Green Book Notes
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Overview of Grammar-Translation Theory

Grammar-Translation (GT) teaches by comparing the target language to the learners' native language(s). New vocabulary is introduced as needed or as requested by the students. Lessons instead focus on grammatical structures and provide multiple opportunities for students to practice each kind of grammatical structure with the instructor and with other students. Translation tasks require the students to apply the rules they have learned to transform sentences and/or paragraphs from one language into the other. These tasks can work either into the target language or into the students' native language(s). Translations should then be guided by the instructor into the most natural versions which would likely be produced by native speakers of that language.

The key factor to success with the Grammar-Translation Theory is that students must learn the rules, see the rules demonstrated, practice the rules, and receive positive feedback to know when they are accurate and specific guidance (with encouragement) when they fall short of accuracy.

Overview of the Green Books "American Sign Language"

The Green Books are designed as three sets of nine lessons. In order to make this course content less redundant / repetitive, we have chosen to make use of the teachers' text instead of the three sets of student books. This also reduces the students' cost for the text.

The Preface talks about transcribing ASL so that students can understand more than just which signs are being produced on the videotape. The transcription system shows very important details about how to use proper facial expression for grammar and for affect (emotional information). It is important for students to understand how the transcription system works so that they will begin to see these additional details in the videotape and know how to produce them correctly.

The next several chapters cover concepts related to language and sociolinguistics. Chapter Six begins the portion of the book which presents specific grammatical rules and the transcripts for dialogues which appear on videotape. Each chapter also presents a brief introduction to three different cultural concepts related to the Deaf community.

Overview of The Chapter Notes

The Chapter Notes are provided as part of the course outline. They follow the sequence of the text content and provide highlights for where students should focus their attention. The notes for the Preface and the sociolinguistic content is the most detailed. These portions of the textbook are very lengthy in detail and the notes are intended to focus the students' attention to key concepts. The notes for chapters 6 - 14 are mostly outlines so that students will read the chapters and fill in the outlines as part of the learning process. Chapter 10 (Classifiers) is outdated (although still useful) and so the notes for Chapter 10 are intended to REPLACE the content of Chapter 10 in the textbook

Preface (pages 1-29) - Transcription Symbols

Transcribing the Meaning of ASL Signs
A GLOSS is an English word which is used to reference an ASL sign. GLOSSES are not 100% equivalent to.the meanings of an ASL sign. We use GLOSSES to quickly reference the basic meaning of ASL vocabulary, but the GLOSS does not reveal the structure of the ASL sign.

When we transcribe ASL using GLOSSES we can take advantage of some additional ways of conveying important information about ASL. The first of these is the use of hyphens between words to help better pinpoint the meaning of the ASL sign. An example would be FROM-NOW-ON.

It is important to recognize that fingerspelling is a part of ASL. Every part of fingerspelling (handshape, palm orientation, location, movement) is ASL, but ASL often uses fingerspelling to represent English spelling. The GLOSS for any ASL Fingerspelling handshape is just the letter of the alphabet (A, L, Z, etc). When a sequence of letters is combined then we hyphenate the entire sequence to show that it was represented by a series of ASL signs. An example would be P-A-T.

Two ASL signs can be compounded or contracted together so that the boundaries of the signs are blurred and may even look like one sign instead of two. Compounds represent a new meaning, not exactly the same as the two pieces put together. An example would be TRUEWORK. Contractions maintain their separate meanings. The book identifies contractions with a curved line, but since each sign maintains its separate meaning, there is no special notation needed.

If a sign has developed based on fingerspelling then it is known as Lexicalized Fingerspelling. The textbook refers to it as Fingerspelled Loan Signs. Technically, that label is incorrect because true loan signs come from other signed languages, such as British Sign Language or French Sign Language. We can show that an ASL sign is based on fingerspelling by using a pound symbol (#) in front of the GLOSS. An example would be #WHAT.

If a sign is repeated we can very quickly show the repetition simply by using a plus symbol (+). An example would be DIFFERENT +++, which indicates that the sign was performed a total of four times... one original and then three copies.

If a sign is done with emphatic movement, or is in some way unusual in its production, we use an asterisk (*) to indicate that difference. An example would be BORED*.

If we wish to show some kind of transition or break within a sentence then we use the comma (,). An example would be MAN THERE, MY FRIEND.

Information about the additional shades of meaning can be added by using lower-case writing. Sometimes this may occur inside quotes. An example would be BECOME-SICK "regularly". Another example shows the relative space of the beginning and end of a subject-object-agreement verb: Bob-GIVE-Mary.

Classifiers are generally represented with the letters CL. Additional information may either indicate how the classifier is produced or what meaning the classifier represents. An example would be CL:two-legs-walking.

Encoding Grammatical Information
Once we have the basic meanings of the signs represented by GLOSSES, we can then superimpose information about grammar above them. There are six basic grammatical markers used: q (yes/no question), wh-q (wh-question), rhet-q (rhetorical question), neg (negation), t (topic), and cond (conditional). A seventh marker, rel-cl (relative clause) is essentially the same as topicalization.

Encoding Affective Information
Information conveying emotional, or affective, information can also be superimposed above GLOSSES. There are six basic grammatical markers used: cs (cheek-to-shoulder), indicates recent or imminent time, th (tongue-between-teeth) indicates carelessness, mm (lips together), indicates regularity, puff.cheeks indicates large amounts, intense (bared teeth) provides emphasis, pursed.lips indicates very small amounts, pah (success) pow (abruptness), cha (large amounts), and sta (determination) are patterns which also appear.

Chapter 1 (pages 31-45) - What is a Language?

a) A language has symbols and grammatical signals
b) ...that members of a community share
c) ... which is systematic
d) ... and is relatively arbitrary
e) ... and changes over time
f) ... and is used for various and specific purposes within the community

Chapter 2 (pages 47-61) - What is American Sign Language?

Signs are a subset of Gestures (just as spoken words are a subset of Speech)

ASL is historically linked to Laurent Clerc and French Sign Language. Clerc taught at the Hartford school, beginning in 1817, and initially used his native LSF with his students. Some of his students were from Martha's Vineyard, which had a strong Deaf community with its own signed language. Clerc's LSF quickly merged with the signing of all of his students and thus the roots of ASL were established in 1817.

While Deaf people are the primary community of ASL-Users, children of Deaf people, Interpreters, and Teachers of Deaf Children also comprise the community of ASL Users.

Membership in the Deaf Community is based on a number of factors: Audiological (physical deafness), Social (choosing to associate with Deaf people), Linguistic (choosing to use ASL for face-to-face communication with Deaf people), and Political (Advocating for Deaf-related causes/events). Additional features include Genealogical (having a history of Deaf ancestors) and Educational (having been educated within a residential school for Deaf children). People with all of these factors will be considered among the CORE MEMBERSHIP in the Deaf Community. More distant connections to the Deaf Community have fewer factors involved. Most hearing people who learn sign language later in life will exhibit no more than half of these factors; but if the same person has deaf ancestors, then two-thirds of the factors are present and thus a more instant recognition of connection to the community will be granted by other members of the community.

ASL has survived over the years due to two significant factors: 1) physical need and 2) social identity. Because Deaf people cannot hear, they need a language which is visually complete. Lipreading does not provide sufficient access to spoken language to serve this purpose. When signed languages were banned from residential schools for Deaf children, personal pride and social identity also played a role as Deaf people were unwilling to give up the very language that they thought in.

Chapter 3 (pages 63-78) - English in the Deaf Community

The Deaf community is largely a bilingual community. There is good reason for Deaf people to know some English because it is the language of newspapers for Deaf people, the language of TTY communication, and the language of closed captioning. Deaf people may struggle to learn English because they have reduced access to the phonological base of English (speech sounds). Research indicates that Deaf children of Deaf parents demonstrate the overall greater success in English among profoundly deaf children. This is largely due to the fact that the children are not delayed in their acquisition of a FIRST language and thus they are more easily able to apply their language skills toward the acquisition of a second language.

In the 1960s most instruction for Deaf children was based in oral-only education (meaning that no sign language was allowed). Several educators of Deaf children in California saw that their Deaf students were not gaining the necessary skills in English. One of these educators, David Anthony, was himself a Deaf child with Deaf parents. He knew the advantages he had from having a visual language that he could apply to learning English. He worked to develop a way to use ASL systematically to teach English. He called the result of his efforts "Signing Essential English". He later realized that his best chances of getting school systems to adopt his manual English code was if it didn't even mention the word "sign". So he renamed it "Seeing Essential English" to emphasize that it was a visual system. David Anthony's system is known by the acronym SEE1 because there would be an off-shoot from his system. The offshoot was called Signing Exact English and it is known as SEE2. A third offshoot was known as the Linguistics of Visual English (LOVE).

The basic similarities of all three of these manual English codes is that they use ASL vocabulary, often with modifications, and attempt to represent English syntax (word order). While some children have demonstrated success in learning English through this mixing of languages, it is most likely due to their success in speechreading which provides the essential link for success. None of these manual English codes provides sufficient access to the phonological base of English (because they all use ASL phonology) and so the Deaf child must still work beyond the information presented in the manual English code if they are to succeed in English.

Research in the area of Pidgins and Creoles sheds some interesting light on manual English codes. A Pidgin is an emerging language which develops out of three or more languages in sudden contact with each other. Pidgin languages typically have one language of power and several languages among the masses. For example, a sudden discovery of diamonds or gold may draw workers from several different countries where numerous languages are used. The company running the mine might use English for its official documents and management communication. So there is an incredible advantage for people who know English and no particular advantage for any of the other languages in use. The people will naturally try to learn the English vocabulary but they will not have sufficient access to the rest of the language so they will use their own syntax, in its simplest forms, to try to communicate. The result of all of this is a Pidgin. A Creole is simply the result of having a Pidgin last long enough for a second generation to be born into the community. The children "fix" the pidgin and the result is known as a "Creole."

Manual English codes actually fit this model very well. One language provides the vocabulary (ASL) and another language (English) is used to provide the syntax. Thus manual English codes could more appropriately be called "Mainstream Pidgins". When the Deaf children attempt to Creolize this input they attempt to "fix" it (this process has been documented in research such as that done by Sam Supalla).

Chapter 4 (pages 79-101) - Sign Formation and Variation

Until the American School for the Deaf was established there was no easy way for Deaf children to learn a single, common signed language in the United States. The school for Deaf children in Paris, France had established a common place for French Sign Language to grow and spread; the Hartford school was just as important for the spread of ASL. One of the largest reasons for this is the fact that most Deaf children do not have Deaf parents. That means that some other model of signed languages must intervene if the Deaf child will learn a signed language natively.
Within the Deaf community and the use of ASL there remains significant variation. The residential schools for deaf children in each state provide a source for regional variation. While most of the signs of ASL are similar across the country, each residential school provides the opportunity for local variation to emerge. These local variations are known as dialect variation.

Variation in ASL also comes from social status. One way that social status variation is introduced is through the higher institutions of education for Deaf people. Gallaudet University, the National Technical Institute for the Deaf (in Rochester, NY) and the California State University in Northridge, California (CSUN) all provide significant gathering places for deaf people who have a variety of dialects. They are gathered together to achieve an education, which reflects on their social status. Thus this form of variation in ASL is known as a sociolect variation rather than a dialect.

A third factor of variation is the age of the signer. All languages change over time, and ASL is no exception. Older signers may use different vocabulary, different word orders, and may spell more frequently (as new signs emerge they will replace fingerspelling of the concept). We also see predictable patterns of how signs are produced which change over time so that the sign is basically done the same way, but younger generations produce it with less movement than older generations. This variation is known as chronolect variation. Several of these patterns of change include the following:

Handshapes adust for less complexity and greater comfort:
- two handed signs with different handshapes change to use the same handshape on both hands
- one handed signs may add a second handshape which duplicates the movement pattern
- two handed signs may drop the second hand

Locations move from outer, distant areas to space closer to the chin or chest
- sign locations may move downward below the eyes and/or below the mouth.
- sign locations which are off-center may shift to become centered
- sign locations which are on the arm may shift to become hand-to-hand contact
- sign locations below chest level may shift to above or at chest level

Chapter 5 (pages 103-120) - Selected Sign Types

Noun-Verb pairs

Movement Patterns:

a) Manner

b) Frequency

c) Directionality

ASL compounds

ASL contractions

ASL Idioms

Chapter 6 (pages 121-174) - Sentence Types

Yes/No Questions

Wh Questions

Rhetorical Questions

Topicalization

Conditionals

Negations

Assertions

Commands

Chapter 7 (pages 175-204) - Time

Forward and backward movement patterns

Near and distant locations (near the body, far from the body)

Non-manual, adverbial time markers

Numeral incorporation in time-base signs

Palm orientation

Two-hand time references (FROM-A-TIME-FORWARD, PRIOR-TO-A-TIME, etc.)

Clock-surface representations of time (HOUR, MINUTE, etc)

Relative sun-position representations of time (MORNING, AFTERNOON, etc)

Chapter 8 (pages 205-246) - Pronominalization

Indexing (singular & plural)

Honorific (singular & plural)

Dual

Trial

Quadruple

Quintuple

Eye Indexing

Possessive (singular & plural)

Reflexive (singular & plural)

Establishing referents in space

Establishing referents on the non-dominant hand

Chapter 9 - Subjects and Objects

"The girl gave the boy a kiss under the mistletoe"

Subject:	girl	
Verb:		gave
Direct Object:		kiss
Indirect Object:	boy	
Oblique Object:	mistletoe	

NOTE: by converting the noun "kiss" into a verb, the number of objects is reduced.
"The girl kissed the boy under the mistletoe"

Subject:	girl	
Verb:		kissed
Direct Object:		boy
Oblique Object:	mistletoe	

Three ways of distinguishing subjects and objects in ASL:
subject-object modulation (subject-object inflection & locative inflection)
word order (generally subject-verb-object or SVO, other word orders modify non-manuals or signing space)
direct address (controlled use of signing space, body posture, and eye gaze to represent subjects and addressees)

Subject-Object Modulations

Subject-Object Inflection

Verb indicates both a subject and object for the verb. Generally the beginning location of the verb indicates the subject, the end location indicates the object. 1-GIVE-2, 2-GIVE-1, 2-GIVE-2. Eye gaze determines whether the "2" location is the addressee or a third person.

Restrictions on SO Inflection

Object-Only Inflection - verbs which contact the body generally can only truly inflect for the object. (TELL, ANNOUNCE, ORDER). Likewise, some two-handed signs in which both hands move at the same time cannot incorporate the SO Inflection (GIVE-ATTENTION-TO, RESPECT, HONOR).

Reverse-Order Inflection - verbs which indicate the object of the action first and inflect to the subject second. (BORROW-FROM, COPY, STEAL-FROM, SUMMON, TAKE-TURN-AFTER).

Extensions of SO Inflection

Reciprocal Inflection - if the verb is one handed, then it may be possible for a two handed version to indicate dual subjects and verbs such that each hand's starting location is related to the other hand's ending location. Several signs require reciprocal inflection (AGREE-WITH, CHANGE-PLACES-WITH, QUARREL-WITH, STRUGGLE-WITH). Some two-handed signs may also use reciprocal inflection if both hands use the same handshape.

Locative Inflection

Some verbs can indicate a spatial reference for destination (DRIVE-TO, FLY-TO, GO-TO). Some verbs can indicate a specific body location (SHAVE, HAVE-OPERATION). Some verbs can indicate a relative location for an activity to take place (CLEAN, PICK-UP, THROW).

Word-Order: Basic word order is SVO (p271) but can be modified through Topicalization. Potential results of topicalization include O,SV and [VO,S]. It is also possible to emphasize the subject with S,VO.

Direct Address: (also known as Role-Shifting) Signing space and body posture are modulated to reflect different participants in a conversation, whether quoting statements or indicating behaviors.

Chapter 10 - Classifiers

NOTE - THIS INFORMATION REPLACES THE TEXTBOOK DESCRIPTIONS, BUT PLEASE USE THE TEXT TO SUPPLEMENT THIS INFORMATION.

ASL Classifiers are predicates which generally follow the use of an ASL noun. ASL classifiers represent complex morphology which contains no less than two pieces of meaning at all times as represented by Movement Roots and Classifier Handshapes.

Three different Movement Roots are the more verb-like element of classifiers.

1) Contacting Movement Roots represent the establishment of a classifier at a certain location in signing space. Baker & Cokely refer to classifiers which use this movement as being similar to pronouns, but the movement root itself is not enough to function as a pronoun. The downward direction of Contacting Movement Roots does not indicate the actual movement of the object being classified, neither does it describe the contours of the object. The downward movement means (in simple terms) "it is there, at this location in signing space". Contacting Movement Roots are inherently singular, not plural. Plurality can still be achieved, however, by repetition of the movement or by the use of two hands simultaneously to indicate dual plurality.

2) Process Movement Roots represent the relative motion or movement of a classifier. While straight movement across signing space implies a flat surface, the movement itself indicates that an object travelled across the surface. Thus the primary meaning of this movement root is the actual movement of the object, a secondary meaning can include information about the contours of a related object or surface. Since a process movement implies multiple locations, but for only one object, Process Movement Roots are inherently singular, not plural. Dual plurality can be indicated by the use of two hands simultaneously.

3) Stative-Descriptive / Plurality Movement Roots represent the relative boundaries, contours, or dimensions of the object. Like the Contacting Movement Roots, Stative-Descriptive Movement Roots do not indicate the actual movement of the object being classified. Stative-Descriptive movement can be classified as a type of Contacting Movement Room but combined with Plurality Movement because the perimeter, shape, or size of something could be considered as the multiple representations of various elements. Consider how a physician can analyze the body through a series of Magnetic Resonance Images (MRI) each representing a specific cross section of the body. Placed in sequence these images can also identify the contours of the body. In this way the movement of handshapes, which could reveal the contours of a pole, for example, could also be considered an immense stack of hollow discs, all connected to each other. Placing these two movement roots in the same category allows us to avoid some otherwise conflicting combinations of movement roots with classifier handshapes, such as describing stacks of paper or books. Therefore Stative-Descriptive/Plurality Movement Roots are inherently plural, not singular. If the contours of a single object are analyzed as being multiple cross-sections of the object, then Stative Descriptive Movement Roots can be considered to be plural Contacting Movement without conflict.

Two different kinds of Classifier Handshapes are the more noun-like elements of classifiers. Classifier Handshapes must combine with one of the three movement roots.

Interface Handshapes represent how an object is held or manipulated. Generally these reflect the actual handshapes used in real life to manipulate the object such as holding a coffee mug, a screwdriver, a steering

wheel, a telephone handset, a stack of papers, etc. Interface handshapes generally only combine with process movement roots and cannot be pluralized other than to represent simultaneous process movements of two different objects (one for each hand).

Entity Handshapes represent either the entirety of an object or a specific part of the object. "1" handshapes (with only the index finger extended) often represent relatively long cylindrical objects such as people, telephone poles, flag poles, pipes, and fence posts. The "2" handshape (index and middle fingers extended) and the "Bent 2" handshape generally represents the legs of animate beings such as humans, dogs, chickens, etc. The "3" handshape (index and middle finger extended plus thumb extension) generally represents vehicles such as cars, trucks, vans, bicycles, motorcycles, boats, and submarines. "4" or "5" handshapes (with all four fingers fully extended, possibly also with thumb extension) often represent relatively flat objects such as books, floors, beds, table-tops, road surfaces, or walls. "I" handshapes (pinky finger extension) generally represents long thin objects such as string, wire, or spaghetti. "A" handshapes (no extended fingers) often represent large solid objects such as houses, trophies, appliances, and containers. "O" handshapes (four fingers extended but bent so that they touch the tip of the extended thumb) generally represent short cylindrical objects such as rolls of coins. "C" handshapes (four fingers extended and bent toward, but not touching, the extended thumb) generally represent short and thick cylindrical objects such as coffee mugs and cups. "F" handshapes (index extended and touching the extended thumb) generally represent small discs such as buttons and coins. "Open F" handshapes (index extended and bent toward, but not touching, the extended thumb) generally represent large discs such as frisbees, trivets, and CD ROMs. "ILY" handshapes (index, pinky, and thumb extended) are restricted to representing aircraft. All of the previously mentioned handshapes may occur either as singular or plural forms. "Bent 4" handshapes are a variant of "Bent 2" handshapes which inherently imply a plurality of animate beings (regardless of whether they are sitting or standing). Lucas and Valli (1992) segment Whole Entity handshapes into six categories: Whole Entity, 2) Surface, 3) Depth & Width, 4) Extent, 5) Perimeter, and 6) On-Surface.

Entity Handshapes may combine with any movement root, although some specific handshapes are restricted to specific movement roots. When both hands are configured in the same handshape then plurality is implied. With one hand stationary and the other moves in a sweeping motion, it generally implies contact-plurality (rows or stacks of whole entities located within the signing space). If both hands move then it may either be two process movements for two whole entities or a stative descriptive plurality describing the contours of an object.

Chapter 11 - Locatives

A. Locatives identify spatial relationships by means of language. English makes extensive use of prepositions, while ASL rarely uses specific vocabulary for locative information.

B. ASL makes use of the following systems to identify the spatial relationships within signing space:

1. Classifiers - often 2-handed constructions representing at least 4 meanings simultaneously.
[Handshape and Movement]

2. Directional Verbs - Subject-Object Inflection (GIVE, TELL, INVITE)
[Location] Locative Inflection
spatial reference for destination (DRIVE-TO, FLY-TO, GO-TO).
body location (SHAVE, HAVE-OPERATION).
relative location for an activity to take place (CLEAN, PICK-UP, THROW).
3. Indexing - (Singular, Honorific, Plural, Dual, Trial/Quad/Quint, Eye-indexing)
[Hsp, Mvt, Loc, Eye-Gaze]

4. Separate Locative Signs - Adding emphasis or otherwise clarifying spatial reference.
[Loc, POR]

There are four main aspects of using locations within signing space (from Liddell, 1990):
Articulatory Function - the location is just where the sign is made... it holds no separate meaning.
3-D function - the location shows the relative spatial relationship between things.
Location Fixing - the location identifies pronominally where something is for future reference.
Referential Equality - the location identifies items in a list (on non-dominant hand)

The dominant function depends on the information conveyed. Plain verbs which do not inflect for subject or object information would be generated at locations in signing space which demonstrate only Articulatory Function. Classifiers with process movement roots would clearly demonstrate 3-D Function while classifiers with stative-descriptive/contacting movement roots would demonstrate at least Location Fixing, and simultaneously serve some 3-D Function. Referential Equality (assigning meaning to the thumb and finger tips) serves no 3-D function and works differently than standard location fixing because the non-dominant hand is unlikely to be fixed at any specific location.

Chapter 12 - Pluralization

A. Classifier Constructions

1. Single-Entity Handshapes
dual (two-handed) single contacting movements (dual plurality)
repeated contacting movements (distributive plurality)
sweeping movements (collective plurality)
alternating repeated contacting movements (random plurality)

2. Plural-Entity Handshapes
handshape reveals specific number (2,3,4,5)
handshape reveals multiple entities (SCADS-OF)

B. Pronouns (pointing handshapes)

dual (two-handed) single contacting movements (dual plurality)
repeated contacting movements (distributive plurality)
sweeping movements (collective plurality)
alternating repeated contacting movements (random plurality)

C. Quantity Signs (identifying specific number separately)

1. Specific Numbers
ONE, TWO, THREE, etc.

2. Non-Specific Adjectives
FEW, MANY, SOME, etc.

3. Numeral Incorporation
Time-related signs
X-DOLLAR

D. Nouns (repetition of the noun)

E. Verbs

1. S-O Agreement
dual (two-handed) single contacting movements (dual plurality)
repeated contacting movements (distributive plurality)
sweeping movements (collective plurality)
alternating repeated contacting movements (random plurality)

2. Locative Verbs (spatial agreement)
dual (two-handed) single contacting movements (dual plurality)
repeated contacting movements (distributive plurality)
sweeping movements (collective plurality)
alternating repeated contacting movements (random plurality)

3. Plural Verbs
verbs which imply plurality (MEETING, PARADE, DISPERSE)

Chapter 13 - Temporal Aspect

A. Movement Shape Provides Adverbial Information

1. Regularly - repeated, straight-line movements
2. Over Time - repeated, circular movements
3. Regularly Over Time - Combination of the above with straight movement at top and arced movement on the bottom

B. Movement Speed Provides Adverbial Information

1. Slow - may indicate longer time (but may also suggest a "slow-motion" analysis of high speed)
2. Fast - short duration or urgency
3. Immobile - may indicate extreme urgency OR imminent onset of the verb (EX: about-to-run)

Chapter 14 - Distributional Aspect

Inflections Indicating Distributional Aspect of Verbs

A. One-handed Inflections

[singular (one-hand) uninflected form] (no inflection)

1. repeated (one-hand) movements (distributive plurality)

2. sweeping (one-hand) movement (collective plurality)

[continuous circular (one-handed) movements] (reveals temporal aspect, not distributive inflection)

B. Two-handed Inflections

1. dual (two-handed) single contacting movements (dual plurality)
2. repeated (two-hand) movements (dual-distributive plurality)
3. sweeping (two-hand) movement (dual-collective plurality)
4. alternating repeated contacting movements (random specific plurality)
5. continuous circular (two-handed) movements (random unspecific plurality)

[combination of temporal aspect (circular movement), and distributive inflection (two hands, different locations]