THE ENGLISH OF AGRICULTURE: COMPOUNDS AND DERIVATIVES WITH ‘CULTURE’

ENGLESKI U POLJOPRIVREDI. SLOŽENICE I IZVEDENICE S RIJEČI “CULTURE”

ANICA PERKOVIC*, GEORGETA RAŢĂ**, IOAN PETROMAN**

*J. J. Strossmayer University of Osijek, Croatia
**Agricultural and Veterinary University of the Banat, Timişoara, Romania

Abstract: Agriculture (whose name was attested for the first time between 1425 and 1475) has been developing from times immemorial. New agricultural branches have brought about new terms to designate them, from horticulture (attested ever since 1670–1680) and going on with floriculture, arboriculture, terms appeared during the 19th century, and with mariculture, monoculture, polyculture, and citriculture, terms appeared during the 20th century, to permaculture (a term that appeared sometime in the 1970s), or to aeroculture, agrosilviculture, algaculture, animaliculture, boviculture, caniculture, heliculture, mosaiculture, multicuture, nutriculture, oleiculture, oligoculture, ostriculture, pecudiculture, plasticulture, spongiculture, terraculture / terriculture, and zooculture, that still do not have a “birth certificate” (they are attested, but linguists cannot yet say for sure when they appeared for the first time). This means 300 years of linguist’s creativity enhanced by the need to define new realities, and a relatively short inventory of nouns (designating both the agricultural branch and the agricultural ‘agent’), adjectives, and adverbs – quite difficult to understand and learn by students in agriculture, particularly when it is about synonyms designating the same agricultural branch or about derivatives that follow no pattern discernible whatsoever.

Key words: English, agriculture, compounds, derivatives, culture

INTRODUCTION

The structural transformation of agriculture in the 19th and 20th centuries should be approached in the context of sociological theory, with emphasis given to key historical transitions, changing social relations of production, and state policy. Such emphasis could provide a framework for understanding the historical roots and future prospects for the socioeconomic problems confronting contemporary agriculture. As mechanical tillage machinery and methods revolutionized agriculture in the 19th and 20th centuries, the field became the major unit of production. This can also be said about “linguistic products” such as
English compounds and derivatives containing culture and belonging to the field of plant and animal production.

MATERIALS AND METHOD
We have inventoried, with the help of one of the best English language comprehensive dictionaries [2] and of the Internet [1], a number of 39 terms [+ action] (i.e., denoting farming and the different agricultural branches) appeared during the last three centuries. We have taken into account only compounds made up of combining forms (“bound forms used in conjunction with another linguistic element in the formation of a word”, [3]) and of the noun culture [+ action]. We have ignored compounds such as anaculture, biopyoculture, capilliculture, contraculture, coproculture, cyberculture, domiculture, feticulture, hemoculture, hirudiculture, homoculture, infanticulture, interculture, menticulture, microculture, psychoculture, puerculture, pyoculture, seroculture, subculture, superficiculture, urbiculture, or vacciniculture, that have nothing to do with the practice of agriculture, and compounds such as pond culture, oyster-culture, potlatch culture, or seaweed culture, made up of two nouns.

RESULTS AND DISCUSSION
There are, in the contemporary English of agriculture, 39 compounds with culture [+ action] (the figures between brackets indicate the time the compound appeared, while the underlined nouns are synonyms for the compounds with culture): aeroculture [-] ‘a method of growing plants without soil by suspending them above sprays that constantly moisten the roots with water and nutrients; aeroponics, geoponics, hydroponics’, agriculture [1425-1475] ‘the science, art, or occupation concerned with cultivating land, raising crops, and feeding, breeding, and raising livestock; the production of crops, livestock, or poultry; agronomy, farming’, agrosylviculture [-] ‘the growing of crops and trees in the same units of land’, algaculture [-] ‘a form of aquaculture involving the farming of species of algae’, animaliculture [-] ‘the rearing of animals as a branch of industry’, apiculture [1860-1865] ‘beekeeping, especially on a commercial scale for the sale of honey’, aquaculture [1865-1870] ‘the cultivation of aquatic animals and plants, especially fish, shellfish, and seaweed, in natural or controlled marine or freshwater environments; underwater agriculture; aquaculture’, ariiculture [1865-1870] ‘hydroponics; aquaculture’, arboriculture [1820-1830] ‘the cultivation of trees and shrubs’, aviculture [1875-1880] ‘the rearing or keeping of birds’, boviculture [-] ‘cattle-rearing’, canicuture [-] ‘the breeding and rearing of dogs’, citriculture [1915-1920] ‘the cultivation of citrus fruits or products’, electroculture [-] ‘the use of electricity to grow crops’, floriculture [1815-1825] ‘the cultivation of flowers or flowering plants, especially for ornamental purposes’, heliculture [-] ‘the farming or raising of snails’, horticulture [1670-1680] ‘the cultivation of a garden, orchard, or nursery; the cultivation of flowers, fruits, vegetables, or ornamental plants; the science and art of cultivating such plants’, mariculture [1900-1905] ‘marine aquaculture; also ocean farming’, monoculture [1910-1915] ‘the use of land for growing only one type of crop; monocropping’, mosaiculture [-] ‘the cultivation of beds of gardens that consist of plants with small foliage and different colours, arranged to form a pattern resembling that of a carpet’, multiculture [-] ‘polyculture’, nutriculture [-] ‘plants growing in nutrient solutions with or without an inert medium; such as, gravel or sand to provide mechanical support; hydroponics’, oleiculture [-] ‘the production, processing, and marketing of olives’, olericulture [1885-1890] ‘1. The cultivation of pot-herbs or other esculent (edible) vegetables. 2. The processing and marketing of vegetables, as a branch of horticulture’, oligoculture [-] ‘the cultivation of a few crops or species’, ostrioculture [-] ‘the artificial breeding of oysters for the market; oyster-culture’, pecudiculture [-] ‘1. Raising, or rearing, cattle. 2. Etymologically, from Latin pecud-em “a beast”; in plural, “cattle”
plus "culture". The word format is based on agriculture, horticulture, floriculture, etc. 3. The genetics, breeding, nutrition and housing of domesticated animals; animal husbandry; zooculture. permaculture [1970] ‘a design system which aims to create sustainable habitats by following nature’s patterns’ pisciculture [1855-1860] ‘the breeding, rearing, or transplantation of fish by artificial means’, plasticiculture [-] ‘all kinds of plastic plant coverings: mulches, row coverings, high and low tunnels to plastic greenhouses’, polyculture [1910-1915] ‘the raising at the same time and place of more than one species of plant and animal; a place where this is done; multiculture’, sericulture / sericiculturalist [1850-1855] ‘the raising of silkworms for the production of raw silk’, siliculture / sylviculture [1875-1880] the cultivation of forest trees, forestry’, spongiculture [-] ‘the cultivation of sponges’, stirpiculture [1865-1870] ‘1. The application of selective breeding laws to improve a species of plants or animals. 2. The production of pure races or stocks of animals by careful breeding’, terraculture / terriculture [-] ‘cultivation on the earth; agriculture’, viniculture [1870-1875] ‘the science or study of making wines’, and viticulture [1870-1875] ‘the culture or cultivation of grapevines, grape-growing; the study or science of grapes and their culture’, zooculture [-] ‘1. The cultivation (breeding and care) of animals for food or for biodiversity in the wild, zoological gardens, etc. 2. The genetics, breeding, nutrition, and housing of domesticated animals; animal husbandry; also, pecudiculture or the raising, or rearing, of cattle’. To these 39 compounds with culture denoting farming practices (noun [+ action]), correspond nouns denoting the person practicing the different types of farming practices (noun [+agent]), adjectives, and adverbs. Among these 39 compounds, there are three couples of terms composed with culture [+ action]. The first one, siliculture / sylviculture, is made up of two spelling variants of the same term, while the other two, agriculturist / agriculturist and viticulturist / viticulturist, are the result of a different root and of the same suffix (agriculturist > agriculture and agriculturist > agricultural) or of the same root and of different suffixes (viticulturist > viticulture and viticulturist > viticulture) in the process of derivation.

As far as the derivatives are concerned: of the 39 compounds with culture [+ action], 19 (49%) have corresponding adjectives: agricultural, agrosilvicultural, apicultural, aquacultural, aquicultural, arboricultural, floricultural, horticultural, monocultural, multicultural, olericultural, ostericultural, piscicultural, sericultural, silicultural, stirpicultural, vinicultural, viticultural, and zoocultural; of the 39 compounds with culture [+ action], 17 (44%) have corresponding nouns [+ agent]: agriculturist / agriculturist ‘a farmer; an expert in agriculture’, apiculturist, aquaculturist, aquicultural, arboricultural, aviculturist, citriculturist, floricultural, horticultural, olericultural, piscicultural, polyculturist, sericultural / sericicultural, stirpicultural, vinicultural, and viticulturist / viticulturist; of the 39 compounds with culture [+ action], 5 (13%) have corresponding adverbs: agriculturally, floriculturally, olericculturally, pisciculturally, and siliculturally.

From the point of view of the completeness of the lexical series (i.e., of the existence of a noun [+ action], of a noun [+ agent], of an adjective, and of an adverb): 17 compounds with culture [+ action] (44%) have no corresponding derivative whatsoever (i.e., noun [+agent], adjective, and adverb): aeroculture, algaculture, animaliculature, boviculate, caniculate, electroculture, heliculate, mariculate, mosaiculate, nutriculate, olericulate, oligoculture, pecuculture, permaculture, plasticiculture, spongiculture, and terriculture / terriculture; 9 compounds with culture [+ action] (23%) have the corresponding noun [+agent] and the corresponding adjective: apiculture (apiculturist, apicultural), aquaculture (aquaculturist, aquacultural), aquiculture (aquiculturist, aquicultural), arboriculture (arboriculturist, arboricultural), horticulture (horticulturist, horticultural), sericulture / sericiculture (sericulturist/sericulturalist, sericultural), stirpiculture (stirpuriculturist,
stirpicultural), viniculture (viniculturist, vinicultural), and viticulture (viticulturist / viticulturer, viticultural); only 5 compounds with *culture* [+ action] (13%) have all the derivatives (i.e., noun [+agent], adjective, adverb): agriculture (agriculturist / agriculturalist, agricultural, agriculturally), floriculture (floriculturist, floricultural, floriculturally), olericulture (olericulturist, olericultural, olericulturally), pisciculture (pisciculturist, piscicultural, pisciculturally), and silviculture / sylviculture (silviciculturist, silvicultural, silviculturally); 5 compounds with *culture* [+ action] (13%) have only the corresponding adjective: agrosilviculture (agrosilvicultural), monoculture (monocultural), multiclude (multicultural), ostriculture (ostreicultural), and zooculture (zoocultural); 3 compounds with *culture* [+ action] (8%) have only the corresponding noun [+agent]: aviculture (aviculturist), citriculture (citriculturist), and polyculture (polyculturist).

If there are 5 derivate adjectives and 3 derivate nouns [+agent] from compounds with *culture* [+ action], there is no derivate adverb in the absence of the noun [+agent] and of the adjective in the same lexical series. It is interesting to note that language dictionaries only give the meaning for *agriculturist*, the meaning of the rest of the derivatives being easy to understand. The number of adverbs derived from compounds with *culture* [+ action] is small compared to the corresponding nouns ‘agent’ and adjectives.

**CONCLUSIONS**

The large numbers of adjectives (49%) and of nouns [+agent] (44%) shows that for agriculturists, everything related to the farming practice and the farming practice in itself was more important than the way things are being done, such as expressed by adverbs (13%). Adverbs will appear with more analytic approaches, i.e. with the increase of a more scientific approach of agriculture on the whole and of farming practices in particular.

The large number of compounds with *culture* [+ action] (44%) having no corresponding derivative whatsoever speaks of the recentness of the basic nominal compound. The quite considerable number of compounds with *culture* [+ action] (23%) having the corresponding noun [+agent] and the corresponding adjective shows that this is an on-going process, as well as the rather small numbers of compounds with *culture* [+ action] (13%) having all the derivatives, of compounds with *culture* [+ action] (13%) having only the corresponding adjective, and of compounds with *culture* [+ action] (8%) having only the corresponding noun [+agent] shows that the derivational process is on-going: this means that we may expect to have, in the near future, all the rest of the derivatives due to the fact that the derivational pattern is quite simple.

In practice, students in agriculture and in fields closely related to agriculture use most of these unattested derivatives, as for them they come in the most natural way.

**LITERATURE**

2. ***http://wordinfo.info/words/index/info/view_unit/58677/?spage=14&letter=C