Screenshots of the spectrogram and oscillogram of the original human laugh (H) (top) and the variation-rich laugh version V of the articulatory synthesizer [3] (below). Both show the acoustic signal of the laugh, with an *onset*, a *main part*, a *pause*, and an *offset*; at the *bottom*, temporally aligned: Gestural score used to simulate the laugh *version* V. It depicts the articulatory events of that laugh, using the following gestures:  $1^{st}$  tier: vocalic gesture "E:" for the open-mid front unrounded vowel  $/\varepsilon$ :/,  $2^{nd}$  tier: consonantal gesture "E:\_Pharynx" for a slight constriction in the pharynx,  $3^{rd}$  tier: no gestures for velic aperture,  $4^{th}$  tier: glottal gestures "open" and "close" in an alternating sequence,  $5^{th}$  tier: F0 phrase components for the phrasal (long-term) intonation contour,  $6^{th}$  tier: F0 accent components for short-term F0 variations,  $7^{th}$  tier: subglottal pressure gestures simulating the airflow throughout the laugh.

