Summary - Research Report 2018

Public discourse about energy policies plays a key role in the successful implementation of the Swiss energy strategy. The interdisciplinary research project Energy Discourses in Switzerland focuses on the patterns of language use related to energy policy. Patterns of language use are understood and analyzed as drivers or constraints of democratic dialogue and collective innovation in the field.

Issues surrounding the production, supply, and use of energy will continue to be of great concern to Switzerland over the next few years and decades to come. In the project Energy Discourses in Switzerland, researchers in the ZHAW School of Applied Linguistics are investigating the communicative prerequisites for the anticipated changes. The objective of the project is to identify how patterns of language use surrounding energy issues develop across institutions, media, and societal sectors in the three official Swiss languages (German, French, Italian) as well as the international lingua franca (English). The methodology being developed in the project involves corpus-based and corpus-driven analyses of digital texts from the communicative fields of interest, in-depth analyses of patterns of language use and texts in Swiss energy discourses, and mapping to convey the interconnections among and to the various actors involved in the transition to sustainable energy systems and in the democratic dialogue.

In 2017, the project team focussed on substantially expanding the existing multilingual corpus of digital texts with respect to both volume and breadth in order to adequately model publically accessible Swiss discourses on energy. The most recent release of the Swiss-AL corpus (Sept17) comprises over 1 billion tokens distributed across 3.75 million texts from over 300 Swiss internet sources. The sampling criteria were linguistic, geographic, thematic, and situative (e.g. related to political, societal, or natural events). This report outlines exemplary results of the project work in the first year of the 3-year project, including exploratory analyses of the corpus and comparisons of the discourses typical of actors whose public communication is in one of the Swiss national languages or some combination of them.

The influence of events such as the Fukushima Daiichi nuclear disaster on public discourse were traced by mapping the frequency of references to that event in texts. Although the dramatic peak at the beginning of 2011 quickly dropped to a relatively low frequency in German-language media texts overall, the number of texts referring to renewable energy (erneuerbare Energie) that mention "Fukushima" increased noticeably in the lead-up to the popular vote on the federal Energy Act, suggesting that it has strong argumentative potential. As a comparison, far fewer texts referring to atomic energy (Atomkraft) mention "Fukushima" although the pattern of peaks and troughs over time is similar. The changes over time of terms associated with energy issues also provided indications of the development of public discourses. For example, terms strongly associated with atomic energy (Atomkraft), nuclear withdrawal (Atomausstieg), and renewable energy (erneuerbare Energie) all evinced frequency peaks in German-language media in Switzerland in 2011 before dropping off to relatively stable baseline levels. The frequency of nuclear withdrawal peaked dramatically at the time of the vote on the Nuclear Withdrawal Initiative and then immediately dropped back to the low baseline. Occurrences of renewable energy also rose at that time but seemed to stabilize at a higher level, even after the popular vote on the

federal Energy Act. In the same quarter as the popular vote, the frequency of occurrences of hydro power (Wasserkraft) rose significantly and stayed high into the subsequent quarter. The next release of the Swiss-AL corpus, planned for 2018, will be analysed to determine whether this trend continues.

Initial analyses of the multilingual Swiss-AL corpus indicate that the way that energy in its various forms is discussed seems to differ depending on the language of the texts. The most frequent word combinations represent concepts such as renewable, hydro, wind, solar, nuclear, and fossil-fueled energy but the order of importance differs for German, French, Italian, and English. Argumentation strategies also seem to vary not only between languages but also between multilingual and monolingual sources in the Swiss-AL corpus, suggesting that national and local discourses need to be examined separately and in more detail. The focus of the next project years will be on systematically analysing discourse controversies and coalitions in order to identify discursively linked actor networks.