Speech-Translation: From Domain-Limited to Domain-Unlimited Translation Tasks

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Speech translation research started more than 15 years ago. Early projects and demonstrations, like Verbmobil and work done by the C-Star consortium where restricted to domain-limited applications, esp. travel domain. We see continued interest in this kind of projects, and also a strong tendency to commercialize speech translation technology. In recent years the goals have become more challenging: domain-unlimited speech translation. Projects like TC-Star in Europe and GALE in the United States aim at translating parliamentary speeches, broadcast news and even broadcast conversations. Ongoing research focuses on questions like tighter coupling between speech recognition and translation, segmenting speech recognition output into sentence-like units, and how this affects translation quality, detecting and removing disfluencies, and end-to-end optimization. In this paper we will review some of recent work done in both domain-limited and domain-unlimited speech translation. We will show where progress has been made and highlight areas, where initial expectations have not been met so far.