

first attempts

vocoder

vocoder

important
inventions

speech
recognition

References

Computer Speech technologies

G. Moroz

21 March, 2019

Wolfgang Ritter [von Kempelen 1791: 76]

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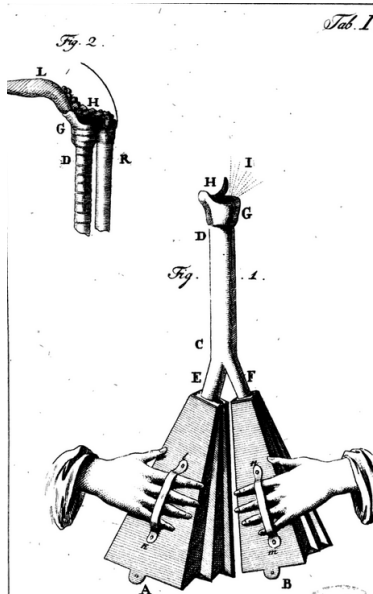
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Wolfgang Ritter [von Kempelen 1791: 107]

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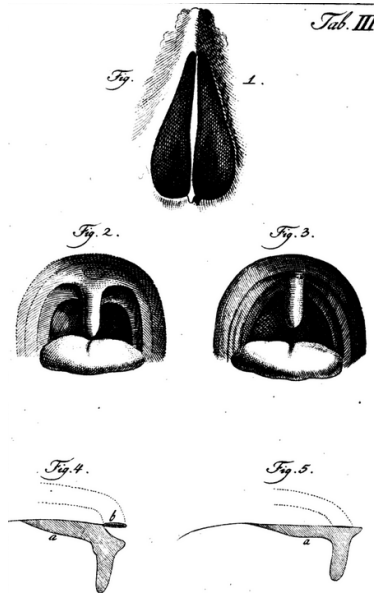
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vocoder

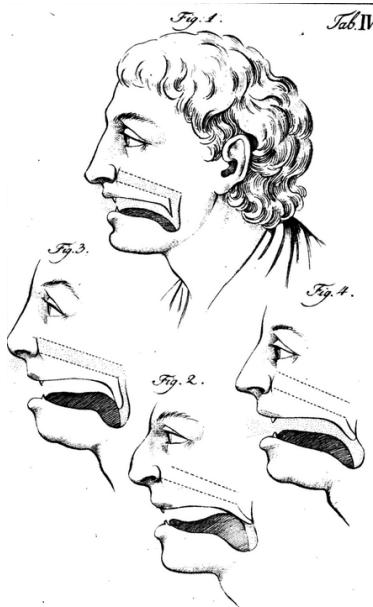
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Wolfgang Ritter [von Kempelen 1791: 110]



Wolfgang Ritter [von Kempelen 1791: 144]



Aleph



Beth

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W. R. von Kempelen: chess-playing “automaton”

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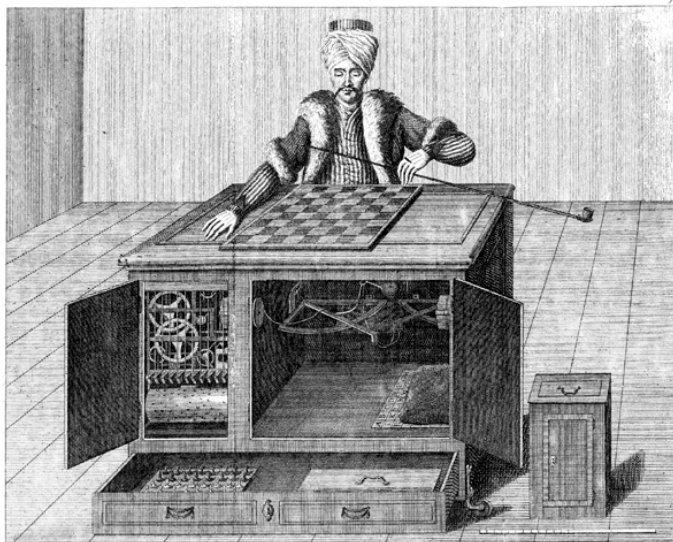
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W. de Kempelen del.

Ch. a Mehel. excudit. Basileae.

P. G. Ratz. fecit.

Par Schach-Spieler, wie er vor dem Spiel gezeigt wird von vorn. Le Joueur d'Échecs, tel qu'on le montre avant le jeu par devant.

Development of vowel production theory

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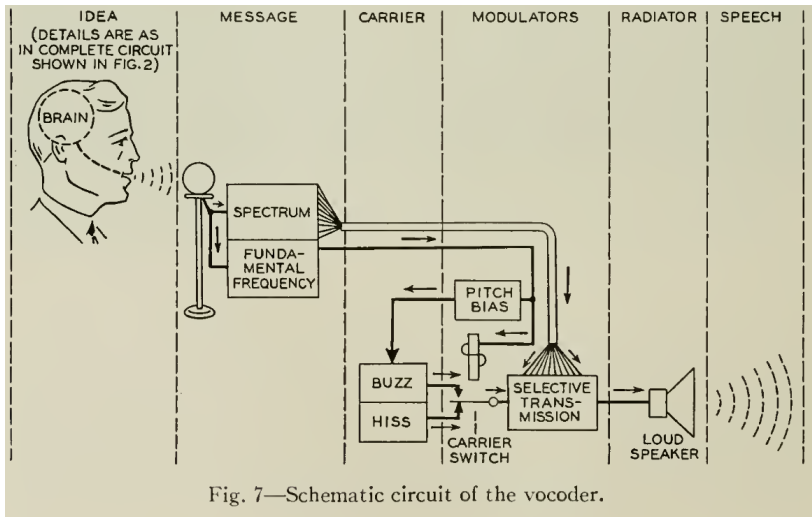
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- Christian Gottlieb von Kratzenstein
- W. Willis
- Sir Charles Wheatstone
- Hermann von Helmholtz
- L. Hermann
- Alexander Melville Bell and Alexander Graham Bell

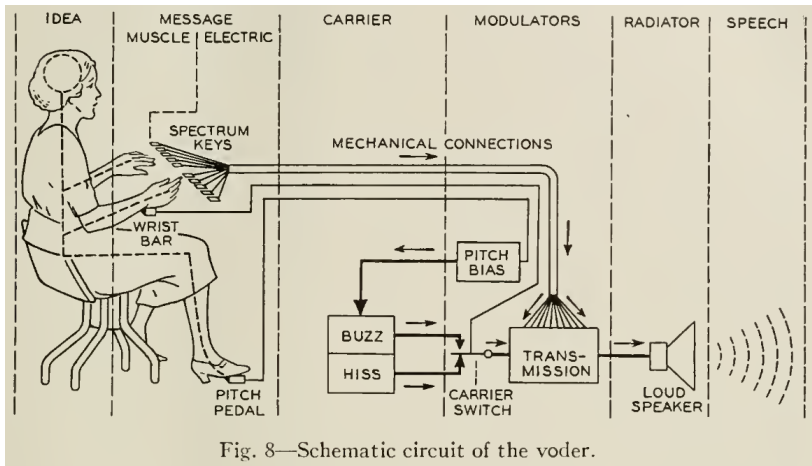
Vocoder

- In 1928 Bell Labs engineer Homer Dudley invented vocoder.
[Dudley 1940: 508].



Vocoder

- In 1928 Bell Labs engineer Homer Dudley invented vocoder.
[Dudley 1940: 509].



Important inventions

- Furier transform
- Linear predicting coding (LPC)
- Mel-frequency cepstrum (MFC)
- Wavelets

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Wavelet: from Martti Vainio presentation 2017

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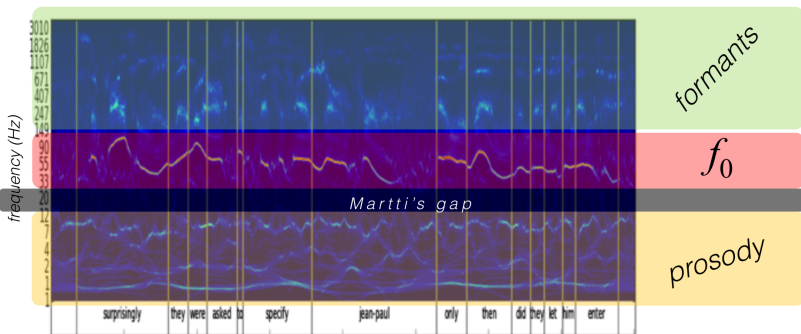
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Wavelet: from Martti Vainio presentation 2017

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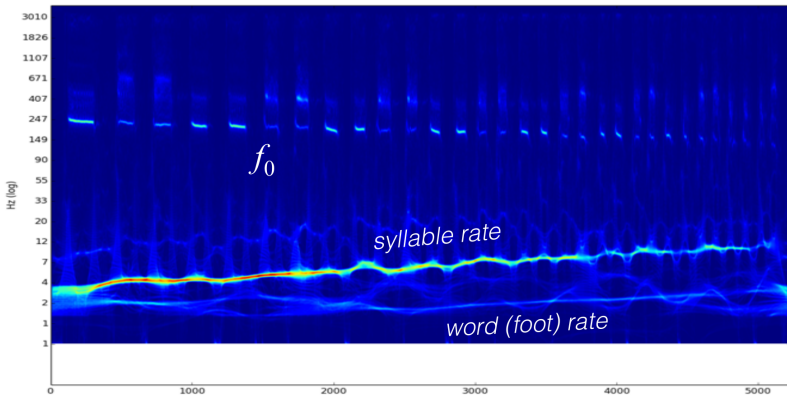
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Thank you!

Please, don't hesitate to write me
agricolamz@gmail.com

Reference

Dudley, Homer (1940). The carrier nature of speech. *Bell System Technical Journal* 19(4), 495–515.

von Kempelen, Wolfgang (1791). *Mechanismus der menschlichen Sprache*. Degen.

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