Understanding footage sharing and reuse in Estonian and Soviet newsreels

Newsreels – the short news films shown in cinemas before the feature films – were at the forefront of disseminating audiovisual information about the world in the 20th century. Their production relied on combining newly shot local material with reusing older local together with international footage exchanged between studios (Heftberger 2018; Chambers, Jönsson & Vade Winker 2018; Hickethier 2016; Kowalsky 2007). Preceding research has recognized this phenomenon, but it has not been so far studied using a large set of data and computational methods. How often did the studios reuse their own material, and on which occasions? How often did material published by one studio travel to another studio's newsreels, and what kinds of cultural patterns does this reveal?

The aim of this work is twofold: we will test usability of the Video Reuse Detector (VRD, HumLab & Skotare 2021), an audiovisual footage reuse algorithm for historical data, and explore what kinds of footage reuse patterns we can detect if the algorithm works for our data. For this study we will explore and compare two distinct newsreel series: *Hosocmu дня* (Daily news) produced by the Central Documentary Film Studios in Moscow in 1944-1992, and *Nõukogude Eesti* (Soviet Estonia) produced by the Tallinnfilm studio in 1940-1941 and 1944-1988. Our hypothesis is that in order to work with low-quality historical data, the algorithm requires some adjustments. We also expect that it is possible to identify patterns of reusing older local material particularly for commemorating purposes, for example in issues repeating highlights of the past year in New Year, and that newsreel issues composed in Tallinn contained more footage coming from Moscow, than the other way round, as indicated by preliminary visual examination of the data.

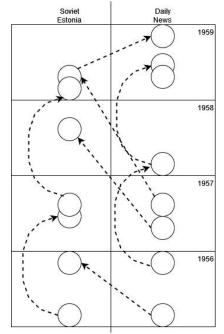


Figure 1. A schematic visualisation of hypothetical patterns of footage reuse and circulation patterns in Daily News and Soviet Estonia.