

The Role of Iconicity in Home Sign Language

Iman Garra-Alloush*

Abstract:¹

The study of signed languages provides an interesting insight into the way humans develop communication systems. The present study involves an analysis of a selected set of chosen vocabulary used by an adult homesigner, and then is compared to the productions made by his hearing wife. By comparing the signs made by both of them, conclusions are to be made about the role iconicity plays in their languages. The wife -a hearing woman- was asked to describe a set of pictures, and the man was asked to describe what he sees respectively. Grammarians since Saussure have investigated whether language signs and symbols are arbitrary or not. In general, they have insisted that the relation between languages and symbols produced by the speakers is arbitrary (Frishberg, 1975). In particular, this paper may shed light on questions of language creation, especially the question “How many brains does it take to make a language ²”?

1. Background information

Sign languages of the deaf are autonomous languages which are not derivative from the spoken languages of hearing people (Klima & Bellugi, 1979). A sign language is just like any other language. It is a primary linguistic system that is passed down from one generation of deaf people to the next. It has structural properties at syntactic, morphological, and phonological levels of structure (Goldin-Meadow, 1993).

* Al-Qasemi Academy

¹ This study was supervised by Prof. Wendy Sandler, and with the help of her Sign Language Lab, University of Haifa.

² The question was raised by Prof. Wendy Sandler (English Department, University of Haifa).

1.1 Home Sign:

In an appropriate Linguistic environment, deaf children are not considered handicapped. That is, deaf children of deaf parents are exposed from birth to a conventional sign language input, for example ASL. It has been found that these children acquire language naturally. They acquire languages in almost the same stages hearing children go through (Newport & Meier, 1985). However, these children mentioned above (deaf children with deaf parents) constitute only 10% of the deaf community. The other 90% of the deaf children are not born to deaf parents. They are born to hearing parents who cannot expose them to a conventional sign language input. They naturally expose them to speech (Hoffmeister & Wilbur, 1980). Unfortunately, it is completely uncommon for deaf children to acquire the spoken language of their parents, without specialized training. Even with this training, deaf children's acquisition of speech is delayed when compared to the acquisition of hearing children with hearing parents or either the language acquisition of deaf children born to deaf parents. (Goldin-Meadow, 1993). In addition, deaf children of hearing parents are not likely to receive any conventional sign input unless they are sent to a school in which sign language is used.

Studies of deaf children of hearing parents have shown that these children spontaneously develop a system of gestures to communicate, even though they are not exposed to a conventional sign language model. These gestures are referred to as "home signs" (Goldin-Meadow, 1984; 1993). The name "homesign", maybe named so, because the environment in which family members communicate with each other, is the environment in which the child develops his own language system. A home signer, then, is a deaf person who had no access to conventional sign languages during childhood, and had no contact with a Deaf community since then. Despite the circumstances, he

develops a homesign system that he shares with the hearing people around him (Torigeo & Takei, 2002).

1.2 Functions of Homesign System:

The studies addressing the functions of homesign systems indicate that deaf children can use homesign for many functions that a conventional language is used for, but the lack of certain linguistic structures constrains homesign system from serving these functions. Some of these functions are the following (Also summarized in Morford, 1996):

1. Homesigners use their homesign system for **conventional language functions**. Furthermore, homesigners can use their gestures to make what Morford (1996) refers to as “displaced reference”. Displaced reference is a kind of communication about information that is “remote from the site of communicative interaction” (Morford, 1996: 172).
2. **Narrative:** Morford’s (1995) study of a spontaneous narrative of past personal experience and an elicited fantasy narrative of two adolescent homesigners shows that the homesigners focus on the sequence of actions that describe the event.
3. **Metalinguistic functions:** There are reports of instances in which homesigners use their gestures for metalinguistic functions (Morford, 1996). For example, some homesigners use one hand to make a gesture, and other hand to point at the gesture (Goldin-Meadow, 1993).

1.3 Basic properties of Homesign:

Homesign is structured independently of speech. It exhibits many structural similarities to signed languages (Morford, 2002). Homesign is used by a very limited sociolinguistic community, which is the deaf member, and in some cases some of the family members. These factors may prevent homesign becoming as complex as a natural sign language such as ASL (Morford, 1996).

Deaf individuals, who have not yet been exposed to a conventional signed input, communicate via gestures. There are two primary types of gestures that are included in analysis of these systems: “deictic gestures” and “iconic/ descriptive” gestures (Morford, 1996). Deictic gestures refer to some feature of the present environment. The descriptive gestures are pantomimic (Morford, 1996). The homesigner interlocutor understands these gestures according to the context of the speech (Morford, 1996).

There are also other two additional classes of gestures which Morford (1996) mentions: first, conventional gestures, which are used by hearing people within the homesigner’s culture. For example, some cultures communicate the concept of good luck with crossed fingers, or thumb up. Second, markers that are gestures that modify the meaning of a string of gestures. An example is conveying negation by a headshake or waving index finger.

.14 The Role of Iconicity in a Language

The relationship between word and meaning in spoken languages is arbitrary. However, that same relation is quite motivated relating sign languages, e.g. ASL (Meier & Newport, 1985). Both signed languages and homesign systems have many iconic signs. An iconic sign is a sign that bears some resemblance to its referent (O’Grady, Archibald, Aronoff, and Rees-Miller, 2001). Research on sign languages indicates that the iconicity of signs does not make it easier for the deaf to acquire or to remember by native signers (Klima & Bellugi, 1979; Newport & Meier, 1985). In deaf communication, mimetic representation is the source of many symbols used in signing. For example, for the sign ‘SAD’, Klima & Bellugi (1979) quote from Riekehof (1963): “long-faced, gloomy.”

Klima & Bellugi (1979) give the example of deaf children learning ASL as a native language: when they want to express something which they do not know the sign for, they simply ‘invent’ signs, that often represent mimetic properties.

One three-year-old deaf child invented a sign for 'milkshake' which exhibits the movement of a blender (Klima & Bellugi, 1979).

Although these 'inventions' are described as mimetic, they are not completely so. They have some qualities which are conventional characteristics of ASL signs for example, there are: the handshapes, the locations, and the movements that belong to the sign language inventory (Klima & Bellugi, 1979).

Based on the above, the following section will investigate the role of iconicity in the home sign gestures used by the two signers investigated.

Section 2: Analyzing the Vocabulary used by the home signer and his hearing wife:

*** Introduction**

In this section, I describe some of the vocabulary used by a homesigner, who had no access to conventional sign languages during his childhood, and continued living in a hearing community with no other deaf person to share his language with. But despite these circumstances he developed a homesign system that is shared with the close hearing community he is living with. The deaf man who participated in the study is sixty-two years old. I was informed that he got deaf from a very early age. He is the only deaf member in his family, and maybe even the only deaf person in the village. He had never attended school, and never was in contact with deaf communities.

At present, most of the hearing people living around him usually communicate with him through gestures. It might be important to note that these people communicate with this man through gestures, but also (and mostly, as reported from his relatives), they accompany the gesturing with speech. His wife -a hearing woman- participated in the study as well. It might be worth mentioning that the woman is a housewife, and has a broken leg, so while signing she was stretched on her bed.

2.1. Procedure

The deaf man was videotaped when he was shown some pictures on the laptop's screen by Prof. Wendy Sandler. His job was to sign what appears on the screen, in the attendance of his wife. Then, the laptop was moved to his wife. She was shown the same pictures her husband saw. Her job was to sign what she sees on the screen.

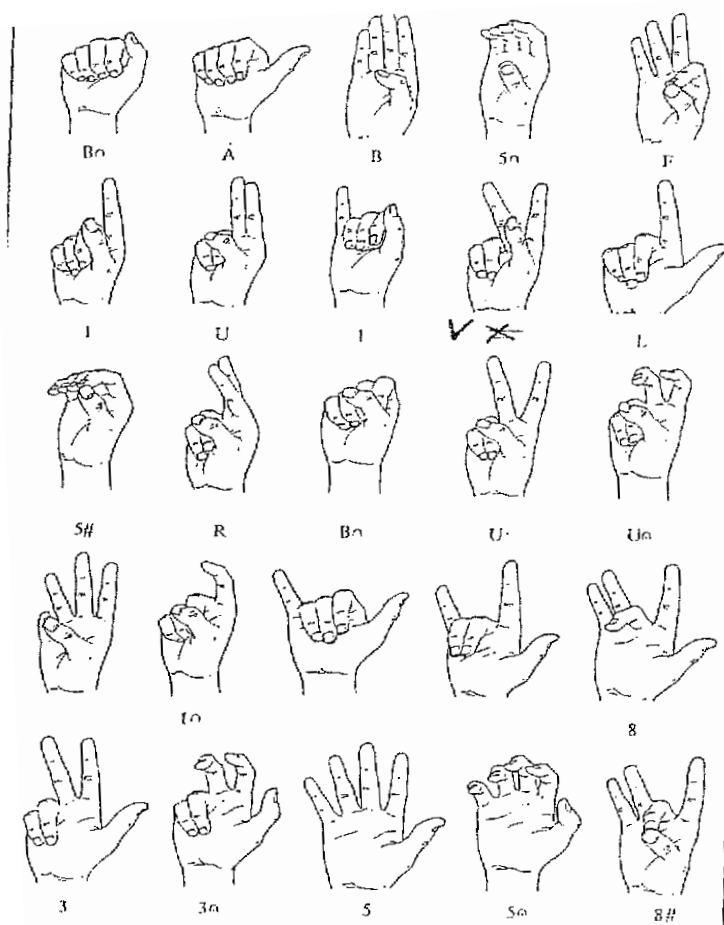
In the following, I aim to compare the signs made by both of the signers. By comparing the signs made by both of them, I can conclude whether they have exactly the same 'language' or not. Among the different things that could be depicted from his speech, I will draw conclusions about the role of iconicity in his home sign system .

2.2. Analyzing the vocabulary¹

The following lines are paying closer attention to the differences between the man's signing and his wife's signing, concentrating mainly on hand shapes location, (also, if available, facial expressions).

Following the conventions of literature on American Sign Language, I use an English word in capital letters to represent a sign. I will first describe the man's signing and then the woman's signing. After that I write a comparison between the two methods of signing. Many times I rely on the primary Handshape Sketch with new symbols (adapted from Meier (1982) to describe the hand-shape of both signers:

¹ . The original study includes a detailed description of 35 pictures; however, and due to the limited space of this paper, I will only relate to a few of them.



1. 'DOG:'

***Man:** gesture like “go away” ; then biting gesture with his teeth. Then as if he repeats again:

Hand biting gesture: dominant hand shape (5), palm down. The hand is close to the mouth, and then he makes a biting gesture, as if hand is between the teeth. Then hand goes away.

***Woman:** mouth is doing biting motion. Hand is in front of the body, doing a biting gesture, shaped (3). Then gesture like “go away .”

***Comparison:** They both share the biting motion and the “go away” gesture. Yet, they differ in hand-shapes and their hands locations.

2. ‘CAT:’

***Man:** “scat gesture”, like “go away .”

Only one hand moves, shape (5), palm in.

***Woman:** hand is doing a “scat” gesture; hand is in front of the body, shape (5), and palm in.

***Comparison:** they share the “scat” gesture. They also share one hand movement. They use the same shape, almost the same location (in front of the body).

3. ‘CAMEL’

***Man:** Non-dominant hand; shape (5), the palm is towards the signer’s body.

Dominant hand: shape (V). Hand doing riding motion on the non-dominant hand. Then, he points with his index finger towards himself and then makes a gesture implying something happened in the ‘past’, as follows: dominant hand shaped (L), palm in (towards the signers body), then hand moves towards the body of the signer, up of his shoulder.

Then he points with his index toward her

***Woman:** Says “this is a camel” then gestures :

(a.) The non-dominant hand shape is (B), the location is almost facing the chest.

Dominant hand: shape: (L); makes a riding motion at the non dominant hand.

(b.) then she makes a gesture like “come here”, or “look here”, or maybe “pay attention”, in the following sequence:

Non dominant hand does not move, but at the same place parallel to dominant hand. Dominant hand's shape is (5) (but fingers close each to other) palm facing her face.

(c.) She says "Where the picture is". (Not in the form of a question, but conveying that there's a picture of them, Lying somewhere, and she is reminding him of this). At the same time she gestures:

Dominant hand is making a stop figure (shape no. (5) but fingers are close one to the other); palm facing her face .

(d.) She says: "This is a camel, where....", while saying this she signs. Her hands are near to her ears (respectively: right hand next to right ear, left hand next to left ear), (This is actually a gesture that Muslims do whenever they start praying.(

(e.) Then she makes the same (a.) signs, but this time, the location of the hands is parallel to the top of her face.

(f.) She says: "When we were praying there" [maybe she means 'Mecca' by "there"]. At the same time her hands go back to their location at (d.). And afterwards, her hands move away from her body implying something far.

(g.) She continues saying: " that you rode", and makes the same riding motion described at (a.), but hands are almost at nose's level.

(h.) Then she points at him by her index, and says "This is it."

* **Comparison:** Regarding this sign, it is obvious that the woman's signing is more complex than her husbands. They both share the riding motion gesture, though they do it with different hand-shapes. They also share the general idea that they have themselves been connected to the 'thing' described (The man points towards himself, the woman points towards her husband, and while she talks we understand her path of thinking of this "thing" as something they both have shared and experienced). They also both point one toward the other

at the end of his signing. However, they are different in the use of their hand-shapes, the woman describes almost in detail what came to her mind to give a clear idea to her husband of what she saw.

4. 'HORSE':

***Man:** non-dominant hand: shape (5), palm towards the signer's body.

Dominant: shape (V), palm makes a riding motion on the non-dominant hand. Then he points towards himself with all his hand (almost shape (5#), but thumb's tip is touching the middle finger).

***Woman:** She says: "This is a horse", while she gestures in the following sequence:

The non-dominant hand is located parallel to the abdomens shape (5) palm up. (She uses fingers).

Dominant hand: shape (L), dominant hand is at the non-dominant hand making a riding motion (almost at the thumb).


***Comparison:** they both share the riding motion. Hand-shapes are not exactly the same. There are also differences in hands locations.

5. 'FISH':

***Man :**

a. Dominant hand shape (5#) (all fingers are close to each other), hand moves toward his mouth, then he opens his mouth and makes an eating motion

b. Then dominant hand moves down parallel to the abdomen, shape (5), and palm down, above the non-dominant hand.

Non-dominant hand: shape (5), palm down:  (the top of the arrow resembles the direction of the tips of fingers).

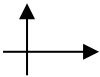
Dominant hand goes back and forth (twice), making a fish scaling motion

c. Then dominant hand moves toward his mouth and does the eating gesture described in (a).

***Woman:** she says: “this is...” and signs as follows :

Non-dominant hand: palm down, shape (5) (stop figure).

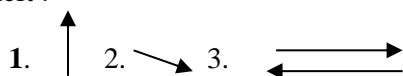
Dominant hand: shape (5), above the non-dominant hand (but not touching it), twice .

Hands are in the following shape:  (the top of the arrow resembles the direction of the tips of fingers). Dominant hand goes back and forth, making a fish scaling motion.

***Comparison:** the first evident difference is the man’s gesturing for eating, while the woman does not do that. Yet they share the fish scaling motion. Hand shapes gesturing the fish scaling are the same for both the man and the woman, yet their locations are different.

6. ‘BUG’:

***Man:** only dominant hand moves, hand shape is (5), the palm is out. Hand is parallel to the neck, moves down and then goes to the right and then to the left :



***Woman:** she says: “this is a bug, oh, it is too big!” then she starts signing:

a. Both hands shape (5), palms down, away from the signer’s body, moving towards the wall. (As if the bug is moving on the wall). One hand is above another, yet not touching each another. One hand touches the wall; the other hand does not touch the wall .

b. Then she explains: “like the ones moving in the [our] toilets”: and signs: a taking off pants motion: both hands make the same movement. They start from above next to the chest, each hand at its side: left at left side, and right next to right side. Hands are shaped (5#), and then each hands moves down towards the legs. Hands movement is as follows :

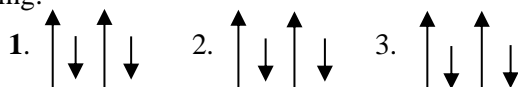
c. When hands are down towards legs, fingers are released.



***Comparison:** there is almost no common thing between their gesturing of ‘BUG’. The man describes it maybe as something not worthy, or something that should be got rid off. On the other hand the woman tries to explain what she saw by making a moving motion, and relates it to a common experience she and her husband have bugs in their house’s toilets. The arrows above show the difference in hand shapes directions.

7. ‘7DOVE’:

***Man:** both hands make a flying motion: shape (5). Hands move up and down, palms out. The hands are parallel to shoulders, yet far from them. Hands are far one from another. The hands movement is like opening hand and then directly closing it. Then he repeats the signing, but this time makes his lips as whispering and as if pronouncing “ama” (the word for ‘dove’ in Arabic is ‘hamami’). Hands are located high in the air. The hands movement is like the following:



***Woman:** she says: “this is a dove”, and signs as follows: hands alternating, palms out. Shape (5) hands moving up and down. Hands are located in front of the face high in the air.

***Comparison:** they do almost the same gesturing. They both share the flying gesture, which they use the same hand shapes and movements.

8. ‘DONKEY’:

***Man:** non-dominant hand: shape (5). Palm towards the signer’s body. Hand is parallel to the abdomen

Dominant hand: shape (V), palm in. Hand doing riding motion on the non-dominant hand. Then he repeats the riding motion.

***Woman:** a. she says: “this is a donkey”. Then makes a riding gesture where the hands are parallel to the chest:

Non-dominant hand: shape (5), palm out .

Dominant hand: shape (L), hand is at the non dominant hand making a riding motion.

- a. She says again: “This is a donkey” and explains by gesturing: raises her hands up parallel to the neck, and does the same riding motion in (a). again.
- b. She continues saying: “ just like the one we had once...” and gestures at the same time: the dominant hand moves from up to down, shaped (1?), index moves in a circle-like movement (twice).
- c. “... and was stolen”, as she says this, both hands make the (5?) shape, and then fingers close making a (B?). (The movement is from up to down making a gesture of someone taking something or catching it).

***Comparison:** they both share the riding motion, but the woman adds some details to explain what she saw. If we want to compare the common thing between them (the riding motion), we find that they do not exactly have the same hand shapes. They have the same non-dominant hand shape (i.e. (5)), but the dominant hand shapes differ, the man uses the (V) shape, while the woman uses the (L) hand shape .

9. ‘ TOMATO’:

***Man:** non-dominant hand: shape (B), palm down.

Dominant hand: crossing non-dominant hand (at it), shape (5) (fingers are close together), palm towards the body, making a cutting gesture twice .

Then hand shape changes to (5 ??), palm up. Hand moves towards his mouth, and then away from his mouth.

***Woman:** a. she says “tomato” and signs it as follows:

- b. Dominant hand is above the non-dominant hand (almost touching it, yet not touching), with the palm in, a slightly towards the abdomen of the signer. Then shaped (5) going back and forth (three times).
- d. Then does it again but this time the non-dominant is shaped (5Ω) (Or maybe (5#)), while the dominant is shaped (5) goes down above the non-dominant hand, and then up, for one time (as if cutting something).
- e. Then dominant hand moves in the air, in front of the face. She makes a hand shape like (3?) but only the small finger is closed down, as if she is catching a tomato .
- f. Then points with her two hands' indexes toward the kitchen and says to her husband: "go and bring a tomato ."

***Comparison:** they both share the ideas of cutting and the eating gesturing. However, their hand-shapes are not exactly the same.

10. 'TELEPHONE':

***Man:** makes a facial expression of being annoyed. His hands move away from his abdomen. Then he furthers them.

Dominant hand: palm in (towards body), shape (5), then he removes it away from his body. He makes a (...) (am... am...), then he makes a 'non' gesture: palm in and then out (hand opens and closes.)

Then, he bends his head a little. He puts his hand at his ear. Then he points towards himself 'no', with his two hands. (Meaning that he does not hear, or is incapable of using it), with an affective facial expression.

***Woman:** She says: "This is a telephone that is put at the ear". Dominant hand moves towards right ear, palm is out, shape (5?)

* **Comparison:** Hand-shapes are not the same. The woman's dominant hand-shape is (5?), while the man uses (5) hand-shape.

2.3. Iconicity in the Investigated Homesigner's Gestures /Results.

Iconicity is one feature of signed languages that often captures a non-signer's attention, i.e. the prevalence of signs that resemble their referents. (Morford, Singleton, and Goldin-Meadow, 1993). Before getting into the analysis of the role of iconicity in this specific homesigners' vocabulary, one should keep in mind the following facts:

- 1 Iconicity does not by any means ensure a one-to-one mapping between form and meaning. (Morford, 1996).
- 2 Iconicity does not guarantee the transparency of a symbol's meaning unless the signer and the interlocutors share cultural knowledge of the relationship between the gesture's form and it's meaning (Morford, 1996).

I will adopt the following definition of iconicity when determining whether a sign is iconic or not: "iconicity is the degree of physical similarity between a sign and its referent, in conjunction with the extent for which a sign offers the perceiver a clue to meaning" (Meier & Newport, 1985).

The results of my study support the notion that many of the homesigners' gestures are iconic. Consider the following examples:

Sign	Relation between sign and meaning (man)	Relation between sign and meaning (woman)
1. DOG	Biting motion	Biting motion
2. CAMEL	Riding motion	Riding motion
3. HORSE	Riding motion	Riding motion
4. FISH	Fish scaling, eating	Fish scaling
5. DOVE	Flying gesture	Flying gesture
6. TOMATOE	Eating and cutting	Eating and cutting
7. EGG	Breaking egg	Breaking egg
8. LEMON	Juice motion	Juice motion

Sign	Relation between sign and meaning (man)	Relation between sign and meaning (woman)
9. KNIFE	Cutting gesture	Cutting gesture
10. FLOWER	Eating gesture	Smelling gesture
11. SNAKE	'sting' motion	'sting' motion
12. PEN	Writing gesture	Writing gesture
13. BANANA	'peeling' gesture	'peeling' gesture
14. DONKEY	Riding motion	Riding motion
15. TELEPHONE	Hand at ears	Hand at ear
16. WATCH	Uses the referent itself to refer to what he sees	Uses the referent itself to refer to what she sees
17. REMOTE CONTROL	'pressing' gesture	Uses the referent itself to refer to it.
18. SPOON	Ladling motion	Ladling motion
19. COCKROACH	"killing" gesture/of getting rid of something	Crawling motion

The table shows a high percentage of iconicity between the two signers. The questions to be asked here are: "who is more iconic, the man or the woman?" "Are they systematic in their signing"?

In order to answer these questions, we should be aware of the fact that their iconicity is not a mere matching between a referent and its meaning. It is actually more than that. Almost every sign they are asked to describe, they try to connect it to something personal, a kind of a personal experience that is connected to the picture they are asked to describe. This is actually how they differentiate between different pictures with close connotations. Consider the words 'CAMEL', 'HORSE', and 'DONKEY', for example. All these three words involve a 'riding' motion in both the man's and the woman's gesturing. So, how can they know

it's a 'CAMEL' being described and not a 'HORSE'? That's why they look for a common, shared experience, to connect it with what they have seen. So, they connect the camel with a picture they had when they were visiting Mecca (usually Muslims who go to Mecca take photos when riding camels). In this particular example, the woman elaborates and gives a full description of this thing that they rode at and have a picture of it. However, the man only signs that it is something he rode in the past and had a picture of it. This is also the case with the woman's description of 'DONKEY', when she connects it with a shared experience namely, they had a donkey in the past but it was stolen, and of course she gestures all that.

It seems that the woman is more specific than the man when she gestures. This also can be seen with her description of the 'COCKROACH'. It is enough for the man to 'say' that a cockroach is something we get rid of. However, the woman gives a full experience, a very personal one, to describe the cockroach. This also shows the importance of her speech to us –the hearing, non-signing observers- because it is very difficult to guess what she is talking about. It might be that the woman wants to make sure that her husband understands what she is describing and that is maybe why she elaborates more than he does. The speech accompanied to her gesturing is very important. In fact, it reflects the way she thinks. So, her signing is a kind of a literal drawing to her thoughts. This way one might understand why she is iconic in some way or another. Consider her signing of 'SPOON' for example, she says "This is a spoon, which people eat with", and makes a ladling gesture. This is completely iconic, because her signing matches the action people usually do with a spoon. This is also predicted, and anyone who is not familiar with any sign language can predict what is going on. On the other hand, there are pictures that are completely difficult to understand without hearing her speech, and –surprisingly enough- they turn to be iconic, the obvious examples are the 'CAMEL' and the 'COCKROACH.'

Many other times, you do not have to be an expert in sign language to understand what they are signing. Their signing of 'EGG' is an obvious example of such cases. The difficulty, again, is with the accompanied gestures, which –as it seems- indicate a shared experience, or culture.

Regarding the man, he is also iconic in a high percentage. It is also important to notice that the difference is not only between the man's gesturing and his wife's. There are also differences between the man and himself, as well as the woman and the woman herself. Here we consider the man's two different descriptions of SNAKE, and the woman's two different descriptions of 'cockroach'. It seems as if their description of the accompanying context is an immediate translation to his/ her thoughts. They describe whatever comes to their mind which is connected to the basic picture at the same moment. This means that maybe after one year or even less, their descriptions might be different. So if we take the woman's description of 'DONKEY', the accompanying description is very personal, "this is a donkey, like the one we have once, and then it was stolen" and she gestures accordingly, this might be different if they had a donkey at their house, and she could gesture "this is a donkey just like the one we have there." Even though both signers are iconic, yet each one is iconic according to his own vision of the world. So, the woman who is a housewife, and spends most of her time at the kitchen –maybe-, relates the 'FISH' to what she does with it: fish scaling. While the man connects it with something eaten.

Conclusions

This paper addresses the role that iconicity played for an adult homesigner. This homesigner developed a system of gestures and used it over the course of his lifetime as his primary form of communication. The subjects included in the study are: one deaf homesigner, and his hearing wife.

My observation indicates that this couple was able to develop a communication system in order to communicate with each other, though not fully systematic. A high percentage of iconicity was found among both signers. They are both iconic, yet there are many differences in their signing. They mostly shared the basic gesture, but they differed (though not always) in the accompanied gestures. They can differentiate between signs with close connotations by the accompanied gestures. Another difference between their “iconicity” regard objects is that each of them signs according to his experiences and world.

It’s important to mention that a word does not have a single sign. It is even sometimes a compound (as in the case of ‘BANANA’). A word –for them- in general is a basic gesture with different accompanied illustrations. It is in other words a “complex” system of different gestures.

My results support Morford’s claim that iconicity does not guarantee the transparency of a symbol’s meaning unless the signer and the interlocutors share a cultural knowledge. My results are also supported by Morford, Slingeton, and Goldin-Meadow’s (1993) in providing evidence that generating symbols via and iconic representation of their referents is one strategy that can be enlisted in language creation.

References

- Frishberg, N. (1975). Arbitrariness and iconicity: historical change in American Sign Language. *Language*, 696-719.
- Goldin-Meadow, S. & C. Mylander (1984), "The Development of Morphology without a Conventional Language Model", *CLS 20*. Chicago Linguistic Society, 26-27, pp. 119-133.
- Goldin-Meadow, Susan (1993). "When does gesture become language? A Study of Gesture used as a primary Communication System by Deaf Children of Hearing Parents", *Tools, Language, and Cognition in Human Evolution*. Kathleen R. Gibson and Tim Ingold (Eds.). Cambridge University Press, pp. 63-83.
- Hoffmeister, ft & R. Wilbur (1980). "Developmental: The Acquisition of sign language". In Lane, H. & F. Grosjean (Eds.), *Recent Perspectives on American Sign Language*.
- Klima, E. & U. Bellugi (1979). *The Signs of Language*. Boston: Harvard University Press, pp. 11-32.
- Meir, R. & E. Newport (1985). "The Acquisition of American Sign Language", in Slobin D. (Ed.) *The Cross-linguistic Study of Language Acquisition*. Vol.1: The Data, Lawrence Erlbaum & Associates, Hillsdale, NJ. pp. 881-938.
- Morford, J.P.,J. Singleton, and S. Goldin-Meadow (1993) "The Role of Iconicity in Manual Communication". In Beals, K. G. Cooke, D. Kathman, S. Kita, K.McCullough, and D. Testen (Eds.) *Papers from the Chicago Linguistic Society 29*, vol. 2: The Parasession, pp.243-253.
- Morford, Jill P. (1996) "Insights to Language from the Study of Gesture; A Review of Research on the Gestural Communication of Non-Signing

Deaf people”, *Language and Communication*, vol. 16, no. 2, Elsevier Science Ltd., PP. 165-178.

Morford, J. P., (2002) “The expression of motion events in homesign”. *Sign Language and Linguistics* 5:1, John Benjamins Publishing Company, pp. 55-71.

Torigeo, T. & W. Takei, (2002). “A Descriptive Analysis of Pointing and Oral Movements in a Home Sign System”, *Sign Language Studies*, Washington: Gallaudet University Press, pp. 281-295.

The Role of Iconicity in Home Sign Language

Iman Garra-Alloush

The study of signed languages provides an interesting insight into the way humans develop communication systems. The present study involves an analysis of a selected set of chosen vocabulary used by an adult homesigner, and then is compared to the productions made by his hearing wife. By comparing the signs made by both of them, conclusions are made about the role iconicity plays in their languages. The wife -a hearing woman- was asked to describe a set of pictures, and the man was asked to describe what he sees respectively. Grammarians since Saussure have investigated whether language signs and symbols are arbitrary or not. In general, they have insisted that the relation between languages and symbols produced by the speakers is arbitrary (Frishberg, 1975). In particular, this paper may shed light on questions of language creation, especially the question “How many brains does it take to make a language ”? 1-21