1. THE ARBITRARINESS DEBATE

Within the conceptual framework of classical structuralism, language is seen as an entirely self-contained system, and consequently linguistic signs are not motivated by any language-external facts. Arguing for the arbitrariness of the sign, de Saussure claimed that not even purportedly onomatopoeic words are directly motivated by the actual sounds found in nature. Following de Saussure, most linguists maintained that iconicity is either absent from language or trivial in import. Chomsky [1981: 3] stated that "our interpretation of the world is based in part on representational systems that derive from the structure of the mind itself and do not mirror in any direction the form of things in the external world..." Jakobson [1966], who insisted that the imitative component of language is too salient to be ignored, and pointed to diagrammatic iconicity in the grammars of various languages, was rather isolated among his colleagues. It is only in recent years, with the advent of cognitive linguistics, that the issue of iconicity has begun to re-surface. Cognitive linguists emphasize the experiential basis of linguistic coding; since experience itself is structured, and organized into gestalts (cf. e.g. Lakoff 1977, Johnson 1987), it is natural to expect that this structure will be reflected in the physical form of linguistic constructions. The systematic research of Haiman [1980, 1983, 1985] and Givón [1985] has demonstrated that this is indeed the case.

Givón seeks a psychological basis for linguistic iconicity, and arrives at what he calls the iconicity meta-principle [1985: 189].

All other things being equal, a coded experience is easier to store, retrieve and communicate if the code is maximally isomorphic to the experience.
While Haiman [1980] maintains that linguistic signs in isolation are symbolic, and it is only the system of grammar that relates them which may be diagrammatically iconic, for Givón [1985] it is obvious that “the traditional, prototypical icon and symbol are two extreme points on a scale that represents degree of abstraction or generalization” (p. 192). As one illustration of this thesis, Givón traces the gradual evolution of the letter “A”, which is believed to derive historically from the pictorial representation of the Hebrew ‘iif – ‘bull, cattle’. The process of abstraction began when only the head of the animal was chosen to represent the whole, and continued when its ‘minor’ features and smaller details were discarded and curving lines regularized – until the head gradually assumed its more abstract iconic representation, that of an upturned A (horns, ears, head-top, snout). The gradual process of abstraction of the iconic model was completed when this sign was turned upside down [cf. Givón 1985: 193–195]. Givón points out that “there is no logically principled way for deciding at what point, on the continuum of reduction/abstraction outlined above, one traverses the boundary between icon and symbol” (p. 196). One is reminded here of similar problems with pictorial representations. Should we regard the hearts in Valentine postcards as icons or symbols, and how should we approach various extremely reduced forms in modern paintings? Or the little circles and triangles on the doors of public toilets? In visual communication, as in language, it seems best to answer such questions using the notion of a continuum. The abstracted “symbol” is just as isomorphic to the modeled phenomenon as the “image”, though at a different level of generality.

Givón [1985: 213–214] claims that

it is very likely ...that all “arbitrary” symbols arise naturally – ontogenetically, phylogenetically and diachronically – from more concrete/natural/isomorphic icons. ...It seems to me that in order for us to understand the seeming “magic” of symbolic representation, we ought to consider iconicity the truly general case in the coding, representation and communication of experience, and symbols a mere extreme case on the iconic scale.

Givón’s example comes from the most basic level of iconic coding. However, such coding may also manifest itself at the propositional level or at the more complex, abstract level of various discourse-pragmatic functional domains. It seems rather obvious that at all these levels iconicity is firmly grounded in the visual experience.
2. THE FORM/CONTENT ISOMORPHISM

The iconicity of linguistic forms is often mediated through metaphors. It is natural for us to conceptualize both linguistic form (physically temporal) and meaning in spatial terms. The CONDUIT metaphor [cf. Reddy 1979], makes us see linguistic expressions as containers, and their meanings as the contents of those containers, which makes for an automatic close link between them. As a number of linguists [e.g. Bolinger 1977; Haiman 1980; Langacker 1987] have rightly observed, this isomorphism between form and content, both in a single word or a grammatical construction, precludes the existence of true synonyms or exact paraphrases, as different forms must have different meanings.

The natural consequence of our thinking in terms of this metaphor, is the expectation that MORE OF FORM IS MORE OF CONTENT [Lakoff and Johnson's formulation, 1980: 10–11]. Thus, predictably, "small words", being smaller containers, hold less invariant meaning and are therefore more vague, easier to adapt to changing contexts — i.e. have greatest "polysematic potential". These include such words as particles and prepositions, as well as mostly monosyllabic copular or copula-like verbs. We might also note in this connection that most of the verbs occurring in phrasal constructions, i.e. with particles which may change their meanings, are monosyllabic (in English, e.g. come, go, put, take etc.). Although I am not aware of any systematic research of this phenomenon in other languages, it seems to be rather universal (consider Polish prepositions, the verb być, and such prefix-taking verbs as brać, jeść, iść etc.).

Another kind of linguistic device that reflects the metaphor MORE OF FORM IS MORE OF CONTENT is iteration:

1. He talked and talked and talked.

means something more than just

2. He talked.

the longer time necessary to utter the former represents the longer duration of the action. If someone thinks of something for weeks and weeks, it seems longer than if he just thought about it for weeks. More of form may also indicate more of emotional content: the extended lengthening of a vowel in

3. N-o-o-o-o-o-o !

produces an utterance infinitely more expressive than simple No! Among numerous literary examples, perhaps the most famous is Gertrude Stein's *A rose is a rose is a rose is a rose*.; the repetition of the word *rose* serves to intensify the image; the flower seems to be viewed from different angles, and stands vividly before our eyes. Implicit in a poem by Vladimir
Mayakovski (transl. by Gerald Fitzgerald; cit. in Poggioli 1968) is the idea that the “greatness” of poetry is proportional to the number of elements available for combination:

(4) Shakespeare and Byron possessed 80,000 words in all;
The future genius-poet shall in every minute
Possess 80,000,000,000 words, squared.

This is certainly extending the metaphor beyond its reasonable limits; but that is poetic licence. A rather similar case of magical thinking, however, may be familiar to any teacher whose students produce endless pages of text during a test, hoping that what they have written will make more sense if there is more of it.

Probably most languages of the world use the morphological device of reduplication, i.e. the repetition of one or two syllables of a word, or of the whole word. As pointed out by Moravcsik [1978], the meanings associated with (full or partial) reduplication strikingly recur across languages.

The most common concept expressed by reduplicative constructions is the concept of increased quantity – either quantity of referents or the amount of emphasis.

The use of noun reduplication to express plurality of referents is exemplifiable by

MANDARIN: renren ‘everybody’ (ren ‘man’) [Chao 1968: 202]

Reduplication of verbs may express repeated or continued occurrence of an event:

TZELTAL: pikpik ‘touch it lightly repeatedly’ (pik ‘touch it lightly’);
mahmah ‘fight’ (mah ‘hit it’) [Berlin 1963: 214]

Reduplicative/iterative constructions are also often used to express increased emphasis (as Moravcsik [1978: 301] observes, “intensity appears related to quantity in that it involves quantity of energy investment or size of effect”): (5) He is very very bright.

The emphatic modifier, in English as in most other languages, can be reduplicated open-endedly for additional degrees of emphasis (e.g. Polish: Bardzo, bardzo dziękuję.).

Predictably, increased morphological complexity reflects increased semantic complexity: e.g. the positive, comparative, and superlative degrees of adjectives show a gradual increase in length. We should observe, too, that the longer a compound, the more complex and deep its intension, as in daughter vs. daughter-in-law.

Markedness, too, is assumed to be iconically motivated: grammatical categories that are marked morphologically are also marked semantically.
Among the numerous examples is the case of the non-present tense, the preterite, denoting anteriority, i.e. the idea that the narrated event occurred at some time prior to the moment of speaking – the (unmarked) present.

Incidentally, the metaphor MORE OF FORM IS MORE OF CONTENT may also be seen to influence the work of some visual artists. Andy Warhol’s soup cans or dollar bills painted or printed in huge format, repeated over and over again in stereotyped series, impress the viewer as having more significance than ordinary-scale individual objects. Quantity thus becomes a new quality, as is also well known to advertising specialists.

The relationship between form and content may also be observed in the case of written discourse, which commonly contains subdivisions depicting visually its content structure. Words are separated by an empty space, and so are sentences. Paragraphs mark the ends of episodes or thoughts. Poetry is distinguished for the eye from prose. This visual distinction is not a superficial one: the breaking up of a line of words into smaller units reflects the poet’s mental focus on relatively self-contained, small units of experience.

We might also note the difference in interpretation between

(6a) Mary washed her hair., and
(6b) Mary wet her hair. She opened the cupboard and took out a bottle of shampoo. She opened the bottle, applied a drop of the shampoo to her wet hair, and massaged gently. She then rinsed her hair thoroughly, towed it dry and styled it as usual.

In b., the painstaking description of the action (it uses nine action verbs to represent the same thing as a., which uses only one verb) iconically represents the painstakingness of the actions. Posner [1986: 306] elevates such observations to the status of a general principle, viz. “the degree of painstakingness in the presentation of action conveys the degree of painstakingness of the actions presented”. What is clearly happening here, therefore, is again a transfer of properties of the sign onto the designatum.

I would also like to suggest a possibly iconic motivation for such tautological constructions as

(7) Men are men.
(8) War is war., etc.

The spatial symmetry of the construction, or the identity of the two noun phrases beginning and ending the sentence, may be a linguistic reflection on the belief that the entities involved do not change with the passage of time (represented here by the left-to-right linearity of the sentence).

In many cases, we might also postulate an iconic motivation for the reduction of form. As much as Haiman [1983: 802] insists that “reduction
of form is an ECONOMICALLY motivated index of familiarity, not an iconically motivated index”, I will argue that the opposition is a false one. I believe that the economy of expression iconically reflects the economy of attention: one does not spell out what is already known or unimportant, as one does not give familiar objects in the visual domain one’s full attention. Linguistic reductions and ellipsis only reflect a much more basic tendency in human perception, one that may have survival value (the unfamiliar requires more careful scrutiny, as it may mean potential danger). We reduce the time spent on the visual scanning of a familiar object; since THINKING IS SEEING, we reduce the time spent on contemplating a familiar concept; since time is spatialized, and language is conceptualized in spatial terms, this results in the reduction of linguistic form.

3. ICONICITY OF SEQUENCE

One of the most often cited cases of iconicity is that of isomorphism between the temporal order of events/experiences and the order of clauses describing these events, as in the classical “I came, I saw, I conquered”. A narration is iconic to the extent that events are recounted in the sequence in which they occurred.

It follows from the principle of temporal sequence that the preferred, or natural, order of clauses of complex sentences is that within which the clause that codes the causal state/event precedes the one that codes resultant state/event, and the clause that codes the condition precedes the one that codes its entailment, as the given precedes the new.

The principle of temporal sequence is probably a universal, i.e. all languages can and do represent iconically the temporal order of events [cf. Greenberg 1966]. Still, there is a precisely opposite, competing principle which tells us to attend first to the most salient event; this might be emotionally motivated. A student might tell a friend that she had failed her exam, and then recount the events that led up to it, such as e.g. a quarrel with her boyfriend.

Another strategy of expression where the order of events is iconically reflected by the text organization is the fronting of locative adverbials (To the left of the church, you can see a theatre...) common in guidebooks for the obvious reason that a tourist must be guided to a certain place before he can be told what to look at.
4. THE ICONIC REPRESENTATION OF DISTANCE

If we consider the prevalence of the conceptual metaphor THINKING IS SEEING [cf. Sweetser 1988, Danesi 1990], it is not surprising that conceptual distinctions are represented by means of linguistic-spatial distinctions. Thus, e.g. the linguistic distance between expressions corresponds to the conceptual distance between them.

Givón [1985: 202] has proposed a general cognitive principle that he named Proximity Principle and formulated as follows:

The closer together two concepts are semantically or functionally, the more likely they are to be put adjacent to each other lexically, morpho-tactically or syntactically.

The principle predicts the co-lexicalization of parts of a whole, as well as the co-lexicalization of derivational affixes with their stems, and adjacency between modifiers and modified word.

As a painter who wants to portray a yellow flower does not normally sketch a colourless flower on one part of his canvas and put a blob of yellow somewhere else, so in speech the most natural way to indicate that a flower is yellow is to put the words next to each other. As a word has two sides, in some languages it is possible to follow the proximity principle with two adjectives (cf. French petit chat noir, Polish złoty ząb trzonowy). Where two or more adjectives stand in succession there is often a definite tendency to put certain adjectives closer to the noun than others. The order of attributive adjectives was investigated by Posner [1986]. He has observed that the attribute standing nearer to the head noun designates a property that changes less in objects of the sort referred to by the head noun. Thus we have the specification of age before the specification of sex for persons (a young female singer), and length of hair before color (she has long blond hair); as regards objects, in standard situations the color adjective is preferred nearer to the head noun than the form adjective (a round white table).

The Proximity Principle is also at work in blends, such as smog, motel, brunch, where the combination of two forms iconically represents the combination of their meanings.

There is a definite tendency to put operators close to the operands. One case in point is the placement of the negative marker. Both in our Polish examples and in their English translations, it is placed as close as possible to the element being negated:

(9a) On nie widział tego zdjęcia.

‘He didn’t see that picture’.
(9b) On widział nie to zdjęcie.
'It wasn't that picture he saw'.
(9c) (To) nie on widział to zdjęcie.
'It wasn't him who saw that picture'.

In sentences which had undergone negative transportation (placing the negative further away from the predicate it logically negates), such as e.g.
(10) Mary doesn't think he'll leave until tomorrow.,
as against
(11) Mary thinks he won't leave until tomorrow.,
the force of negation is significantly weaker.

Cooper and Ross [1975] postulate a "Me first" principle, which in essence is an observation that we tend to place first in expression the elements closer to our egos: therefore we say here and there rather than *there and here; they talked about this and that, and not *.about that and this; now and then rather than *then and now. We might suppose that this principle is responsible for the fact that if we push off the expression of our opinion to the far end of the sentence, as in
(12) Well, I believe that's right.,
as opposed to
(13) That's right.,
our interlocutor rightly assumes that we are distancing ourselves from what we say, perhaps because we are still not sure what to think.

Another self-distancing device is using a longer descriptive phrase to refer to yourself, as in the present author thinks... as opposed to I think...
Such forms as e.g. We, queen of England... serve similar purpose, that of objectivization/self-distancing of the subject.

The linguistic category of causation provides another example of the iconic expression of conceptual distance. The conceptual distance between cause and result corresponds to the formal distance between cause and result [cf. e.g. Haiman 1983]. Hence the difference in meaning between 'cause to VI' and 'V2' (e.g. cause to die vs kill in English, equivalent expressions spowodować czyjs śmierć vs zabić kogoś in Polish). The analytical construction, where cause and result are separated, suggests an absence of physical contact between the causer and the causee; so much so that you could only understand the sentence
(14) He caused the spoon to bend,
in contrast to
(15) He bent the spoon
as implying that the person in question has magical powers.

Language is also able to express social distance iconically. Euphemisms and formal expressions are nearly universally longer than offensive four-letter words and colloquial phrases (piss vs. urinate or spend a penny).
Haiman [1983: 801] claims that

[...] the verbosity or prolixity of formal registers may be a verbal icon of an envelope around the speaker's actual message. The addressee is protected by this envelope from the speaker's ideas in the same way that he is protected by physical distance from other emanations of a personality.

To sum up, it seems that there is already quite a body of evidence that iconic motivation plays an important role in shaping the form of language. This is further proof that linguistic coding is determined by our experience with reality, i.e. ultimately by the nature of our perceptual processes. I have pointed out earlier that human perception is predominantly visual. The iconicity of language further confirms the importance of our intimate relationship with space and its inescapable hold on our thinking.

REFERENCES

IKONICZNOŚĆ JĘZYKA

W artykule zebrano wiele przykładów na to, że forma języka jest znacznie mniej arbitralna, niżby to wynikało z twierdzeń strukturalistów. Takie ogólne metafory pojęciowe jak MYŚLENIE TO WIDZENIE, prowadzą do pojmowania treści w kategoriach formy, np. utożsamiania fizycznej wielkości kodu z jego informacyjną zawartością, fizycznej odległości między elementami kodu z odległością pojęciową, a nawet przestrzennego porządku elementów kodu z czasowym porządkiem wydarzeń (co umożliwia inna metafora pojęciowa, CZAS TO PRZESTRZEŃ). Obserwacje te prowadzą do wniosku, że forma językowa jest ściśle związana z naszym postrzeganiem rzeczywistości, szczególnie za pomocą zmysłu wzroku.