Something You Are: Biometric: 4. Voice

- Voice identification is a mechanism in which a computer asks a user to say a particular phrase.

- The computer system then takes the electrically coded signals of the user's voice, compares them to a databank of previous signals, and determines whether there is close enough of a match.

- Possible Problem?

Something You Are: Biometric: 4. Face

- Facial recognition involves a camera taking a picture of a person's face and a computer system trying to recognize its features.

Something You Are: Biometric: 5. Signature

- Another technique, signature dynamics, records not only a user's signature, but also the pressure and timing at which the user makes various curves and motions while writing.

- The advantage of signature dynamics over simple signature matching is that it is far more difficult to replicate.

Something You Are: Biometric: Disadvantages

- Key disadvantages to these biometric authentication techniques are
  - the number of false positives,
  - number of false negatives generated,
  - their varying social acceptance, and
  - key management issues.

Something You Are: Biometric: Disadvantages

- A *false negative* occurs when a user is indeed an authentic user of the system, but the biometric authentication device rejects the user.

- A *false positive* occurs when an impersonator successfully impersonates a user.

- Tradeoff needed for both (Tutorial)

- Social acceptance is another issue to take into account when considering biometric authentication techniques.

- All the biometric authentication techniques discussed here are less socially accepted than entering a password.