

Symbolising features

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Overview

- Symbology
- Symbology in QGIS (layer styles)

Symbology



Information about
location

Information that **describe**
spatial location

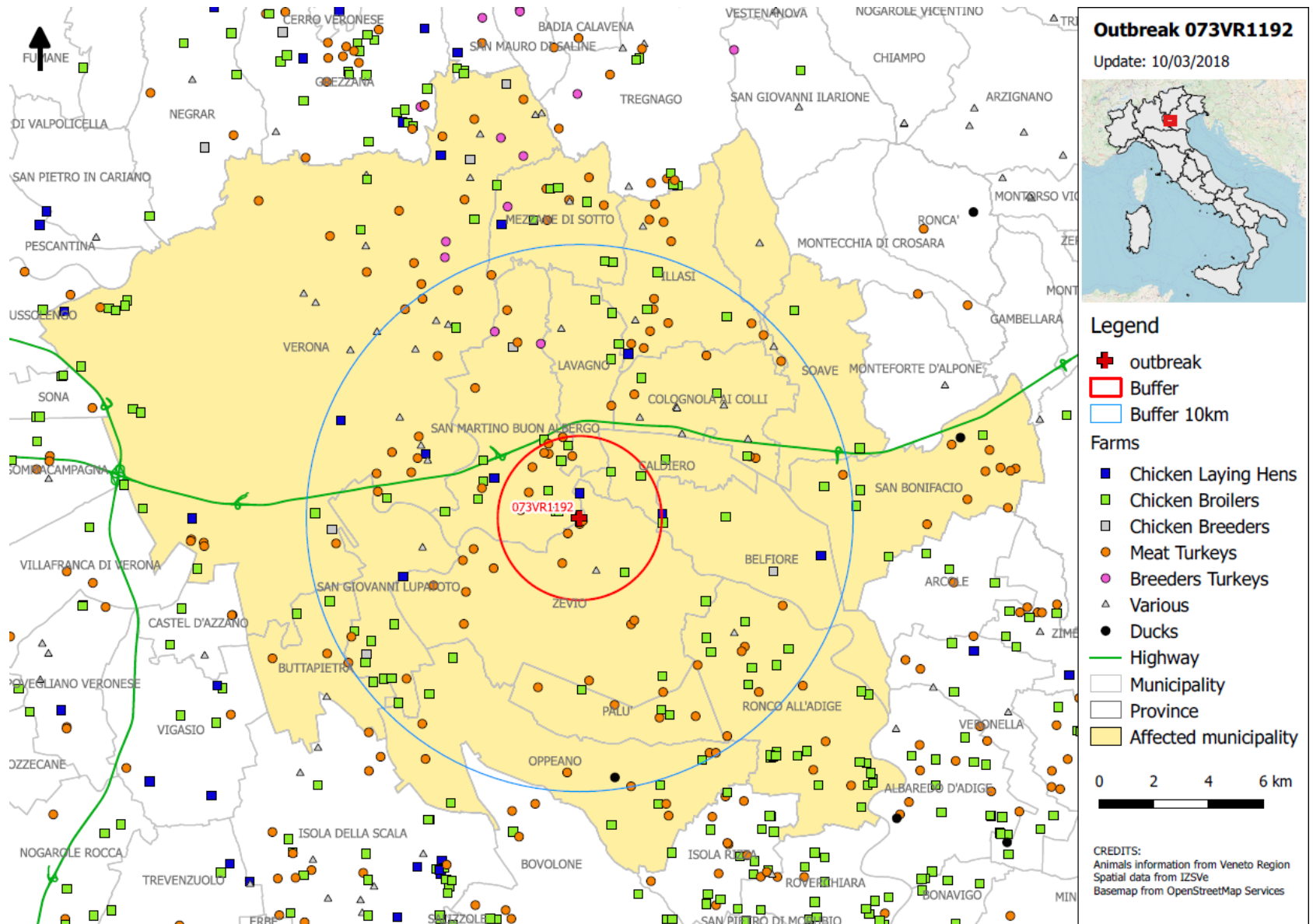


Display data in graphical way
using symbols

Symbology

- Visualize information
- Communicate concepts

Symbology



Changing Symbology

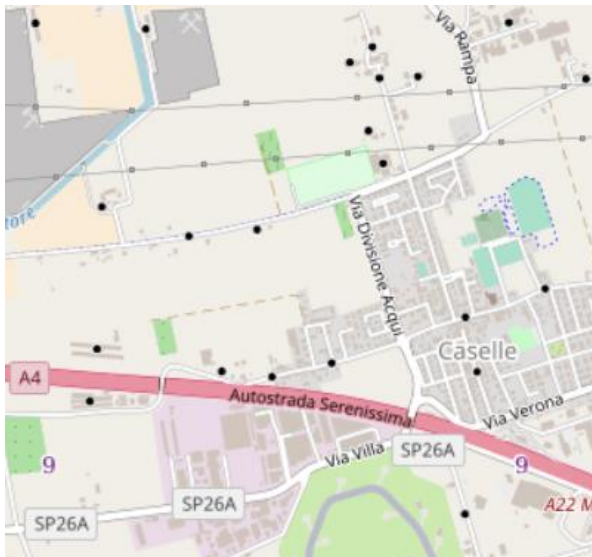
- Colors
- Shapes and elements
- Dimensions
- Pattern/Fills

		primitives			
		point	line	polygon	
data types	nominal	<ul style="list-style-type: none"> ● town X bench mark ⊕ hospital 	<ul style="list-style-type: none"> — road - · - · - boundary — stream 	<ul style="list-style-type: none"> ▨ swamp ▨ desert ▨ lake 	
	ordinal	<p>farm size</p> <ul style="list-style-type: none"> □ small □ medium ■ large 	<ul style="list-style-type: none"> — highway — state road — county road 	<p>administrative district</p> <ul style="list-style-type: none"> ▨ municipality ▨ province ▨ region 	
	interval	<ul style="list-style-type: none"> ⋯ each dot represent 200 farms 	<p>elevation and depth contour line</p>	<p>animal density</p> <ul style="list-style-type: none"> ▨ 50 per sq. ▨ 100 per sq. ▨ 200 per sq. 	

Right symbology

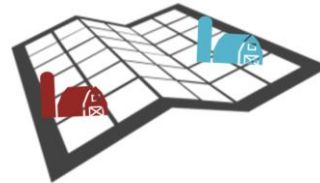
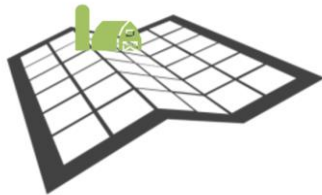
There isn't a unique right **symbology**. It depends on:

- The scale
 - Small scale (1:2.000.000) → Less details
 - Large scale (1:5.000) → More details
- Type of element to represent
 - Event / Concept
 - Natural / anthropic element

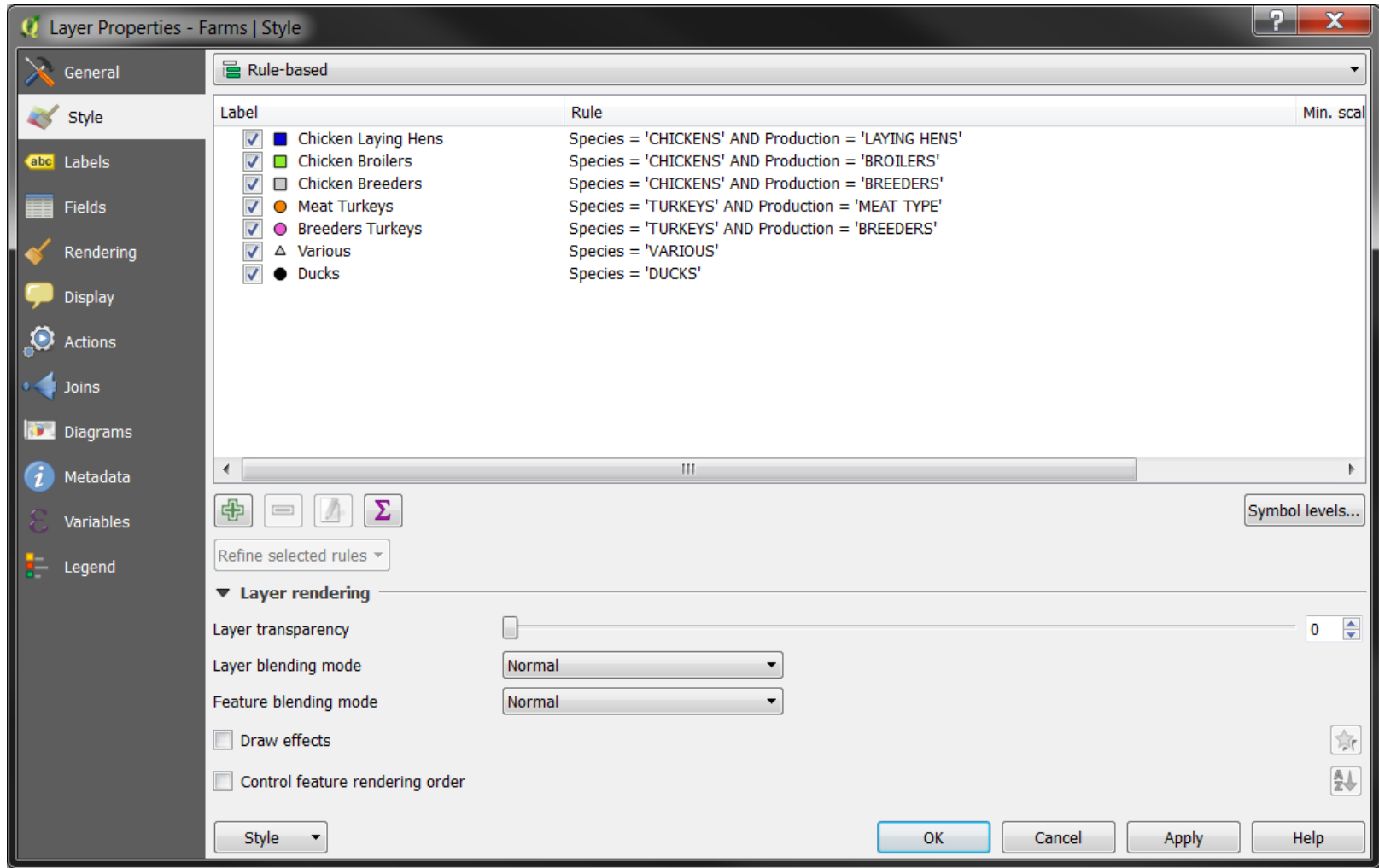


Right symbology

- Don't use too many information in the same map
- Split in different maps to reduce the «rainbow effect»



Changing Symbology in QGIS



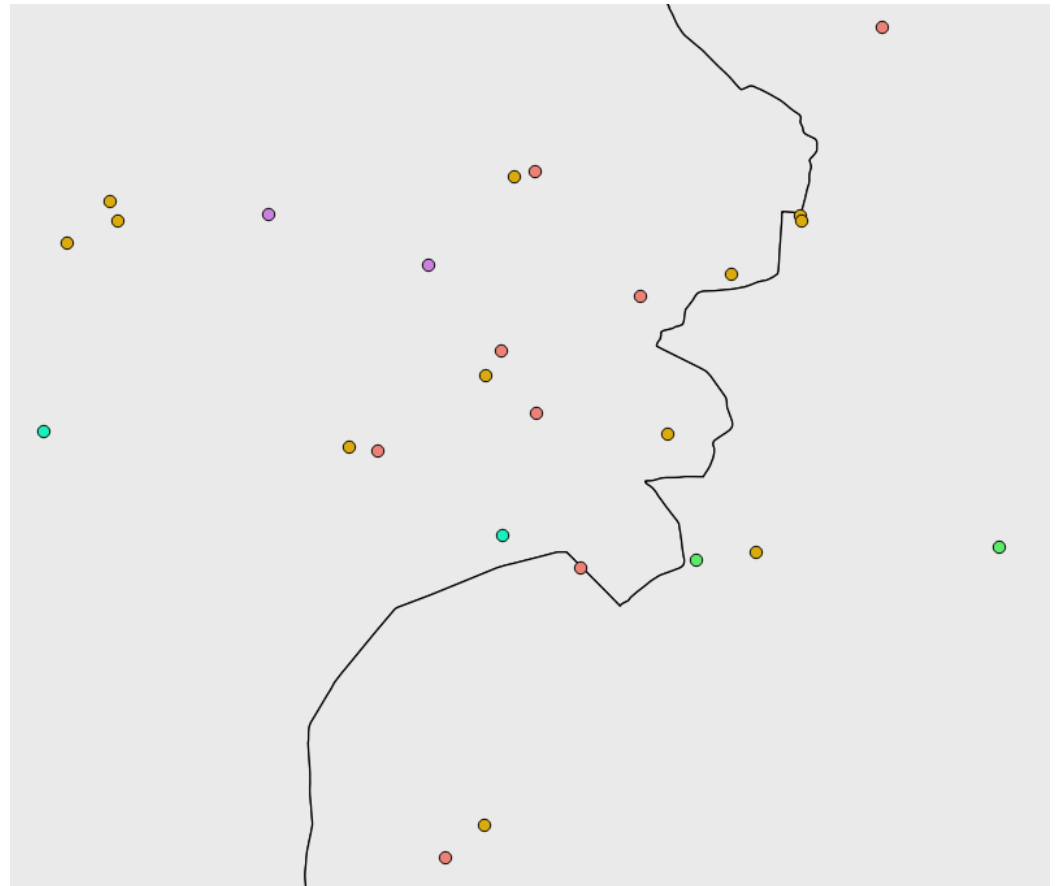
Changing Symbology

- No symbols
- Single symbol
- Categorized
- Graduated
- Rule-based

Symbolising by categorical attributes (Categorized)

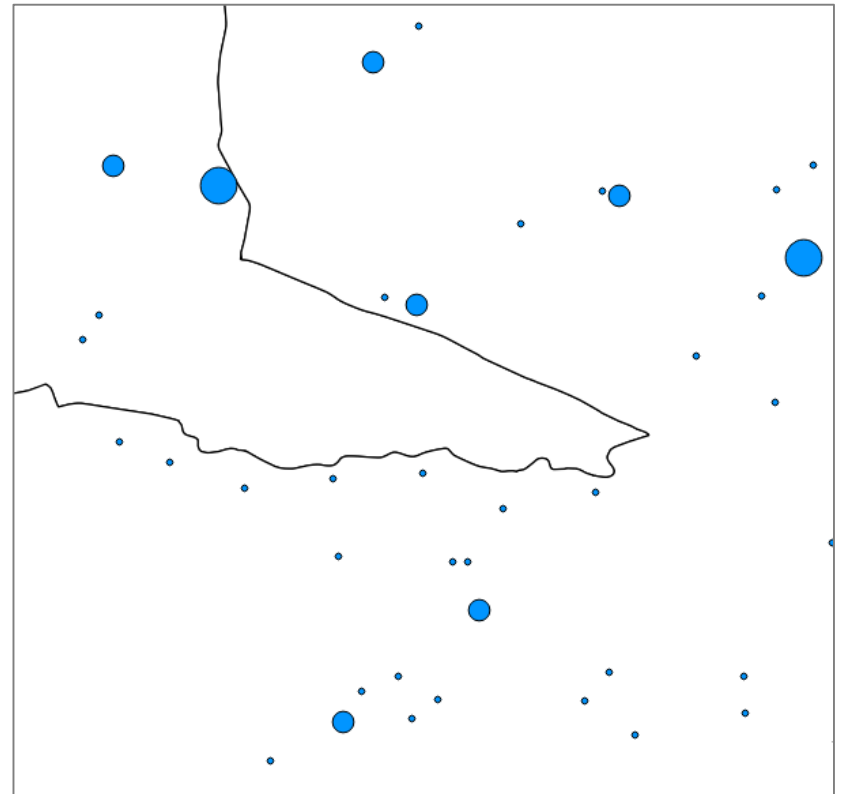
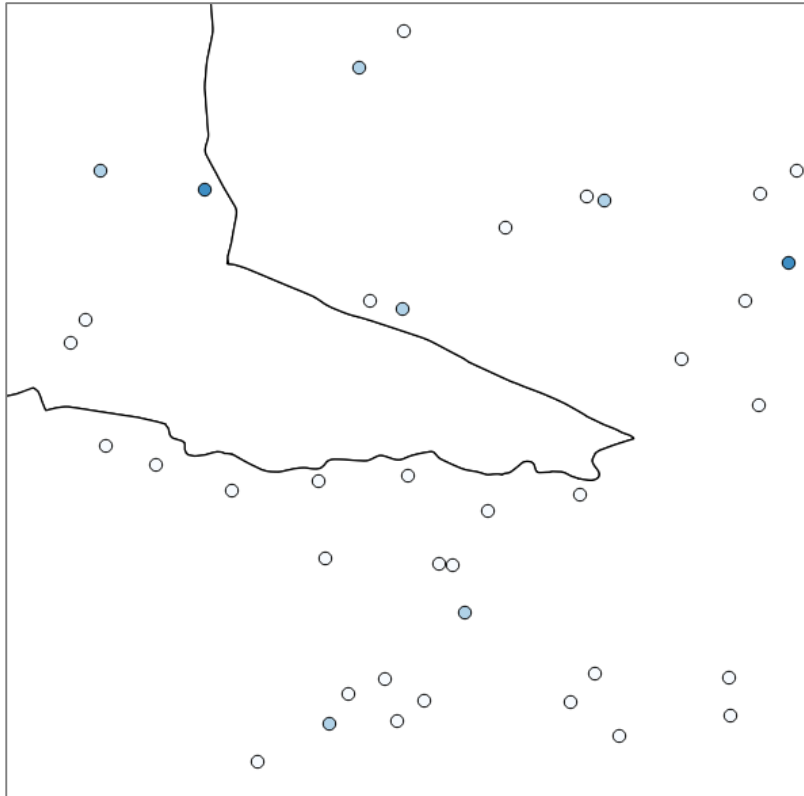
Industrial_farms (SPECIES)

- Chickens;
- Ducks;
- Turkeys;
- ...



Symbolising by quantity attributes (graduated)

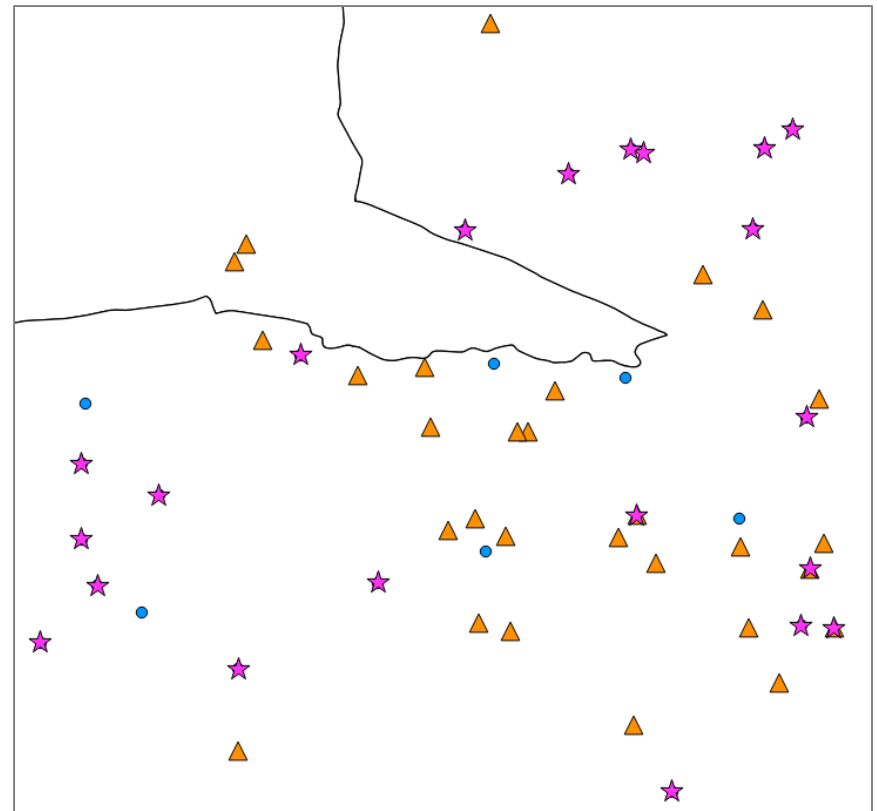
Industrial_farms (N_ANIMALS)



Symbolising by rules (Rule-based)

Specific symbols to specific group of element based on SQL rules defined by user.

- Chickens with 250 - 50000 animals
- ▲ All turkeys
- ★ Specific owners



SLD

Styled Layer Descriptor (SLD) is an XML schema specified by the Open Geospatial Consortium (OGC) for describing the appearance of map layers.

- A set of rules to describe layer symbology
- An OGC standard
- Use in the Geographyc Web Services
- QGIS may use it to style layers
(but layer must be compliant with the SLD data structure)

Practical Exercise (1.8)

1_8_ex_symbology.doc

Objectives

- Change styles of the following layers
 - Highways,
 - Industrial_farms
 - Provinces