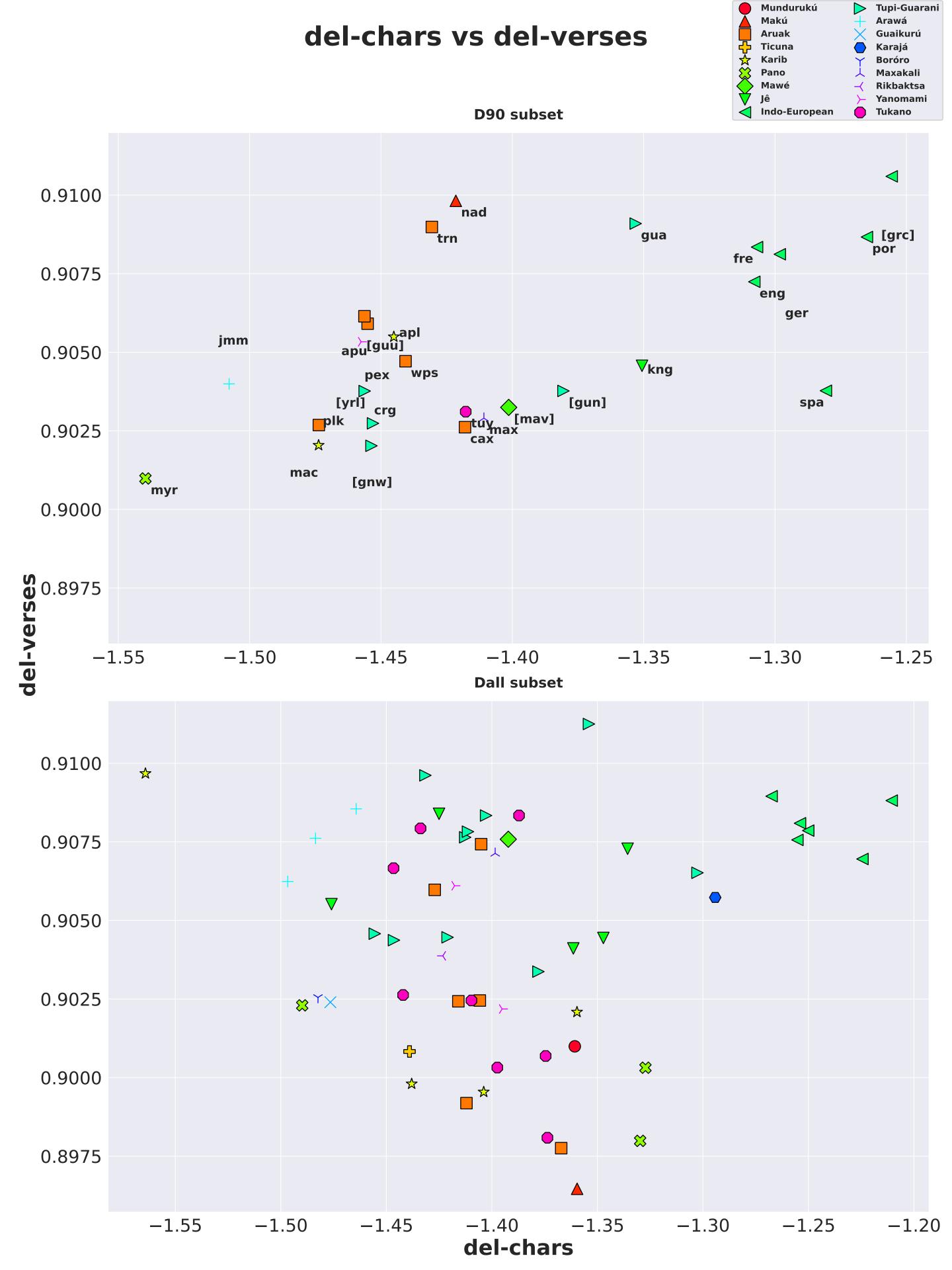
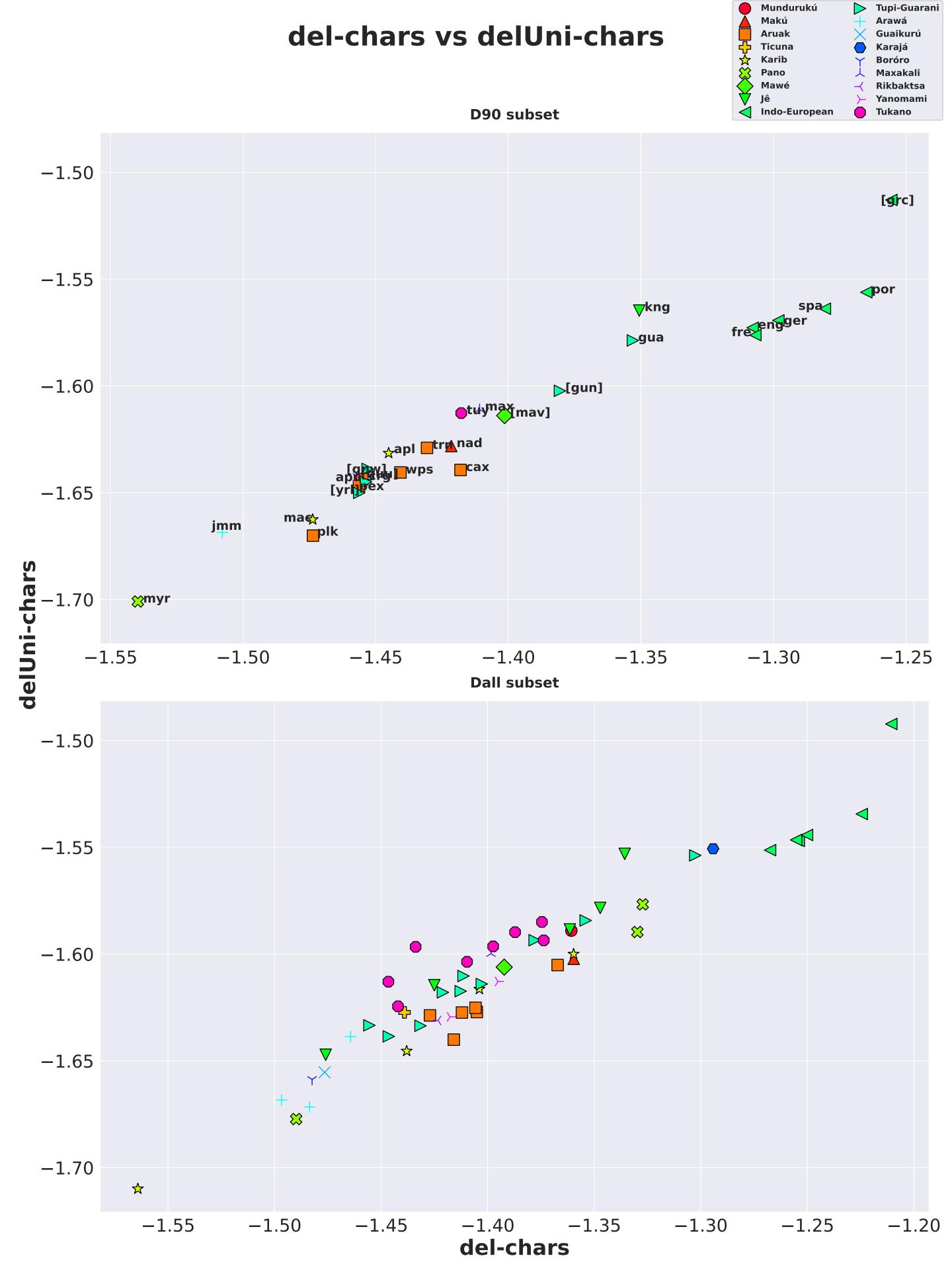
Tupi-Guarani Mundurukú Makú Arawá del-chars vs del-words Guaikurú **Aruak Ticuna** Karajá Boróro **Karib Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Indo-European Tukano **≜**nad 1.02 **∀**kng 1.00 **≻**[guu] 0.98 jmm **\ max** plk [gnw] fre**<** ☆apl **⊳**[gun] 0.96 **∷**myr **⊲**eng trn mac[∤] otuy (mav) **>**gua **⊲**por apu gegpa [yrl wps 0.94 pex [grc] **del-words** cax -1.40-1.55-1.50-1.45-1.35-1.30-1.25**Dall subset** 1.02 $\stackrel{\bigstar}{}$ \bigvee 1.00 \bigvee $\overline{\mathbf{A}}$ 0.98 Y 0.96 +8 ☆ 🔲 0.94 \approx ☆ X \triangleleft ₿ 0.92 -1.55-1.50-1.20-1.45-1.35-1.30-1.25-1.40del-chars

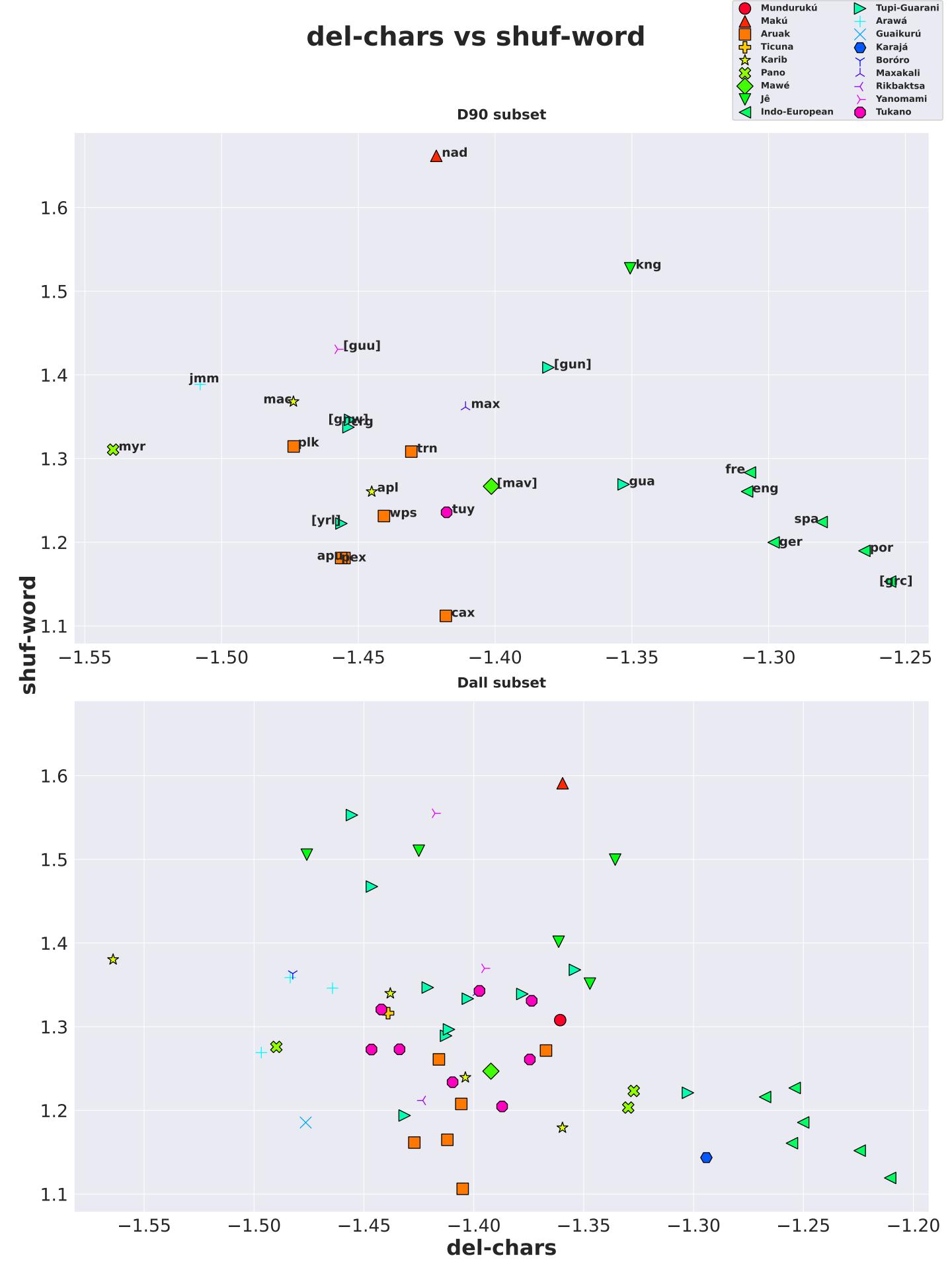
Tupi-Guarani Mundurukú Makú Arawá delUni-chars vs delUni-words Guaikurú **Aruak Ticuna** Karajá **Karib Boróro Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Indo-European Tukano 1.14 1.12 **⊢**[guu] jmm √kng **\L max** 1.10 mac **⊳**[gun] 1.08 cro [gnw] plk 1.06 fre eng (mav] **⇔**myr [y🔀 **Etrn _tuy ⊲**por 1.04 ger apex 1.02 delUni-words [grc] 1.00 cax -1.60-1.70-1.65-1.50-1.45-1.40-1.55-1.35**Dall subset** 1.14 1.12 1.10 $\stackrel{\bigstar}{}$ ☆ + c 1.08 Y 1.06 **☆** \approx 1.04 ☆ 1.02 1.00 -1.5-1.6-1.4-1.7-1.3delUni-chars



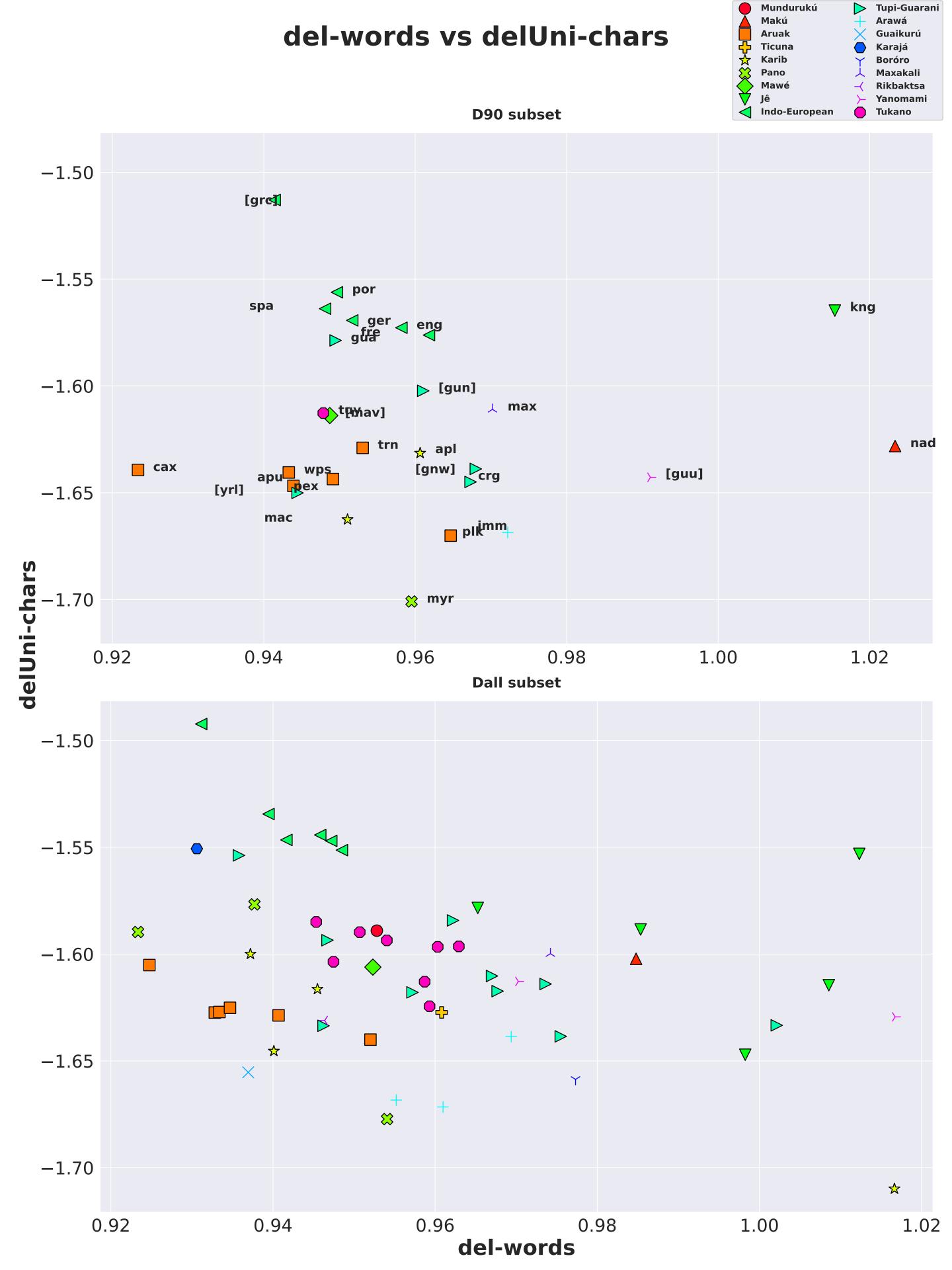
Tupi-Guarani Mundurukú Makú Arawá del-words vs delUni-words Guaikurú **Aruak Ticuna** Karajá **Karib Boróro Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Indo-European Tukano nad 1.14 1.12 jmm **▽** kng **⊥** max 1.10 $\stackrel{\bigstar}{\Rightarrow}$ mac > [gun] 1.08 [gnw] crg plk 1.06 **♦** [mfar@] [yrl] spa 1.04 ger apu pex 1.02 delUni-words [grc] 1.00 cax 0.92 0.94 0.96 0.98 1.00 1.02 **Dall subset** 1.14 1.12 1.10 ☆ ☆ X 1.08 Y 1.06 1.04 \approx 1.02 1.00 0.96 0.98 1.00 0.92 0.94 1.02 del-words

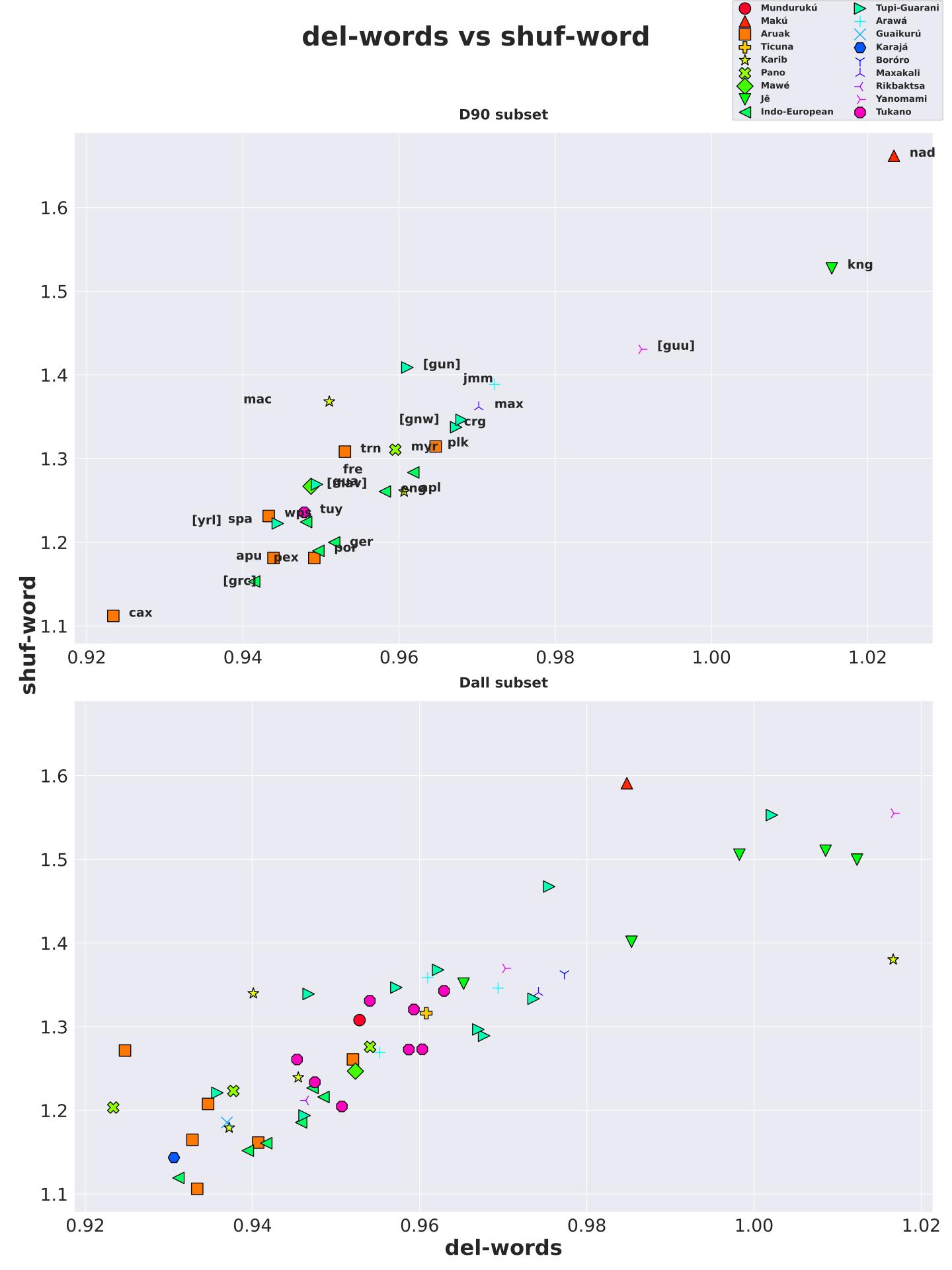


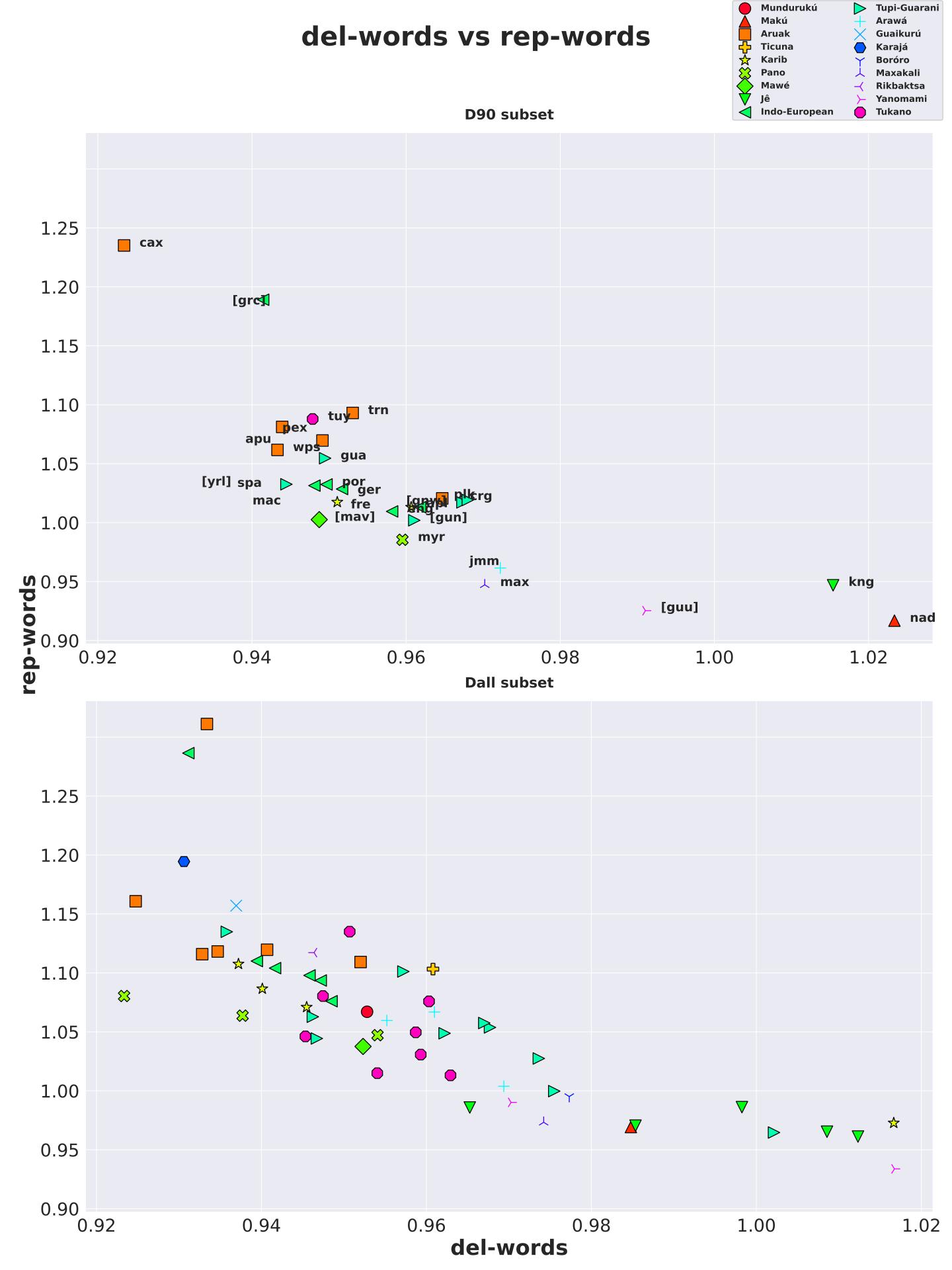
Tupi-Guarani Mundurukú Makú Arawá del-chars vs delUni-words Guaikurú **Aruak Ticuna** Karajá **Karib Boróro Pano** Maxakali Mawé Rikbaktsa Yanomami Jê **D90** subset Indo-European Tukano **▲**nad 1.14 1.12 **⊢**[guu] jmm √kng 人max 1.10 ma& **⊳**[gun] 1.08 [ghw] plk 1.06 freeng (mav]
 myr [yrl]> tuy **>**gua **⊲**por spa< 1.04 ger apupex 1.02 delUni-words [grc] 1.00 cax -1.50-1.45-1.35-1.30-1.55-1.40-1.25**Dall subset** 1.14 \bigvee 1.12 1.10 $\stackrel{\bigstar}{}$ \bigvee ☆ 1.08 Y 1.06 1.04 \triangleleft ☆ 1.02 1.00 \triangleleft -1.55-1.50-1.35-1.25-1.20-1.45-1.40-1.30del-chars



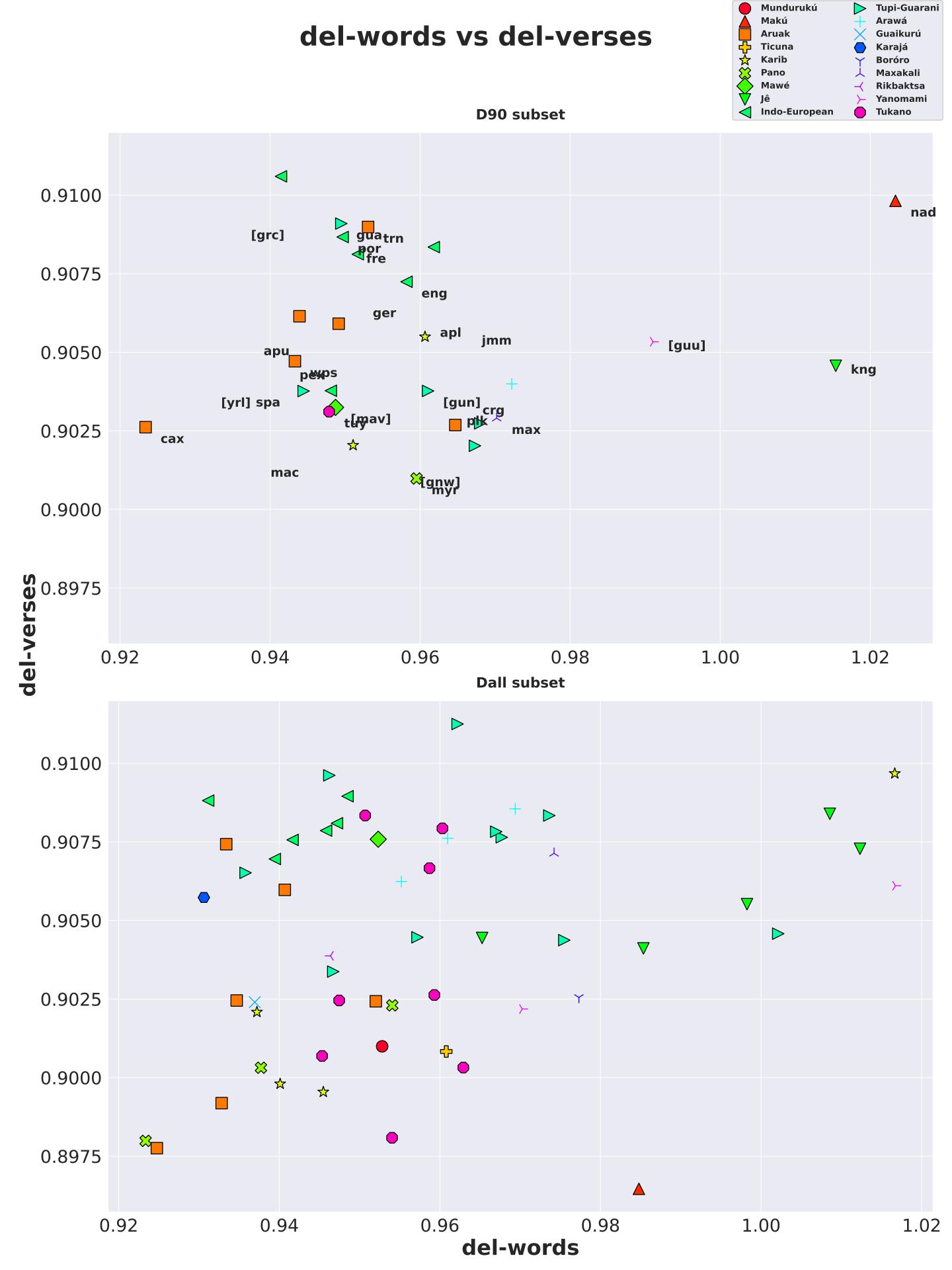
Tupi-Guarani Mundurukú Makú Arawá del-chars vs rep-words Guaikurú **Aruak** Ticuna Karajá Boróro **Karib Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Tukano Indo-European 1.25 cax 1.20 [grc] 1.15 1.10 trn otuy apw apw wps **S**gua 1.05 [yrl] macplk [gpwgapl **⊲**ger^{spa} **⊲**por freeng **⊘**[mav] **⊳**[gun] 1.00 **⇔**myr j<u>m</u>m **cep-words ∀**kng **人max** >[guu] ▲nad -1.55-1.50-1.45-1.40-1.35-1.30-1.25**Dall subset** \triangleleft 1.25 1.20 \times 1.15 ☆ 1.10 **\$** 1.05 1.00 ☆ 0.95 0.90 -1.55-1.50-1.40-1.30-1.20-1.45-1.35-1.25del-chars







Tupi-Guarani Mundurukú Makú Arawá del-words vs do-nothing Guaikurú **Aruak** Ticuna Karajá **Karib** Boróro **Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Indo-European Tukano -0.96-0.98-1.00[yrl] space w w with the space of the space **≻** [guu] **∀** kng ▲ nad cax [gnw] -1.02do-nothing 0.92 0.94 0.96 0.98 1.00 1.02 **Dall subset** -0.96-0.98-1.00 \approx -1.02-1.040.96 0.98 0.92 0.94 1.00 1.02 del-words



Tupi-Guarani Mundurukú Makú Arawá delUni-chars vs shuf-word Guaikurú **Aruak** Ticuna Karajá Boróro Karib **Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Indo-European Tukano Anad 1.6 √kng 1.5 **⊢**[guu] **[gun]** 1.4 jmm maķ **__max** c[gnw] plk **⇔**myr trn 1.3 fre gua eng **⊘**[mav] ∆apl **o**tuy wps [y**r**] spa 1.2 **⊲**ger por **apu**x shuf-word [grc] cax -1.70-1.50-1.65-1.60-1.55-1.45-1.40-1.35**Dall subset** 1.6 1.5 1.4 ☆ \curlyvee **☆** + 1.3 \approx \approx 1.2 X $\stackrel{\bigstar}{\Rightarrow}$ 1.1 -1.5-1.7-1.6-1.4-1.3delUni-chars

Tupi-Guarani Mundurukú Makú Arawá delUni-chars vs rep-words Guaikurú **Aruak** Ticuna Karajá Boróro **Karib Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Tukano Indo-European 1.25 cax 1.20 [grc] 1.15 1.10 trn **o**tuy pex apu wps gua 1.05 [y por **Spar Plka** C[¶nw]_☆apl freeeng **√**[mav] [gun] 1.00 ₩myr jmm **cep-words** 0.95 **∀**kng **__max ⊢**[guu] ▲nad -1.70-1.65-1.60-1.55-1.50-1.45-1.40-1.35**Dall subset** 1.25 1.20 X 1.15 $\stackrel{\bigstar}{\mathbf{x}}$ 1.10 $\stackrel{\bigstar}{}$ \approx 1.05 1.00 ☆ \bigvee 0.95 **>** 0.90 -1.6-1.5-1.7-1.4-1.3delUni-chars

Tupi-Guarani Mundurukú Makú Arawá delUni-chars vs del-verses Guaikurú **Aruak Ticuna** Karajá Boróro **Karib Pano** Maxakali Mawé Rikbaktsa Yanomami Jê **D90** subset Indo-European Tukano \triangleleft 0.9100 nad gua [grc] trn **⊲** por 0.9075 eng ger apu [guu] Aapl jmm 0.9050 **∇**kng pex wps [gun] [yrl] **⋖** spa plk 0.9025 cax $\stackrel{\bigstar}{}$ **⇔** myr mac [gnw] 0.9000 **del Verses** 0.8975 -1.65-1.50-1.70-1.60-1.45-1.40-1.55-1.35**Dall subset** 0.9100 \Rightarrow 0.9075 + \bigvee 0.9050 0.9025 \times ₿ { 0.9000 $\stackrel{\bigstar}{\Rightarrow}$ $\stackrel{\star}{\Rightarrow}$ 0.8975 -1.5-1.6-1.7-1.4-1.3delUni-chars

Tupi-Guarani Mundurukú Makú Arawá delUni-words vs shuf-word Guaikurú **Aruak** Ticuna Karajá Boróro **Karib Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset **Indo-European** Tukano nad 1.6 **▽** kng 1.5 > [guu] > [gun] 1.4 jmm **☆** ⊥ max mac [gnwdrg plk **myr** 1.3 spa 1.2 gerpor apu shuf-word [g**r**] cax 1.00 1.02 1.04 1.06 1.08 1.10 1.12 1.14 **Dall subset** 1.6 1.5 1.4 1.3 1.2 1.1 1.04 1.00 1.02 1.06 1.08 1.10 1.12 1.14 delUni-words

Tupi-Guarani Mundurukú Makú Arawá delUni-words vs rep-words Guaikurú **Aruak** Ticuna Karajá **Karib Boróro Pano** Maxakali Mawé Rikbaktsa Yanomami Jê **D90** subset Tukano Indo-European 1.25 cax 1.20 [g**r**] 1.15 1.10 **Litrn** pex apu wps gua 1.05 spa divisior - Blk Aka mac > [gun] 1.00 **⇔** myr jmm **cep-words** 0.95 ⊥ mæxkng > [guu] nad 1.00 1.02 1.04 1.06 1.08 1.10 1.14 1.12 **Dall subset** 1.25 1.20 X 1.15 1.10 1.05 1.00 \checkmark 0.95 0.90 1.04 1.10 1.12 1.00 1.02 1.06 1.08 1.14 delUni-words

Tupi-Guarani Mundurukú Makú Arawá delUni-words vs del-verses Guaikurú **Aruak Ticuna** Karajá **Karib Boróro Pano** Maxakali Mawé Rikbaktsa Jê Yanomami **D90** subset Tukano **Indo-European** 0.9100 nad [grc] 0.9075 eng ger ☆ apl jmm ≻ [guu] 0.9050 apu **∇** kng wps pex ▶ [gun] [yrl] spa crg [mav] plk tuy 0.9025 max cax $\stackrel{\bigstar}{\Rightarrow}$ mac [gnw] myr 0.9000 del-verses 0.8975 1.00 1.02 1.04 1.06 1.08 1.10 1.12 1.14 **Dall subset** 0.9100 \Rightarrow 0.9075 $\perp \nabla$ 0.9050 0.9025 ☆ \approx 0.9000 $\stackrel{\bigstar}{}$ \Rightarrow \approx 0.8975 1.06 1.00 1.02 1.04 1.08 1.10 1.14 1.12 delUni-words

