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Sign Language – A Real and Natural Language

1. Introduction

It seems reasonable to begin a discussion on the "realness" and "naturalness" of sign language by comparing it to other human languages of whose "real" and "natural" status there can be no doubt whatsoever. They will be our reference point in the process of establishing the status of sign language. The assumption being made in this paper is that all real and natural languages share certain characteristics with one another, that they all behave in a certain way and that certain things happen to all of them. If it transpires that the same characteristics and behaviours are also shared by sign language and that whatever happens to real and natural languages also happens to sign language then the inevitable conclusion follows: sign language is indeed a real and natural language[1].

2. The number of languages in the world

One of the first things to be noticed about real and natural languages is their great number. *Ethnologue: Languages of the World*, one of the most reliable and comprehensive encyclopedic reference publications, catalogues in its 16th edition of 2009 6,909 known living languages in

[1] The designation "sign language," as used in this article, refers to the languages used within communities of the deaf. American Sign Language, for example, is a sign language in this sense. Artificially devised systems, such as Signed English, or Manual English, are not sign languages in this sense.

the world today[2]. The same source includes in their listings sign languages – 126 such languages to be precise, but it needs stressing that their number runs in hundreds, which *Ethnologue* readily admits[3]. We find then that our first criterion of comparison yields, *mutatis mutandis*, the same results for the two groups of languages. Admittedly, there is a quantitative difference between "thousands" of spoken languages and "hundreds" of signed languages, nevertheless the difference can to a large extent be explained by the number of speakers of respective languages, the number of users of sign language being considerably smaller[4]. According to Margalit Fox, the author of *Talking Hands*, "[n]early every country has its own national sign language" (2007:23). There is Polish Sign Language, British Sign Language, American Sign Language, Japanese Sign Language, Norwegian Sign Language, Portuguese Sign Language, Swiss Sign Language and so on.

Carol Padden and Tom Humphries in their book *Deaf in America* (1999:15-16) recount a fascinating story of Samuel Supalla, a young boy born into a deaf family, who was to become a linguist and educator. One day, little Sam befriended a hearing girl who lived next door. She was a "satisfactory" playmate, but a little strange, as it was next to impossible to communicate with her. It was so easy for Sam "talking" to his deaf parents and his deaf brothers, but the girl did not even understand the easiest gestures. Sam even wondered what was wrong with her, what "strange affliction" she had. But, because the children finally found a way of interacting with each other, he was happy to adjust to her "special" needs. One day, Sam was playing in the girl's home. Suddenly, the girl's mum came up to them and excitedly started to move her mouth. Sam was bewildered by the fact that his playmate instantly, as if by magic, picked up one of the toys and moved it elsewhere. Back home, Sam talked to his mother about

[2] http://www.ethnologue.com/print.asp
[3] http://www.ethnologue.com/ethno_docs/introduction.asp
[4] The number of users of sign language as their first language runs in hundreds of thousands. For various reasons, exact numbers are hard to be estimated, but given the large numbers of deaf people, for example, over 20 million deaf persons in China (http://www.ethnologue.com), the number of signers may run in millions.

the odd behaviour of his friend next door. When Sam found that the girl was able to hear and therefore communicate by moving her mouth, he asked his mother if the girl and her family "were the only ones "like that"." His mother responded that nearly everyone else was like the girl and her family and that "[i]t was his own family that was unusual." It was a memorable experience for Sam.

We learn from this story that it is possible to think of sign language as the language of the majority of the population, and even to treat it as such. It seems realistic to believe that if the proportions of the entire population were reversed – if the number of deaf people today equaled the number of hearing people, and vice versa – we would have 6,909 recorded living languages a 126 of which would be spoken.

There is no doubt that real and natural languages spoken in the world today are great in number. The same holds true for sign languages. The conclusion for this section is then that our first feature that characterizes real and natural languages – their great number – finds its fulfillment in sign languages.

3. The mutual unintelligibility of the languages of the world

Another conspicuous thing to be noticed about real and natural languages is their mutual unintelligibility. The fact that the people of one language do not understand the people of another language is quickly discovered when one crosses the borders of countries: Poles don't understand Germans, Germans don't understand the French, and the French don't understand the English. Signers are no different in this respect: the users of Israeli Sign Language do not understand American Sign Language or Chinese Sign Language. Just like it is a myth that there is one sign language used all over the world, it is also a misconception that sign languages are mutually comprehensible. One user of a local sign language called Arab Sign by the locals said that when he sees Israeli Sign being used "it looks to him like gibberish", reports Margalit Fox (2007:42-43). Even American Sign Language (ASL) and British Sign Language (BSL) are not mutually intelligible. Professor David Crystal made an interesting observation in this respect (2005:161): "When Mark Medoff's play about deafness, *Children of a Lesser God*, was first shown in London, the

actors used ASL. BSL members of the audience had to have the signs interpreted". Incidentally, it is easier for the users of French Sign Language to communicate with deaf Americans – this is because American Sign Language derives from the French system. This shows something very interesting about sign languages: that they are not dependent upon the area or the spoken language that may surround it – sign languages are independent, autonomous systems.

Needless to say, there are separate spoken languages that are, to various degrees, mutually intelligible, Danish, the Norwegian Bokmål and Swedish being one example. However, the same situation can be observed in sign languages: Austrian Sign is partially intelligible with French Sign and with Czech Sign; Danish Sign is mutually intelligible with Swedish Sign and Norwegian Sign with moderate difficulty.

Again, there is no doubt that the thousands of languages spoken in the world today are mutually unintelligible. The same holds true for sign languages. The conclusion for this section is then that our second characteristic of real and natural languages – their mutual unintelligibility – is also a characteristic of sign languages.

It is difficult to resist temptation and not to ask at this point why it is so that there are many human languages in the world rather than one? And why are most of these languages mutually totally unintelligible? Surely, our human need to talk and to listen, to name and to be named, to understand and to be understood does not answer the question. It only (partially) answers the question why there is language at all. But why are there *many, unintelligible* languages? These are interesting questions to ask. They certainly deserve a more ample treatment, but several comments may be given in passing.

There is something in us that drives us towards dissimilarity, towards difference, in spite of our being identical – for we are all humans. This drive towards dissimilarity is found in both hearing people and deaf people, in spoken languages and in signed languages. There is no difference here: we are no different in our natural want to be different. And neither is there difference in the natural byproduct of

our common desire: the many, unintelligible spoken and signed languages[5].

4. The first language acquisition

Another conspicuous thing to be noticed about real and natural languages concerns the way they are acquired. What one quickly notices about language is that it is caught rather than taught. No one teaches us our mother tongue – we pick it up. It is the same all over the world, no matter where a child is born – the first language is picked up quickly, effortlessly, and almost completely and perfectly. This becomes especially evident when one contrasts the first language acquisition with a foreign language acquisition. The Danish linguist Otto Jespersen found this contrast "striking and manifold" (1922:140):

> *[H]ere* we have a quite little child, without experience or prepossessions; *there* a bigger child, or it may be a grown-up person with all sorts of knowledge and powers: *here* a haphazard method of procedure; *there* the whole task laid out in a system […]: here no professional teachers, but chance parents, brothers and sisters, nursery-maids and playmates; *there* teachers trained for many years specially to teach languages: *here* only oral instruction; *there* not only that, but reading-books, dictionaries and other assistance. And yet this is the result: *here* complete and exact command of the language as a native speaks it […]; *there*, in most cases, even with people otherwise highly gifted, a defective and inexact command of the language.

This is exactly what researchers found in deaf children exposed to sign language: picking language up; quickly, effortlessly, and almost completely and perfectly[6]. One of the experts on sign language acquisition, Diane Lillo-Martin, says that (2003:1181) "Deaf children acquire [sign language[7]] in much the same way that hearing children

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[5] This situation doesn't pertain to language alone. We see this drive towards difference in the types of houses we build, the types of clothes we make and the types of customs we observe. In fact, we see it in the whole of the world and even in the whole of the universe. Indeed, the name *universe* is indicative of it: it suggests unity in diversity, or diversity in unity.

[6] So, Jespersen, in maintaining that children acquire their native tongue only upon "oral instruction", misses the mark. Language operates in different modalities: in an auditory-vocal modality and in an visual-gestural modality.

[7] Lillo-Martin focuses on American Sign Language here, but she readily admits (2009) that examples from other sign languages can be found.

acquire their native languages. They acquire the language by exposure to it; they are not taught it by parents or educators. They do so along a timeline much like that for spoken languages, hitting major milestones in the same range of ages as hearing children do". Elsewhere, Lillo-Martin argues that (2009:399): "a variety of studies […] show that sign language acquisition takes a similar path as spoken language acquisition, under comparable input conditions (i.e. children whose parents sign to them fluently from birth)." Her conclusion is that (2009:399) "such studies serve to drive home the point that sign languages are fully natural languages."[8]

In 1991, one of the *New York Times* headlines read "Deaf Babies Use Their Hands To Babble, Researcher Finds," and the very first sentence of the article stated: "Deaf babies of deaf parents babble with their hands in the same rhythmic, repetitive fashion as hearing infants who babble with their voices, a new study has found". The authors of this study were the psychologists Laura Ann Petitto and Paula F. Marentette who published their findings in the journal *Science* (22.III.1991). Based on the discovery of manual babbling in deaf infants and its striking correspondence to vocal babbling as found in hearing infants, the authors of the article made the following claim (1991:1493): "The similarities between manual and vocal babbling suggest that babbling is a product of an amodal, brain-based language capacity under maturational control, in which phonetic and syllabic units are produced by the infant as a first step toward building a mature linguistic system". Let us, in this connection, return to Jespersen.

Jespersen stated that as far the acquisition of the native language was concerned, we found a child "without experience or prepossessions". There is, however, growing psycholinguistic evidence to suggest – and Petitto and Marentette add to this evidence – that every normal child has some prepossessions or prior possessions of some kind. Many linguists are convinced today that children are born with an innate predisposition or propensity for language development; that humans are genetically programmed, that

[8] See also Lillo-Martin 1999.

they possess – or prepossess – a device, a language organ, an endowment, or "innately specified knowledge about language", as Petitto and Marentette call it, that begins to operate once children are exposed to oral or signed input. Language operates in different modalities – in an auditory-vocal modality and in a visual-gestural modality – and the similarities between these two modalities are "striking evidence of the biological nature of language", says Lillo-Martin (2003:1181). Visual-gestural modality – since the time it began to be studied – fully supports this. The conclusion for this section is then that our fourth characteristic of real and natural languages – the nature of first language acquisition – finds support in the workings of individual oral and signed languages, as well as in the workings of language in general. I leave the last word to Lillo-Martin (2009:403): "Such conclusions about the nature of the language-acquisition mechanisms would not be warranted if sign languages were considered anything less than full, natural human languages with the same biological foundations as well as similar social environments."

5. Hockett's design-features

In 1960, an American linguist Charles F. Hockett published in *Scientific American* an article entitled "The Origin of Speech". In this article he presented a set of 13 design-features which, as he maintained, all the languages of the world possessed. If each of these design-features is also shared by all sign languages, then it will be difficult to deny them the status of a language.

The first design-feature that Hockett mentions seems straightforward – the "vocal-auditory channel". If this feature is an integral part of language then sign language is not a full human language. Sign language is, obviously, not a vocal-auditory system – there is neither voice nor hearing in it. In a vocal-auditory system, the vocal organs, such as the vocal folds, the tongue, the lips or the teeth, all play an important part in the production of speech; the reception part is also vital: our ears receive the language that comes from the mouth of speakers. Hockett admits that there are communication systems that use other channels – such as gesture or the dancing of the bees – but he makes no mention of sign language. The year is 1960

and it is the very year that marks the beginning of the more serious and systematic study of sign languages. It is in this year, for example, that William C. Stokoe of Galludet College publishes his seminal paper on sign language in which he convincingly demonstrates that sign language (ASL to be precise) has a structure comparable to the structure of spoken languages, which on its own is solid evidence to support the fact that sign language is indeed language (Stokoe 1960). Before 1960s, there was a lot of misunderstanding about sign language used by the Deaf. It was called by different names: limited pantomime, mime, imitations of spoken languages, pictorial language, playacting, a gesture system, a gestural code, signed forms of spoken language[9]. These names were not helpful in the true recognition of the nature of sign; for this and other reasons, sign was often treated with disdain. Even the renowned linguist Leonard Bloomfield looked down upon it, putting it together with other gestural systems and making it dependent on spoken languages (2005[10]:39):

> Some communities have a *gestural language* which upon occasion they use instead of speech. Such gesture languages have been observed among the lower-class Neapolitans, among Trappist monks (who have made a vow of silence), among the Indians of our western plains (where tribes of different language met in commerce and war), and among the groups of deaf-mutes.
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> It seems certain that these gesture languages are merely developments of ordinary gestures and that any and all complicated or not immediately intelligible gestures are based on the conventions of ordinary speech.

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[9] One needs to keep in mind that the name sign language can be highly ambiguous. When I wrote to Polski Związek Głuchych to inquire about sign language, I received the following reply: "[S]potykamy się z tzw. „mitami" na temat języka migowego (rozumiem, że ma Pan na myśli naturalny język migowy, a nie system językowo-migowy). Niektórzy uważają, że nie jest on prawdziwym językiem, że jest bardzo ubogi pod względem leksykalnym, a nawet prymitywny. Inni określają go „językiem gestów"." This answer shows that the designation "sign language" (or "język migowy") can be ambiguous. Stokoe (1980:365) notices that "[t]he designation "sign language" has been used for a wide variety of semiotic systems ranging from the expression of emotions in men and animals to the transmission and reception of genuinely linguistic structures." In this paper, it is the latter understanding of "sign language" that is used – sign language as an indigenous, natural language of deaf people, not a signed form of a spoken language, not a gestural code or pantomime.

[10] The date of the first edition of Bloomfield's work is 1935.

The fact that Bloomfield considered sing languages as "merely developments of ordinary gestures," "always [running] ahead of gesture" (*op. cit.*:40), is suggestive of the way of thinking according to which there is one real channel for language – the oral channel. Today, there is general agreement in the linguistic community that the signing medium is independent of the oral medium[11]. At a 1965 conference entitled "Brain Mechanisms Underlying Speech and Language," Noam Chomsky characterized language as follows (Klima & Bellugi 1979:35): "a language is a specific sound-meaning correspondence." Asked what he makes of sign language in this context, he rephrased his characterization: language is a specific "*signal*-meaning correspondence." Psycholinguists Edward Klima and Ursula Bellugi both known for their research on the neurological bases of sign language, find the issue "fundamental" (*op. cit.*:35). Many linguists may have drawn conclusions about the nature of language from oral languages; this approach, however, is, according to Klima and Bellugi, biased and preconceived, because it makes sound "central, if not essential, to language" (*op. cit.*:35). Chomsky, as Klima and Bellugi report, took at the 1965 conference an unbiased approach: "It is an open question whether the sound part is crucial. It could be, but certainly there is little evidence to suggest it is" (*op. cit.*:35).

Today, I believe, Bloomfield would readily admit his error and say that sign languages are not only independent of spoken languages, but also that there is a qualitative difference between the sign languages of the deaf and the signing systems used, for instance, by Trappist monks. Hockett, I believe, would also acknowledge his omission and rectify it – language is channeled via different media: vocal-auditory and visual-gestural, neither of which seems, in linguistic terms, superior to the other. The conclusion, therefore, is that the vocal-auditory channel is not essential to language, there being other channels or vehicles through which language emerges. Yet, this does not disprove the fact that there indeed exists some sort of channel, and

[11] Some scholars even suggest the priority of sign over speech. Stokoe himself (2001:407) holds that "[i]n the debate over continuities vs. discontinuities in the emergence of language, sign language is not taken to be the antithesis but is presented as the antecedent of spoken languages."

here we are in full agreement with Hockett: the vocal-auditory channel is not essential to language, but some kind of channel is crucial. The criterion of the channel finds its fulfillment in both spoken and signed languages.

Then, Hockett discusses the two design-features at once: "rapid fading" and "broadcast transmission and directional reception". The signals of language disappear quickly, contrary to, for example, animal tracks, which may last for some time[12]. In addition, linguistic signals are transmitted in all directions – anybody within hearing (for oral languages) or sight (for signed languages) can pick them up, but they are received in a limited direction – those who are in front of the senders are more likely to locate the source of the signals. The same is true for sign languages.

The next design-features mentioned by Hockett are "interchangeability" and "total feedback". The former means that a speaker of a language is able to reproduce any linguistic information he understands: he can be a receiver and a sender of language. Language then is bidirectional, contrary to some types of human communication systems, such as road signs, which are often uni-directional. The latter feature refers to the fact that the speaker of a language hears what he says – he can monitor his speech or change it or adapt it. Needless to say, the same holds true for sign languages. For example, just like hearing people can talk to themselves by total feedback, deaf people can sign to themselves too.

"Specialization" is the next design-feature which signifies that the sound waves of speech sent by us serve no other function but signalling something. The hand waves of sign work along the same principles – this is one of the differences that distinguishes sign language from body language, the latter being far less conscious, more incidental and more reflexive in comparison to the former. Similarly, the design-feature of "semanticity" is not present in body language as

[12] It has to be remembered that Hockett focuses on spoken languages only. This favouritism is visible even in the title of his paper. Even though he writes about language, his work bears the title "The Origin of *Speech*" (emphasis mine).

much as it is in spoken or sign language[13]. We can recall the above-mentioned definition of language made by Noam Chomsky: language is a specific "signal-meaning correspondence". Two phenomena often associated with semantics are worth mentioning: metaphor and metonymy. It is clear enough that they are present or even omnipresent, as cognitive linguistics has shown, in spoken language. But are they to be found in sign language? Let us begin with metaphor.

Sarah F. Taub in her book *Language from the Body*, investigates "the impressive variety of […] metaphorical forms in signed languages, [and] compares them to their tamer counterparts in spoken languages" (2004:2). If Lakoff and Johnson meant spoken language only when they expressed the famous now statement, "[m]etaphor is pervasive in everyday language and thought" (1980:ix), what are we to think of the metaphors of sign language, if the metaphors of spoken language are "tamer" according to professor Taub? Of language, sign languages and metaphors, Taub has this to say (2004:231):

> Conceptual metaphor, another feature of all languages, creates associations between abstract and concrete conceptual domains. Although all languages have metaphor and iconicity, signed languages excel at putting the two together to create a vast range of iconic and metaphorical/iconic words, inflections, and syntactic structures.

Metonymy, so common in spoken language, is easily to be found in sign languages (Wilcox 2002:86):

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[13] That body language is very different from sign language (and from spoken language) is also evidenced by the findings from the field of neurolinguistics. It has been shown that signing primarily requires the use of the left hemisphere, just like speaking does. Lesions in this part of the brain may cause an aphasia for sign language – "a breakdown in the understanding or use of Sign analogous to the aphasias of speech" (Sacks 1989:94). But – what is important for us here – aphasic signers are not affected in nonlinguistic visual-spatial abilities. Body language is quite distinct from sign language here (Sacks 1989:94): "Gesture […] – the non-grammatical expressive movements we all make (shrugging the shoulders, waving goodbye, brandishing a fist, etc.) – is preserved in aphasia, even though Sign is lost, emphasizing the absolute distinction between the two. Patients with aphasia, indeed, can be taught to use "Amerindian Gestural Code," but cannot use Sign, any more than they can use speech."

> There are many metonymical signs in ASL in which a part represents the whole through nondirect representation. HORSE, BUNNY, and COW are examples of words in which body parts (ears or horns) that resemble the physical attributes being graphically articulated are used to specify the entire animal. The ear of a bunny metonymically represents the whole rabbit through synecdoche, or a part-to-whole relationship. The icon of a hand representing what looks like a rabbit's ear is an instantiation of iconicity.

"Arbitrariness" is the next design-feature discussed by Hockett. He says that there are no direct ties between the type of message elements (words) and their meanings or their referents. The word "salt," for example, is neither salty nor does it look like salt – there is nothing in this word that resembles the real world object "salt." "A picture, on the other hand" – says Hockett – "looks like what it is a picture of". The problem, however, seems to be that sign language has sometimes been viewed as a picture language. The 14th edition of the *Encyclopedia Britannica* called sign language "a species of picture writing in the air," and Myklebust in *Psychology of Deafness* called it "an Ideographic language," adding that "it is [essentially] more pictorial, less symbolic, and as a system is one which falls mainly at the level of imagery. Ideographic language systems, in comparison with verbal system symbols, lack precision, subtlety and flexibility" (all citations after Sacks 1989:76). Oliver Sacks in his fascinating *Seeing Voices* rightly observes that there is a certain paradox about the whole issue of sign language being a picture language (1989:76):

> [A]t first Sign looks pantomimic; if one pays attention, one feels, one will "get it" soon enough—all pantomimes are easy to get. But as one continues to look, no such "Aha!" feeling occurs, one is tantalized by finding it, despite its seeming transparency, unintelligible.

Why do non-signers find sign language unintelligible if, given its pictorial or ideographic status, it should be intelligible, at least to a great extent? The answer is that sign language is not a picture language; that it is, to a great extent, not iconic; that it is not a mirror reflection of the external world, but an arbitrary system, a fully-fledged language – therefore one should not expect of it such transparency. Many of the signs may have been iconic at first, but during the natural language development – sign language, just like spoken language, is not immune to linguistic change – they lose their

iconicity, increase their abstractness and become more arbitrary in meaning (Klima & Bellugi 1979). Crystal notices an interesting parallel between written languages and sign languages (2005:160): "It is no longer possible to see the originally iconic basis of most Chinese characters, for example, and it is the same with signs"[14]. The problem of iconicity becomes more intense when signs of different languages are compared. The sign for "push" in ASL is equivalent to CSL (Chinese Sign Language) for "help," and the CSL for "father" looks like the ASL sign for "secret." Signs can deceive us. Interestingly, an analogous situation is found in spoken languages in what is known as *false friends*. The English word "actually" looks like the Polish word "aktualnie," but it doesn't mean it; the English word "lecture" looks like the Polish word "lektura" but these words have completely different meanings – "[t]here are many such "false friends" between sign languages too," says Crystal (2005:160).

With the advent of cognitive linguistics, there have been linguistic discoveries which demonstrated that language is not entirely arbitrary, that it is at some level highly motivated. Taub observes, for example, that as far as spoken languages are concerned (2004:9): "individual word roots are usually not iconic [are usually arbitrary] (e.g., there is nothing about the form *dog* to motivate its connection to the meaning "dog"), but their extensions to new meanings, on the whole, are motivated by natural human processes of conceptual association". The same pertains to sign languages – they also employ conceptual motivations that are found in spoken languages (*op. cit.*:10).

The feature of "discreetness" refers to the elementary units of a human language which are distinct or discreet from each other; the phonemes /p/ and /b/ are distinct from each other, which gives rise to the meaningful difference between *pet* and *bet*. The same holds true for sign languages. In BSL (British Sign Language) for example, 'B' and '5' are differentiated in the same way (Sutton-Spence & Woll 2003:12): "[a] handshape produced with slightly spread fingers is understood as either 'B' or a '5', not as some other intermediate handshape."

[14] See also Crystal 1992:220.

The feature of "displacement" means that humans can "displace" language to talk about things that are temporarily or spatially remote – in fact, it is so easy for humans to talk about things that are not "here and now," compared to animals whose communication seems to be "almost exclusively designed for this moment" (Yule 1993:17). As the British philosopher Bertrand Russell once said: "No matter how eloquently a dog may bark, he cannot tell you that his parents were poor, but honest." Sign language users sign about events far removed in time and place effortlessly, without any difficulty. These users of this spatial or visual language, by means of a three-dimensional sign space, can communicate anything – time relationships including – that an oral, non-spatial language can. And they do it with ease. It is enough to get to know one signer to appreciate it. Myron Uhlberg is one such person – a hearing child born to deaf parents, a child whose first language was sign; he tells his amazing story in the book *Hands of My Father*.

"Productivity" or "open-endedness" is one of the most important features of language. It is our human capacity to create an infinite number of novel utterances out of a finite means – these are utterances that have never been heard or said before, and yet are completely understandable by other users of the language. Hearing people can talk about anything, and so can deaf people who use sign as their native tongue. As Margalit Fox put it (2007:20): "[Sign languages] can be used to talk about anything spoken languages can, from daily banalities to the loftiest abstractions". One can visit Gallaudet University[15] – a university for the Deaf and Hard of Hearing – to see for themselves. The physician, neurologist and best-selling author Oliver Sacks did visit this university and was astonished by what he had found there. It is worth quoting him at length (1989:127-128):

> When I had visited Gallaudet in 1986 and 1987, I found it an astonishing and moving experience. I had never before seen an entire community of the deaf, nor had I quite realized (even though I knew this theoretically) that Sign might indeed be a complete language — a language equally suitable for making love or speeches, for flirtation or mathematics. I had to see philosophy and chemistry classes in Sign; I had to see the absolutely silent mathematics department at work;

[15] See http://www.gallaudet.edu/

> to see deaf bards, Sign poetry, on the campus, and the range and depth of the Gallaudet theater; I had to see the wonderful social scene in the student bar, with hands flying in all directions as a hundred separate conversations proceeded — I had to see all this for myself before I could be moved from my previous "medical" view of deafness (as a "condition," a deficit, that had to be treated) to a "cultural" view of the deaf as forming a community with a complete language and culture of its own. I had felt there was something very joyful, even Arcadian, about Gallaudet — and I was not surprised to hear that some of the students were occasionally reluctant to leave its warmth and seclusion and protectiveness, the coziness of a small but complete and self-sufficient world, for the unkind and uncomprehending big world outside.

This quote – by mentioning the deaf as forming a community, a culture of its own – brings us to the next defining feature of language – "traditional or cultural transmission." We inherit a lot of traits from our parents, but we don't really inherit their language, for this happens extragenetically by living in a community, in a culture, among other speakers. Children produce that to which they are exposed – if they are exposed to a language, they produce this language; but if they are not exposed to a language, they produce no language. We may be programmed to acquire language, but we are not programmed to acquire a particular language. This is true for spoken language/s, and this is true for sign language/s. A hearing child can learn spoken language from any language speaker, but Polish – being a specific language – can be learned from speakers of Polish. Likewise, a deaf child can learn sign language from any language signer, but Chinese Sign Language – again, a specific language – can be learned from signers of CSL. The power of the community and culture can be seen on the example of Martha's Vineyard Island where sign language was used by both hearing and deaf people. The hearing population of the island did not consider deafness to be a handicap, and therefore did not want to isolate from the deaf who, thanks to a sign language known by everybody, were smoothly integrated into the community. Nora Ellen Groce related the story of this community in 1985 in the book *Everyone Here Spoke Sign Language*. A more recent study – that of Al-Sayyid, an isolated Bedouin community in Israel, related by Margalit Fox in her book *Talking Hands*, is another example of the

power and wonder of the hearing and the deaf living and signing together in a small community.

The last feature discussed by Hockett is the feature of "duality of patterning". There are a number of words in any language, e.g. in English, but all these thousands of words have been made up of a small number of basic units. These basic units – e.g. sounds /n/, /t/, /e/ – are meaningless; they exist at the physical level. They combine to form larger units – words, such as *net* or *ten*; these exist at a meaningful level. The same feature is true for sign languages (Sutton-Spence & Woll 2003:12): "[e]ach sign is made up of a handshape, a sequence of movements and holds, and a location. Each alone is meaningless, but when they are put together, a [meaningful] sign is formed. For example, FLOWER has a handshape […], a location at the nose, and a movement from one side of he nose to the other." This alone shows that sign language has a structure; numerous studies have demonstrated beyond any doubt that this is a highly developed structure with its own orderly morphology, syntax, phonology, semantics, pragmatics and more.

6. Conclusion

The presented study is by no means exhaustive; an enumeration and discussion of additional characteristics of real, natural languages and their comparison to sign languages may continue[16]. Nothing, for example, has been said about written language. We know that spoken language is usually accompanied by its written form in the modern world, but is there anything like signwriting?[17] Therefore, an elaboration of the undertaken subject may continue. However, it is the hope of the present author that the goal of the article has been achieved – that it has been sufficiently demonstrated that sign language is indeed language; that it is a fully-fledged, genuine, natural language of exactly the same nature as any natural spoken language.

[16] See, for example, Valli and Lucas 2002:1-15 or Lane and Grosjean 1980.
[17] See http://www.signwriting.org

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