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Swiss Federal Office of Energy SFOE



Smart Governance embedded in multilingual discourses

International Seminar on "Towards Smart Sustainable Cities – Integrated Approaches", Nasarbajev University, Astana/Kasachstan, 15-16 June 2017

Introduction by Prof. Dr. Peter Stücheli-Herlach, ZHAW (supported by the ZHAW-research team)

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Integrated innovation is made of language!



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coalitions, embedded in controversies

patterns of language use

policy/government networks

innovation systems

energy regimes

knowledge passages

innovation narratives

innovation management by communication promoters who "create meaning"

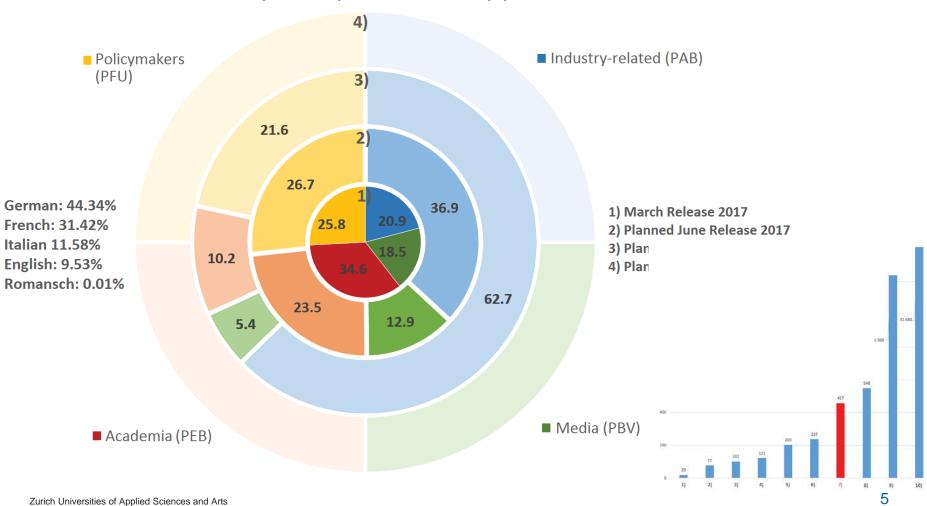
Complexity, uncertainty, controversies, polyphony

In search of discourse coalitions & controversies



Swiss-Applied Linguistics (AL)-Energy Discourses (ED)-Corpus

Corpus development - no. of actors (%)



Composition on the textual level



"smart"-combinations in the Wikipedia-entry for "Smart Cities"

smart city
smart cities
smart urban growth
smart urban services
smart city technologies
smart city programs
smart city label
smart cities council
smart cities/city roadmap
smart city initiative
smart cities academic
network

smart city applications
smart street light
smart city strategy
smart energy meters
smart traffic management
smart traffic lights
smart city technologies/
technology
smart city concepts
social smart city

smart city project smart cities mission smart city scheme eu-smartcities smart cities development

Transformation on the transtextual level

"smart" in word combination across languages, Swiss-AL-ED, march17 release









Frequency: "Technology" – all languages

Cross-language: 108

German: 105 French: 50 Italian: 24

lian: 24

Impulse Sensor Domaine
Fortwo Cover Design View Association
Projet Tension
Technologie
Indice Partnership
Système

French

Maintenance
Technologie Home

Tension Fault Phasensymmetrie Phase Grid Energy

Determination Grid Energy

Mater City Business German

Meter City Beta

Spannungshaltung Fehlererkennung Fehlerdiagnose

Voltage Instandhaltung

Soluzione Applicazione
Programma Casa Immatricolare
Telefono Casa Medicina
Sistema Tecnologia
Associazione
Orologio Elettrico
Televisore Essere

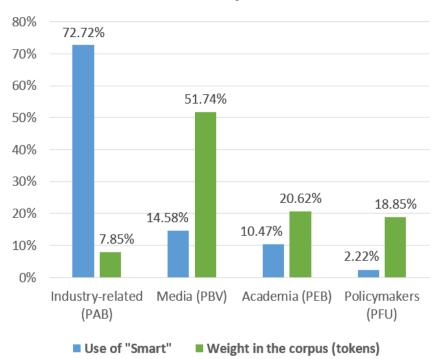
Italian

Transformation on the transtextual level

Use of "smart" and word combinations across actor classes, Swiss-AL-ED, march17 release







↑ Use of "Smart" by actor class

Most frequent "Smart" combinations for each actor class:



Home Living
Government
Gity Grid Tv
Phone Network
Transparency
Meter

Beta
Sein Fortwo

4) Policymakers (PFU)

Meter

Event Grid

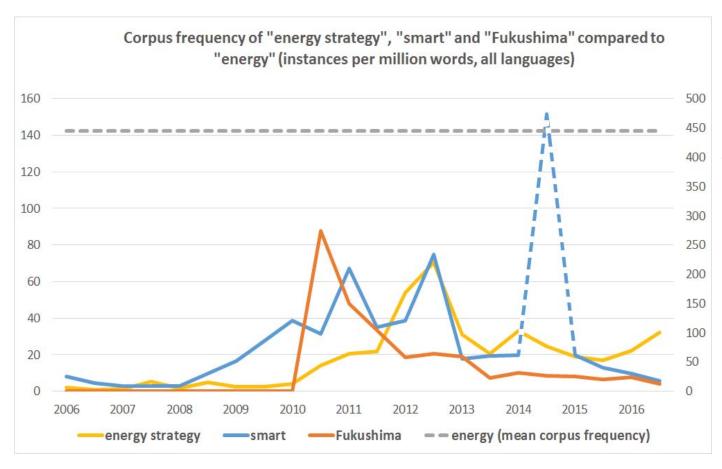
Weben Home
Home Building
View City

Control

8

Distribution on the macro-level

frequent words and timeline, Swiss-AL-C-ED, march2017 release



Ratio to frequency of "energy":

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Energy strategy \rightarrow 8.26 : 100

Smart \rightarrow 10.12 : 100

Fukushima \rightarrow 3.47 : 100

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