

Report on International Spring School – ISSonVIS2026

Introduction

ISSonVIS2026 is online international spring school on visualisation organized by professors Jakub Konicek and Stanislav Popelka from University of Palacky, Olomuc. International spring school was organized for two days: 01.- 02. 04. 2026. and the general topic of the school was 'EMOTIONS AND MAP: THE AFFECTIVE DIMENSION OF VISUALISATION'. The spring school was organized in a way that on each day we had 6 speakers presented their topic that is connected to the visualisations and emotions.

Objectives

Objectives of the ISSonVIS2026 was (student point of view):

- To learn about peoples emotions when they interprate the maps, visualisations
- To learn how to design decisions shapes and maps
- To learn about meaning of map and data visualisations
- To learn how to recognise the human emotions when they are reading the maps
- To get theory on emotions in cartography
- To see case studies about emotions and mapping (to be able to see real examples on connection between the emotion and visualisations)
- To be able to recognize meanings of mapping
- To see that emotions are conected with mapping
- To see that with feedback on emotions can provide data for better mapping and visualisations of data
- To learn that maps and visualisations are more than just images

Activities

As mentioned in the intoduction ISSonVIS2026 was organized that on each day we had 6 presenters with their topic in their level of experties. But before every day we had introduction from organizers.

Presenters on first day (01.04.2026.) was:

1. Georg Gartner, 'Emotion in Cartographic Theory: Epistemological and Semiotic Considerations'
2. Jiri Panek, 'Emotional mapping - from the theory to the practice'
3. Merve Keskin, 'Sensing Human, Sensing Environment and Personalizing Geo-Experiences'
4. Dennis Edler, 'Objectifying Space: Cartography Between Perception, Power, and Landscape Conflict'
5. Petra Hypsova, 'Recognising Human Emotions, Recognising Maps: Why Emotion Recognition Ability May Matter in Map Reading'
6. Veronika Kvetonova, 'Sensed, Felt, Mapped: People-Oriented Paradigm in Thermal Environment Research'

Presenters on second day (02.04.2026.) was:

1. Zdenek Stachon, 'Satire and Aggression in Cartography: Maps as Instruments of Humor, Critique, and Propaganda'
2. Amy Griffin, 'Entanglements of Maps, Emergencies and Emotions'
3. Carolyne Fish, 'Mapping for Change'
4. Ondrej Mitas, 'Measurement, modeling, and management: Closing the circle between emotion data and spatial intervention'
5. Jakub Konicek, 'How Design Decisions Shape the Meaning of Maps and Data Visualizations'
6. Ian Muehlenhaus, 'Prompt Cartography: Natural Language Mapmaking for Everybody'

DAY 1 WEDNESDAY 1ST APRIL		
11:30-12:00	ORGANIZERS	Welcome and introduction
12:00-13:00	GEORG GARTNER	Emotion in Cartographic Theory: Epistemological and Semiotic Considerations
13:00-14:00	JIRÍ PÁNEK	Emotional mapping - from the theory to the practice
14:00-14:30	BREAK	
14:30-15:30	MERVE KESKIN	Sensing Human, Sensing Environment and Personalizing Geo-Experiences
15:30-16:30	DENNIS EDLER	Objectifying Space: Cartography Between Perception, Power, and Landscape Conflict
16:30-17:30	BREAK	
16:30-17:30	PETRA HYPŠOVÁ	Recognising Human Emotions, Recognising Maps: Why Emotion Recognition Ability May Matter in Map Reading
17:30-18:30	VERONIKA KVĚTOŇOVÁ	Sensed, Felt, Mapped: People-Oriented Paradigm in Thermal Environment Research
DAY 2 THURSDAY 2ND APRIL		
11:30-12:00	ORGANIZERS	Welcome and introduction
12:00-13:00	ZDENĚK STACHOŇ	Satire and Aggression in Cartography: Maps as Instruments of Humor, Critique, and Propaganda
13:00-14:00	AMY GRIFFIN	Entanglements of Maps, Emergencies and Emotions
14:00-14:30	BREAK	
14:30-15:30	CAROLYNE FISH	Mapping for Change
15:30-16:30	ONDREJ MITAS	Measurement, modeling, and management: Closing the circle between emotion data and spatial intervention
16:30-17:30	BREAK	
16:30-17:30	JAKUB KONÍČEK	How Design Decisions Shape the Meaning of Maps and Data Visualizations
17:30-18:30	IAN MUEHLENHAUS	Prompt Cartography: Natural Language Mapmaking for Everybody
All times are in CEST. Regular breaks will be scheduled throughout the programme.		

Image 1 Schedule of ISSonVIS2026

Image 1 shows the schedule of the ISSonVIS2026. Schedule shows all the times of activities that was held and presented. Schedule was changed in the last two sections because there was overlap in the times.

In both days we took pictures.

Results (Takeaways)

Takeways from presentations that was held:

1. Georg Gartner, 'Emotion in Cartographic Theory: Epistemological and Semiotic Considerations'

- Affective dimension – complements the cognitive and perceptual aspect of visualisation (how people feel about the data)
 - Maps evoke: emotional impact, aesthetical appeal, emotional meaning, narrative and story telling, personal relevance, engagement and interest, empathy and humanization, trust and credibility, surprise and novelty, cognitive load and comfort, ethical and moral response
2. Jiri Panek, 'Emotional mapping - from the theory to the practice'
 - EmotionalMaps.eu (web-based participatory, since in 2014., over 200 projects, tool for GeoParticipation)
 - Scale, geometry, topics matter
 3. Merve Keskin, 'Sensing Human, Sensing Environment and Personalizing Geo-Experiences'
 - Understanding of the map users by measuring their cognitive processes
 - Highlights of their research: average fixation duration, number of fixation per second, saccade velocity and amplitude
 4. Dennis Edler, 'Objectifying Space: Cartography Between Perception, Power, and Landscape Conflict'
 - *„Cartography does not end conflicts- however, it increasingly makes even the emotional dimensions of space visible and measurable, enabling more informed, reflexive, and negotiable forms of dealing with disagreement.“*
 5. Petra Hypsova, 'Recognising Human Emotions, Recognising Maps: Why Emotion Recognition Ability May Matter in Map Reading'
 - *„If our ability to navigate the physical world is linked to our ability to understand each other, then designing maps is not just about the quality of the map, but about who the map reader is....“*
 6. Veronika Kvetonova, 'Sensed, Felt, Mapped: People-Oriented Paradigm in Thermal Environment Research'
 - Thermal perception can never be separated from the overall perception
 - Deeply individual
 - Cities are sensed, felt, experienced, remembered by people who live in them
 - Thermal discomfort it has affects on physical and emotional health of people
 - Adaption matters
 7. Zdenek Stachon, 'Satire and Aggression in Cartography: Maps as Instruments of Humor, Critique, and Propaganda'
 - Understanding symbolic distortion and persuasive spatial storytelling
 - Maps do not only describe space – they produce political realities
 8. Amy Griffin, 'Entanglements of Maps, Emergencies and Emotions'
 - Bush fires in Australia are big problem
 - Mapping emergencies are emotional business
 - It is important to acknowledge people emotions
 - Misunderstanding can happen without acknowledge
 - Emotional responses can motivate acts and behaviours
 9. Carolyn Fish, 'Mapping for Change'

- Polygon maps enhance cognitive clarity about glacier retreat
 - Imagery maps underperformed for both clarity and engagement
 - Emotional responses varied by condition and other variables
 - Audience-aware cartographic strategies are critical
10. Ondrej Mitas, 'Measurement, modeling, and management: Closing the circle between emotion data and spatial intervention'
- Valence appears as context-sensitive as basic emotion behavior; self report is best available measurement
11. Jakub Konicek, 'How Design Decisions Shape the Meaning of Maps and Data Visualizations'
- *„be visual, be precise, be minimalistic“*
12. Ian Muehlenhaus, 'Prompt Cartography: Natural Language Mapmaking for Everybody'
- Prompt cartography is a design workflow, not a waiver from human judgment

Conclusion

In conclusion, from this spring school I will say that I need to make maps and visualizations with concern of the users' emotions. Also, I need to be aware that cartography and visualization is not just placement of data, it is much more. There are a lot of things that need to be considered and acknowledge. And in the end, no matter what you are doing, there are emotions involved, from users and yours.

Literature

Presentations from ISSonVIS2026

Image table

Image 1 Schedule of ISSonVIS2026 2