

Titel: Notes on Douglas MacFarland, [EliFischerJørgensen1948-51] 038-0190

Citation: "Notes on Douglas MacFarland, [EliFischerJørgensen1948-51] 038-0190", i *Louis Hjelmslev og hans kreds*, s. 1. Onlineudgave fra Louis Hjelmslev og hans kreds: https://tekster.kb.dk/text/lh-texts-kapsel_038-shoot-workidacc-1992_0005_038_EliFischerJørgensen1948-51_0190.pdf (tilgået 10. juli 2024)

Anvendt udgave: Louis Hjelmslev og hans kreds

Ophavsret: Materialet kan være ophavsretligt beskyttet, og så må du kun bruge det til personlig brug. Hvis ophavsmanden er død for mere end 70 år siden, er værket fri af ophavsret (public domain), og så kan du bruge værket frit. Hvis der er flere ophavsmænd, gælder den længstlevendes dødsår. Husk altid at kreditere ophavsmanden.

unsure, Louis Hjelmslev og hans kreds,

i.'

19^5, p.l-Vf).

Louglas MacParian . opeech hearing Tests (The Laryngoscope, opeech frequencies have been investigated by ..iller, Gradualland fletcher, fletcher used filtering frecuency bands to see in wh ich zones good hearing must exist in order to corr ctly interpret speech sounds . (Vowel and Consonant List Bell Labs. Ree. Oct. 1937,

an

r. and Cteinberg, Bull, no date).

Articulation Methods , Bell Telephone Labs.

Lowest sistent with

cut-off free, con- 9 5 p.c. iutelli^ibil

s z 5000 t 4500 th 3800 ch 3?50 v, j,r 3000 P 2750 d,g,k,sh,oo(look) °500 h»y. m, b, a (tap) kbo (ton) 2o >0 e (bet) 17 50 ng» r,i(tip) i ^ (bu f)) &Y f 0 .• f tiO >X) 1500 w,ou(bout) 1250 0 (tone) 1200 1, e(tearn) iooo

(not ser neget wrkeligt ud, ""an maa først vide under" hvilke betingel— sar o , gene er gjort - '4Kswå*rahstyd*xxtøx jrxjwxr ajeataal-i rhed>at ■-eats) 'len det er højet besynderligt at 00 i tool forstaas naar alt under L500 (d.v.s beg e væsentlige forreanter) er skaaret f a, aaaaxi.-... Talle- no s*ulde vise at der er et eller andet væsentligt over tal.) The following table gives the intelligibility caused off all components above a given frequency. percentage iatelligibillxy xlaaa 3000

d v: t

S£51>:

p.-agldsn d by cutting

q i, team) i (bite) n a(tape) w y

looo 95 90 90 90 88 88

2000 loo loo 99 98 loo 97

loo loo loo 1.0 > loo lo 0

5h F. z p t ch

0 (boat) 84 loo loo th ng 84 loo loo s *£ ' u(bo.t) 85 98 99 ou (bout) 80 loo loo (denne

4o 4o 63 A o 60 4o 74 3o 4o

84 85 78 ho 7o 7? 63 52 46

99 97 80 97 80 93 85 66 42.

i (bit; o(bought) h æ r

80 80 80 72 7o

99 98 95 98 99

loo 98 98 ld»o lo 0

d 75 91 99 b 7o 57 98 3 64 88 96 u (bo a;) 5o 95 98 n 62 85 96 0 :,but; 5o 95 93 V 57 86 95 K 4o 88 97

\

ved sal. med den fo egaaende at nan ikke kan trak.xe procenter fra hi nand as , i forstaas 9 5 0/0 baade naar alt over looo og alt under lo >' er akaaret ura. - noget tyder paa at slappe vokali hu.r nogle højere komponenter— f er åbenbart den der har forr ■ lavekomp. (mangler i t., oste lis s or ch ens lave, en s flere betydningsfulde høje, tl^ flrre lave også-

komp. af bot dn ny, men iLrra høje, vher spiller

MacJTarl an

-a

intensitetens ogsa ind.)- Many children have been tested by the western Electric 4-a .e. oiaetc.r. wit.-, records containing numbers. The author has -at an atxenua. list of numbers with decreasing i tensity, ih s method is very crude oat has been useul for finding child en \ith hearing—lost. investigations made by The dell Lab. and others show that the most com ion speech freeuencies lie in the area of best hearing (300-3000, particularly 1000-2000). iHxtv.BSStingx, Many factors in- tendere in the result of the testing (education, familiarity, mental acuity or agility, work inemoru ans word association, noises interrup- tiuils and distractions).- The Bell Lab. have employed meaningless syllables, Type cv, cve, and. vc)(cp. i'åla. Mag. dan. 1910 and Phys. Rev. duly 1917), The tests were called articulation tests",The percentage of spoken syl- iabies which were correctlu obserbed ras called the Syllable Articu- lati>n, The percentage of the total number of spoken sounds correct- 1 - observed was called Bound Articulation . when using vords or senten- cos fletcher spoke of warrd and sentence intelligibility. The author has made repeated efforts to utilize the Bell Lab.

.0 i (

aroiculationiists" of meaningless sounds and has found nothing but trouble and failure in them. The difficulty of reporting meaningsleas sounds heard , and the difficulty of recording or writing what is repor- ted, is insurmountable. (examples fro;;, one of the lists' savp, vud, pe , bahn, r.ayzh, sest, Choasp, beej, lut, foot, jesp, dav.x etc. (det er klart at engelsk ortografi gxr dutte ru*sten umuligt- paa dansk lader det sig gøre).

11.intelligible Speech Tésts. dialect differences make certain d'ixPiculties, but not so much as should be expected. If numbers are used these difficulties are neglegible. Numbers 1- lo are used (except number 7, because it is dissyllabic},; and therefore too easily recomi- zable. -i8/.a.xd/åhE8-- are(8 is often heard for 3, and conversely, althoug! acoustically they are very different). - A3 a rule a person can make a lower threshold in going from audiolte ti inaudible intensity than in coming from an inaudible level to audible The two trhesholds are close rile in good central acuity, in auditory alertness, and in ;>e ve deagneso as compared with catarr al deafness. . - i*xg«iag-xfffK*xattditel*xi<rkjbi«!rlihia.'lo i3 advisable to recor; the lowest ar faintest level at which all testa words are heard correctly , and then, continuing id « attenuation, recor-1 the lowest 1 level at which any word is interpreres correctly. e.g. .. to x - 20- 15 (all words heard at 20) 1 to A 2b -25 (----- 25).

in selecting words for testing, it is veil to use only the most X a i liar words ai in the language thus thére 'is .reduce to a minimum .. e factors oi e ucati >n nd in ixigence. e.g. v e first 406 words f rom Thorndike's nd nates' lists. ror small children short lists of very co...-'ton words are used v, e»g* box, ball, apple, moon, do , boat, bird, oo/, girl, book, door, bell) and the children get a card with pictures ox toe x objects and mx.ve to indicate deb one is beingnaaided. for very small children test of the type : shov me / u.r mouth, yoqr arm tc. must be used. -And lor deafened chil en with a very mall vocabulary , this vocabulary must oe used, the author has also made lists d stinea fo; contro Ling the hearing loss of definite sounds. - e.g. a list of llo words containing 22 consonants in initial position 5 times each, and combined with 5 different vowels v skiftende hvilke;- with few exceptions these words

belong to t) e 500 con on words.- i'he vov el li^'t contains the following words (the numbers are indicate acoustic power in microwatts for sight male voices J tool (22), took (32), "tone (33), talk(37), ton (29,), top (50), tap(43), ten (23), tape +.1 n (1^ .

tn

the

diffe-

lists ox vowels eonsistsof words vi . - . b and t or k, and the consonant list consists

+ ai or i short i plus similar he has chosen

tip(32) Fletchers rent vowels between b and t or k, of words xxt beginning with the consonants a consonant; But in order to get the words so many rare words. (TTt ?" "T "list parti/ rith icre-frequency sounds (' out uw par<ly with high foeo, sounds (g,k, t,f, s, sh,n 1 aetbul5"l4i°4 bereynetj.o, de andre 1/1 er forskellige og si nas

d< kan I weugi

roe; na.<

3 d) Mf tests for controlling the frequency loss 1. ■: ith the, difference voiced- voiceless consonants ,2.

wordpair .-.orepairs . wnth vowel-difference, 3. wordoairs te«tin»r +h8 a* ■■■ nation betreun hitf- freéuency-cSnbÆST ® åls*™ Robert west has united these three tyn-s into one test. 7C- ^e^nudsen-watson "articulatiordlist (JaSA l^o.upri!) comor^e-, <u »■-ui.r.s ^ CO..sonant— arid vowel words of the t p© Ufee- bv flg+chp-r o.« vorel, oetween b and k.t , sonaonants before ai or i Jr i f'T ' T are SaM to*ether (oo. vo?el- and <rdj) increaLrS;Seatihe **<■ nothi^ is h<rd and then i-xego^seo again, ihe threshold level is chosen ^ JroiSutSat tiiu-t°lavbr®r(rei!panSs !TOt than' half of ^ v^rds "inoo -f- level. (consonants count the double of vowel«- ?In0e th'3y are "3'e S?® « *r. the undo.-•standing of ejelchl ' % tt?L^r4s ill fo'r U<lf, Vb£V% • i ? Oin!s T hVert ora * 1 hvis slet intet er hurt. flet ***** of et shoe useThe •»*»•». J*e took fathers Uli *« fundao^tersiiglish soSjj"** "iy JhSis&r130 ^ C<mtai m£?S ™ "afesr spoken , and seed JiaMo, tail . , oil. boil spoil) -del •*•»- nfta -ini-1- no- w-i i«llej' ente °pTCTBn'(el"e f0 *• imt. kojsndor's£ri.lfe - .'ianT.fer^ei f^saTfertiVlf8? Sirl1dur frem svTes rtnkiSL listen skulde v.-olges ~t ^ejlh-ringer (i Robert West det samme), man vil naturligvis ^ nanirii^- tor skel, det er ikke helt seen og man undgaar st-'V^vas^- ni t,ITm om Ix* m °£ 1 h res forskellig ord sLi aa%sj?(:sas;?Ss;**^:aLjdSt*f rr 1-f.c at Vidsom manden evt. har hert noget helt fjerde)' - xaar tut they o Ttrzt ?ort!ÆStog\^nnÆgi^sre"d>

4

k.

MacFarlan 4 The patients hearing is tested first without the hearing aid, then"with it (sætningerne axxf brugt af Koxoe,Bél lab.) er "por^emaal ,som er svire at besvare (fx.wfeat knowledge is coveren by the study of astronomy ? o.l. Hvad er" en ingen med det?) MacFarlan uses sometimes ninsens sentences of the type;Giraf ..es are protected by lightning rods, there are no tuasd&y** in Baltimore etc. - iV It has been assumed that the hearing loss for speech could be calculated, on the basis of toé tone audiogram. Fletcher cal- c dates the average loss for the pitches 512,lo24 arc! 2o48,multiply:Lr

x

srtheless these methods are absolutely insuflicéænt. since in normal hearing individuals ,there a is a loo db. span between correct speech hearing at the minimal threshold and the maxim mum loudness of speech that call be tolerated, it is obvious that decibel hearing loss to speech is equivalent to percentage loss. A comparison between the percentage loss according to speech- tests and to theetffneaudiogram shows no correlation (three case,: mentioned). Two dif.. erent persons having according to Fletchej>- * s method 44 and :3S percentage loss show cult different results when speech hearing is tested, na. 1 cannot understand anything, number two can converse easily. - -d. Warfield has compared 21 cases tested by the t§necaudiometer aad(calculations according to Fletcher) and by the 4a phonograph audiometer. The discrepancy was very great. There is -a variation in tue ration 22;9 in .favor of the frequency audiometer presuming greater hearing loss. (men i ølle til fælde undtagen 1 "iver Flet- oher me to den sturre tab, om det er ikke «ae mærkligt i betragtning af at 4a listen aabenbart er d n i beg. nævnte 4a Western Electric liste, o: 'fat Lend., talord. Og her er kun fcvaSz. S tal at g .tte imellem, Bet mail nødvendigvis sætte procenten op axxx Forf. tilføjer en beregning fo een person ,sml. mellem "constant intensity phonograph record ,og a.u.a, metoden fo frekvens, dø. n viser stor overenstémme mels© for begge ;rer paa een gang (mindre ve d- enkelte). - - ik e dest o.mindre harhan sikkert ret i at tone audio metret er ganske u tilstræk.- eligt* Hen siger "io isa common experience fox- one who makes a point of doing both frequency testing and phonograph audiology on patients to find no correlation between the two tests. The phonograph usually shows up settter hearing than one would incline to believe from first tuiin-" c. fi.ecue.ucy run* but this is not invariably true, and the reverse may be

found.*' (44).

x