

Comparative and Superlative Adjectives in Iranian Sign Language

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Abstract

Comparison is an inseparable part of a language. It can be performed using various constructions in both oral and signing languages. English and Persian, for instance use affixes for comparative and superlative adjectives. Sign languages such as Australian Sign Language (Auslan), New Zealand Sign Language (NZSL), American Sign Language (ASL) and British Sign Language (BSL) employ affixes, use intensifiers and nonmanual features (by itself or along with a sign) to indicate a comparison. This research was aimed to investigate the constructions employed to make comparisons in Iranian Sign Language, Zaban Eshare Irani (ZEI). The findings indicate that, besides the aforementioned constructions used in other sign languages, excluding 'affixes', the main construction ZEI signers used was descriptive mode of discourse (e.g. Anker 2004), individually explaining the compared topics to clarify their preference. To a lesser extent, numbering, topicalization, and repetition were also used which mostly united together or alone in the same discourse. A similar construction was also observed for both comparative and superlative adjectives. This study opens a new window to comprehend the deaf people's mind of thinking, and will benefit studies on language and linguistics, sign language interpreters and those that are interested.

Keywords: Adjective, Comparative, Superlative, Sign language

1. Modes of Discourse

Foucault (1972), a philosopher and social theorist, defines discourse through addressing the relationship between power and knowledge; he considers knowledge more than merely way of thinking and producing meaning. It is a way of constituting knowledge in relation with power and subjectivity. Foucault and other linguists including Teun van Dijk (1993) believe

that discourse is a unit of language which consists of both form and function, beyond the grammatical units such as phonology or morphology. In fact, language can never be used neutral but in the social context which conveys much broader meaning.

According to Foucault (1972), discourses are "groups of signs (signifying elements referring to contents or representations) but as practices that systematically form the objects of which they speak. Of course, discourses are composed of signs; but what they do is more than use these signs to designate things. It is this more that renders them irreducible to the language (langue) and to speech. It is this 'more' that we must reveal and describe" (P. 49). He recognises various types of discourse such as narratives, literary, ritualized texts, scientific, religious and judicial.

The different modes of discourse, also known as rhetorical modes or discourse types, in both writing and speaking are based on purposes and conventions of communication. However, they are usually united together in the same discourse although one should be clearly dominant. Discourse has also been classified differently by authors, which they believe is not exhaustive but cover the main modes. Newman (1837) divides the system of rhetoric based on the writer's object to didactic, persuasive, argumentative, descriptive and narrative. By didactic he means the mode used mostly in text-books in order to teach or convey instruction; during instructions the teachers order to follow the specific rules and control what the students perceive. Persuasive writing has the ability to convince or influence the reader to pursue the object including sermons. Argumentative, usually used along with other modes, is related to reasoning such as proofs, causes and arguments. Descriptive and narrative relate the past experiences or events and help the reader review the happenings to consider and think about.

Smith (2003) claims the discourse needs to be treated as pragmatic rather than unsuccessful linguistic approaches; the organization of linguistic action (such as genre, episode, etc.) instead of the organization of linguistic construction (which is the organizations of sentences into passages of the discourse modes). He also classifies the discourse modes into five categories: narrative, description, argument, report, and information. The formal semantic theory of Discourse Representation Theory (DRT) formalizes the analysis of modes of discourse, which was introduced by Kamp (1981) and Heim (1982) independently.

Anker (2004) identifies nine different modes: narration that is an essay writing mode for storytelling; illustration for giving examples to explain something; description for creating verbal depiction; process analysis for explaining or clarifying how things happen; classification for putting things into categories; definition for saying exactly what something means; comparison and contrast for showing similarities and differences; cause and effect for explaining reasons or results; and argument for persuasive writings.

This paper aimed to study the comparative construction used in ZEI which demonstrates gradability as possessing a property by an object compared to the other(s).

2. Adjectives

An adjective describes a noun or pronoun, detailing its feature (e.g., type, size, and colour) or

quality. It can function as a modifier of a noun or a predicate. As a modifier, it might either precede or follow a noun (e.g., Sutton-Spence & Woll, 2013; Johnston & Schembri, 2007). For instance in Persian, it goes second while in English the adjective goes first and the noun goes second. The order might change in some languages when it comes to literature and poetry; in Persian, for example, the order in certain cases introduces more beauty and impression.

Adjectives are used differently to compare the people and objects in both oral and sign languages. Comparison, according to Stassen (2006: 686), is “a mental act where two objects are assigned a position on a predicative scale”, and this mental act linguistically occurs by encoding the elements in a comparative construction. Stassen (1985, 2013) makes a distinction between two types of comparative construction. The basic parameter in these types is the encoding of the standard NP (yard-stick following *than*); if the standard NP is always in the same case, independent of the comparee NP (the object of comparison), it is an instance of fixed-case comparative, e.g. Mary is taller than Jan. However, if the standard NP is dependent or independent of the comparee NP, it is an instance of derived-case comparative, e.g. Mary loves Jan no less than you (love Jan) or Mary loves Jan no less than (I love) you.

Stassen subcategorized the two comparative constructions into four types of comparatives. Fixed-case comparatives include Exceed Comparatives and Adverbial/Locational Comparatives. And there are two subtypes for derived-case comparatives: Conjoined Comparatives and Particle Comparatives.

In exceed comparative, the NP standard is constructed as the direct object of a verb which means 'exceed/surpass'.

Thai (Warotamasikkhadit 1972: 71, cited in Stassen 2013, <https://wals.info/chapter/121>)

<i>kǎw</i>	<i>sǔuŋ</i>	<i>kwǎ</i>	<i>kon</i>	<i>tǐk</i>	<i>kon</i>
he	tall	exceed	man	each	man

‘He is taller than anyone.’

In locational comparatives, the NP standard has a locational/adverbial function. There are three kinds of locational comparative according to the nature of this function. When the NP standard is the source of movement using a marker which means ‘from’ or ‘out of’, it is *From-comparatives*.

When the standard NP is the goal of a movement (‘to, towards’, ‘over, beyond’) or as a benefactive (‘for’), *To-comparatives* is constructed. When the standard NP acts as a location, in which an object is at rest (‘in’, ‘on’, ‘at’, ‘upon’), the result is *At-comparatives*.

Mundari (Hoffmann 1903: 110, cited in Stassen 2013, <https://wals.info/chapter/121>)

sadom-ete hati maranga-e

horse-from elephant big-3sg.pres

‘The elephant is bigger than the horse.’

Conjoined comparatives includes two structurally independent clauses. One contains the comparee NP, and the other one the standard NP with the same grammatical function, e.g. subject. The clauses may contain two predicates which are either antonyms (good-bad) or positive-negative (good-not good).

Amele (Roberts 1987: 135, cited in Stassen 2013, <https://wals.info/chapter/121>)

jo i ben jo eu nag

house this big house that small

‘This house is bigger than that house.’

The second type of derived-case comparison is particle comparative which contains a specific particle (e.g. *than* in English or *que* in French) that accompanies the standard NP.

French (Bernard Bichakjian, p.c., cited in Stassen 2013, <https://wals.info/chapter/121>)

tu es plus jolie que ta sœur

you are more pretty than your sister

‘You are prettier than your sister.’

In addition to the case assignment of the standard NP, Stassen (2013) points out that the presence or absence of comparative marking on the predicate is another way of comparison in various languages. The majority of languages do not mark the adjective but some languages including English, German and Dutch do it by means of a special affix *er* or a special adverb (e.g. *more*).

As the native Iranian signers' second, third and fourth languages at schools are Persian, Arabic and English respectively, these languages are briefly examined to find out whether ZEI is more similar to these oral languages (which they studied systematically) or to other sign languages in the world, also to discover if any particular construction is used in ZEI.

3. Persian

"At times we use an adjective in order to compare a person or an object with other people and objects regarding that attribute" (Natal Khanlari, 1984, p. 189). In Persian, the comparative adjective is used with the suffix 'tar'. For example (Natal Khanlari, p. 189):

Fereidoun bozorg tar az baradarash ast.

Fereidoun old er than his brother is.

Fereidoun is older than his brother.

'older' (bozorgtar) precedes 'than his brother' (az baradarash)

In this sentence, the word 'older' has the meaning of 'comparison of Fereidoun with his brother' besides the meaning of the adjective 'old'. This kind of adjective is called comparative. The adjective can precede or follow the noun which it is compared to. And the noun comes with the preposition 'az' (than), that is:

Fereidoun az baradarash bozorgtar ast.

Fereidoun than his brother older is.

'older' (bozorgtar) follows 'than his brother' (az baradarash)

"As the comparative adjectives suggest the meaning of 'comparison', they require a 'complement'; the complement comes with the help of the preposition 'az' accompanying the comparative adjective" (Vahidian Kamyar, 2001, p. 85). The complement of the comparative adjectives are usually omitted. In fact an ellipsis occurs as the complement seems superfluous or able to be understood from contextual clues. Example (p. 85):

Ba motale'e (Note 1) ye bishtar mitaban be tavanaeiha ye elmi bishtari
dast yaft.

By studying of more can to abilities of scientific more
achieve.

By studying more we can achieve more scientific abilities.

'bishtar' contains 'bish' + 'tar' = 'a lot/much' + 'er'.

In this sentence, the adjective complement 'gozashteh' (past/before) and the preposition 'az' have been removed because the meaning can be inferred from the context and the complete sentence becomes:

By studying more than before we can achieve more scientific abilities.

Superlative adjectives are used when we compare one thing with similar other things regarding a common/shared attribute expressing its superiority over all of them. They are formed by adding the suffix 'tarin' to an adjective.

The superlative adjective usually precede its own modified noun (or the noun which the

modified noun is compared to) in two ways (Anvari & Ahmadi Givi, 2010, p. 168-169; see also Farshidvard, 2009):

Bozorgtarin shahr e (Note 2) Gilan, Rasht ast.

The largest city in/of Gilan, Rasht is.

The superlative 'bozorgtarin' (largest) is not complemented to the next noun 'shahr', the noun is singular and considered the modified noun of the superlative. Thus, the structure is an adjective and a modified noun with adjective coming the first (opposite the usual order in Persian).

Rasht, Bozorgtarin e shahrhay e Gilan ast.

Rasht, the largest of cities in/of Gilan is

The superlative 'bozorgtarin' (largest) is complemented to the next noun 'shahrha', the noun is plural and considered the complemented-to/complementary noun, hence the superlative is the complemented noun.

As the examples indicate, the superlative adjective 'largest' and its own modified/complementary noun 'city' can precede or follow the modified/complementary noun of the sentence 'Rasht'.

Sometimes the superlative adjectives is used without the compared noun (the noun which the modified noun is compared to), hence the modified noun is complemented to the adjective (Anvari & Ahmadi Givi, 2010, p. 169):

Bande ye kamtarin, molla mibasham.

This person/I of lowest, molla am.

This person of the lowest (i.e. I) is molla.

'This person' (meaning 'I' in formality) has been complemented to the superlative adjective with 'e' (of), because the noun with which it was compared (e.g. man/person) has been deleted. 'This person of the lowest' implies humbleness (humility) and modesty.

Sometimes comparative adjectives are used with the words 'hame', 'tamam', or 'kollieh' which mean 'all'; in this case the adjective means and acts as a superlative adjective (Anvari & Ahmadi Givi, 2010).

4. Arabic

Comparative adjectives describe the higher degree of an attribute in a thing or a person compared to another thing or person (Sharatuni, 2010; Sharatuni 2005; Qalaeini, 2005; Tabatabaei, 1999). Superlative adjectives describe the highest degree of an attribute in an object or person compared to others. An example for the case 1 (Qalaeini, 2005, p. 153):

Khalil alam min Saeid wa afzal min hu.

Khalil more knowledgeable than Saeid and better than him.

Khalil is more knowledgeable than Saeid and is better than him.

The elative pattern of 'afal' is used to compose a comparative adjective. Khalil and Saeid share the attributes 'knowledge' and 'goodness' but the former has more of them than the latter.

5. Pattern of the Comparative Adjective in Arabic

The comparative adjective in Arabic has a special pattern or form 'afal' ('fula' for feminine), called 'elative', which provides both comparative and superlative adjectives. 'Elative' which means 'gradation' is an inflection used for both comparative and superlative adjectives. To compare two objects or people, we should use an elative adjective followed by 'min' (than). However, to compare one object or person with others (i.e. a superlative construction) the adjective is not followed by 'min' and is preceded by definite article 'al' (which literally translates as 'the') and agrees with the noun before in definiteness, number and gender. Example for comparative adjective (Uroosa, 2010, p. 438)

Wal fitnatu akbar min al-ghatl.

And persecution is a greater (sin) than slaughter.

Example for superlative adjective (Fiqhizadeh, 2004, p.128):

Ahmadu wa Aliyyu al-afzalani.

Ahmad and Ali the best.

Ahmad and Ali are the best.

Refer to the authors mentioned above for further details in - conditions of making comparative adjectives, noun-adjective agreement, using comparative adjectives for meanings other than 'comparison', and irregularities.

6. Sign Language: Adjective

Sign languages, similar to the oral languages, have specific rules for the choice of order in adjectives. According to Sutton-Spence and Woll (2013), in BSL the adjective generally comes after the noun. However, the choice of order would change partly depending on the context and sentence. This is only one of the reasons that explain why it would be difficult to sign and speak at the same time. Similarly in Australian Sign Language (Auslan), adjectives can come before or after nouns (e.g., BLUE CAR or CAR BLUE) and also after some linking verbs such as LOOK and BECOME (Johnston & Schembri, 2007). In Turkish Sign Language (TİD) the adjectives can also precede or follow (Nuhbalaoğlu and Özsoy 2014).

Sutton-Spence and Woll (2013) discuss whether BSL indicates the nouns and adjectives separately putting the adjective second, or it builds adjectives into nouns through changing the form of the noun. As an example, it is possible to sign BOX SMALL, but it is more common in BSL to incorporate the size and shape to have the sign SMALL-BOX, LARGE-BOX OR ROUND-BOX. It is worth noting that the adjective can be incorporated into both nouns and the noun's preform (Note 3), for instance BOOK THICK-BOOK.

7. Sign Language: Comparison

“Comparing involves identifying and often evaluating the degree of difference between two things, often in relation to a particular characteristic – such as the intelligence of two individuals, the loyalty of cats versus dogs, or the benefits of attending a Deaf school versus a mainstream school” (McKee 2015, p. 109).

Adjectives can be graded or emphasized using an adverb including *very* in English and its degree marked by using *-er* and *-est* or *more* and *most*.

Sign languages are fully-fledged languages, similar to the oral languages, through which the native signers can communicate their feelings and compare them with one another.

No specific research has been done on comparatives and superlatives in BSL. However, BSL signers can inflect the adjectives to show the intensity by using an extra bound morpheme (Sutton-Spence and Woll, 2013). Meaning, a long, tense, initial hold is used followed by a very sharp release to a final hold. The authors emphasize this form is independent from the meaning. For instance, VERY-SHORT and VERY-LONG have the same long hold.

Studies on Auslan also indicate Auslan signers use *very* or *true* as intensifiers. In addition, an inflection is used similar to BSL by lengthening the initial hold in sign, followed by a rapid release (e.g., BLACK vs. BLACK-intense) (Johnston & Schembri, 2007). The reason for calling the modification of movement an example of an inflection is that it is systematic with a specific grammatical meaning and covers all the classes of signs (e.g., Sandler & Lillo-Martin, 2006).

Some of the abstract features of spoken languages, which are not directly visible, are made visible by sign languages (Wilbur, 2008). Example, locations (loci) in signing space are overt realizations of the comparative constructions (Aristodemo and Geraci 2017).

In Auslan, space can be used to compare two things or ideas. Auslan signers produce signs on a separate part of signing space (i.e., the left and right side of their body) (Johnston, 1992; Winston, 1995). Many adjectives are also modified by adverbial signs for comparison including *more*, *most*, *worse* and *very*. Adverbs can also be used to show intensification (Johnston & Schembri, 2007).

Besides the form, as shown by Sutton-Spence and Woll (2013), nonmanual features can also be used to show the intensity.

A study by Aristodemo and Geraci (2017) in the area of semantics on 'Visible degrees in Italian Sign Language (LIS)' is also worth mentioning. The study indicated that there are two groups of adjectives in LIS: adjectives with iconic degree mapping and adjectives without iconic degree mapping (or classifiers). The authors express two strategies to represent comparative constructions: one with analytic forms of more or less, and the other using synthetic forms of more-iconic or less-iconic. Gradable adjectives without iconic mapping only use the first strategy. However, gradable adjectives with iconic mapping can use both strategies. Iconic mapping supports the fact that gradable adjectives have a degree-based approach; that is, the degree variables (e.g., 1.70 m) of the gradable adjectives (e.g., tall) is

presented as the loci (positions/points) in signing space. Hence, the visible degrees or the loci in the signing space associated with degrees appear, like an anaphoric system, as antecedents for a later pronoun, e.g. the pronoun IX refers to the degree of GIANNI's height (pos means positive which refers to the adjectives that can iconically map the amount of the property onto the signing space, IX means Index) (Aristodemo & Geraci (2017, p. 8):

GIANNI TALL- α (Note 4) pos β IX β 1 METER 70

Gianni is tall. This one (Gianni's degree) is 1.70 meters.

In New Zealand Sign Language (NZSL) and Turkish Sign Language (TİD), a major construction to compare things is indexing – or 'placing' – a referent in a certain location in the signing space, and then referring to the locations in sequence ((McKee 2015; Özsoy & Kaşıkara 2018). This is called locational comparative. No affixes are used in both NZSL and TİD.

In NZSL the degree of an adjective or adverb is expressed in NZSL by the signs of MORE and THAN, and also by raising the intensity (Note 5) of adjectives through nonmanual signals (NMS) and movement. Example (McKee 2015, p. 110):

More + adjective

MORE AWARE more aware

MORE EASY easier

More + adverb + verb

MORE DEEP TEACH teach in more depth

MORE CLEAR EXPLAIN explain more clearly

The same pattern as adjectives but the comparative adverbs precedes the verb

THAN can follow the adjective: MORE + adjective (THAN), or with and adjective alone. Example:

(MORE) adjective THAN

NOW BETTER THAN BEFORE It's better now than it was before.

PRO1 (Note 6) MORE INDEPENDENT THAN MOTHER-FATHER

I'm more independent than my parents.

It is also possible to use THAN by itself to state the comparative. Example (McKee 2015, p.111):

MY CAR FLASH THAN MY BROTHER My car is flashier than my brother's (Note 7).

Using nonmanual signals to intensify the adjectives (e.g. *furrier* and *thinner* + THAN), the signer makes the sign THAN towards the referent it refers to (first signs towards the *furrier*

cat on the right, then towards the thinner on the left). However, using the sign THAN is not sometimes essential because the signer uses the sign with tensed movement and eye narrowing to indicate a comparison.

TİD also uses conjoined comparatives, called ‘Delineation Semantics’ by Aristodemo and Geraci (2017), to express comparison. This construction includes two structurally independent juxtaposed clauses, containing the standard and the comparee; they have parallel constructions in which both verbs and adjectives can function as predicates (Özsoy & Kaşıkara 2018). In adjectival (and verb) comparative constructions, the NPs function as the subjects of their clauses. In object verbal comparative constructions, it is the objects which are compared. In the locational comparative construction, there is a single adjectival predicate expressing the property that the standard and the comparee share. Therefore, in both locational and conjoined comparative constructions in TİD, the adjectival predicates occur.

The nature of the predicate in TİD, whether adjectival or verbal, determines the semantic aspect in the conjoined comparative constructions. When the predicate is adjectival, it encodes absolute gradability. That is, the comparee does not possess the property possessed by the standard. The absolute gradability contains three patterns: the predicate of the second clause is the antonym of that of the first clause; the predicate of the second clause is the negated form of that of the first one; a combination of both one and two, i.e. the predicate of the second clause includes both the negated form and the antonym of that of the first clause, for instance:

Construction 1 (p. 54): [NP NUM N] [CL (Note 8) a ADJ1] [CLb ADJ2]

[TWO MEN] [ONE TALL] [ONE SHORT]

two men one man tall one man short

‘(There are) two men. One is tall. One is short.’

Regarding the semantics of comparison, the predication expresses that the subject of the second clause (the man) possesses the property (shortness) opposite to the one (tallness) that the subject of the first clause possesses. That is, the second does not have the property of the subject of the second clause at all.

Construction 2 (p. 54): [NP NUM N CLa CLb] [CLa ADJ] [CLb ADJ-NOT]

[TWO PEOPLE] [ONE OLD] [ONE OLD NOT]

two people one person old one person old not

‘Two people. One is old. One is not old.’

In the negated construction, the predicate present in the first clause is negated in the second clause using the lexical sign NOT. Semantically it means the negated predication states that the subject of second clause does not possess the property possessed by the subject of the first clause, being inferred that the opposite property is possessed.

Construction 3 (p. 55): [NP NUM N] [[NP Na IX] ADJ1] [[(IX)/bs ADJ1-NOT] ADJ2]

[TWO WATER] [[WATER IX] HOT] [[HOT NOT] COLD]

two water water this hot hot not cold

‘(There are) two (glasses of) water. This water is hot. (This water) is not hot. (It is) cold.’

In the conjoined construction, the first clause presents the standard and the predicate, the second clause introduces the comparee as subject which negates the predicate, being followed by the third clause which has the antonym of the predicate. The comparee can be communicated whether manually by indexing (IX) or nonmanually by body shift.

From the semantic point of view, the subject of the first clause possesses a property, which is negated by the subject of the second clause. Moreover, the construction confirms the subject of the second clause possess a property which is the opposite of the property possessed by the subject of the first clause.

When the predicate is verbal or a verb functions as the predicate of comparison, the grade degree sign MORE/LESS is used to express scalar gradability (in which one of the objects possesses a property to a more, less or equal degree relative to the other; whether two different subjects are compared with regard to a single object (Construction 4) or two objects are compared with regard to a single subject (Construction 5). The standard and the comparee are on ipsilateral (on the opposite side of the dominant hand) and contralateral (on the same side of the dominant hand) side of the body respectively; they both are located by indexing and/or body shift/head shift. The parameter (/predicate) marker, MORE/LESS, occurs in the second clause containing the comparee before the predicate, for example:

Construction 4 (p. 55): [NP_a NP_b V] [NP_c NP_b MORE V]

[GIRL DOG SCARED] [MAN DOG MORE SCARED]

girl dog scared man dog more scared

‘The girl is scared of the dog. The man is more scared of the dog.’

Construction 5 (p. 56): [NP_a NP_b V_b] [e bs V]⁷ [e NP_c V_c] [e bs MORE V]⁸

[SELF⁹ GIRL CAT SEE] [SCARED] [DOG SEE] [MORE SCARED]

self girl cat see scared dog see more scared

‘The girl sees the cat and is scared. (She) sees the dog and is more scared.’

In both Locational and Conjoined Comparative construction in T1D, the standard and the comparee are introduced as the 'topic of comparison' by a topic phrase that precedes the predicate. In the Locational Comparative construction, the topic phrase can be optional. In the absence of an overt topic phrase, localization also happens to function as the topic phrase. Even in the absence of the standard, the side of the dominant hand signifies the location of the comparee. Using a single predicate which expresses a property shared by the standard and the comparee and indexing to express the relation between the two NPs differentiates Locational from Conjoined Comparatives.

The IX comparison occurs in three phases: Indexing of the standard (and/or body shift to locate the standard and the comparee on the opposite sides of the signing space for respective referentiality), movement with continuous eye-gaze shift from the R-locus (referential location in signing space) of the standard to that of the comparee, and finally indexing of the comparee. At the location of the comparee the manual sign of the predicate is expressed; using both manual and nonmanual means in TĪD presents the comparative constructions structurally and semantically.

As for the order of constituents in a Locational Comparative construction, the standard precedes the comparee otherwise it results in an ungrammatical construction. The standard can be optionally left out; the following example illustrates that the standard is implicitly expressed in the topic phrase TWO BALL:

Construction (p. 61): [NP NUM N] [[NP e ADJb] aADJb]

_____eo (Note 9)

_____ebr (Note 10)

[TWO BALL] [[BLUEb] aBIGGERb]

two balls blue bigger

‘Two balls. The blue is bigger.’

There are two kinds of Locational Comparative construction in TĪD that their distribution depends on the nature of the predicate. TĪD uses lexical degree signs (parameter markers) MORE and MOST to encode superiority (relative and absolute) and LESS to express inferiority (relative but not absolute); the manual signs of the degree always precede the predicate and are accompanied by nonmanuals. The other variant of gradability is the incorporation of the degree into the predicate sign. As an example, the sign for MORE semantically combines with the sign of the predicate and is incorporated into it. The incorporation of the degree is similar to adding the suffix of the comparative –er or –est to adjective in English. For instance, to articulate BIGGER, the deaf sign BIG, using two flat hands with extended fingers apart from each other in front of their body, then holding their hands further apart associating with wider eyes and more raised eyebrows.

Both MORE and IXCOMP can be incorporated into the predicate. IXCOMP is incorporated by means of the movement of the hands from the R-locus of the standard to the R-locus of the comparee while signing the predicate. It means the incorporation involves both a manual and spatial modification of the predicate sign. The incorporation of the degree sign MORE into the IXCOMP sign can also occur which is indicated nonmanually by eye-opening and eyebrow raise.

In TĪD, the two nonmanuals of eye opening and eyebrow shape are used to encode comparative. The higher degree of positive or negative values of an attribute is expressed by open eyes and raised brows, or squinting eyes and furrowed brows respectively.

The order of the constituents in TĪD Locational Comparative constructions is similar to that

of non-comparatives; the predicate is in the final position. The location of comparee is optional to follow or precede the predicate.

In a Locational Comparative construction in TĪD, there is a phenomenon similar to verb agreement in which verbs agree with locations associated with their subject and object. The agreement is expressed by the directionality of either the sign IXCOMP or the predicate sign if IXCOMP incorporated into it. The comparee is expressed either by indexing or body shift in the direction of the R-locus of the comparee; if there is no indexing, body shift is compulsory. The indexing for the standard is optional. Therefore, the directionality of indexing in the signing space and body shift from the R-locus of the source argument to the R-locus of the goal argument parallels verb agreement.

8. Elliptical Comparison

In most cases NZSL users, like English speakers, also delete unnecessary parts in a comparison. In other words, they ellipt the final clause [THAN 'referent 2'] when it is easily understood through the context. Example (McKee 2015, p. 113):

YOUR HEAVY + intense Your [bag] is much heavier [than mine]!

In NZSL, to make a superlative, the signer uses the sign MOST before an adjective. Sometimes the sign MORE is used instead of the sign MOST to mean most. Example (McKee 2015, p. 113):

MOST + adjective

MOST EMBARRASSING The most embarrassing

MOST GOOD The best

Similar to English, NZSL also contains some adjectives which have a comparative or superlative form (e.g., GOOD and BAD).

It is worth mentioning that in NZSL, when something in the present form is compared with itself in the past, the speed of movement of the adjective is reduced or increased depending on the concept (e.g., hair growing longer BECOME-LONGER).

ASL has no comparatives or superlatives like English. Instead the base of the adjective is signed (e.g., *greater* or *greatest* is signed GREAT) (Penilla & Taylor 2012). Alternatively, the base is signed, followed by one of words from Figure 1. Example:

the cheapest CHEAP+ TOP

the most expensive EXPENSIVE+BETTER

ugliest UGLY+WORST


		Super Words	
English	Sign	English	Sign
GOOD		BETTER	
BEST		TOP	
BOTTOM		BAD	
WORSE/ WORST			

Figure 1. ASL, Comparatives and Superlatives

Source: Penilla & Taylor (2012).

9. Nonmanual Features in Sign Language

9.1 Nonmanual Signals as Dependent Lexical Items

Nonmanual markers have been identified in different sign languages including Auslan, American Sign Language (ASL), BSL, and German Sign Language (DGS). Two types of markers can be distinguished linguistic/grammatical and affective; some of the linguistic elements are expressed by hands and some others by nonmanual markers using head and/or body movements, facial expressions, and mouth patterns. The nonmanuals are grouped into phonological, morphological, syntactic, and pragmatic (Pfau & Quer, 2012).

Nonmanual features are used widely in Auslan in combination with signs as a verb and an adjective (e.g., DRIVE and THIN), and not as a noun, except when the nominal signs are modified for shape and size (Johnston & Schembri, 2007). Liddell (1980) considers these features as nonmanual adverbs. These features are mostly believed to be bound morpheme (e.g. Sutton-Spence and Woll, 2013) because the majorities of signs appear in combination with other signs rather than being produced freely or independently. As these nonmanual features modify signs, they have a productive role in language.

The nonmanual markers in Auslan include 'ee', 'th', 'mm', 'puffed cheeks', 'pursed lips', and head and body movement known as 'cs' ('cheek to shoulder' movement) (Liddell, 1980; Johnston & Schembri, 2007). Some of these features may use a mouthing movement which is

similar to the mouthing of some of the English words but it needs further studies to indicate whether or not there is any relationship between them. For instance, 'ee' is produced by tightly pulling the lips in the shape of 'ee' while showing the teeth. The 'ee' nonmanual maker with an intensifying role indicates something is very close whether in time or space.

Nonmanual signal 'mm', which is produced with the lips pressed together, means moderately, normally, or as expected. And 'th' means carelessly, neglectfully, or lazily.

'Puffed cheeks' and 'pursed lips' involve respectively puffing out of the cheeks along with exhalation of air and sucking in of the cheeks with inhalation of air. The former revealing very large, done hard, or very distant in location/time. 'Puffed cheeks' frequently occurs with aspectual modifications such as WAIT+rept-slow 'wait for ages' as pointed out by Brennan (1992). And the latter showing or intensifying the negative or unpleasant meaning.

9.2 Nonmanual Signals as Independent Lexical Items

The number of nonmanual signals that acts as meaningful units is very limited in sign languages. For instance, in Auslan the 'puckered nose' and the 'tongue-in-cheek' are the nonmanual elements that show disapproval and an intention to mislead respectively. Brennan (1994a) recommends that further research is needed to find out the nonmanual components that produce an independent or meaningful item. This is because the movement of trunk, shoulder or head, and facial expressions occur simultaneously and the one intensifies the other.

10. Aim

A study has been conducted to explore how deaf people express comparative and superlative adjectives in ZEI. And whether the factors such as age, gender, degree of deafness, school, family and education affects the result.

11. Participants

The participants consisted of 30 deaf people (Table 1), aged 18 to 58. 12 males and 18 females. 13 participants attended both deaf and hearing schools and the rest only attended Schools for the Deaf. Participants' education ranged from year 9 (at school) to Masters. Those with a university degree studied at hearing universities as there is no deaf university in Iran. Each participant has been assigned a unique number and their names have been kept anonymous for privacy reasons.

The participants were profoundly deaf, excluding participants 2, 19, 20, and 27 who were hard of hearing. Participants 10 and 30 had cochlear implant. Participant 30, a 25 year old, had the implantation 3 years before the interview and participant 10 had the implantation at a younger age. Both participants had deaf families and were immersed in the language and community of the Deaf. All participants had deaf families except for participants 1, 2, 16 and 24. However, these four participants were also socializing with deaf people, had lots of deaf friend, attended in Deaf Society, and studied in Deaf schools, thus they had the fluency in ZEI and were acquainted with deaf culture completely. All participants were part of the Deaf Community, attended Deaf Societies and took part in their activities.

Table 1. Summary of the Participants' Background

Table shows the participants age, gender, level of hearing, whether the family is deaf or hearing, the type of school attended (hearing or deaf) and their level of education. Abbreviations: P (Participant), M (Male), F (Female), BA (Bachelor of Arts), MA (Masters of Arts).

P #	Age	Gender	Deaf/Hearing/ Cochlear Implant	Deaf/Hearing Family	Deaf/Hearing School	Education
1	58	M	Deaf	Hearing	Deaf	Year 9
2	32	F	Deaf	Hearing	Deaf	BA Graphic
3	32	F	Hard of hearing	Deaf	Deaf & Hearing	BA in Animation, BA in Painting, MA in Painting (incomplete)
4	57	M	Deaf	Deaf	Deaf & Hearing	High School Diploma
5	40	F	Deaf	Deaf	Deaf	High School Diploma
6	45	M	Deaf	Deaf	Deaf	High School Diploma
7	35	F	Deaf	Deaf	Deaf & Hearing	Two Years After Diploma/ Junior College
8	38	M	Deaf	Deaf	Deaf	High School Diploma
9	30	F	Deaf	Deaf	Deaf	High School Diploma (Sewing Education, Dressmaking)
10	25	F	Cochlear Implant	Deaf	Deaf	BA Graphic
11	24	F	Deaf	Deaf	Deaf & Hearing	BA Graphic
12	35	M	Deaf	Deaf	Deaf	High School Diploma (Graphic)
13	30	F	Deaf	Deaf	Deaf & Hearing	High School Diploma (Graphic)
14	39	M	Deaf	Deaf	Deaf	BA Linguistics (incomplete)
15	56	M	Deaf	Deaf	Deaf & Hearing	High School Diploma
16	54	M	Deaf	Hearing	Deaf	Year 9
17	32	M	Deaf	Deaf	Deaf	MA
18	34	F	Deaf	Deaf	Deaf	MA

19	30	M	Hard of hearing	Deaf	Deaf	High School Diploma (carving)
20	34	F	Hard of hearing	Deaf	Deaf	High School Diploma (Sewing Education)
21	27	F	Deaf	Deaf	Deaf	High School Diploma (Sewing Education)
22	32	F	Deaf	Deaf	Deaf & Hearing	Two Years After Diploma/ Junior College (Visual Arts)
23	33	F	Deaf	Deaf	Deaf	High School Diploma (Sewing Education)
24	34	F	Deaf	Hearing	Deaf & Hearing	Two Years After Diploma/ Junior College (Designing, Painting)
25	27	F	Deaf	Deaf	Deaf & Hearing	Two Years After Diploma/ Junior College (Graphic)
26	34	F	Deaf	Deaf	Deaf	High School Diploma (Sewing Education)
27	35	M	Hard of hearing	Deaf	Deaf & Hearing	MA Social & Communication Sciences (incomplete)
28	31	M	Deaf	Deaf	Deaf & Hearing	BA Mining engineering MA Sports Marketing Management
29	30	F	Deaf	Deaf	Deaf & Hearing	MA
30	18	F	Cochlear Implant	Deaf	Deaf & Hearing	High School Diploma

12. Procedure

The 30 participants were interviewed individually or in groups of 2 to 8, in different cities of Iran. Three participants were interviewed individually as they could not attend the group discussions. The researcher (Zohreh Ghari) knew ZEI, so communicated with the participants without an interpreter. The interviews were held in Deaf Societies or in the sign language classes at their university. Two set of questions were prepared for the interview – thirteen research questions and proceeding informal questions. The discussions were recorded, with the participants' permission, for data analysis. The recorded discussions were analyzed qualitatively, and frequency of the construction of comparative and superlative adjectives were measured and recorded.

Thirteen research questions were prepared for the participants to measure the frequency and

construction of comparative and superlative adjectives used in their dialogues. The questions were prepared from topics of their interest and became an opening channel for the discussions. The questions controlled the conversations direction toward the related subjects and the comparisons. The participants were allowed to some extent speak about other related subjects as far as they made comparisons in their speech. This was important in order to obtain consistent data and ensure accurate results. In the group interviews, sometimes the questions were repeated by the participants for their friends to answer. The discussions were naturally on going. The research questions were sometimes asked in a different order depending on the participants' discussions.

The thirteen research questions were preceded by informal background questions, serving as ice-breakers, creating a calm friendly talk. Any person whether deaf or hearing, a close friend to the researcher or a stranger feels, uncomfortable when inquired a direct question and cannot react nor respond naturally. To remove this issue and improve the participants' understanding of the topics, the research questions, specially the first ones, were asked after informal questions. The informal questions also directed the conversations towards the research questions. This also eliminated the necessity of the researcher to sign the comparative or superlative forms of an adjective when asking the research questions which may have affected the participants' signing.

The informal questions also eliminated the effect of camera. Although the discussions were recorded with the participants' permission and willingness, it was natural for them to feel discomfort at first. However, as the conversations warmed up the participants totally forgot about the camera and ignored it.

13. Data Analysis

Some of the participants' answers have been glossed, particularly when ZEI does not have equivalent words represented in Persian.

Question 1 – Signing

Participants were asked whether they could understand everybody's signing and whose were more comprehensible. Who, among deaf people or ZEI interpreters, signed better, more understandably, more naturally (Note 11), and knew the sign language grammar and deaf culture better. Whom they felt more comfortable having a conversation with. The participants and the researcher discussed their experiences.

The proceeding informal question was regarding their family. Whether they were deaf or hearing, knew sign language or not, what was their means of communication at home and whether their hearing family members tried to learn sign language.

Participant's 25 Glossing:

[WITH]-BROTHER (Note 12) ME, PRO.1 (Note 13) TALK++(Note 14). A-LOT PRO.1 UNDERSTAND. PRO.3 TALK UNNDERSTAND-him (Note 15). PRO.1 COMFORTABLE, [with]-OTHERS NOT. FATHER MOTHER PRO.1 UNDERSTAND-NOT. THEY LIPREAD SLOW, SIGN A-LITTLE. ALL HEARING, ONLY BROTHER ME DEAF.

[WITH]-INDEX-him (Note 16) [my brother] PRO.1 LIKE TALK. INDEX-he OUT [AT] WORK PRO.1 TALK SISTER ME.

Participant 25: *“I talk with my brother because I understand [him/his speech] a lot. When he talks, I understand him. I feel comfortable. With others I do not. I don’t understand [my] father’s and mother’s speaking; they do lipreading (i.e. speak) slowly and know signing a little. All are hearing, only my brother is deaf. I like to speak with my brother but when he’s out or at work I speak with my sister”.*

The participant did not use any affixes or inflections to compare her family members. She used comparative discourse. Their ways of communication were explained individually and separately (i.e., her family were all hearing except her brother. They did not know signing well so they spoke and the participant was not happy with it because she could not understand their speech. However, her brother was deaf, she felt comfortable with him, and liked to talk to him). Through this construction she made comparisons and clarified whose signing/communication she liked more. She explained, with reasons, each person's ability and allowed the researcher to figure out her choice, that is, which family member she preferred to talk to and why. It seems the participant indirectly, freely and logically involved the researcher in the comparison. In this construction, she used 'a lot/very' and topicalised her 'brother' a couple of times to indicate that she liked to communicate with him the most. She also used the locational comparative or indexing.

Question 2 - Communication

Participants were asked with whom they spoke the most at home.

The deaf usually complain that the hearing members of their family do not know signing or are not fluent at it so they cannot communicate with them easily, but just a few necessary words.

Participant 9’s Glossing:

MUM A-LITTLE SIGN, LIPREAD/SPEAK A-LOT. SISTER A-LITTLE SIGN A-LITTLE. TWO-SISTER ONE BROTHER A-LITTLE SIGN. ALL HEARING, PRO.1 ALONE. PRO.1 TOLERATE. MUM THINK LEARN SIGN DON’T-HAVE USE/BENEFIT; LIPREAD/SPEAK GOOD. OUTSIDE LOOK SPEAK, PRO.2 LEARN; PRO.2 SPEAK++, PRO.2 their-SPEECH-UNDERSTAND. HUSBAND ME GOOD SIGN. MUM "OK WAIT". PRO.1 TOLERATE. PAST/BEFORE PRO.1 MARRY, THANK-GOD, LEAVE HOME. [BEFORE MARRIAGE I ASKED MY PARENTS] PRO.1 GO DEAF SOCIETY? THEY "NO". PRO.1 GO DEAF ASSOCIATION? THEY "NO", difficult, STAY HOME. THEY WORK, GO COME-BACK++. PRO.1 ALONE, THINK ALONE UPSET. [TO]-PRO.1, THEY PAY-ATTENTION-TO-PRO.1 NOT.

Participant 9: *“[My] mum signs a little. She speaks a lot. [My] sister signs a little. [My] two sisters and one brother know a little signing. ALL are hearing, I’m the only deaf. I tolerate. [My] mum thinks learning sign language is useless, lipreading/speaking is good [because] outside you can look at people speaking and learn; you can speak and understand their*

speech. My husband signs well. [My] mum says, "Ok wait". I tolerate. Thank God, I married and left home. [Before marriage I asked them to] go to Deaf Society, they said, "No", [I asked them to] go to Deaf Association, they said, "No". It was difficult. I had to stay at home. They were going to work and coming back [home]. I was lonely and felt upset. [To] me, they didn't pay attention to me".

Participant 9 talked about every single member of her family individually; in separate discourses she explained those who spoke and their reasons and those who signed ...This clarification provided us with enough information to understand with whom she spoke more and which language she would prefer. She was happy to marry her deaf husband who could sign, and leave home because her family were hearing, did not know signing, and she could not understand their speech). The participant mentioned repeatedly that she had to tolerate loneliness, lack of mutual understanding/communication, and not receiving enough attention from her family.

Participant 20: *"...my family are deaf... Mostly my sister, mostly my sister, she pays attention to me more/first. My family all sign. [My] friends all are alone and come to our house saying 'good for you because all your family sign'. I told them that being hearing is good, having one hearing member of family is good... [My] niece and nephew are hearing but they also sign. When we don't understand the television, they tell us... we talk about the news, what happens all over the world...This way the family communicate with each other and become aware (improve). My cousin is deaf; my family are genetically deaf... My mother-in-law and my father-in-law sign well; they help me. Sometimes my mother-in-law speaks (not sign), I tell her I don't understand".* Conversation has been shortened.

Participant 20 explained each family member individually - whether they were deaf or hearing, knew signing or not, and how they were helpful. Besides this construction, she used the sign 'more' and 'first' for her sister to show her as the top choice, with a strong facial expression accompanying a long tense hold and a rapid release. She mentioned a specific point to distinguish her sister from others because the condition of deafness and signing was equal among her family. Thus, she explained that her sister paid more attention to her. She also compared 'signing' with 'speaking/lipreading' by explaining about the advantages of having a deaf family and signing, and disadvantages of a hearing family and lipreading separately. The former resulting in awareness about the world or news, a close relationship and communication among the members but the latter ending in loneliness and escaping of the deaf family members to the deaf families.

Participant 15 first explained each interpreters' job briefly, and then named the interpreters based on their sign language skill and relationship with the deaf, e.g. first Ms A, second Ms B, third Ms C.

The participants' answers to Question 2 indicate that, in order to compare two (groups of) people or one person with a group, the participants explain each one separately to clarify their characteristics and roles. Sometimes 'very' or 'more' are signed to show the comparison (comparative/superlative), with a strong facial expression accompanying a long tense hold and a rapid release.

Question 3 – Schooling

Participants were firstly asked – the names of the schools they attended from kindergarten to High School Diploma, whether they attended deaf or hearing school, and with which school were more satisfied. Then, the participants were asked to compare - the teachers' and students' knowledge of sign language and deaf culture, the methods of teaching, the means of instruction, the teachers' and the staff's attitude towards the deaf and sign language, the level of knowledge at each school, patronizing the deaf students, etc.

Participant 27: *“Deaf schools at the moment are awful because they have not been adapted, the teachers don't know sign language and deaf culture/identity, they are not specialized. How can a person who doesn't know anything about deaf identity be allowed to teach at a school for the deaf. I know that the deaf students' performances educated in those schools are not good. Hearing school is difficult for deaf people because they don't understand, they miss a lot; some of the letters are pronounced or have similar lip pattern so they misunderstand the words... If the deaf schools improve, they are much much better”*. He continued *“[using sign language in deaf schools] we can give or teach the deaf students all the expressions or concepts”*.

Besides the separate explanations and details of deaf and hearing schools, he repeatedly used 'much/very' to indicate a comparison. He signed 'very' with a strong facial expression accompanying a long tense hold and a rapid release and 'better' like 'good' with one movement towards left.

The participants were very eager to speak about this topic. They shared their experiences, problems, and complaints about each school. The participants explained the positive and negative points of each school. This helped the researcher to understand whether they preferred deaf or hearing schools.

Questions 4 and 5 - Media, films and news

Participants were asked whether they watch TV, and what programs and channels they prefer.

A lot of comparisons were made including what channels had films and news with subtitles and sign language interpreting, how they solved their problems with lack of subtitle or interpreting services (i.e., helpful family members), and what kind of films were more comprehensible even without a subtitle. Participants also discussed the need for hearing-sense based TV channel(s) and program(s).

Participant 15's Glossing:

TV A-LOT PRO.1 WATCH NOT. FOR US GOOD NOT. ONLY ... S-E-R-I-E-S (Note 17)
PRO.1 WATCH. FAMILY LIFE... LIKE WATCH... SUBTITLE HAVE... [THE FAMILY]
FILMS INDEX-they [THAT] PRO.1 WATCH ACTION HAVE, GO COME.
[HAPPENING/EVERYTHING] CLEAR BUT ...[OTHER] FILMS ACTION ... FACIAL
EXPRESSIONS... DON'T-HAVE, ONLY TALK+++ WE DEAF UNDERSTAND NOT
SPEECH. DAUGHTER ME EXPLAIN/HELP NOT, ALWAYS STUDY.

Participant 15: *“I don’t watch TV that much. It is not good for us. I only watch ... series on family, everyday life, I like this [kind of films] ... [because] they have subtitles... these films have (more) actions... and facial expressions... (than words), they (the actors) go and come ... it is clear [what happens] but in ... [some other] films there is no actions, just talk and talk. We (deaf people) don’t understand what they talk about. My daughter is always studying and can’t explain [them to us]”.*

Participant 22: *“I don’t watch any programs; it is useless. I don’t understand. I just watch CDs that have subtitles; I understand, I feel comfortable... I don’t like to make people tired to explain the programs for me. I like to watch it myself, subtitles are good”.*

The participants explained the programs and films with subtitles, sign language interpreters, actions, facial expressions, and deaf-related topics, and the essential needs of deaf people for them, as well as the programs which were mostly dependent on the hearing sense (vs. visual sense) and the support of the deaf individuals' families. They were clear enough to help us understand the former was remarkably more beneficial to them.

Question 6 – Healthy eating, fruits and their benefits

Participants were asked whether they like to eat fruits or not. Discussions were led to the benefits of each fruit, and healthier fruits including apples and bananas.

Participant 20 compared fruits with tea, *“I like orange, lemon, [but] not a lot, [I like them] a little. I like tea a lot; I’m not interested [in fruits a lot]. First I like tea, tea”.*

She explained her likes and dislikes separately saying that she did not like fruits ‘a lot, but a little’ as compared with tea that she liked ‘a lot’. To put emphasis on ‘tea’, compared with ‘fruit’, she also used the number ‘first’ for ‘tea’ as well as repeating it. Hence, conjoined comparative construction and numbering were also utilized and united in the descriptive discourse to make a comparison. Deletions were occurred for unnecessary parts.

Participant 28’s Glossing:

APPLE ANTI-OXIDANT, ... VITAMIN, EVERYTHING HAS. BUT BANANA ONLY POTASSIUM HAS. [TO] OPINION ME APPLE MUCH BETTER. OF COURSE, SAYINGS IMAMS SAY APPLE CURE ALL DISEASE.

Participant 28: *“Apple has anti-oxidant,... vitamin, everything. But banana has only potassium. Of course, in the (Muslims’) Imams’ sayings it is quoted that apples cures all the diseases”.*

Participant 14: *“Apple exists in all the seasons, it’s useful, it’s good for eyes, it’s good for memory, in internet it is said to use an apple... orange is a seasonal fruit but we can use apple in four seasons”.*

Participants 14 and 28 explained the benefits of apples, bananas and oranges individually. They believed that apples are always available, good for all kinds of disease, and highly recommended. But other fruits such as oranges are seasonal, and bananas contain limited benefits (i.e., has only potassium). The explanation given plus the adverbs 'all' and 'only',

clarified the participants' preference.

Question 7 – Favorite food

Participants were asked their favorite food and their opinion on healthier meat options (i.e., fish, chicken, or lamb).

Participant 1: *“I like chicken and fish [a lot], [I like] meat a little. If the meat is quality, (i.e. lamb) it's good. But the red meat is not good; we get sick”*. He did not sign ‘a lot’, but used a facial expression. He continued, putting his preference in order: *“First I like fish... then chicken...vegetables [a stew which contain red meat]”*.

Different kinds of meat were explained as well as using 'very/a lot'. Preference was shown by putting the varieties of meat in order.

Question 8 – Home food versus restaurant food

Participants were asked which is healthier - home food or restaurant food?

Participant 1: *“We eat Lenjan (Note 18) rice, vegetables ... quality food but we don't buy food from outside. We only cook at home. We don't like the food outside because we get sick. We are not sure about the ingredients or quality, we buy the things and my wife cooks at home”*.

Participant's 16 Glossing:

WIFE HOME FOOD GOOD. OUTSIDE GOOD BUT HYGIENIC NOT. WIFE ME CONFIDENT [FOOD].

Participant 16: *“Home food is good. Outside (restaurant) is good but it's not hygienic. I feel confident with my wife's food”*.

All participants explained and gave details of different aspects of cooking at home versus eating out. Their preferences were clarified by making comparisons in food quality, price, hygiene, and quality time with family and friends.

Question 9 – Cities close and far

Participants were asked to compare cities closer to and farther from their home city. The participants used different constructions besides the main one. That is, in addition to explaining the distances between cities by kilometers and length of the time to get to them, they also used larger signs, numbering (putting the cities in order) based on distance/length of time, and inflicting ‘far’ and ‘near/close’ with a long tense initial hold followed by a rapid release to indicate a longer time or distance, and all were accompanied with facial expressions. Inflection happened in all the participants' signing ‘far’ and ‘close’.

Participant's 16 Glossing:

INDEX-it MASHAH... (pause to think), INDEX-it AHVAZ FURTHER. WINDING [SO] FURTHER. INDEX-it MASHAD STREIGHT, 12 HOURS. INDEX-it AHAVAZ 14, 15 HOURS, FURTHER, PRO.3 WINDING.

Participant 14: “*Mashad... , Ahvaz is further; [the road] is winding, [so] it [becomes] further. [The road of] Mashad is straight. It’s 12 hours [from Karaj]; Ahvaz is 14 or 15 hours; it’s further. [The road] is winding*”. The participant repeats the 'winding' road to indicate the longer distance and inflicted ‘far’ besides telling the exact time.

Participant 15: “*Mashad is further. Ahvaz is closer. We go to Ahvaz by car in 6 hours. But we go to Mashad straight (nonstop) in my car for 13 hour, two times...*”. Besides explaining the distances, he used the opposite adjectives ‘further’ and ‘closer’ in conjoined constructions and in comparative forms. That is, three ways to compare: descriptive discourse, conjoined sentences, and infliction.

Participant 3: “*We get to Qum early; if you go (leave Isfahan) at 3, you will get there at 7. Mashad is further*”.

Comparing the place for a deaf ceremony with Deaf Society, Participant 9: “*The place [for deaf ceremony] is far*”. She signed ‘far’ accompanying a long strong hold and sharp release along with a facial expression to show ‘further’ (Figure 2).



Figure 2. Participant 9 signing ‘far’ with a long strong hold followed by a sudden release along with facial expressions to indicate comparative adjective

Question 10 – Size of their house and city

Firstly, the participants’ own house and their parents’ house were discussed, whether their houses were close to one another, and close to Deaf Society. Depending on the age of the participants and whether newly married, participants were asked if they owned a house or rented, how large their house was, and if they felt content with it.

Participant 3: “*Our house is bigger. It has a garden. Deaf society is of medium size...*”. She talked about the length (size).

Participant 9: “*My mum’s house is 80 m in Zeinabieh. Her house is good. It has a big lounge, a yard. My house is 60 m, small, one bedroom, without yard. My mother-in-law’s house is rental, biggest*”. She explained the houses size, gave their measurements in square meters and described their layout. She used 'good' with a facial expression to indicate it was bigger than her house, and signed 'big' with a long tense initial hold followed by a rapid release to show her mother-in-law's house is the biggest.

Participant 10's Glossing:

WE HAVE YARD, KITCHEN, TWO-BEDROOM, PRO.1 THINK HOUSE US BIGGER.
[OUR HOUSE] GOOD BIGGER.

Participant 10: *"We have yard, kitchen, two bedrooms, our house is bigger. It's good, big. [Of course] we have divided one of the bedrooms by partition so we have three bedrooms... our house is big"*.

Participant's 11 Glossing:

HOUSE US MEDIUM TWO-BATHROOM, TWO-BEDROOM. HOUSE US SMALLER.
HERE BIGGER.

Participant 11: *"Our house is of medium size. It has two bathrooms, two bedrooms. Our house is smaller. Here is bigger"*. Participant 11 and 10's explanation accompanied with a facial expression and looking around the Deaf Society, showed their houses were larger or smaller than the Deaf Society, respectively. She used the opposite adjectives in comparative forms 'smaller and bigger' in conjoined sentences.

Participants made comparisons by describing their house - layout (i.e., the number of bedrooms, lounge, garden), size (big or small), and measurement in square meters. Nonmanual features (facial expressions) were used. Instead of indexing to indicate the Deaf Society (as compared to their house), the participants including participants 10 and 11, used nonmanual features smiling and turning their eyes and heads around the building to show that it was small/big. 'Big' and 'small' were inflected with a long tense initial hold followed by a rapid release to a final hold accompanied with facial expressions. Conjoined sentences with opposite adjectives was also employed.

Question 11 – Tallest family member

Participants were asked whether they have – a spouse, siblings, or children, and how tall they were. The participants described those they compared individually, gave their exact height in centimeters, used numbering to indicate the tallest, and used conjoined constructions with opposite adjectives. Numbering was the dominant construction to compare the heights besides the explanation.

Participant 5 said, *"I'm tall, all are short"* and again she said (rephrased), *"All are good but I'm tall"*. She used her right hand to sign that she was tall and simultaneously her left hand to sign they were short. She used her flat hands palm facing down, with her right hand to be higher than her left hand, and her left hand moving to the left side several times linearly to show several people, comparing herself with other (more than one) family members. Participant 6 made the same comparison.

Participants 10 and 11 used 'numbering' to show the order. Participant 10: *"First my brother, second my dad, third myself, fourth my mum, fifth my brother the little one"*. Participant 11 did the same but in a different order.

Participant 9: *"First I was tall, all were short. All did exercises gradually, now all are tall,*

I'm short... my brother 178 cm, me 170 cm, a little different".

Question 12 – Sports – liked, practiced and good at

Participants were asked if - they did any sport, were interested in any specific sport or if they watched sports on TV. Different sports were compared. Participants shared their experiences, explained (descriptive discourse) their preference and discussed whether they continue to play or stopped for a particular reason.

Participant 9: *"I like volleyball. Some years ago when I was single I was playing volleyball... but my father said when you pass your studies you can go to volleyball... I don't know swimming. I'm scared. Everybody told me come come (to swim), then pulled me on my hand... I was about to drown".* Participant explained her experiences in volleyball and swimming to clarify which sports she had done, would prefer to continue, and which was scary and less wanted. Similarly, Participant 21: *"I like volleyball. I can't swim, I'll drown. I'll be suffocated... I like walking a little".* Three sports were explained individually to clarify which one she liked most.

Participant 14: *"I like bowling. I won the national championship... When I was single I liked footsal very much. We were practicing it. I regularly played. But unfortunately it is a difficult sport, you hurt a lot. But bowling is easy...".* Participant 14 spoke about his success in bowling, and his favorite sport in youth (footsal) which was difficult and so stopped following it. This explanation made it clear bowling was his current preference for a sport.

Participant 25: *"I like shooting, swimming, volleyball very much/ a lot, a lot, a lot. They are active. I like shooting and swimming a lot [because] I need to concentrate on my aim [for shooting]. For swimming you get wet but I like it as you become strong when you swim".* Three kinds of sports were explained one by one and the reason for being interested in them. 'A lot' was repeated three times to indicate her sports preference (Figure 3).



Figure 3. Participant 25 signing: (A) 'a lot'

(B) 'a lot'.

Question 13 – Seasons

Participants were asked the season(s) they liked more, believed was more beautiful, and was useful for them. Depending on the weather of the day they were interviewed, they were asked if they felt cold or not, watched the news on the snow or rain in some of cities of Iran, etc. Participants preferred to discuss the season(s) they liked more, the reasons behind it, and their

feelings or experiences.

Participant 4: *“I like autumn, I like cold weather, I don’t like heat. As I go climbing mountain, I like autumn because I sweat a little, also because of the nature, falling leaves, sightseeing, short days it’s good for me. Spring is also good. They are the same but I like autumn more”*. He explained about autumn and spring indicating his interest in autumn.

Participant 9: *“I like winter. The weather is good. I become happy. Spring and winter are good. In spring the flowers sprouts. Everywhere is green. I think [feel] it’s like heaven; trees, water, grass, flower like heaven. I don’t like summer; it’s hot...like hell. I become languid. I don’t like autumn”*. The seasons and feelings towards each one were explained individually and

Participant 27: *“As I’m born in Aban (the second month of autumn), [so] I like autumn a lot. In autumn when the leaves fall on the ground and I step on them..., it reminds me of my destiny. It’s interesting for me. It shows that this world is not eternal, hence whatever you do, [you need to] select the right way [so that] you don’t regret tomorrow. That is why I like autumn a lot. Spring shows reviving, coming back to life. Summer is hot; you feel tired. Winter is cold”*. He explained about his thought and feelings towards each season. ‘Cold’ was signed ‘cold’ along with a negative facial expression to show his opinion instead of talking about it.

14. Observation: ‘More’ and ‘Better’

‘Better’ and ‘more’ were the only words the participants signed as a comparative adjective. The same signs were also used for their superlative adjectives, ‘the best’ and ‘the most’. But a few participants, including Participants 15, signed ‘best’ as ‘good’ + ‘all’. ‘All’ was signed with flat hand palm facing down moving from right to left in the signing space. Some others, including Participants 17 and 18, signed ‘best’ like ‘good’ and then moved their hands (palm facing up) from left to right to show the word ‘all’.



Figure 4. Participant 1: Good two-handed/one-handed

The most typical examples of ‘more’ and ‘better’ observed in the current research were - ‘more’ signed same as ‘very’, ‘better’ signed like ‘good’, and ‘better’ signed the same as ‘very’ plus ‘good’

‘More’ signed same as ‘very’. Majority of the participants signed ‘more’ the same as ‘very’ whether one-handed or two handed: one or two open hands facing diagonally down, then

moving outwards simultaneously (Figure 5).



Figure 5. Participant 14 signing ‘more’

‘Better’ signed like ‘good’. Some of the participants signed ‘better’ like ‘good’ but with a long tense initial hold followed by a sharp release to show the comparative and superlative forms. Some others, including Participants 14, 15, 17 and 18, signed it like ‘good’, then opened their hands with spread fingers. It was signed one-handed (Figures 5) or two-handed (Participant 8). Participants 20 and 27, signed it similar to ‘good’ and then moved their both hands outwards and to the left side, without opening hands (keeping the original hand shape).

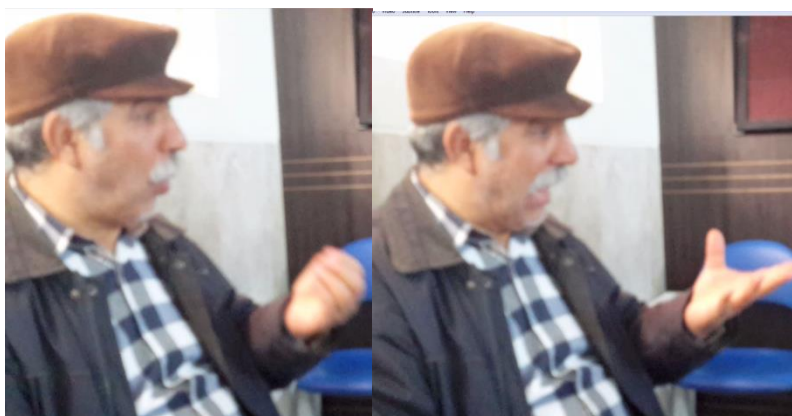


Figure 6. Participant 15 signing ‘better’ as ‘good’ one-handed. Closing the hand and then Opening hand with spread fingers

‘Better’ signed the same as ‘very’ plus ‘good’. Some participants signed ‘better’ the same as ‘very’ plus ‘good’. For instance, Participant 21 when comparing her family members who had more conversation with her said, “*There are three deaf people in my family; my sister, my brother and me. I talk with my brother a little. I talk with my sister; I understand. My sister is better*”. She signs ‘very’ plus ‘good’ to show ‘better’ (Figures 6).



Figure 7. Participant 21 signing: (A) ‘very’ and (B) ‘good’

15. Discussion

A study was performed with 33 deaf individuals in Iran to assess comparative and superlative adjectives used in the native sign language ZEI. The participants (Table 1) whom were from different cities of Iran, education background and age groups, were asked thirteen questions from selected topics and the adjectives used in their signing were observed. The participants were interviewed either individually or in groups depending on their availability. Group interviews rendered more natural, richer, and larger amount of data.

The study was designed based on the observations from a pilot study conducted prior with five deaf individuals. The pilot study participants were asked to compare different aspects of some pictures. The pilot study indicated that participants were not motivated enough to speak when asked to make a comparisons directly through pictures. Their speech was restrictive, lacking comparative and superlative adjectives needed to perform the current study. However in an informal friendly talk, where participants were asked questions on a topic, they were observed to be more relaxed, and enjoyed speaking about questions asked indirectly. For this reason questions were prepared on different topics for the deaf individuals to discuss and make comparisons in their signing.

The participants were asked a single question at a time. Interestingly, one topic led to another and the participants were comparing things and people. At times the discussions diverted to other topics. In such cases the conversations were allowed to continue as long as comparisons were made. Otherwise the discussions were redirected to comparisons by asking other questions.

Data excluding a comparison were omitted in the data analysis. For example in *Question 6 – healthy eating, fruits and their benefits*, some participants made a generalization stating they like all fruits equally. Such generalizations made which did not include a comparison have been removed.

The participants were asked counter questions. Sometimes the participants did not make a comparison. For example in *Question 8 – Home food versus restaurant food*, the participants were asked to compare whom cooks better in their household. Participant 3 in reply to this

question said “*All cooked well*”. So counter questions (i.e., who likes cooking more? What do you usually cook - traditional or modern food? Which one is healthier? etc.) were asked to guide Participant 3 to make a comparison.

The purpose of this research was to investigate the comparative construction in ZEI. The designated construction was found to be descriptive discourse in order to express gradability. The other constructions employed in other sign languages including NZSL and TĪD united together in this (descriptive) discourse.

To make comparisons, the participant mainly employed the descriptive discourse (not comparative), according to Anker 2004 (see also Smith 2003; Newman 1837), to explain the experiences or events and help the addressee to analyze and think about the happenings; they described, explained, reported, narrated, and represented each topic of comparison (the standard and the comparee) individually. Through the detailed explanations it was made clear which one they liked the most. A similar construction was used for both the comparative and superlative adjectives. For this reason, the participants sometimes required longer time to elucidate the (exact) differences. The same construction of explaining every single topic distinctly, was observed even when they talked briefly. Example:

Participant 24's Glossing:

MUM DAD ME HEARING, THREE-SISTER ME HEARING, TWO-BROTHER ME HEARING, PRO.1 ALONE DEAF. ALL [THE FAMILY] SIGN LIPREAD EQUALLY, NO DIFFERENCE. A LOT TALK TALK NOT, [TALK] A LITTLE. FRIENDS INDEX-them SONG GROUP TALK A LOT.

Participant 24: “*My mum and dad are hearing. My three sisters are hearing. My brother is hearing. I am the only deaf. All [the family] sign and lipread/talk equally; there is no difference. We don't talk a lot, [we talk] a little. I talk with my [deaf] friends, song group, a lot*”.

Participants did not use any suffixes like English and Persian and not a special pattern like Arabic but through explanations provided the addressees with enough information to discover which item they preferred. Ellipsis was occurred, similar to NZSL and TĪD, to delete unnecessary parts in the comparison.

The conjoined constructions, including two clauses with similar structures used independently and next to each other, were used both with verbal predicate: ‘don't talk a lot/[talk] a little’ (Participant 24) and with adjectival predicates (large/small): “*My mum's [house] is large, our house is small*” (Participant 13); the latter clauses involve a subject, verb to be, and a predicate; the predicate of the second clause ‘small’ is the antonym of the predicate of the first clause ‘large’.

The intensifier ‘very’ has been observed to be used by ZEI signers in a similar way as Auslan signers. It was signed as two open hands facing diagonally down that move outwards simultaneously accompanied with a facial expression to indicate a comparison. Sometimes the participants built the adverb ‘more’ or ‘a lot/very much’ upon the noun, not adjective; that

is, they signed a noun with a specific facial expression which meant ‘very’ to make a comparison. For example - Participant 22 signed CD (vs. TV) with the facial expression (Questions 4 and 5), Participants 24 and 25 upon Indian films (vs. the other kinds of films and news) (Questions 4 and 5), Participant 16 did it upon home food (vs. restaurant food) (Question 8), and Participant 19 upon cucumber (vs. other fruits) (Question 6).

‘Topicalization’ is another construction observed. Some participants used the comparee at the front of the sentence to show that they would prefer it ‘more’ or ‘the most’, e.g., Participant 19 said, “*Cucumber I like...*”:

In Question 6 he said, “*Cucumber I like, I don’t know why. Since I was a child until now I eat cucumber. When I was single, my mum went out of the house, I ate all the cucumbers in the plastic bag quickly. It finished. My mum didn’t say anything. She bought again and again... it’s delicious. Only cucumber, only cucumber. If it finishes or I’m a guest (going to somebody’s house), I have to eat [other fruits], I eat apple, banana, orange but more/a lot cucumber*”. Participant 19 explained his eagerness and interest in cucumbers and his lack of interest in other fruits separately. Besides, he signed ‘cucumber’ with intensity and strength along with a facial expression to show that he liked it ‘most’ (Figures 7), i.e. just used a nonmanual feature to refer to the meaning of ‘very’ without signing the word. Several repetition of ‘cucumber’ was appeared in his speech as well.

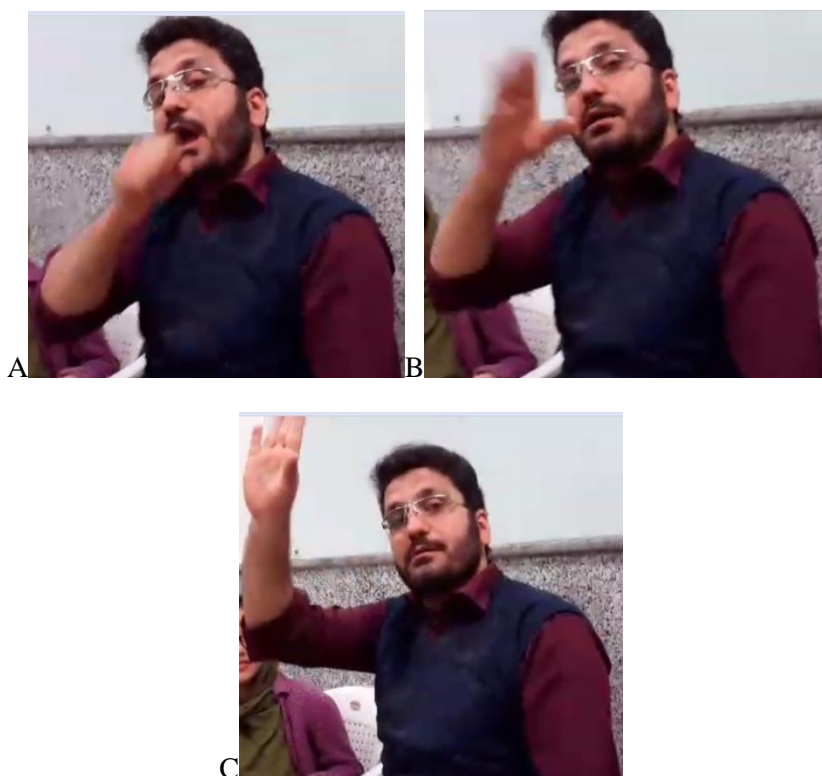


Figure 8. Participant 19 signing: (A) ‘Cucumber’ with a long tense initial hold, (B) a rapid release and (C) a final hold

ZEI signers, like BSL and Auslan signers, inflected some adjectives by bound morphemes. They used a long tense initial hold followed by a rapid release to a final hold. For instance, all

the participants inflected 'far', 'near/close', 'big/large' and 'small'. For example in Question 9 Participant 12, in reply to the question of "which was larger, Rasht or Lahijan?", said 'Rasht is larger'. He signed 'large' with a long tense hold followed by a sharp release (Figure 9).

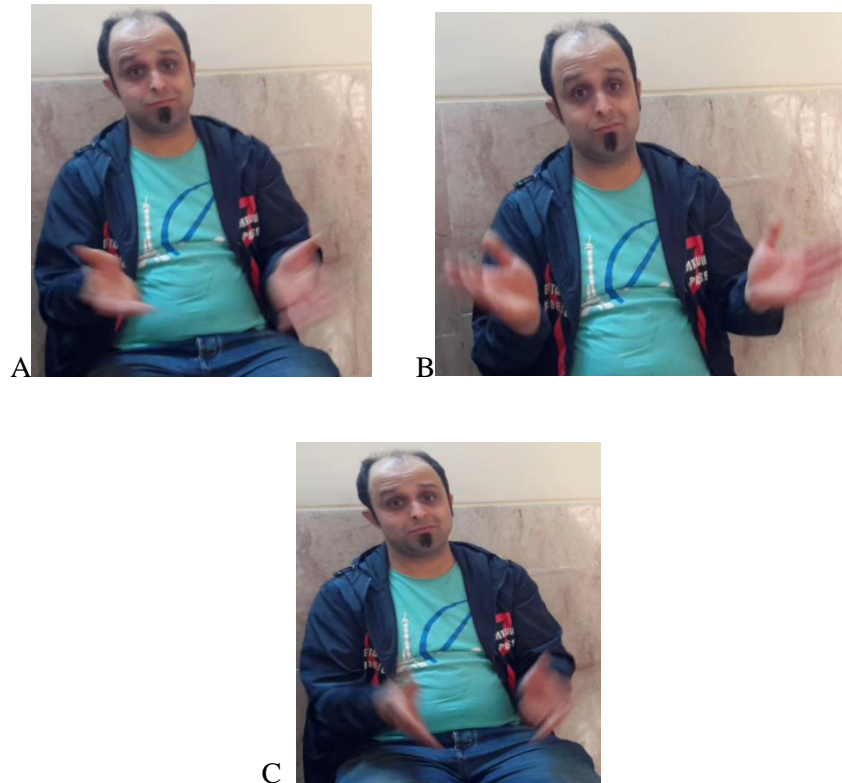


Figure 9. Participant 12 signing 'larger'. (A) A long tense hold, (B) Continuing the hold, and (C) a rapid release

The participants used indexing as in NZSL and TĪD. A referent was placed in a certain place or location in the signing space, and then referred to in turn. For example in Questions 6 when comparing the benefits of fruits, Participant 3 referred to banana and apple in the signing space to compare them. In Question 8 when comparing two people for their cooking, Participant 1 pointed his index finger to the left side of the signing space to indicate and explain about his wife and to right side at the Deaf Society (Figures 9).



Figure 10. Participant 1: (A) Indexing 'his wife' in the signing space. (B) Indexing 'Deaf Society/Deaf people' as compared with 'his wife'

Majority of the participants used repetition in their signing to indicate the comparative/superlative adjective:

In Question 3, Participant 13 said, *“I feel comfortable at deaf schools because at hearing schools the teachers speak and I don’t understand what they say. I get tired. I feel comfortable at deaf schools”*. The statement *“I feel comfortable at deaf schools”* was repeated twice.

‘Numbering’ was another construction the participants used. Items were put in order through numbers to make a comparison or mark a degree. Examples of ‘numbering’ used by the participants include - in Question 9 to discuss distances between cities, participants gave the cities an identifying number according to the distances with other cities and the length of the time taken to travel. In Question 10 to the houses, according to the size of their house. And in Question 11 to family members for their height, when discussing the tallest family member. Numbering was accompanied with longer and larger signs and a facial expression.

Sometimes the participants had the lip pattern of Persian comparative adjective but they signed the base of the adjective with the intensity and the facial expression. For instance Participants 2 and 3 said ‘better’, ‘healthier’ or ‘more’ but signed ‘good’. This was observed mostly with participants with a higher education.

The main construction, i.e. descriptive discourse for comparison, was impressive. The participants seemed patient and courteous; instead of jumping to the conclusion, they tolerantly explained the two cases (comparatives) or one case with the others (superlatives) leaving the judgment to the addressees. This technique improved the addressees’ knowledge helping and stimulating them to ponder over the options before making any decisions.

For instance in Questions 4 and 5, the participants could not select specific movies or programs they were interested to watch. This was because most of the programs had no subtitles or sign language interpreting. They were not interested in news, scientific films, documentaries and alike programs. They were restricted to watch programs with more physical everyday events that they themselves had experienced in their physical life, not those containing the mental and psychological issues, because they could better understand them. For this reason, the majority of the participants, including Participants 20, 21, 22 and 24, liked Indian films as they were mostly about love and marriage. The participants also pointed out, the hearing members of their families were usually too drawn into the TV programs and could not explain the contents to them, but briefly. When the participants asked about the films, their families asked them to wait but the families never went back to the films/programs and the participants tried to be patient. Despite this serious problem, the participants calmly explained the very limited TV channels and programs that they could watch and those that they couldn’t, explaining the reasons. Participants also noted they mostly preferred to use the internet for reading news. All this information provided the addressees an opportunity to understand which option was preferred by the native signers.

Socializing with the deaf participants during this research helped me realize that the hearing world needs to learn this calming well-mannered construction. Although the deaf participants’

experiences directly and indirectly indicated that they suffered from discrimination and oppression in the hearing world, they did not judge or put a label on anything. They took time to explain the topics of comparison set forth by the researchers. This might be due to the effect of the construction of ZEI. According to the hypothesis of linguistic relativity, also known as the Sapir-Whorf hypothesis, a language construction has influence in some areas of cognition or the world view of its speakers. Lack of affixes – but a few - for comparison in ZEI might have affected its speakers' cognitions, preventing them from inconsiderate and direct comparisons. Certainly further research is needed in this area.

16. Some Practical Examples

I (the researcher) immersed myself in the deaf community, attending deaf ceremonies, Deaf Societies, conferences, journeys, etc.; even accompanying them on the public transports when going to an event, rather than traveling alone. Therefore, I could obtain some data in the natural environment (e.g., when they were shopping or speaking together) which is worth mentioning.

For instance Participant 18 went to a shop with her friends to buy different things. They talked with one another and with the shopkeeper about the size, the thickness, or the length of the cardboard boxes, cardboard/paper tubes, and the bag they needed. They compared them so clearly that the hearing shopkeeper could understand. First she pointed to a box on the shelf that she needed to put her vase in. The shopkeeper brought her the box. Then she signed 'a large box' along with her facial expression to show it was too big for her purpose; she put her small vase inside the box moving it up and down to indicate it was not the right size. Immediately she signed a smaller box while moving the vase in the imaginary smaller box in the space along with a pleasing facial expression; she meant "I want a smaller one". The process (of bringing and taking back the items) sometimes continued more than once to get the right size. Therefore, in order to compare the boxes she described their sizes separately (e.g. this box is big and is not a right size to put my vase in. I want a smaller box); along with this construction they sometimes signed an adjective with a long tense initial hold followed by a rapid release as well to show how big or small the box was.

She and her friend did the same with other items they needed. For instance they used the same construction for the designs and materials of the bags, a thin cardboard, a long paper tube, etc.

17. Conclusion

The current study was an attempt to gain deeper insight into ZEI, leading to a broader perspective in all other sign languages. Improving the knowledge of ZEI helps to record its grammar, in invaluable act in preserving the language as well as benefiting linguistics, sign language interpreters and those interested in learning sign languages.

No similarities were observed in the construction used and the oral languages (i.e., Persian, Arabic, and English) the ZEI native signers were exposed to at school and at home in Iran.

The findings indicate that, native signers of ZEI used a specific construction, that is, the

discourse of description, individually explaining and clarifying the topics compared, to make comparisons, similarly for both comparative and superlative adjectives. Through these explanations and discussions the addressees realized the participants' preference. No matter how long or how briefly the participants explained, they always kept this construction.

Besides the constructions used in other sign languages including Auslan, BSL, and ASL (i.e., using the intensifier 'very' along with a facial expression, using a nonmanual feature by itself, using the bound morphemes of a long tense initial hold followed by a rapid release for inflection, and the use of 'indexing' which is pointing at the two already identified locations in the signing space to refer to two referents respectively), four other constructions were used in ZEI including 'numbering' (i.e., giving an identifying number to some people or some items the participants are comparing), 'repetition', and lastly 'topicalization'. The descriptive discourse was sometimes accompanied by some of these constructions.

Factors such as age, gender, education, degrees of deafness, deaf/hearing families, and cochlear implant did not affect nor interfere with the findings. Hence all the participants utilized the same constructions for comparisons.

The descriptive construction was a logical discussion on the topics of comparison (the standard and the comparee) to be compared. This provided the researcher an opportunity to find out which topic the ZEI native signers preferred and why. In other words, superiority, inferiority, equality, the degree or amount of a property which the topics possess is made clear. Without judging and creating a negative atmosphere, the participants explained the compared items clearly and left the decisions and inferences to the researcher. It seemed the participants indirectly involved the researcher in the comparisons.

Furthermore through this construction, the participants could express the degree or the amount of their inclination towards each item compared. Helping the researcher to somewhat understand the signers' tendency in their choices and avoid thinking the participants made an absolute decision.

Finally, the results indicate that the participants used some constructions more for specific topics. To compare distances or size, 'inflection' was preferred. To compare height, 'numbering' would be preferred. However, all these constructions united together in the main construction that is the descriptive discourse. Further research is needed to determine the dominant constructions applied in different situations and register.

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References

Anker, S. (2004). *Real Writing with Readings: Paragraphs and Essays for College, Work,*

and Everyday Life. Boston: Bedford / St. Martin's.

Anvari, H., & Ahmadi Givi, H. (2010). *Persian Syntax 2*. Tehran: Fatemi Press.

Aristodemo, V., & Geraci, C. (2017). Visible degrees in Italian Sign Language. *Natural Language and Linguistic Theory*, 36, 685-699.

Bahadori, I., Loh Mousavi, M., Tehranizadeh, H., Pirouzi, M., Mahmoudi, R., & Ghasemishad, E. (2010). *Farsi Sign Language* (Vol. 1 & 2). Tehran: Disability and Welfare University Press.

Brennan, M. (1992). The Visual World of BSL: An Introduction. In D. Brien (Ed.), *Dictionary of British Sign Language/English* (pp. 1-133). London: Faber & Faber.

Brennan, M. (1994a). Pragmatics and Productivity. In I. Ahlgren, B. Bergman, & M. Brennan (Eds.), *Perspectives on Sign Language Usage: Papers from the Fifth International Symposium on Sign Language Research* (pp. 371-390). Durham, UK: International Sign Linguistics Association.

Chafe, W. L. (1976). Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Points of View. In C. Li (Ed.), *Subject and Topic* (pp. 25-55). New York: Academic Press.

Dixon, R. M. W. (2012). *Basic Linguistic Theory* (Volume 3). *Further Grammatical Topics*. Oxford: Oxford University Press.

Farshidvard, Kh. (2009). *A Brief Summary of Recent Syntax Based on New Linguistics*. Tehran: Sokhan Press.

Fiqhizadeh, A. H. (2004). *Arabic Syntax (2)*. Compiled by Shafiei, S. and Mir Abulhasani, R. Tehran: Hadith Sciences Open College.

Foucault, M. (1972). *The Archaeology of Knowledge and the Discourse on Language*. Translated from the French by A. M. Sheridan Smith. New York: Pantheon Books.

Johnston, T. (1992). The Realization of the Linguistic Metafunctions in a Sign Language. *Language Sciences*, 14(4), 317-353.

Johnston, T., & Schembri, A. (2007). *Australian Sign Language: An introduction to sign language linguistics*. Cambridge: Cambridge University Press.

Kamp, H. (1981). A theory of truth and semantic representation. In J. A. G. Groenendijk, T. M. V. Janssen, & M. B. J. Stokhof (Eds.), *Formal methods in the Study of Language, Mathematical Centre Tracts 135* (pp. 277-322). Amsterdam: Mathematisch Centrum.

Leavitt, J. (2011). *Linguistic Relativities: Language Diversity and Modern Thought*. Cambridge, UK: Cambridge University Press.

Liddell, S. K. (1980). *American Sign Language Syntax*. The Hague: Mouton.

McKee, R. (2015). *New Zealand Sign Language: A Reference Grammar*. Bridget Williams Books. Retrieved from <http://www.bwb.co.nz/books/new-zealand-sign-language>

- Natel Khanlari, P. (1984). *Persian Grammar*. Tehran: Tous Press.
- Newman, P. S. (1837). *A Practical System of Rhetoric; or the principles and rules of style, inferred from examples of writing. With an historical dissertation on English style*. London: John R. Priestley.
- Nuhbalaoğlu, D., & Özsoy, A. S. (2014). Linearization in NPs in TİD. *Paper presented at Formal and Experimental Approaches to Sign Linguistics Theory (FEAST)*, University of Venice.
- Özsoy A. S., & Kaşıkara, H. (2018). Comparatives in Turkish Sign Language (TİD). *Linguistic Discovery*, 16(1), 47-63.
- Penilla, A. R., & Taylor, A. L. (2012). *Signing for Dummies*. John Wiley & Sons: New Jersey.
- Pfau, R., & Quer, J. (2012). Nonmanuals: their grammatical and prosodic roles. In D. Brentari, (Ed.), *Sign Languages* (pp. 381-402). Cambridge: Cambridge University Press.
- Qalaeini, M. (2005). *A Comprehensive Collection of Arabic Lessons*. Cairo: Dar al-Hadith Press.
- Sandler, W., & Lillo-Martin, D. (2006). *Sign Language and Linguistic Universals*. Cambridge: Cambridge University Press.
- Sharatuni, R. (2005). *Translation and Explanation of Basics of Arabic/Translated by Seyyed A. Hosseini*. Qum: Dar al-Ilm Press.
- Sharatuni, R. (2010). *Basics of Arabic/Translated by M. Sarmadi*. Tehran: Ilmi.
- Shariat, M. J. (1993). *Persian Grammar*. Tehran: Asatir Press.
- Stassen, L. (1985). *Comparison and Universal Grammar*. Oxford: Basil Blackwell.
- Stassen, L. (2006). Comparative Constructions. In K. Allen, (Ed.), *Encyclopedia of Language and Linguistics* (2nd ed., pp. 687-689). Oxford: Elsevier.
- Stassen, L. (2013). Comparative constructions. In M. S. Dryer, & M. Haspelmath (Eds.), *The World Atlas of Language Constructions Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://wals.info/chapter/121>
- Sutton-Spence, R., & Woll, B. (2013). *The Linguistics of British Sign Language: An Introduction*. Cambridge: Cambridge University Press.
- Tabatabaei, M. R. (1999). *Primary Morphology*. Qum: Dar ul-Ilm Press.
- Uroosa, I. (2010). *Learning Arabic Language of the Quran*. Riyadh: Darussalam.
- Vahidian Kamyar, T. (2001). *Persian Grammar (1)*. Tehran: SAMT.
- Van Dijk, T. A. (1993). Principles of Critical Discourse Analysis. *Discourse & Society*, 4(2), 249-283. London. Newbury Park and New Delhi: Sage.

Wilbur, R. B. (1999). Stress in ASL: Empirical Evidence and Linguistic Issues. *Language and Speech*, 42, 229-250.

Wilbur, R. B. (2008). Complex Predicates Involving Events, Time and Aspect: Is This Why Sign Languages look so similar?. In J. Quer (Ed.), *Theoretical Issues in Sign Language Research* (pp. 217-250). Hamburg, Germany: Signum Press.

Notes

Note 1. In Persian, when two vowels are adjacent in a word, a consonant comes between them making the pronunciation easier. Hence, *motale'e + e* changes to *motale'e + y + e* (Vahidian Kamyar, 2001).

Note 2. Gilan is a province in the North of Iran, and Rasht is the center of it.

Note 3. A 'proform' is any form that refers to, and stands in the place of, or does the job of, some other form, which is often a noun previously identified; therefore the terms 'proform' and 'pronoun' are the same (Sutton-Spence and Woll 2013).

Note 4. "...the adjective TALL is associated with two loci α and β which correspond to the standard and reference degrees" (Aristodemo & Geraci 2017, p. 4).

Note 5. The intensity has been interpreted as the incorporation of the degree into the predicate sign in TİD by Özsoy & Kaşıkara 2018.

Note 6. "PRO1" meaning a first person pronoun. In NZSL, is done by simply pointing at yourself with an index finger.

Note 7. Video available at: <http://nzsl.vuw.ac.nz/signs/6168>

Note 8. 'CL' refers to classifier.

Note 9. 'eo' refers to eye-opening.

Note 10. 'ebr' refers to eyebrow raise.

Note 11. 'Natural' sign language is an important issue in Iran. A dictionary in four volumes, which are also used for the purpose of teaching ZEI by a few people and not simply as a dictionary, has been prepared by the group of 'teaching and rehabilitating the deaf'; this group contains both deaf and hearing individuals. There are some disagreements about some of the signs in those books by Deaf Community; in fact, they are considered as made-up/standard signs vs. natural signs. The authors have decided to make changes in the new versions but it has not yet been revised.

Note 12. Many signs need more than one English word to be glossed because there is not an exact word or word for word English translation. Thus, we need several words to refer to the meaning of the sign. However, they should be connected by a hyphen to indicate they refer to a single sign, e.g. 'DON'T-HAVE' in ZEI is a single sign, thus it is written with a hyphen if we want to sign 'don't have'; also to join an object to a verb, e.g. TELL-HIM.

Note 13. PRO.1, PRO.2, PRO.3 refer to pronouns to first person (I or me), second person (you), and third person pronouns (s/he, it, him, her, it).

Note 14. When we want to show a verb sign repetition, we can use the plus symbol, e.g. TALK ++, which means the word has been signed more than once or repeatedly. The adverb 'a lot' is not signed at all, but implied.

Note 15. The word in capital letters contains the main meaning, e.g. 'GIVE'. The word in small letters refers to something about the main meaning: GIVE-me or you-GIVE-me.

Note 16. To indicate that a signer has pointed to a specific location whether personal pronouns and pointing towards an object, we write 'INDEX'; then to show grammatical information we add pronouns: 'I or me', 'you', 's/he, it, him, her, it', 'they', 'we', 'you all', 'them', e.g. INDEX-I or INDEX-me.

Note 17. To differentiate between the sign and a finger spelled word we include dashes in between each letter.

Note 18. A small city in central Iran, near Isfahan, known for its unique texture (smell and taste) rice.

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