

ON THE IDEA OF AN 'ECOLOGICAL GRAMMAR'  
OF VERBAL DISCOURSE  
FROM A HUMAN-CENTERED PERSPECTIVE

ELŻBIETA WĄSIK

**1. On the notion of ecology and its applications in human-related sciences**

This paper compares ideas about the ecology of language and semiotics with human linguistics, while metaphorically alluding to the branch of biological sciences, which deals with the relations and interactions between organisms and their environment. Methodological foundations of the present outlook relate to the author's (Wąsik, E. 1999a, 1999b) previous investigations in the domain of the ecology of Frisian from the viewpoint of a descriptive model deduced and construed on the basis of some works hitherto conducted by practitioners of language minority studies. However, its basic conceptual apparatus has been enriched following her participation in two workshops devoted to *Ecosemiotics: Studies in Environmental Semiosis* (within the Nordic-Baltic Summer Institute for Semiotic and Structural Studies at Imatra) and: *Exploring the Domain of Human-Centered Linguistics from a Hard-Science Perspective* at SLE Meeting in Poznań (cf. Wąsik, E. 2000a, 2000b as well as Wąsik, E., Wąsik, Z. 2000).

An ecological way of reasoning is rooted in the naturalist heritage of Ernst Heinrich Haeckel ([1866] 1988), German biologist and philosopher of evolution (1834-1919). The term "ecology" referred initially to the studies of the relationships existing between organisms and their environments, has lately become popular in the domain of sociological studies concerned with the spacing and interdependence of people and institutions, following the idea of "human ecology" advocated by Amos H. Hawley (1950). Additionally, the word *ecology*

has started to connote also care for endangered species or for the purity of the environment, in which all living systems function or live. In the 1970s, practitioners of linguistic sciences put into use the term *ecology of language* (Haugen, [1970] 1972; cf. Waśik, Z. 1993 and 1997; Waśik, E. 1999a and 1999b) with reference to a neutral understanding of the German *Ökologie* coined in 1866.

Slightly earlier in Leo Zawadowski's (1966) linguistic theory, the so-called ecological-relational properties of language were distinguished as opposed to lexical-relational, lexical-inherent and grammatical-inherent properties of language as a system. Zawadowski considered as unimportant for the essence of a natural language that it has an international range or is limited to a local vernacular. For Einar Haugen (1972), however, the basic part of the ecology of language constituted human minds of monolingual, bilingual or multilingual individuals who take part in the interactions between members of speech communities. From that time on, external conditionings of verbal forms of communication, the dependence of languages on the people who speak them while realizing their communicative tasks appeared to be the most important factors for practitioners of language sciences. Contacts between languages and contextual properties of the manifestation forms of language become realized (materialized) exclusively through the language bearers in interpersonal communication, and, what is more, thanks to their activity.

Under the influence of Zawadowski's and Haugen's conceptions, *the ecology of language* was understood as a domain dealing with extra-systemic conditionings of language (cf. Waśik, E. 1999b: 10ff, 41-42, see also Waśik, Z. 1993: and 1997). Linguistic contributions to the model of the ecological description of languages consisted in a survey of those external factors that surround natural languages and influence them, i.e., all social and cultural forces, which shape the life of individuals or communities of language "knowers", language doers and language speakers and interpreters. For example, ecological variables were taken into consideration, which resulted from knowledge elaborated in the domains of the neighboring disciplines of linguistics and the non-linguistic sciences of language. Among them are, e.g., name, history, users, territory, standardization and codification, domains of use, symbiosis with other languages and with other semiotic systems created for the purposes of understanding in contact situations, forms of struggle for independence, language loyalty and ethnic solidarity, legal status and attitudes toward language.

In elaborating a descriptive model for external linguistics in the traditional sense, I have noticed in my previous studies (Waśik, E. 1999a, cf. mainly 1999b: 12-14, 1999c: 57-59) that some ecological variables are more or less distant from language as a system of verbal expressions. This conclusion entitled me to

detach questions regarding linguistic classifications of languages and other communication systems from the characteristics of speaking individuals and speech communities, and furthermore from their communicative settings. Accordingly, I postulated a distinction between (1) a meta-linguistic ecology, including what can be said in linguistic sciences or in a language about a language, (2) an ecology of language bearers, (3) an ecology of language communication (as it is shown in Table 1).

TABLE 1. ECOLOGICAL VARIABLES IN THE EXTERNAL DESCRIPTION OF LANGUAGES

### I. The metalinguistic ecology of a language

(1) *The position of a language in linguistic classifications*: language family, Sprachbund; language group; pidgin, Creole, natural or artificial language; living, developing, endangered, dead language, etc.

(2) *The name of a language and language bearers*: native or foreign, acquired or imposed; neutral or marked; motivated or unexplained, etc.

### II. The ecology of language bearers and language users

(3) *Present demographic characteristics of speech communities*:

*The statistical quota of native and foreign language speakers*: major and small languages, linguistic majorities and minorities;

*Sociostratigraphic data of language bearers*: age, sex;

*Socio-ethno-economical distribution of language bearers*: individuals, groups, social classes, professional and/or confessional communities; nation or nationality; sedentary or nomadic, consolidated or Diaspora, etc.

*The question of anthropological properties of language bearers*;

(4) *Territorial, geographical and political settings*: compact or diffuse; indigenous or alien; language island, state, country, region, district, etc.

(5) *An external history of language and language bearers*: conquests, expansions, peoples wanderings or migrations; formations and impacts of power centers, empires, national-liberation movements on the ground of language, etc.

(6) *Attitudes towards language*:

*Language as a criterion of ethnic identity and other semiotic systems characterizing language bearers*: language and literature, anthem(s), flag(s), costume(s), music, folk dance, artifacts, etc.

*Language loyalty and ethnic solidarity*: acceptance or rejection of the language status; fidelity or renouncement; intimacy, proximity or alienation on the ground of common language among participants of interpersonal communication, inter-

group or inter-ethnic; the sense of domination or subordination; the evaluation of superiority, inferiority or equality of a language used as a native or foreign means of communication (reciprocally or unilaterally), etc.

(7) *Language policy and language planning:*

*Standardization, codification, autonomization and maintenance of the vitality of a language:* cultivation of a language, implementation of a language for official matters; language norm, orthography and orthophony, unification of writing and pronouncing or acceptance of variants in spelling and, speaking; grammars and dictionaries, etc.

*Organizational and political support for a language and forms of struggle for its maintenance, cultivation and education:* formal or informal, parliamentary or terrorist; manifest or hidden, tolerated or forbidden, etc.

### III. The ecology of language communication

(8) *The media-related realization of a language:* types and styles of textual messages and forms of communication channels; prose and poetry, folklore and proverbial phraseology; metaphorical idioms and world view; vocal-auditory, written, printed, visual or palpable; dialogical or monological, direct or indirect, official or casual, spontaneous or formal; frank or reserved, informative or performative; scientific, artistic, colloquial, or professional; urban, rural, metropolitan, or regional; journals, newspapers, radio, television, etc.

*Language varieties:* dialects, local vernaculars, contact varieties, functional styles, professional jargons, registers, etc.

(9) *Domains and functions of language use:* intrapersonal vs. interpersonal: dyadic, small-group, public and mass communication; family, market, country fair, shop, school, church, theater, carnival, stadium, office, court, army, etc.; stable, temporary, compulsory, facultative, additional, complementary, progressive, declining; integrating, separating, symbolic, referential; acquisition, use, attrition, etc.

(10) *Symbiosis or conflict with other languages in contact situations:* bilingualism, trilingualism, multilingualism or diglossia, triglossia, multiglossia; substrate, superstrate or adstrate; borrowings, cultural transfers and language interference; boundaries of language, religion, states, powers, etc.

In the investigative practice of linguists, the term “ecology of language” was referred mainly to the extralinguistic properties of languages understood as systems of verbal expressions spoken and understood in human communication, and sometimes it could have a broader range (cf. Wirrer 1997: 155ff; and Di

Cristo 2000: 19f). In the latter case, the system of language was seen as embedded within a more complex system at a higher, the so-called ecosystem, including grammar and lexicon and its environment, the people who communicate with their political settings and their behavioral properties and attitudes. Attention then was paid to the processes of changes within an ecosystem as a whole in order to answer how the environmental factors influence the functioning of elements and structures of language.

The notion of ecology with reference to language as an object of linguistics proper as well as to other objects studied by semiotic-communicational disciplines was indeed metaphorical. Its use resulted from the treatment of language or other systems of signification and communication as an autonomous agent or living subject. However, one should bear in mind that the only active subjects in communication are people. Hence, for the aims of the theory of human communication it would be more appropriate to speak rather about the ecology of man and society than of language and culture.

Being aware that languages, specified in language-centered terms as the investigative object of linguistics proper, are not organisms but rather constituents of “human ecology”, I have tried to reconsider the ecological properties of verbal communication in the light of disciplines that study the spacing and interdependence of people and institutions. So to speak, I have departed from an assumption that the basic parts of the so-called “ecology of language” encompass human minds of monolingual or multilingual individuals who are engaged in interactions with other individuals. While focusing on people (in accordance with Victor H. Yngve, 1996), I have confined myself to treating their communicative behavior as observable links that mediate between communities and their surroundings within a span of years, in a certain territory, in a given country, and/or in the relationship between states. In such a human-centered outlook, communicational forms of interpersonal linkage systems are considered as discourse genres or patterns recognized by communication participants as belonging to certain types of discourse practices. Moreover, linguistic properties of communicating individuals, which aggregate into discourse communities, are specified as parts of ecosystems at various levels of social groupings, phylogenetic, professional, ethnic, cultural, confessional or economic, etc. Considering the existence of various forms of human communication, the societal ecosystem was postulated also within the frames of the so-called ecology of sign, including not only interlocutors but also all semiotic phenomena (cf. Enninger, Wandt 1984: 29ff, mainly 32). Nonetheless, within the framework of human linguistics, those constitutive elements of ecosystems might be considered as parts of linkage systems, individuals playing certain roles of participants in group communication, props, channels and

communicational settings. As regards the verbal forms that unite individuals into communicating groups through different channels of communication, they are studied along with nonverbal behavior in the realization of linguistic properties of people, hitherto included in the realm of bio- and anthroposemiotics.<sup>1</sup>

Discussed in the context of human sciences, parallel to the newly launched "communicational grammar" (postulated inter alia by Geoffrey Leach 1983), the notion of "ecological grammar" is seen as counterpoised to that of "universal grammar" advocated by the followers of the distinction between transformational-generative and traditional grammar. The search of the latter for universal grammar is rooted in the hypotheses of rationalist philosophers that all human languages reflect extra-linguistic reality in a similar way. Henceforth, some philosophically inclined linguists (inter alia Anna Wierzbicka 1972) have believed in the possibility of deducing from all hitherto described languages of the world the elements and structures that are primordial to human thinking. Contrariwise, ecological grammar has grown out of the experience of the practitioners of human sciences bearing in mind that the manifestation forms of verbal behavior of communicating individuals and social groups are polymorphous and unequally put into use when formed in dependence on their environments. It is based on the assumption that verbal and nonverbal forms of communication occur on various organizational levels of society in a twofold manner, as changeable practices and stabilizing patterns of interpreted discourses. In this context, it would be appropriate to mention that the partial inspiration source regarding the sole usage of the term *ecological grammar* was the abstract of the paper published by Albert Di Cristo (2000), who departed, while referring to the book of Knud Lambrecht (1994), from a language-centered perspective.<sup>2</sup>

1 To be mentioned is a conviction of some philosophers (e.g., Searle 1983, 1992) and biologists (Kull 2000) that between human beings and other organisms in the living world there is a biological continuity in evolution. And, such properties as the possession of consciousness, intelligence and the faculty of language, the aptitude of rational thinking, etc., are seen as phenotypic features of an organism resulting from the interaction of the genotype and the environment (cf. Dawkins 1982 and Wašik, Z. 2001: 85).

2 It might be relevant here to quote Di Cristo 2000: 19–20: « Dans cette perspective, nous proposons d'envisager comme cadre interprétatif de la prosodie celui d'une *Grammaire Écologique*, l'expression elle-même étant empruntée à Lambrecht (1994). Avant d'aller plus loin, il importe de préciser que le terme de grammaire n'est pris ici dans son acception restrictif de grammaire formelle (bien de la grammaire formelle puisse et doive, selon nous, être une composante majeure de la grammaire écologique), mais dans la signification extensive de : description des mode d'existence et de fonctionnement d'une langue naturelle où, éventuellement et plus largement, de toute sémiotique. Le terme écologique que nous associons à celui de grammaire tire sa légitimité de l'axiome selon lequel le langage est un éco-système, c'est-à-dire un mode d'expression qui s'adapte en permanence au milieu dans lequel il se déploie, principalement en fonction de l'environnement cognitif versatile de ses utilisateurs et des pressions exercées par les fluctuations constantes de la force

Entering the domain of 'ecological grammar' from a human-centered perspective, I have been more interested in the methodological consequences of this new inter-pretative framework of communicational studies related to verbal discourse and sociological pragmatics rather than to launch the new idea of a grammar of a certain language. Having a certain experience in the domain connected with the ecology of language extending beyond the boundaries of linguistic studies, I am aware that the term 'ecological grammar' gives the possibility of embracing in one approach both systemic as well as ecological properties of language. On account of the fact that the paradigm of ecological thinking is so well developed at present,<sup>3</sup> practitioners of human-centered disciplines may feel truly entitled to settle on the primacy of biological, cultural and psychological cognitive approaches to communicating individuals as organisms, as persons and participants in social roles.

Having worked towards redefining the concept of the ecology of verbal discourse from a human-centered perspective, I came to the conclusion that this domain should encompass the interrelationships between linguistic properties of individuals and groups with the surroundings, in which they function as communicating individuals, and to which they refer their expressions.

Since individuals constitute a group of communicating people they are characterized by such changing properties, as, e.g., (1) statistical quota and distribution, (2) division into sex and age groups, (3) legal acts and their execution in a language (4) cultural patterns and forms of organization (5) attitudes towards their own members and towards aliens, (6) *diglossia* situations, interethnic dependencies between the participants of communication, as well as (7) linguistic contacts, rules of verbal behavior patterned within an ethnic group (cf. Haarmann, Harald 1989. 173f). In dependence on the domain of control, the context of situation, the social stratification and communicational tasks of the participants of social interactions, they may be considered as having an impact upon the differentiation of verbal communication.

interactionnelle qui régle les échanges conventionnels. Telle que nous la conservons, La Grammaire Écologique s'inscrit donc à la fois dans le paradigme d'une théorie pragmatique large de la communication (incluant des aspects qui relèvent de l'illocutoire de l'énonciation, de l'interaction, de la contextualisation et de l'expression de l'affect), et dans celui des sciences cognitives [...]. »

3 Worthy of mentioning here are especially the works of Bateson 1972; Barker 1968, Barker, et al. 1978; Makkai 1993, Kull 1998a, 1998b, 1999, 2000, Nöth 1996, 1998, Ingold 1999 [1996], Hornberg 1996. For further details in the context of linguistic studies, see also Fill 1993, 1996 as well as Fill and Mühlhäusler 2000.

## 2. Some postulates for the study of social groups as ecologically determined communicative linkages in the light of human linguistics

Based on empirical techniques or investigative methods elaborated by sociologists, we usually obtain a static community-related<sup>4</sup> image of a given group of people. The application, however, of the perspective of human linguistics demands from us to present multilingual linkages in a dynamic way. Heretofore, our knowledge of communicational processes within ethnic groups had to be supplemented by considering changes. Groups of people studied by human linguistics are not static in reality, but dynamic, and their existence is conditioned only by communication among their members. For example, the number of speakers within a traditionally distinguished speech community is assessed in a static manner. When taking into account the number of interacting linkages, statistical data always had to be modified.

Linguistic properties of people constantly change because individuals as persons participating in social linkages as assemblage groups are dependent upon biological, psychical, social, cultural, technical, political, economic, and other ecological conditionings, which take part in the determination of modes of their functioning and their development into communicative-interactive entities.<sup>5</sup> Because linkages of lower order are usually situated within linkages of higher order, the sociological notion of "autonomy" appears to be appropriate with regard to the self-government of a smaller community applying the laws established by itself and functioning within larger structures of a given society.

In consequence, any ecologically determined linkage might be observed as developing and becoming more or less autonomous from any point of view independently of whether it is focused or complete in character. Interpreted and described in terms of communication sciences, the relations between communicating individuals can serve as a basis for the distinction of various types or kinds of interacting groups in terms of communicative properties. Thus, a typology of such communicative "ecolinkages" had to consider the degrees of their discreteness, peculiarity, separateness, independence, self-existence, and

4 Following sociological usage, one may distinguish between communicative linkages and communicative communities. The first type of social grouping, linkages (cf. Boissevain 1974), is based on temporary or long lasting interactions in a diffused way; in totality, they might be considered as a set of collections. Communities, however, constitute a set of members who are mutually concatenated by common organizational principles. Communities, being human institutions, should be seen as 'collectivities', not just 'collections' of individuals, in accordance with MacDonald and Pettit's view (1981: 107f; quoted in Downes [1984] 1998: 106).

5 In this context, to be exposed is the opinion of Geertz ([1963] 1996), who distinguished among primordial ties linking social communities, as, e.g., blood kinship, race, religion, customs, also language as a factor forming the center of social matters.

self-reliance. In this set of six qualifiers of autonomy, distinguished by Stanisław Pietraszko (1992)<sup>6</sup>, one could notice both a hierarchy and inclusiveness: less distant, stronger linkages include those, which are weaker and more distant from the core of society crystallizing as an autonomous agent (cf. Wąsik, Z. 2000: 32). One could examine the direction in which the development of long-lasting linkages goes so that they become communities with permanent bonds. That means, one could find out what types of subordinate groups interacting with each other evolve in time and space along with their particular domains of control into ethnic, national, confessional, professional or cultural-natural ecosystems. The latter groups might be considered following Ludwik Zabrocki's distinctions as communicative communities, which may be divided into: "(i) active and passive, (ii) durable and indurable, (iii) loose and compact, (iv) primary and secondary, (v) superordinate and subordinate" (see Bańczerowski 2001: 38). In Zabrocki's view, each individual is, simultaneously, a member of various communities determined by communicative bases as, e.g., family, home, work place, church, political organization, etc. Each community, in turn, is determined by extra-communicative factors of heterogeneous nature depending on geographical, economic, political, ideological, and cultural conditionings of environment, in which communicating individuals as members of respective groups live.

## References

- Bańczerowski, Jerzy 2001. "The linguistic legacy of Ludwik Zabrocki". In Stanisław Puppel (ed.) *The Ludwik Zabrocki Memorial Lecture*, 9-49. Poznań: Wydział Neofilologii Uniwersytetu im. Adama Mickiewicza w Poznaniu.
- Barker, Roger G[arlock] 1968. *Ecological Psychology. Concepts and Methods for Studying the Environment of Human Behavior*. Stanford CA: Stanford University Press.
- Barker, Roger G[arlock] et al. 1978. *Habitats, Environments, and Human Behaviour. Studies in Ecological Psychology and Eco-Behavioral Science from the Midwest Psychological Field Station, 1947-1972*, San Francisco: Jossey-Bass Publishers.
- Bateson, Gregory 1972. *Steps to an Ecology of Mind*. New York: Ballantines.
- Boissevain, Jeremy 1974. *Friends of Friends: Networks, Manipulators and Coalitions*. Oxford: Basil Blackwell. & New York: St. Martin's Press.
- Dawkins, Richard 1982. *The Extended Phenotype*. Oxford: Oxford University Press.
- Di Cristo, Albert 2000. « Une grammaire écologique comme cadre interprétatif de la prosodie de la parole ». *Abstracts. Nordic-Baltic Summer Institute for Semiotic and Structural Studies. 19<sup>th</sup> Annual Meeting of the Semiotic Society of Finland, Finish Summer School held in Imatra, Finland, June 12-21, 2000*, 17-21. Imatra: Imatran kaupunki. Monistamo.

6 Cf. Wąsik, Z. (2000: 32).

- Downes, William [1984] 1998. *Language and Society*. [London: Fontana Paperbacks]. 2<sup>nd</sup> ed. Cambridge [England] – New York, NY – Melbourne [Australia]: Cambridge University Press.
- Enninger, Werner, Karl-Heinz Wandt 1984. "Language ecology revisited: From language ecology to sign ecology. In Werner Enninger and Lilith M. Haynes (eds.), *Studies in Language Ecology*, 29-51. Wiesbaden: Franz Steiner Verlag
- Fill, Alvin (ed.) 1996. *Sprachökologie und Ökoluistik. Referate des Symposiums Sprachökologie und Ökoluistik an der Universität Klagenfurt, 27.-28. Oktober 1995*. Redaktionelle Mitarbeit, Hermine Penz. Tübingen: Staufenburg.
- Fill, Alvin 1993. *Ökoluistik. Eine Einführung*. Tübingen: Narr.
- Fill, Alwin, Peter Mühlhäusler (eds.) 2000. *The ecolinguistics reader: a selection of articles on language, ecology, and environment*. London – New York: Continuum.
- Geertz, Clifford [1963] 1996. "Primordial ties". In John Hutchinson, Anthony D. Smith (ed.), *Ethnicity*. Oxford – New York: Oxford University Press.
- Haarmann, Harald 1989. "Functional aspects of language varieties – A theoretical-methodological approach". In Ulrich Ammon (ed.), *Status and Function of Languages and Language Varieties*, 153-93. Berlin: Walterde Gruyter.
- Haeckel, Ernst Heinrich [1866] 1988. *Generelle Morphologie des Organismus*. Bd. 2: Allgemeine Entwicklungsgeschichte. Reprint. Berlin: de Gruyter
- Haugen, Einar [1970] 1972. "Language ecology". In Anwar S. Dil (ed.), *The Ecology of Language. Essays by Einar Haugen*, 324-39. Stanford CA: Stanford University.
- Hawley, Amos H., 1950. *Human Ecology: A Theory of Community Structure*. New York: The Ronald Press Co.
- Hornborg, Alf 1996. "Ecology as semiotics: Outlines of a contextualist paradigm for human ecology". In Philippe Descola, Gisli. Palsson (eds.) *Nature and Society: Anthropological Perspectives*, 45-62. London: Routledge.
- Ingold, Tim 1999 [1996]. "Social relations, human ecology, and the evolution of culture: an exploration of concepts and definitions". In Andrew Lock, Charles R. Peters (eds.), *Handbook of Human Symbolic Evolution*, 178-203. Oxford, UK – Malden, MA: Blackwell Publishers [Oxford: Clarendon Press – New York: Oxford University Press].
- Kull, Kalevi 1998a. "On semiosis, Umwelt, and semiosphere". *Semiotica* 120(3/4): 299-310.
- Kull, Kalevi 1998b. "Semiotic ecology: different natures in the semiosphere". *Sign Systems Studies* 26: 344-371.
- Kull, Kalevi 1999. "Biosemiotics in the twentieth century: A view from biology". *Semiotica* 127(1/4): 385-414.
- Kull, Kalevi 2000. "Organism can be proud to have been their own designers". *Cybernetics and Human Knowing* 7(1): 44-55.
- Lambrecht, Knud 1994. *Information structure and sentence form: topic, focus, and the mental representations of discourse referents*. Cambridge – New York, NY, USA: Cambridge University Press.
- Leach, Geoffrey 1983. *Principles of Pragmatics*. London – New York: Longman.
- MacDonald, Graham, Philip Pettit 1981. *Semantics and Social Science*. London – Boston: Routledge & Kegan Paul.
- Makkai, Adam 1993. *Ecolinguistics: Towards a New Paradigm for the Science of Language?* London – New York: Pinter Publishers – Budapest: Akadémiai Kiadó (Open linguistics series).
- Mogel, Hans 1984. *Ökopsychologie*. Stuttgart: Kohlhammer.
- Nöth, Winfried 1996. "Ökosemiotik". *Zeitschrift für Semiotik* 18.1: 7-18.

- Nöth, Winfried 1998. "Ecosemiotics". *Sign System Studies* 26: 332-343.
- Pietraszko, Stanisław 1992. *Studia o kulturze*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Searle, John R. 1983. *Intentionality. An Essay in the Philosophy of Mind*. Cambridge: Cambridge University Press.
- Searle, John R. 1992. *The Rediscovery of the Mind*. Cambridge: MIT Press.
- Wąsik, Elżbieta 1999a. „Domänen und Aufgaben der externen Sprachbeschreibung. Am Beispiel des Friesischen”. In Norbert Reiter (ed.), 1999. *Eurologistik ein Schritt in die Zukunft. Beiträge zum Symposium vom 24. Bis 27. März 1997 im Jagdschloß Glienicke (bei Berlin)*, 303-316. Berlin: Harrassowitz Verlag.
- Wąsik, Elżbieta 1999b. *Ekologia języka fryzyjskiego. Z badań nad sytuacją mniejszości etnolingwistycznych w Europie*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wąsik, Elżbieta 1999c. „Przyczynek do modelu opisu ekologicznego języków mniejszościowych w Europie (na przykładzie języka fryzyjskiego) [A contribution to the model of an ecological description of minority languages in Europe (on the example of Frisian)]”. *Kwartalnik Neofilologiczny* XLI, 1-2, ss. 57-64.
- Wąsik, Elżbieta 2000a. "Towards redefining the concept of the ecology of language in the framework of human-centered linguistics (with special reference to Frisian-speaking linkages)". In Yngve, Wąsik 2000: 29-31.
- Wąsik, Elżbieta 2000b. "Ethnic identity in a semiotic perspective (on the example of Frisian)". In Eero Tarasti (ed.), *ISI Congress Papers. Nordic-Baltic Summer Institute for Semiotic and Structural Studies. Part I. June 12-21, 2000 in Imatra, Finland. Plenary Lectures and Sections: Signs of Nation and History*. 267-282. Imatra 2001: International Semiotics Institute. Cultural Centre
- Wąsik, Elżbieta, Wąsik, Zdzisław 2000. "On the ecological properties of languages: Searching for a descriptive model in the domain of external linguistics (on the basis of Aroumunian and Frisian)". *Abstracts. Nordic-Baltic Summer Institute for Semiotic and Structural Studies. 19<sup>th</sup> Annual Meeting of the Semiotic Society of Finland, Finish Summer School held in Imatra, Finland, June 12-21, 2000*, 97-101. Imatra: Imatran kaupunki. Monistamo.
- Wąsik, Zdzisław 1993. „O pojęciu ekologii języka – tytułem wstępu” [On the notion of the ecology of language – Preliminary remarks]. In Z. Wąsik (ed.), *Z zagadnień ekologii języka* [From the issues in the ecology of language], 13-23. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego (=Acta Universitatis Wratislaviensis 1455. *Studia linguistica* XVI).
- Wąsik, Zdzisław 1997. *Systemowe i ekologiczne właściwości języka w interdyscyplinarnych podejściach badawczych* [Systemic and ecological properties of language in interdisciplinary investigative approaches] Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego (Acta Universitatis Wratislaviensis 1948. *Studia Linguistica* XVIII).
- Wąsik, Zdzisław 2000. "On the heteronomous nature of language and its autonomization from the properties of communicating individuals and linkages". In Yngve, Wąsik 2000: 31-32.
- Wąsik, Zdzisław 2001. "On the biological concept of subjective significance: A link between the semiotics of nature and the semiotics of culture". *Sign Systems Studies* 29.1. (University of Tartu): 83-106.
- Wierzbicka, Anna 1972. *Semantic Primitives*. Frankfurt: Athenäum.

- Wirrer, Jan 1997. "Scenarios of Endangeredness: Endangered Languages, Less Endangered Languages, Non-Endangered Languages". In Brunon Synak, Tomasz Wicherkiewicz (eds.), *Language Minorities and Minority Languages in the Changing Europe. Proceedings of the 6<sup>th</sup> International Conference on Minority Languages. Gdańsk, 1-5 July, 1986*, 153-166. Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego.
- Yngve, Victor H. & Wąsik, Z. (eds.) 2000. Workshop: "Exploring the Domain of Human-Centered Linguistics from a Hard-Science Perspective". Societas Linguistica Europaea 33rd Annual Meeting: *Naturalness and markedness in synchrony and diachrony*. Poznań: The School of English, Adam Mickiewicz University, Motivex.
- Yngve, Victor H., 1996. *From Grammar to Science. New Foundations for General Linguistics*. Amsterdam – Philadelphia: John Benjamins Publishing Company.
- Zawadowski, Leon 1966. *Lingwistyczna teoria języka* [A linguistic theory of language]. Warszawa: Państwowe Wydawnictwo Naukowe.