

AUDIO FEATURE INTERACTIONS

IN VOICE-OVER-IP

Pamela Zave

AT&T Laboratories—Research

Florham Park, New Jersey, USA

AUDIO SIGNALING

WHAT IS IT?

Audio signaling is the use of the audio channel for signaling and user-interface purposes.

Touch Tones, progress tones, announcements, voice prompts, voice recognition, etc.

WHY DO WE (STILL) USE IT?

- it is essential for interacting with users on the circuit-switched telephone network, where devices have no other signaling capabilities
- audio user interfaces can be hands-free, eyes-free, very small, and user-friendly

they occupy an important niche

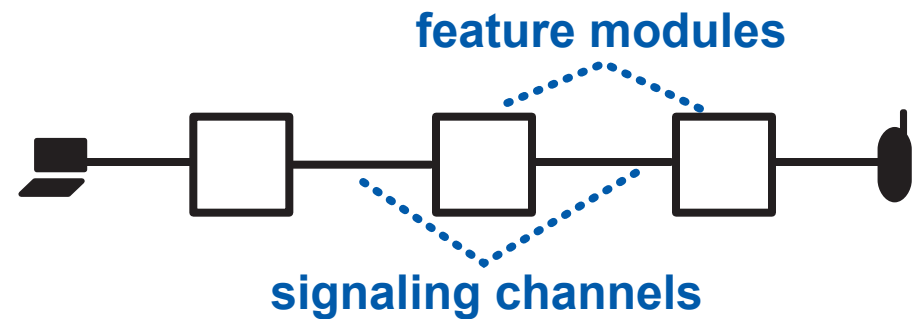
FEATURE INTERACTION

A **feature** is an increment of functionality.

To manage software complexity, we encapsulate features in software **modules**.

The inevitable by-product of **feature modularity** is **feature interaction**, because telecommunication features cannot be completely independent.

we assume a pipes-and-filters architecture that determines how features can interact



Bad feature interactions must be **avoided**.