Natural elements of Landscape: Vegetation



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Vegetation_1: The importance

- Vegetation very visible, <u>quickly changing</u> succesion, changes by Man.
 - very important subject of Landscape evaluation
 - easy vulnerable but
 - sometimes <u>making harms</u> to other elements and Man: Invasive species, esp. trees, weeds. Hiding artefacts and rocks.
- Principle A: 1. The more <u>huge</u> and <u>isolated</u>, the more important
- 2. The closer to horizons or edges, the more important
- **Principle B**: Vegetation in Landscape <u>respecting ecotope</u>! Why: illustration of specific Landscape character, could <u>emphasize</u> it!
- **Examples** projects of planting trees along roads, Austrian Highways
- **Exceptions** parks and alleys in towns and cities -
 - It is mostly a <u>mistake</u> to use common trees in artificial environment in cities. OK in villages.
- In protection of Landscape shape ± problems of <u>spreading the not native</u> <u>species</u>, mostly from other Continents - Changing the Landscape. In Central Europe spontaneous: *Robinia pseudoaccacia*, *Ailanthus altissima, Acer negundo*. Planted: *Picea pungens*, *Juglans nigra, Thuja plicata*, etc.
- But: Spruce plantations on Bohem.- Morav. Highland instead of former beech: Yet for 170 years. People accepted that and Painters painted – to change it?



Vegetation of bushes of dwarf (mountain) pine on boulders 600 m below mountain pine tier – caused by cold cryptoclimate among boulders. Presents this Anomaly.





Vegetation_2: Composition of woody vegetation

- Vegetation according to area:
- Large forests, medium size (≤ 1 km²), groves (≤ 1 ha), group of trees (up to 20),
- Stripes (e.g. bank vegetation), lines (one or more rows), parkway, alley – also in forests! – road to castle, hunting hut
- solitary tree, also in forests (e.g. very old tree)
- Bushy groves
- **Ecotone** on border of very different vegetation, e.g. forest– meadow. Ecological and biodiversity importance, but also for Landscape shape:
- Positive: Hiding the tree composition inside forest, mostly more colourful, changing during year (flowers, leaves).
- In forest-field edge may be negative: Thorny, alien species, poor colours, one species, ruderal vegetation.
- Indentation of forest edge, meadow edge x arondation for economy better straight edge, for Landscape shape <u>indented</u> one

Vegetation_3: Info about History

- In evaluation of vegetation good to know: <u>History of the vegetation</u> old maps, photographs, chronicles, old aerial images, memories of old peoples.
- If not Deductions, Analogues
- If too complicated or extremely important, in parks ask specialist
- The older and more natural the vegetation is, the more important
- Vegetation itself also "speaks" about History:
- Old trees (how old are they?) Memory of Landscape, Memorials for people
- Old trees also: Shade for people, orientation point well accepted.
- In forest maybe tree of primeval species, information for scientists
- Orchards Young, low, highly productive, large, fenced not so valuable
 - Old fashioned (high trunk), extensively used, grassed with flowers, without fertilizers, small – more valuable, also old tree gene pool, old types of fruits ↔ history of Man



Former pasture – with protected trees and bushes needs some care.

> Nature reserve Děvín, Pálava South Moravia



So called <u>Beech of Mr. Milion</u>, ca 15 km N of Brno

Isolated old tree in a forest – also important for natural and local history values

Trees accentuate fields division:

Historical field system – 14. Century Hlásná Lhota village in Southern Bohemia. But now overgrowing





Historical organization and shape of fields – now only valuable rests. Also partly abandoned and overgrown.

White Carpathians Mts., village Velká n./ Veličkou, Eastern Moravia

Southern Moravia – small private vineyards – nice, motley,

- close to village Velké Pavlovice



PROBLEM OF VEGETATION OWERGROWING

- on abandoned meadows, pastures, fields. In Central EU mostly negative, in devastated Landscapes OK Destruction of Natural reserve for flowers, eastern Moravia:



Problem of vegetation overgrowing

•1938, ANTI Svoboda nad Úpou

270

Year 1938 - Giant Mts., village Mladé Buky-Sklenářovice. Foto ANTI



Year 2006, today even more

LOUKY / WIESEN

Parkway – a cathedral with windows to the Landscape



Walter Staudte, •1938, AA

1938 - Giant Mts., village Rokytnice nad Jizerou

Foto Walter Staudte



And in year 2006: The row of trees partly persisted, but ...



Nature Reserve -Meadows in the White Carpathians Mts. in eastern Moravia

Trees and bushes: In places appropriate, in places to much ... "Disappearing rocks and stones" – covered by vegetation – in majority of landscapes perhaps a mistake



Central Bohemian Hilly Land, ca 500 m above s.l., "granit" Landscape

Rock outcrops cleaned by pasture - OK



Good practise exist – Austria:





Haná field plains – for a thousand years without trees: Is present development OK? Ecologically yes. And the Landscape shape?



A Biocorridore in Czechia – Vracov, planted in years 1990-1991 Strait biocorr. lines OK in such geometric Landscape. But in soft-grained, rolling?

Foto from the year 2019



Regional biocorridore (=wider) In village Loděnice close to Pohořelice, southern Moravia – yr. 2000, length 2 km, not one segment, but several in various direction - OK



Biocentrum of reg. importance at village Bedihošť, Haná field plains, Central Moravia. Absence of groves is so bad, that this is improving. Year 2001



Year 2019



Bad: Black locust (*Robinia pseudoaccacia*) – from Eastern USA Prevent it.

 Part of used coloured snaps originate from Edition Chráněná území ČR ("Protected territories of Czechia"), from open Internet and from an Archive of the author.

 Black and white snaps from Giant Mts. (Northern Bohemia) originate from publication P. KLIMEŠ (2007): Krajina Krkonoš v proměně století. Veselý výlet, KRNAP.

• Thanks to everyone.