

CHAPTER ONE: INTRODUCTION

The present study was inspired by a paragraph in JOSEF VACHEK'S *Lingvistická charakteristika* claiming that there were no English names of mushrooms. This claim seemed unusual. Although it is generally known that mushrooms are not collected by the British, they grow in British, North American *etc* woods and fields and it would be unusual if they had no names.

The aim of the present study is

- (i) to establish whether there are English names of mushrooms or not,
- (ii) if there are, how do they compare with the Czech names.

The present study has not been written in chronological order because the very first stages of research showed that many mushrooms had English names. This is why, from the following paragraph on, aim (i) of the study is regarded as achieved. The way to the positive statement, however, is described in the study, especially in the chapters on the sources and on the corpuses.

The present study is an inquiry into the Czech and English terminology of one small area of botany. Studies of this kind are part of lexicological research and are descriptions of semantic fields, more precisely subject fields (FILIPEC 1985.151). The fields are part of systematic description of lexis. The systematic description is opposed to the non-systematic description found in most dictionaries, *ie* in dictionaries where the entries are arranged alphabetically. The absence of system in these dictionaries is a matter of the order of the entries only because the inner organization of the entries is based on systematic arrangement. The absence of system is made up by strict adherence to the conventional alphabet.

The present study deals with the most current names of mushrooms in Czech and English. The limitation to current names means that many of the *fungi* remain outside the scope of our interest, *eg* most of the rusts, smuts, moulds and other microscopic *fungi*. The study concentrates on the linguistic side of the names of mushroom names and thus it is a linguistic study, not a mycological or taxonomic study. This has to be mentioned at the beginning because the names of the mushrooms do not cover any of the genera, families, orders, classes in a systematic way.

The total number of all *fungi* now existing on the earth is estimated at 100,000 species, out of which the number of the higher *fungi*, *ie* the ones that are noticed, collected and used by ordinary people, is about 20,000 species.

Paleontological findings prove that the first *fungi* existed in the Devonian period of the Palaeozoic era, about 400 to 350 million years ago, in which amphibians and forests of giant ferns and of fern-like trees first appeared.

Mushrooms were known in ancient India and were probably used by the ancient Hindus in the manufacture of an intoxicating drink used in Vedic rituals

and called *soma*.¹ The Mayas and the Aztecs are known to have used hallucinogenic mushrooms in their rites.² The Spaniards suppressed the use of hallucinogenic mushrooms, belonging principally to the genus *Psilocybe*, lysohlávka, but these mushrooms were “rediscovered” in the 1930. Many American tourists visited the Oazaca area in southern Mexico where these mushrooms grew before the same mushrooms were found to grow in the United States as well.³ Symptoms are similar to those of LSD, which, incidentally was derived from *Ergot*, *Claviceps purpurea*, paličkovice nachová (námel). As the hallucinogenic effect of the *Psilocybe* has been known for some time, no variety has been described in any Czech or Slovak popular book on mushrooms for some decades. In spite of this measure, these mushrooms are known to drug-addicts, as the tragic events of 1995 in Brno have shown.⁴

The English word *berserk* is probably connected with mushrooms. It was taken over from Scandinavian in the nineteenth century with the meaning of ‘an ancient Norse warrior who worked himself into a frenzy before battle and fought with insane fury and courage’. The warrior was dressed in bearskin (*bern* ‘bear’ + *serkr* ‘shirt, coat’). The mushroom used to get into a rage was probably the **Fly Agaric**, *Amanita muscaria*, muchomůrka červená.⁵ The toxin isolated from this mushroom was named after the mushroom, *muscarine*, but it occurs in the mushroom in insignificant amounts. Curiously, many people fear *Amanita muscaria* more than its deadly cousin **Death Cap/Death Angel**, *Amanita phalloides*, muchomůrka zelená. Many **Inocybes**, vláknice, contain large amounts of muscarine — enough so that they can be fatal in large quantities (ARORA 1986.894).

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- 1 This is claimed by mycologists. Others claim that *soma* was a plant. FRANTIŠEK ŠITA, *Záhada božské sómy*, Hradec Králové 1982, quotes R. GORDON WASSON, *Soma, divine mushroom of immortality*, New York 1967. Wasson’s arguments are based on the colour of the drug, on its shape recorded in sculptures, on the fact that it grows in mountains, ie in Afghanistan. The sculptures in Kánčipuram, photographed by ŠITA, look really like a mushroom. Indian iconography, however, claims that they are parasols, symbols of secular and divine power. Another argument against the mushroom is the fact that the church with the sculptures was built a long time after the era of the vedas. According to *Encyclopaedia Britannica*¹⁵, ‘Fly Agaric does not grow in hot countries, it may have been introduced to India by Aryan invaders from the north; subsequently, other plants may have been substituted until their identity was confused and lost.’ (13.242).
 - 2 Statues of mushrooms from 5th cent. BC testify to the existence of a cult of mushrooms in what is now Guatemala (KLÁN 1989.14).
 - 3 It all started when R. Gordon WASSON and his companions were invited in 1935 as the first non-Indians to taste the sacred mushroom (*EB*¹⁵:13.242). The most powerful variety is *Psilocybe cyanescens* (ARORA 1979.371).
 - 4 The Czech Republic being a developing country in drug addiction also means that “trips” may result in tragedy here while in other countries, already developed, the treatment is known. The suffering person should be assured repeatedly that the effects are temporary. “A factor to bear in mind is that transferring the person to an unfamiliar environment can be frightening, and that sedatives may worsen the effects, especially if administered forcibly.” (ARORA 1979.895)
 - 5 The three names of mushrooms, English, Latin and Czech, will be printed in the following types: English — **bold**, Latin — *italics*, Czech — normal.

A strong cult of **Fly Agaric** is also known to have existed in some areas of Lapland and of Siberia. Dried caps of **Fly Agaric** were eaten as an intoxicant, 'a habit that has died out with the introduction of vodka' (PHILLIPS 1986.13). For those who are willing to believe this, a completely new effect of **Fly Agaric** was discovered by Scott CUNNINGHAM in his book *Cunningham's Encyclopedia of Magical Herbs*: placed in the bedroom it increases fertility. According to CUNNINGHAM, **Fly Agaric** has male polarity, which means strong and powerful vibrations, and its signature, *ie* the governing planet, is Mercury which brings spiritual strength, prophetic abilities and wisdom. The governing element of this mushroom is air, which not only supports the spiritual strength and wisdom gained from Mercury but also brings imagination. The governing god of **Fly Agaric** is Dionysos, the Greek god of wine, fruitfulness and vegetation.⁶ Otherwise **Fly Agaric** was used for killing flies, a fact reflected in its name in Latin, English, Czech and many other languages.

The oldest records of mushrooms are probably the cave paintings near the Pegtymel, a river in Tschukotka, dating from the beginning of the Neolithic, *ie* from about 4,000 BC.⁷ An illustration of *Lactarius deliciosus*, ryzec pravý, **Saffron Milk Cap**, appears on a fresco recovered from the ruins of Pompeii. The oldest written record is that by Aristotle's pupil THEOPHRASTOS from Eres in Lesbos (372?-287? B.C.). In his book (*Historia plantarum* is the Latin title) he described four species of mushrooms and introduced the names *mykes* and *hydnom*. Mushrooms were included in the herbal by the best known pharmacologist and botanist of the ancient world DIOSKURIDÉS PEDANIUS from Anazarba in Kilikia, who lived in Nero's time, in the second half of the first century. His herbal was translated into a number of languages and influenced the European medicine throughout the Middle Ages. One of DIOSKURIDÉS's recommendations survived until recently: the use of what in the modern scientific terminology is called *Fomes officinalis* or *Mensularia officinalis*, **Purging Agaric** or **Quinine Fungus** in English, and 'troudnatec lékařský' or 'verpánik lékařský' in Czech. It was recommended as a 'universal remedy', which has to be understood in accordance with the first of the English names given above.⁸ Some mushrooms are

6 Published by Llewellyn Publications, St. Paul, MN, in 1985. The Czech translation by JAN DOLEJŠÍ, *Magické rostliny*, was published by Volvox globator, Prague, in 1994. Although the book is only for those who believe into this kind of magic, the Czech translation is interesting even for those who do not believe into it because it contains a number of popular names of herbs. Unfortunately, **Fly Agaric** is the only mushroom represented in the book. SCOTT CUNNINGHAM began writing books when he was eighteen. He wrote over thirty books about witchcraft, aromatherapy, the Wicca cult, and about the magic of gems, metals, scents, incense, oils, brews, food, earth, air, fire and water. He died at the age of thirty-seven.

7 Other sources date the Tschukotka paintings between the first millennium BC and the first millennium AD.

8 MATTHIOLI enumerates about forty ways how **Purging Agaric** can be used in medicine (cf. SEMERŽIEVA & VESELSKÝ 1986.51). Other mushrooms used in folk medicine were **True Tinder Fungus**, *Fomes fomentarium*, troudnatec kopytovitý, which was used to stop bleeding (just as the spores of puffballs), **Ear Fungus**, *Hirneola auricula judea*, ucho Jidášovo, which was believed to relieve headaches and swollen ears, **Stinkhorn**, *Phallus impudicus*, hadovka

used in modern homeopathic drugs (eg **Fly Agaric**, *Amanita muscaria*, muchomůrka červená, **Devils' Boletus**, *Boletus satanas*, hřib satan, **Emetic Russula**, *Russula emetica*, holubinka vrhavka). Not everybody, however, shared the view that mushroom had some healing properties. GALENOS (131–201) said that mushrooms “generally speaking, had no medical importance because they only cause flatulence, reduce the bodily temperature, and produce many unclean and sticky phlegm and humidity. To handle mushrooms is very dangerous.” According to PILKINGTON 1994.⁸ mushrooms were also used as absorbents during menstruation and as birth-control means. The book, however, is not a scientific work and it does say where and when this use of mushrooms has been recorded.

If we take the *fungi* in the wider meaning of the word we can quote the use of many *fungi* in the pharmacological and the chemical industries. Two generally known examples of this use are **ergot**, *Claviceps purpurea*, paličkovice nachová⁹ and *Penicillium notatum*.

GAIUS PLINIUS SECUNDUS (23/24–79 AD) is often quoted that he introduced the names *agaricum* (sometimes wrongly quoted as *agaricus*), *boletus*, *fungus*, *suillus*. As a matter of fact there is another name in his *Natural history*: *Sunt et in fungorum genere Graecis dicti pezicae, qui sine redice aut pediculo nascuntur*. PLINIUS was probably the first person to classify mushrooms. He applied a very simple criterion: there were two classes of mushrooms, edible and inedible, a classification used by many later authors of herbals.

To the ancients Romans and Greeks and to the peoples of the Far East, mushrooms were mostly delicacies. They were eaten either fresh or dried or pickled. CAELIUS's cookery book,¹⁰ published in the third century, has one chapter devoted to mushrooms, especially to **Caesar's Mushroom**, *Amanita caesarea*, muchomůrka císařská, and to the **truffles**, lanýže. The Romans also appreciated the boleti, which they called *suilli* (the name *boletus* referred to *Amanita caesarea*). Modern books on *mushrooms* often quote two lines by Marcus Valerius Martialis:

Argentum atque aurum facile est laenamque
togamque mittere, boletos mittere difficile est. XIII.48¹¹

smrdutá, which was applied to heal gout, **Razor Strop Fungus**, *Piptoporus betulinus*, bře-zovník obecný, which is believed to cure tumours, etc. (SMOTLACHA 1989).

The medical use of a fungus is reflected in the English name of **Cramp Balls**, *Daldinia concentrica*, sazovka kruhatá, which was “formerly carried to ward off cramp” (CED). *Cordyceps sinensis*, housenice čínská, was used as a drug against hepatitis and tuberculosis and to heal injuries. Modern research confirmed the healing effects of this *fungus*. The agent was isolated in 1950 and is called *cordycepine*.

- 9 **Ergot** was used already in ancient Chinese gynaecology and then in the Middle Ages to help child birth.
- 10 The book was published under the title *Caelii Apicius de re coquinaria*. Marcus Gavius Apicius was a rich man who lived in the first half of the first century. He was a well-known gourmet and also wrote on cooking. Nothing of his writings has survived, though.
- 11 It is easy to give up silver, gold, one's coat and toga, but to give up mushrooms is difficult.

The assumed healing properties of mushrooms were the reason why mushrooms were described in medieval and later herbals. The Viennese botanist C. CLUSIUS (1526–1609) described and drew over 100 species of mushroom in his herbal (published 1598, reprinted in Budapest in 1900). He distinguished two types of mushrooms: *Fungi esculenti* (edible) and *Fungi noxii er perniciosi* (noxious/poisonous and pernicious/causing great harm). P. A. MICHELI (1679–1737), an Italian botanist, introduced the terms *Clathrus*, *Geaster* and *Polyporus*, which are still used in modern taxonomies. On the other hand there were authors who kept up the ancient prejudices about mushrooms. S. VAILLANT (1669–1723) wrote in his *Botanicon Parisiense*: “Mushrooms are the product of the devil invented with the only purpose of disrupting the harmony of the rest of the nature and of embarrassing the botanists and driving them to despair.” (transl. of KLÁN 1989).

In September 1991 a frozen body of a Copper-age man was found in the Alps. The man died about 3,000 B.C. and he carried a pair of fungi, each pierced by a leather thong. As the fungi contain chemical substances now known as antibiotics, the Iceman, as he is called, may have used them to counteract illnesses. (*National Geographic* 183:6. 36–63, June 1993)

As is well-known, mushrooms are not nourishing at all, yet there have been resorted to in cases of necessity. In times of famine, mushrooms became an essential part of food.¹² German troops in Eastern Africa had to rely on mushrooms for their food for long periods between 1914 and 1918. In 1916 hundreds of people suffered from mushroom poisoning in Vienna because there was shortage of food and lack of knowledge of the mushrooms.¹³ The use of mushrooms as poison administered on purpose is also known from human history.

The use of mushrooms for practical purposes is mentioned in *Encyclopaedia Britannica*. The cap of the Inkcaps, *Coprinus*, hnojník, is known to disintegrate into an inklike liquid. Ink used to be made by boiling the blackened caps in a little water and cloves. It was also used for retouching of photographs. Other practical use of mushrooms is that for making dyes: in Asia Minor silk was dyed with the help of a mushroom called rezavec štětinatý. The changes in wood caused by some mushrooms, eg **Cramp Balls**, also called **King Alfred's Cakes**, *daldinia concentrica*, sazovka kruhatá, were used for making ornaments on furniture. A special case of the practical importance of a mushroom is known from earlier times. Before matches were discovered, the **True Tinder Fungus**, also called **Rusty Hoof Fomes** or **Hoof Fungus**, *Fomes/Polyporus/placodes fomentarius*, troudnatec kopytovitý/troudový (‘dymnivka’ in popular Czech) was used for lighting fires, a fact confirmed by the English, Latin and Czech names of the mushroom.

12 **Blackfellows' Bread** or **Native Bread**, *Myliitta australis*, is eaten by the Australian aborigines.

13 One of the first records of death from mushroom poison was written by EURIPIDES, who described the sad fate of a woman and her family.

The Czech word 'hubka' denotes a number of things, three of them made from **True Tinder Fungus**: (i) a lighting utensil used previously to fire a gun, (ii) (*arch.*) material made from the same mushroom and used for making caps, (iii) material used to stop bleeding, (iv) a small sponge.

In the past, some of the mushrooms were connected with mysteries, thanks to their growth in circles (**Fairy Ring Champignon**, *Marasmius oreades*, špička obecná). In the Middle Ages these rings were thought to be the paths of dancing fairies. The rings grow outwards at a rate of 10 to 50 centimetres a year. Some rings may be hundreds of years old, some are up to 5,000 years old, according to the *Canadian Encyclopedia*, and may be too big to be easily seen. Even GAIUS PLINIUS SECUNDUS believed that mushrooms were the product of lightning and thunder and the progeny of witches and that poison gets into them from poisonous snakes, rotting textile materials and rusty nails. In China, on the other hand, mushrooms are regarded as symbols of happiness and rebirth and were therefore eaten by the Taoist immortals.

The interest in mushrooms in this country already in the Middle Ages is proved by books dealing with mushrooms. Two of them should be mentioned here. MATTHIOLI's herbarium, translated into Czech by TADEÁŠ HÁJEK Z HÁJKU, gives the Fly Agaric, boleti, morels, marasmiuses, lactariuses. The main source of information on the medieval knowledge of *mushrooms*, however, is not MATTHIOLI or any other herbarium but KLARET's *Glossary*. It contains 39 Czech names of *mushrooms*. MACHEK's analysis of these names is summed up here in the chapter on history.

The tradition of collecting mushrooms for food has been preserved in Italy and in some other Romanic countries while most people in the English-speaking countries, in parts of Germany and France and in Holland do not collect mushrooms (F. SMOTLACHA 1936; see also further on in the chapter on sources).

ARORA 1986 discusses fungophobia in the United States. He says that the Americans inherited it from the British and supports this by a quotation from William Delisle HAYS, an Englishman writing in the 1800:

(All mushrooms) ... are lumped together in one sweeping condemnation. They are looked upon as vegetable vermin only made to be destroyed. No English eye can see their beauties, their office is unknown, their varieties not regarded. They are hardly allowed a place among nature's lawful children, but are considered something abnormal, worthless, and inexplicable. By precept and example children are taught from earliest infancy to despise, loathe, and avoid all kinds of "toadstools." The individual who desires to engage in the study of them must boldly face a good deal of scorn. He is laughed at for his strange taste among the better classes, and is actually regarded as a sort of idiot among the lower classes. No fad or hobby is esteemed so contemptible as that of "fungus-hunter," or "toadstool-eater."

This popular sentiment, which we may coin the word "fungophobia" to express, is very curious. If it were human — that is, universal — one would be inclined to set it down as an instinct, and to reverse it accordingly. But it is not human — it is merely British. It is so deep and intense a prejudice that it amounts to a national superstition...

In a striking instance of the confused popular notions of fungi in England that hardly any species have or ever had colloquial English names. They are all "toadstools," and therefore are thought unworthy of baptism. Can anything more fully demonstrate the existence of that deep-rooted prejudice called here "fungophobia"? ...

We hope to show that in spite of the strong fungophobia in Britain many "toadstools" do have English names, recorded in a number books available in British bookshops.

ARORA demonstrates the fungophobia on quotations from Shelley (*agarics and fungi ... pale, fleshy, as if the decaying dead ...*, *The Sensitive Plant, Part Third*, written in 1820), Doyle (*monstrous fungi — it was as though the sick earth had burst into foul pustules*), Lawrence (*all wormy inside... sickening toadstools*), Dickinson (*Had nature any outcast face. — Could she a son condemn — Had nature an Iscariot — That mushroom — it is him*). ARORA says that in Europe fungophobia is the exception and not the rule. The Russians "go absolutely bananas over fungus... Instead of talking about the weather, strangers often engage in polite conversation about how the mushroom season is progressing... Many family names are derived from fungi: Bribov, Borovikov, Gruzdjov, Ryshikov, Opjonkin. Another one is Griboyedev... The poet Majokovsky was a mushroom addict... Even Lenin is said to have been possessed by a *razh* or "mushroom passion."

The English fungophobia is partly reflected in the absence of counterparts to some Czech idioms, *eg to je toho jako hub* 'there's plenty of it', *být ještě na houbách* 'be still a twinkle in one's father's eye' (the meaning of the Czech idiom is explained in MACHEK 1957 by an old custom of the teenagers to go mushroom picking in the spring; the mushrooms were a pretence and the real aim were amorous activities; the custom has been known in Russia and has been indirectly attested even for the Czech lands). The number of Czech phrases is, of course, influenced by the fact that the Czech word *houby* 'mushrooms' functions as an euphemism for *hovno* 'shit'. On the other hand, there is no Czech counterpart to anything she doesn't know about food could be written on the back of a button mushroom.'

ARORA's advice on mushroom collecting includes carrying ample supply of food. "Not known for wasting opportunities, the French carry this tradition even one step further — they bring wine, goblets, and a table cloth, and pause for picnic every half hour. The advantage of this strategy is obvious — you needn't find any mushroom to have a good time.¹⁴"

There are people in the English-speaking countries who collect mushrooms and eat them and give advice in their books how to eat them. However, the advice offered in the books may not be in the same spirit as that given in the Czech books.

14 In connection with *fungophobia* let us mention also *xenophobia*. In a series of guides to the national character called *Xenophobe's Guides* one of the French characteristic features is described in the following way: 'At a business conference two French colleagues spent more than half an hour talking not about work or sport but about the mushrooms they collect in summer and about the way they eat them and what sauce they make. With great delight they discussed less known varieties which one of them found in the mountains of Corsica and the sauce for steeping the mushrooms.' (Nick YAPP, Michel SYRETT, *Xenofobův národnostní průvodce: FRANCOUZI*, Sagitta, Praha 1994, p.42).

Houbařská kuchařka [Mushroom Cookery Book] by Miroslav SMOTLA-CHA contains something like three hundred recipes for all sorts of meals and dishes with mushrooms, including puddings, goulashes, smoked mushrooms, soups, sausages *etc.* More than twenty salads are described, for which the mushrooms are either boiled or stewed. There are only two salads made with raw table mushrooms, *žampiony*, *Agaricus bisporus*.

Houby v kuchyních světa [Mushrooms in the world cuisines] by JIŘÍ BAIER contains over two hundred recipes, again including salads. In all cases the mushrooms are cooked before eating except a Belgian salad for which pickled mushrooms are used.

A very extensive book on mushroom cookery was written by HENRYK DEBSKI and is known here in a Slovak translation *Jedlá z hub*. The number of recipes in this book is at least nine hundred, including a number of salads with various fancy names: London, Vratislav, Bombay, Casablanca, Gdansk, Verdi, Dumas, Imperial, General's *etc.* All these salads are prepared with cooked or stewed mushrooms. The same way of making salads is recommended in *Koření — Houby — Víno* in which the part on mushroom cooking was written by JIŘÍ BAIER and JÁN MAJERNÍK.

The Collins Gem Guide to Mushrooms and Toadstools says 'never eat them raw' and PEGLER 1981 tells his readers to cook the mushrooms as soon as possible.

PHILLIPS differs from the previous sources and gives very personal advice. His *Photographic Guide to Identify Common and Important Mushrooms* is written in a very informal way: 'Julius Caesar and Claudius were both potty about it [= *Amanita caesarea*]' (7). 'When you find a field with the enormous caps [of Parasol Mushroom, *Lepiota procera*, *Bedla vysoká*] ..., if you are like me, you will jump for joy' (21). '... is a mushroom which, in a good year, can be found by the bucketful in almost any kind of woodland, hedgerow or garden' (91). 'I have been offered both the mother and grandmother of an Italian man I met for six good specimens [of *Cep*] I had in my basket!' (141). PHILLIPS' advice about edibility sometimes warns collectors that a species should not be eaten raw: '[**Honey Fungus**, *Armillaria mellea*, *václavka obecná*] is a good edible fungus when cooked' (25). 'Edible, but only when cooked' (87, 91, 145). '[**Hedgehog Fungus**, *Hydnum repandum*, *lošák zprohýbaný*] It is edible but the taste of the raw flesh is rather bitter and so it should always be cooked' (157). PHILLIPS' suggestion about the **Field Mushroom**, *Agaricus campestris*, *žampion polní* is in agreement with the Czech recipe quoted above. The recipe, however, was an exception among hundreds of others. 'Lovely to eat raw or cooked' (119). But the following quotation gives advice which is found in any other book: [*Cep*, *Boletus edulis*, *hřib smrkový*] 'Young, fresh specimens are lovely to eat raw in salads, more mature specimens should be cooked' (141).