'économie" to Protestant Puritanism.

The dual nature of attractors in discourse can be seen quite clearly. Yes, they serve to answer questions and provide information, yet these answers and information

serve as new directions of potential bifurcation. In 75-80 we reach concord on the lexical item through feedback and repetition, and I indeed attempt a bifurcation by adding new information rather than simply reconfirming that I know what the term means. I state in line 82, "yes, the origins of capitalism." This phrase has the potential to lead the discourse into a new direction. Black agrees "capitalism, that's right" and Green returns to the Puritanism concept and describes them as "not generous" (85). Capitalism is not taken up in the dual sense here as it merely clarified meaning and the conversation continues talking about Tetouanis.

While I offer my own idea of Puritanism as the origin of capitalism, Green equates it with penury, the lack of generosity that is such an important character attribute among Arab, and many other peoples. Black agrees and after a brief cacophony of simultaneous talk Green comes out with a utterance neither Black nor myself understand. I take the floor once more (92) offering a proverb "to get blood from a stone," a thought obviously provoked by the "Puritan" attractor further refined by Green as a lack of "generosity."

None of the linguistic moves on any of our parts could be predicted; and while they are within each individual's conceptual linguistic repertoire, the specific code in which they are presented and the very fact that they arise at all can only be traced to the natural organization and evolution of specific discourse. However, obviously, we are "making sense," which means essentially having our linguistic and cognitive expectations and predictions fulfilled to some extent. We are distant idiolects, having lived out our lives under radically different circumstances, and may be "reduced" in our communicative capacities by meeting in far-from-equilibrium settings, we are

nonetheless able to get on with the business of establishing Language Custom, and on a highly abstract level.

From lines 92-110, the main attractors of my proverb, "blood" and "stone" requires some decoding. We negotiate the terms and the concepts by they represent first having to ferret out my Arabic mispronunciation of stone (108) as hežar instead of hažra, which is confused for "skin" by Green and through this negotiation we arrive at the correct Arabic encoding for "rock" or "stone." I attempt to clarify the proverb through the concept of "tight," (110) a term I hope has an analogue in the Darija, mezir, meaning narrow. This lexical item and the concept of "squeeze" explained through paralinguistic gesture with the fist enable at least Green and I to reach concord about the proverb of "cheapness."

Again, Concord (112) serves as a point of departure, and I return to the general topic that begins this section of data in line 113-114 inquiring about the "habitudes" of men and women from Andalus and Rabat (the capital), two quite different places. Green's response in line 115 and 116 illustrates what might be termed "cognate accommodation," lexical items and phrases one perceives as common to the general code(s) comprising the idiolects in play. His utterance "uman phenomenon" with the phonological character of French is employed with an English syntactic construction to more closely accommodate my idiolect. In this utterance we also find the new lexical item introduced earlier "tight," as having been appropriated by Green, who is obviously keen to expand his repertoire. This is a prime example of Herman Paul's contention that language change and variation (seen as an expansion of individual's language that is eventually shared across a community) arises from "intercourse" or language contact.

This term serves as an attractor for both Green and myself in lines 116-120 that begins with a term check on "Berbers," which both Black and Green respond to with positive feedback so that I am able finish my thought in the phrases that the Berber "were very tight with money." Again, this can be viewed as more evidence of self-organization where a new attractor for the group system that has come into being creates a new pathway for speakers. The discourse, following this attractor path, moves now onto discussing the Berbers—a far stretch from the Puritans indeed! Yet, we find they do, in the opinion of those present, share something in common that becomes available through the mutual use of this new term. In this way we can say that the new attractor is successful in influencing the 'arc of discourse.' It further propels the notion of cheapness or penury from the Andalusians and Puritans to the Berbers.

Our idiolects are sharing a brief moment very near to equilibrium as Black responds to my query about the Berbers in line 122, throwing out the name of a large city on the coast in the deep south that is primarily Berber: Agadir. Green responds similarly but with a more general term for southern Berbers, suwissa, the plural form which I was unfamiliar with but I pick it up easily.

The attractor for this brief exchange is an example of when code itself is the draw for speakers with Black helping to further define the term in that code to me. However, the very next line, Green shifts out of Darija as the primary code, satisfied to integrate the Darija "suwissa" into an English construction which he pulls off perfectly in line 127: "the mentality of suwissa is very tight." Surely, this is a novel utterance for him and a very complex thought. He has successfully accommodated both of our codes to maximum efficiency in this line. The fresh metaphor is accomplished by using the two

terms we have just acquired in a highly unambiguous construction. I am obviously pleased with his use of the term "tight," and marks this with laughter. We have reached another point of concord here and my prediction about Berbers was satisfied with the addition of the specific population of Berbers, for the Berbers in the deep south are known to be shrewd businessmen and tough, successful traders. I have had my background knowledge of a specific point in a world view confirmed in a very elegant grammatical structure that I have helped to create in the conversation.

Green's utterance in 129 following concord marks the shift in balance. Black takes the floor ignoring his friend's comment, and I do not go after the comment either, as Black has begun a long and complex thought now and is far from his center of gravity once more as he attempts building the structures in English, which, as we see, breaks down for him, and we find the first really full phrase of "pure" Darija, that is to say, there are no recognizable phonological targets or lexical items that cross over with any of the other codes we share between us.

What this section clearly illustrates is just how very complex language is and how very complex discourse can become as we struggle to express the thoughts and ideas we would have little trouble with in near-to-equilibrium settings. What at first seems like a rather general question about the differences between northerners and southerners, leads us through very complex thought intellectualizations. If we recall the main topic attractors that animate the arc of our conversation, we find two: "Andalusia" and "Money" in some sense. When Black, in line 132-133, reintroduces the concept of "Andalusi" he is trying to relay the understanding of a thousand years of history. Notes written shortly after the actual taping, reveal that I had a poor understanding of this

particular section. Moreover, transcription was—like most of the entire conversation with these two fellows—very difficult, and it was only through this detailed reconstruction that I was able to uncover the gist of what appears to be the intentional meaning. What might seem more or less clear to the reader of the transcribed text was not nearly so clear at conversational speed as there are a number of factors helping to create noise in the signal, the stuttering and altering of phrase beginnings which we have seen a great deal of throughout, and another key element is shifting sense of pronoun referents across long phrases.

In lines 132, 135, and 137, Black employees three different pronouns—they, we, he—all of which appear to represent the same entity, and in fact they do; however, this creates a very noisy signal for a listener attempting to construct, along with the speaker, the context and structure for a larger piece of discourse. Additionally, in between line 135 and 137 Green utters "the contrary," which upon analysis would appear to contradict Black's statement that "we born a first in Morocco," which refers to the Andalusian population that returned after the fall of the Moorish empire (line 135) to find the people "very simple" about commerce (139-141). Green is in agreement with the latter part of the statement. Thus, while they two are in agreement by this point, I am quite lost and am simply fishing for more information by what appears superficially to be an agreement phrase in line 142. Black continues and begins to apparently conclude this thought in 143-144 and pauses halfway through this line and turns his attention to Green saying in Darija, "he doesn't understand the idea the way I explained it. Tell him for me." Green's reply "The people are very simple," (Line 145) fails to clarify the problem which, upon reconstruction, boils down to exactly who is it that is "simple?" The Andalusian refugees

when they came or the populace they came in contact with once they returned to Morocco? This is cleared up by Black's response in 146 "mli žaou men andalus ," 'when to hey came here from Andalusia,' which I supply positive feedback, but more problems are raised in deciphering the kernel of the long phrase that follows. It has only one main attractor for me "jebal" meaning 'mountain' or 'those from the mountains' around northern Morocco. The reminder of the phrase is reconstructed but remains occluded.

I have latched onto the only identifiable item, "jebal" in the string and taken it as the central attractor, mistakenly so, for the entire phrase and applied it (as one does with each new piece of information) to the macro level discourse and 'used it' so to speak, as the solution to the pronominal puzzle that has been created for/by me. "ah, the people from the mountains…" I say (line 149). Thus, my understanding at this point is that it is the mountain people who are simpletons, the poor traders, and not the Andalusian refugees.

Green checks the key term in Black's phrase for me by asking "ɛrfti tižara?" (line 150) whether I understand the term "tižara" and define it as 'to trade or know how to trade' to which Black immediately disagrees: "no, no, not they don't know how to commerce, but the technique, because they are live in the high civilization, Andalus." (line 151-152). I agree with this chaotic utterance most probably in hopes of ending this exchange as it has lead to discord and confusion. It contradicts my interpretation that the mountain people do not know how to trade, rather than the returning Andalusian refugees who populated Tetouan and the rest of the north and other cities in the late fifteenth century. After careful reconstruction, it is clear that Black intended to say that when the

Andalusians returned to Morocco, they lacked the "technique" to be good traders with the jebala, the indigenous mountain people around the newly populated cities.

After my agreement, designed to end this path of discussion, there is simultaneous, unintelligible speech from three of us which is followed by the last two lines of this discourse thread: Green reiterates, trying through repetition and redundancy to help bring me along to concord and Black's reply "the culture," is equally unhelpful; thus, at this point, I break completely, beginning to speak about a book I have read: a willful bifurcation.

On the surface, such a break appears random and indeed it is; however, random behavior, especially in the study of animal predator populations is an adaptive response of an organism that is consistently frustrated and unable to reach the desired goal through tested behaviors, such as freeze and wait, camouflage, and mimicry. In such situations, random deviation from certain paths tried over and over again is considered innovation.

At the end of this analysis, it is clear that any detailed reading of far-from-equilibrium discourse is a lengthy and difficult process. The act of reconstruction and interpretation matches the complexity of the discourse itself. We have spent a good number of pages on less than ten minutes of talk, but enough, hopefully, to sketch this "complexity" and "open-systems" theory methodology. Whether this methodology is sound or productive we now assess in the conclusions of this work.

ENDNOTES

[i] For example, what phonological guide, with respect to accent and fine tuned pronunciation analysis, are we to use regarding French or Spanish spoken by Moroccans? Should we use Parisian French to mark the bull's eye of a target sound? And Spanish as spoken in Madrid or the closer neighbor to Morocco, Andalusia? And how relevant is this information to the analysis of an idiolect and how Language Custom is created? On the one hand, we might say that it is particular to a certain speaker that they typically used the dark, or velarized /l/ and /d/ wherever they occur in English because they are so much more frequent in Arabic. But on the other hand, if this idiolectal phonological coloring has little bearing on how speakers arrive at Concordance, then it can be left untranscribed. However, where it is relevant, if meaning and understanding are obscured or clarified by recognition of distant phonological influences, then it should be noted.

[ii] Hšuma is most broadly translated as public shame but as Crapazano writes "As elsewhere in the Mediterranean, proper social comportment is symbolized by an expression—in Moroccan Arabic—hshummiyya that connotes shame. Hshumiyya is best transcribed as 'propriety,' but includes within its range of meanings 'deference,' 'respect,' 'circumspection,' and 'embarrassment.'" (Eikelman, 1976).

[iii] Heidegger's concept of "house" refers to the existential locale in which *dasein*, a particular person, and *Daesin*, Man, dwells. For Muslims, this is an apt metaphor, as the spiritual dwelling of its believers is indeed one's heart and home as opposed any

institution, the mosque being only a social-spiritual gathering point, the link between Allah and his subjects is always a one-to-one relationship that has no intermediary such as priest or clergy.

[iv] Prior to the admittance of Spain into the EU in 1984, the country was one of weaker economies in southern Europe and there was very little migrant work available for Moroccans. It is only in the last decade that Spaniards have abandoned the agricultural and factory jobs.

[v] Original exiles from Andalusia in the fifteenth century were typically wealthy Moors or Jews, neither of whom were allowed to stay after the fall of Granada. It is a well documented that the Moorish Empire was extremely wealthy in comparison with the rest of Europe and much of African and Asia at their pinnacle. Granada boasted paved streets lit with gas lights, a complex water and sewer system as well as the finest library in the west that was said to have rivaled that of Alexandria.

[vi] Nisba is a morphological feature of Arabic that literally means "naming." This nisba is the high front vowel /i/, and as a bound morpheme inflects nouns to indicate membership in a group or indicates that the noun, typically a person, belongs to a specific geographical location. In Morocco, such naming is highly complex. One of the best accounts of nisba is found in Clifford Geertz's study of Sefrou.

[vii] It might be more accurate to print discourse such as this, of longer, more complex talking, “longways” so to speak on the page, with the speakers beginning where they begin and continuing to the end of the page and continuing on the same line of the next page rather than staggered vertically down the page, but these are issues dealt with through stylistics and the restrictions of printing and readability of format.

CHAPTER 7: CONCLUSIONS

"*And the end of all our exploring*
Will be to arrive where we started
And know the place for the first time.
T.S. Eliot*, Four Quartets.*[i]

7.1 SUMMATION

This research project began nearly five years ago during my first sociolinguistics seminar on language change and variation in which I was exposed to the influential 1967 work of Weinreich, Labov and Herzog that laid the ground work for what would become the ruling paradigm in American and much European research into language change and variation. My initial interest was in their treatment of the ideas of Herman Paul, specifically that of the individual's vs. social factors in the role in language change. As explained in the first chapter, their work is highly critical of Paul's notion of the idiolect and Language Custom, and they discounted any role for idiolects in the process of language change. We believe this project has helped to recover the idiolect as a viable focus of sociolinguistic research and language theory in general.

One of the main goals of this work, which we believe has been successfully reached, was to reclaim Paul's concepts about the idiolect and its central role in language systems. To do so, it was necessary to overcome the theoretical problems created by structuralist approaches to language systems, one of the more formidable being those of

"actuation" and the bridge between individual speakers and social groupings and the concomitant closed language systems they belong to. The problem of actuation, or the onset/causal agent of variation and/or change, was resolved through granting autonomy (from abstract social forces) and creativity in language production to the idiolect, freeing it from the structured norms of speech communities, both as a source of change and means of measurement. Individual language varies, as Paul held, according to its environmental circumstances. This variation is ever present in language contact, and language contact is always a spontaneous and creative act. Idiolects are not closed systems in themselves and nor are the situations they interact in linguistically. The openness of the system is a necessary prerequisite for spontaneity and creativity. Closed systems, as a rule, are not "creative" in the same sense in which we use it here. Closed systems are not capable of innovation, which is not to be confused with recursivity. The rules governing closed systems cannot account for and do not allow for the creation of new structures which would violate syntactical or morphological constraints and parameters.

Another important theoretical move in this work is to locate the human speaker into the center point of all speech communities—wherever two or more are gathered. This philosophical approach borrows loosely from the work of Heidegger and phenomenologist tradition that beings, *dasein*, are always "with language" and situated as such in the world. The idea of a fixed speech community is an abstraction that holds little value as at best they are highly transient and compositionally shifting entities that exist only so long as language contact exists between specific individuals. Thus we have an existential locus for both idiolects and language itself as being-in-the-world, in contact

with innumerable other language systems. The lifeworld, as Habermas has called it, is an open-ended affair with freedom interacting with determining social, psychological, and political factors. Thus when we talk about "man" we talk about her in contact with the environment, initiating and responding to the biological, psychological and linguistic world; moreover, when we talk about such beings, they are always with language and to study language is to study language in contact, as a lived experience, not the participation in a closed set of grammars.

To further define our notion of human beings as linguistic individuals, we explored Laszlo's work on natural systems theory, and in it we found that man, like the environment in which she lives, is an open system, and thus develops evolutionarily through the process of exchange and interaction with the physical and psychological (cognitive) environment. We not only take in food and excrete waste, but we apply energy to the world in the form of work and existence in general. We act on and are acted upon by the world and its many others, and are designed by nature to change and evolve our behaviors, and prime among these behaviors is language. As an element within the open cognitive system of the human mind, it too must remain and open system if it is to continue to evolve within the linguistic environment. Grammars, lexicon, pragmatic knowledge and performance abilities often must adapt and innovate in radical fashions in order to be of use as a tool of survival.

We argued that viewing the idiolect and language itself as open systems was necessary to explain much of language change and variation across time; but that structuralist and generative approaches to language often restrict themselves to study language in what we have termed near-to-equilibrium environments. In such settings,

closed systems emerge as in Labov's "ordered heterogeneity" or Chomsky's Universal Grammar. This account necessarily rejects what are seen as "exceptions" to a system. They are exceptions precisely because they have a relatively low frequency near to equilibrium in, for example, one's native linguistic habitat. These exceptions, mistakes, or outliers have no effect on the deep structure of the closed systems and their orbit is defined in relation to what is "correct" or structurally sound. We have argued that when idiolects are far from equilibrium the "openness" of systems becomes much more apparent. Language interaction is much more than the participation in closed grammatical systems, it is a wildly unpredictable, creative process, and the language structures created show signs of emergence from one moment to the next.

Openness does not imply boundlessness or non-deterministic behavior. The idiolect is bounded by the sum total of one's lived language experience, and its particular form is "shaped" as such. The language choices one makes and is able to make is also determined by linguistic situation, that is, language contact with other idiolects. We bring to bear the linguistic resources, which include pragmatic knowledge and worldview, that seem appropriate to negotiation a particular conversation or discourse. We are engaged in a process of feedback with our interlocutor and these idiolects exert influence over one another throughout the duration of the contact. The influence of other idiolects, depending on frequency of contact, may lead to long-term changes and alterations of a particular idiolect while other changes may be short-term or become stored as a part of the larger idiolectal resources of individuals.

We were not so concerned with how particular items—lexical, phonological, or syntactic—are spread through a community, but rather the shared cognitive and

performative strategies that speakers use to understand and to be understood, and the type of language structures they create, especially when they are outside their natural, native, or familiar linguistic habitat. This question occupied much of the final sections of theory and was addressed using the language and metaphors from complexity and chaos theory. The ideas of complexity theory have enabled us to view language contact as an energy exchange, the creation of discourse as an emergent, diversifying, and self-organizing process that is highly contingent upon the initial states of the speakers who create it and the ecological circumstances of the speakers. Self-organization of language also implies spontaneous change and innovation, in accordance with Herman Paul's concept of language contact and change. All of this is in support of the major claims about the idiolect, namely that it is an autonomous, adaptive agent.

Finally, we introduced Concordance as the guiding principle for idiolectal contact (which we now understand as the process of creating Language Custom, which must be "arrived at" through the give and take, the feedback and exchange of speakers. It is the result of a very active and not always stable collection of agents. We then freed Language Custom from the moorings of near-to-equilibrium environing circumstances in which we typically take no notice of Language Custom as it is a much less strenuous and energy taxing affair. This repositioning of idiolectal contact under far-from-equilibrium conditions revealed the enormous complexity of the unfolding of discourse and a wide variety of chaotic structures that eventually, as Prigogine has shown, lead us to order. This order, what we term the Principle of Concord, is both the end point of all language contact and the fundamental attractor that draws the overall arc of discourse. Within this framework we have also seen that there are a number of other operative attractors within

the different levels and points along the arc. This may be as broad as code or grammar, phonological modeling, lexicalization and the use of condensation symbols and abstract thought. through the study of these attractors, we traced the evolution of selections from the larger flow of language and focused the analysis then onto discerning chaotic structures and ultimately reaching the ordered state of Concord. Concord, we found, occurred at a number of points along the way to clarifying the larger abstract thoughts speakers have in mind. This points of concord often served the dual purpose of signaling mutual understanding as well as propelling discourse into new directions, what we term bifurcations.

Much of this, some might argue, is a very elaborate interpretation and manipulation of metaphors and definitions not typically used in linguistics, and especially not in sociolinguistics. However, this is to miss the point really, and to deny the invigorating force of interdisciplinary research, which has a prominent and defining role in linguistics throughout its history through the incorporation of philosophy, sociology, psychology, statistical science, cognitive science, anthropology and narrative and expository writing. One need only look as far as Chomsky's Cartesian Linguistics for an example of how such interdisciplinary research can radically alter the way one approaches a subject of study. That has been the motivating force in this work, and while we may not have succeeded completely in all areas, it is hoped we have sketched out a theory and methodology that other researchers might find stimulating, provocative even, or at the worst, a house of fancy cards that needs knocking down.

Other sociolinguistic questions, issues, and approaches that were not used or discussed include Speech Accommodation Theory, which is more suited to near-to-

equilibrium language settings. Also, language and social identity studies, social network theory, statistical analysis, linguistic ethnography, pragmatics, and a number of different methods and aims in the field of discourse analysis. Whether any of these questions or sub disciplines might lend themselves to the theoretical and methodological alignment of this research, remains to be seen. Nevertheless, we hope that what has been achieved here will be of some value and benefit to language scholars looking for alternative approaches to a field that is currently tightly constrained by a number of dominant paradigms that have influenced the direction and focus of language research for nearly four decades, and it is our contention that alternative paradigms can only help to more fully develop and invigorate our understandings and interpretations of one of the most ancient and important fields of human endeavor: the investigation into what it means to have and share language with the vastly disparate and distant human community.

ENDOTES

[i] Pg. 145.

REFERENCES

Abu Nasr, Hamil. M. 1971. *A History of the Magheb*. London: Cambridge University Press.

Bentahila, Abdelali and Davies, Eirlys. 2002. "Language Mixing in Raid Music." *Language & Communication*. Vol. 22: 187-207.

Bertalanffy, L.V. 1972. "Trends in General Systems Theory**."** *History and Status of General Systems Theory*. Ed. Klir, G. J. New York: Wiley-Interscience Co. 21-41.

Bloch, B. 1948. "A Set of Postulates for Phonemic Analysis." *Language*. V.24: 3-46;

Bloomfield, Leonard. 1933. *Language*. New York: Holt, Rinehart, and Winston.

Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge: Harvard University Press.

Burling, R. 1959. "Language Development of a Garo and English Speaking Child." *Word*. 15: 45-68.

Campbell, Tom. 1981. *Seven Theories of Human Society*. Oxford: Clarendon.

Campbell, Jeremy. 1982. *Grammatical Man*. New York: Simon & Schuster.

Chambers, J. K. 1995. *Sociolinguistic Theory*. Oxford: Blackwell.

Chomsky, Noam. 2000. *New Horizons in the Study of Language and Mind*. U.K. Cambridge University Press:

---.1986: *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.

Chattou, Zoubir. 1998. *Migration marocaines en Europe: Le paradoes des itineraries*. Paris: L'Harmattan.

Cooke, Maeve. 1994. *Language and Reason: A Study of Habermas's Pragmatics*. Cambridge: MIT Press.

Clifford, James. 1988. *The Predicament of Culture*. Massachusetts: Harvard University Press:

Covington, Michael. 1984. *Syntactical Theory in the High Middle Ages*. Oxford: Oxford University Press.

Crapazano, Vincent. 1980. *Tuhami: Portrait of a Moroccan*. Chicago: University of Chicago Press.

Dilthey, Wilhelm. 1961. *Pattern and Meaning in History*. Ed. H.P. Rickman. New York: Harper and Row

Dineen, F. P. 1995. *Linguistics*. Washington: Georgetown University Press.

Disciullo, A. M., Muysken, P., Singh, R. 1986. "Government and Code-Mixing." *Journal of Linguistics*. 22.1: 1-24.

Dweyer, Kevin. 1987. *Moroccan Dialogues*. Prospect Heights: Waveland Press.

Dummet, Michael. 1974. "What is a Theory of Meaning." *Mind and Language*. Ed. Samuel Guttenplan. U.K.: Oxford.

---.2002. "Language as Our Means of Communication." *Dialegesthai. Rivista telematica di filosofia.* Anno 4. January, 2002. <http://mondodomani.org/>,

Durkheim, E. 1894, 1982. *The Rules of Sociological Method*. Trans. W.D. Hall. London: Macmillan.

Eckert, Penelope. 1989. *Jocks and Burnouts*. New York: Teachers College Columbia University.

Eickelman, Dale F. 1985. *Knowledge and Power in Morocco*. Princeton: Princeton University Press.

Eliot, T. S. 1962. "Four Quartets," *The Complete Poems and Plays, 1909-1950*. New York: Harcourt, Brace and World..

Ferguson, Charles. 1979. "Phonology as an Individual Access System: "Some data from Language Acquisition." Eds. Filmore, Charles, J., Kempler, D., Yang, W. S.Y. eds. *Individual Difference in Language Ability and Language Behavior*. New York: Academic Press. 189-201.

Gadamer, Hans. 2001. *Gadamer in Conversation*. New Haven: Yale University Press.

Giles, Howard. 1973. "Accent Mobility: A Model and Some Data. *Anthropological Linguistics*. 15: 87-105.

---, and Coupland, N. 1991a. *Language: Contexts and Consequences*. Keynes: Open University Press.

---,Copeland, J., and Coupland, N. Eds. 1991b. *Contexts of Accommodation*. Cambridge: Cambridge University Press.

Geertz, Clifford, and Geertz, Hildred, and Rosen, Lawrence. 1979. *Meaning and Order in Moroccan Society*. Cambridge: Cambridge University Press.

George, Alexander. 1990. "Whose Language is it Anyway? Some Notes on Idiolects." *The Philosophical Quarterly*. Vol. 40. No. 160. 275-298.

Gold, Peter. 2000. *Europe or Africa?* Liverpool: Liverpool University Press. Grosjean, F. 1982. *Life with Two Languages*. Cambridge, MA: Harvard University Press.

Gumperz, John, J. 1982. *Language and Social Identity*. Cambridge University Press: Cambridge: UK.

Harris, Roy. Ed. 1983. *Approaches to Language*. Oxford and New York: Pergamon Press.

Habermas, Jurgen. 2001. *On the Pragmatics of Social Interaction*. Trans. Fultner, B. Cambridge: MIT Press.

Heidegger, Martin. 1971. *On the Way to Language*. San Francisco. Harper Collins

Heider, F. 1958. *The Psychology of Interpersonal Relations*. New York: Wiley.

Heylighen, F. *Systems Theory*. 15 Feb. 2002. http://pespmc1.vub.ac.be/ASC/INDEXASC.html

Hermans, Philip. 2000. "The Expression of Guilt in Moroccan Culture." *Moroccan Cultural Studies Journal*. No. 2. 1-20. Fez: The Moroccan Cultural Studies Center.

Humbolt, Wilhelm von. 1970. "Linguistic Variability and Intellectual Development." *Miami Linguistic Series*. No. 9. Trans. Buck and Raven. Miami: Coral Gables.

Harris, Roy. 1998. *Introduction to Integrational Linguistics*. Oxford: Pergamon.

Hart, David Montgomery. 1976. *The Aith Waryaghar of the Moroccan Rif: an ethnography and history*. Viking Fund Publications in Anthology. No. 55. Tucson: University of Arizona Press.

Hopper, Paul. J. 1993. *Grammaticalization*. U.K.: Cambridge University Press.

Hymes, Dell, H. 1962. "The Ethnography of Speaking." *Anthropology and Human Behavior*.

Gladwin, Thomas and Sturtevant, William C. Eds. Washington D.C.: Anthropological Society of Washington. 13-53

Hymes, Dell. 1972. "Introduction." *Language in Society*, Vol. 1: 1-14.

---. 1974. *Foundations in Sociolinguistics*. Philadelphia: University of Pennsylvania Press.

Jankowsky, Kurt R. 1972. *The Neogrammarians*. The Hague: Mouton. Joffe, E.G.H. &

Johnstone, Barbara. 1996. *The Linguistic Individual*. New York: Oxford University Press.

Jakobson and Halle. 1956. "Fundamentals of Language." *Janua Linguarum*, 1: 47-49. The Hague: Mouton.

Kandiah, T. 1998: "Epiphanies of the Deathless Native User's Manifold Avatars: A post-colonial perspective on the native speaker." Singh, R. 79-110.

Ketterer, James. 2001. "Networks of Discontent in Northern Morocco: Drugs, Opposition and Urban Unrest." *Middle East Report*. No. 218. Vol. 31: 30-33.

Labov, W. 1964. Stages in Acquisition of Standard English, *Social Dialects and Language Learning*, Ed. Roger Shuy. Champaign, Illinois: National Council of Teachers of English. 77-103.

---.1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press

---.1972a. *Language in the Inner City: Studies in Black English Vernacular*. Philadelphia: University of Pennsylvania Press.

Laszlo, E. 1972. *Systems View of the World*. New York: George Braziller:

---.1991. *The Age of Bifurcation: Understanding the Changing World.* Philadelphia: Gordon and Breach Science Publishers

Le Page, R. B., Tabouret-Keller, A. 1985. *Acts of Identity*. Cambridge: Cambridge University Press.

Levinson, A. B. 1974. *Knowledge and Society*. New York: Pegasus.

Maddieson, Ian. 1984. *Patterns of Sound*. Cambridge: Cambridge University Press.

Maturana, H., Varela, F. 1987. *The Tree of Knowledge*. Boston: Shambala.

McMurray, David A. 2001. *In and Out of Morocco: smuggling and migration in a frontier boomtown*. Minneapolis: University of Minnesota Press.

Mead, G.W. 1934. *Mind, Self, and Society*. Chicago: The University of Chicago Press.

Mercier, Adele. 1993. "Normativism and the Mental: A Problem of Language Individuation." *Philosophical Studies*. V.72: 71-88..

Mernissi, Fatima. 1987. *Beyond the Veil*. Indiana: Indiana University Press.

Miège, Jean-Louis, Benaboud, M'hammad, Erzini, Nadia. 1996. *Tétouan: Ville Andalouse Marocaine*. Paris: CNRS Editions.

Milroy, James 1980. *Language and Social Networks*. Baltimore: University Park Press.

---.1992. *Linguistic Variation and Change*. Cambridge, Mass., Oxford: Blackwell.

---.1997. "Internal vs. External Motivations for Linguistic Change." *Multilingua*. 16.4: 311-323

Mufwene, S. 1998. "Native speaker, Proficient Speaker, and Norms." Singh, R. 111-123.

---.2001. *The Ecology of Language Evolution*. England: Cambridge University Press.

Muysken, P. 1997. "We are All Native Speakers, But of Which Language?" Singh. R. 193-204

Myers-Scotton, C. 1993. *Dueling Languages: Grammatical Structure in Code-Switching.* Oxford: Oxford University Press.

Nettle, D. and Romaine, S. 2000. *Vanishing Voices*. New York: Oxford University Press.

Ouariachi, Kais. 1980. "Le Rif oriental: Transformation socials et réalité urbaines," Thèse de troisième cycle, École des Hautes Études en Sciences Sociales, Paris.

Paikeday, Thomas. 1985 *The Native Speaker is Dead*. Toronto, New York: Pikeaday Press Inc.

Paradis, M. 1998. "Neurolinguistic Aspects of the Native Speaker." Singh, R. 205-219.

Paul, Herman. 1889. *Principles of the History of Language*. Trans. Strong, H. A. New York: Macmillan & Co.

Pennell, C.R. 2000. *Morocco Since 1830*. New York: New York University Press.

…Ed. 1991. *Tribe and State: essays in honour of David Montgomery Hart.* Cambridgeshire: Middle East and North African Studies Press:

Poplack, Sheena. 1980. "Sometimes I'll Start a Sentence in Spanish Y Termino en Espangnol." *Linguistics*. 26: 581-618.

Popper. Karl. 1950. "Indeterminism in Quantum Physics and in Classical Physics." *British Journal For the Philosophy of Science*, Vol. 1, 117-33, 173-195.

Porch, Douglas. 1982. *The Conquest of Morocco*. New York: Alfred A. Knopf Inc.

Prigogine, Ilya. 1977. "Nobel Lecture." *Nobel Lectures, Chemistry: 1977-1980*. Singapore: World Scientific Publishing Co.

---. and Stengers, Isabelle. 1984. *Order Out of Chaos*. New York: Bantam.

---.and Gregore, Nicolis. 1998. *Exploring Complexity: An Introduction*. New York: W. H. Freeman & Co.

Quine, Willard. 1960. *Word and Object*. Cambridge, Mass.: MIT Press.

---.1961 "Two Dogmas of Empiricism." Reprinted from *A logical Point of View*, 2nd ed. Cambridge: Harvard University Press. 1951

Rezette, Robert. 1976. *Les Enclaves Espangnoles au Maroc*. Paris: Nouvelles Editions Latines.

Robbins, R.H. 1997. *A Short History of Linguistics*. London, New York: Longman.

Rosen, Lawrence. 1984. *Bargaining For Reality*. Chicago: Chicago University Press.

Sapir, Edward. 1934. "Linguistics." *Encyclopedia of Social Science*. 14, 492.

Seddon, David. 1979. "Labor Migration and Agricultural Development in Northeastern Morocco: 1870-1970." *Maghreb Review* 4. 3: 69-77.

Singh, Rajendra., ed. 1998. *The Native Speaker: Multilingual Perspectives*. New Delhi: Sage Publications.

Suliyman, Yasir. 1999. *Language and Society in the Middle East and Africa*. England: Curazon:

Sridhar, S.N., Srindhar, K. 1980. "The Syntax and Psycholinguistics of Bilingual Code-

Mixing." *Canadian Journal of Psychology*. 34: 407-416.

Taylor, Charles. 1989. *Sources of Self*. Cambridge, Mass.: Harvard University Press.

Temsamani, Abdelazziz. K. 1991. "The Jebala Region: Makhzan, Bandits, and Saints." Joffe and Pennell. 14-47.

Terhorst, Bernd. Undated. *With the Riff Kabyles*. New York: Frederick A. Stokes CompanyPublishers.

Thompson, J., ed. 1991. "Editor's Introduction." *Language and Symbolic Power*. 1-31.

Weinreich, U., Labov, W. Herzog, M. 1968. "Empirical Foundations for a Theory of Language Change." Eds. Lehmann, W. P., Malkiel, Y. *Directions for Historical Linguistics: A Symposium*. Austin: University of Texas Press. 98-195.

White, Gregory. 2001. "Risking the Strait: Moroccan Labor Migration Spain." *Middle EastReport*. No. 218, Vol. 31: 26-29.

Whorf, B.L. 1956. *Language, Thought and Reality. Selected Writings of Benjamin Lee Whorf,* Ed. Carrol, J. B. Cambridge, Mass.: MIT Press.

Wittgenstein, Ludwig. 1953. *Philosophical Investigations*. Trans. Anscombe, G.E.M. Oxford: Blackwell.

Woolman, David, S. 1968. *Rebels in the Rif*. Stanford: Stanford University Press.

Wolfram, Walt., Shilling-Estes, N. 1998. *American English*. Oxford: Blackwell.

Wong Fillmore, L. 1991. "When Learning a Second Language Means Losing the First." *Early Childhood Research Quarterly*. 6: 323-46.

Wunderlich, Dieter. 1970. *Tempus und Zeitreferenz im Deutschen*. Munich: Hueber.