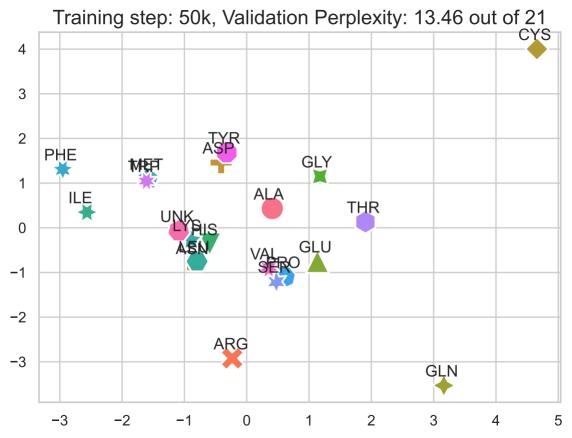
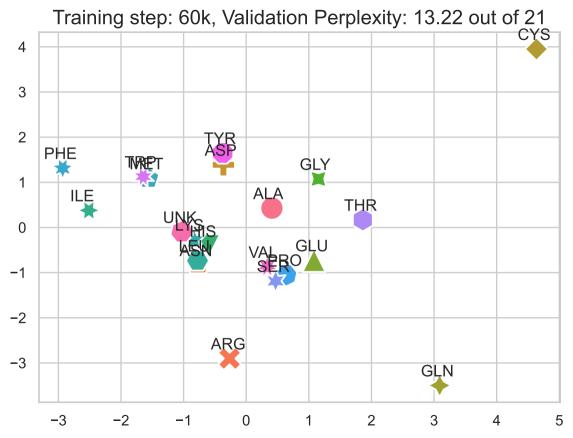
Training step: 10k, Validation Perplexity: 15.02 out of 21 4 3 2 **GLY** PHE MET **ALA** 0 THR GĻU -2 **ARG** -3 GĻN -3

Training step: 20k, Validation Perplexity: 14.36 out of 21 4 3 **ASFTYR** 2 **GLY** PHE MET 1 TRP **ALA WUNK** THR 0 GĻU -2 ARG -3GLN

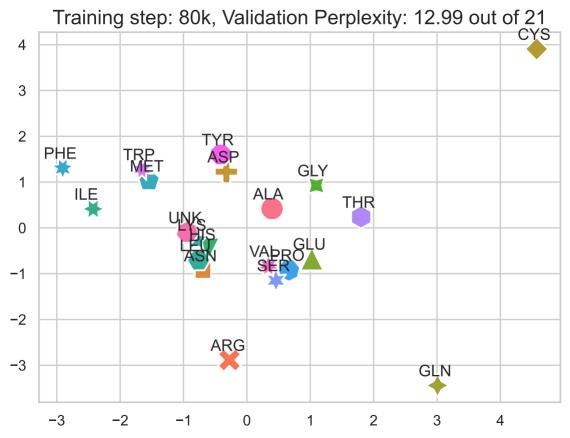
Training step: 30k, Validation Perplexity: 13.93 out of 21 4 3 2 **GLY** PHE MET TRP 1 **ALA** ILE UNK THR 0 GLU -2 **ARG** -3GLN

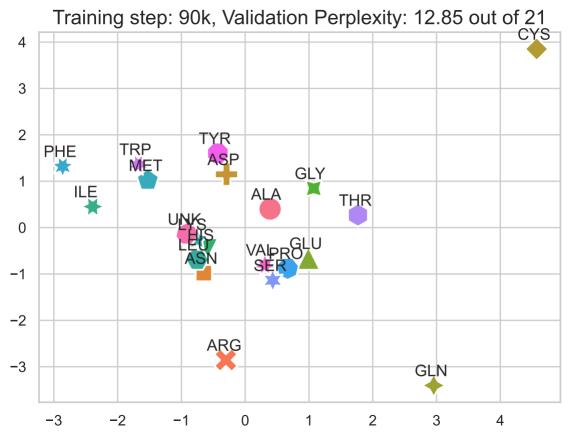
Training step: 40k, Validation Perplexity: 13.75 out of 21 4 3 2 PHE **GLY** 1 **ALA ILE** UNK LY\$IIS THR 0 ASN ĞĻU -2 ARG -3ĞĻN

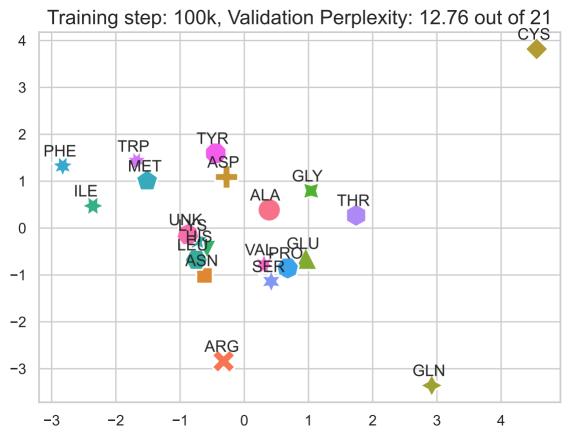


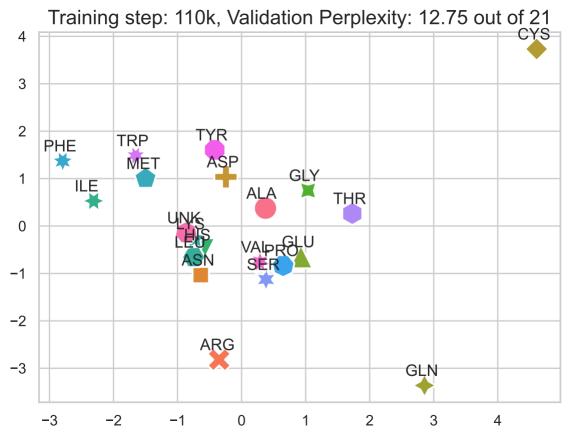


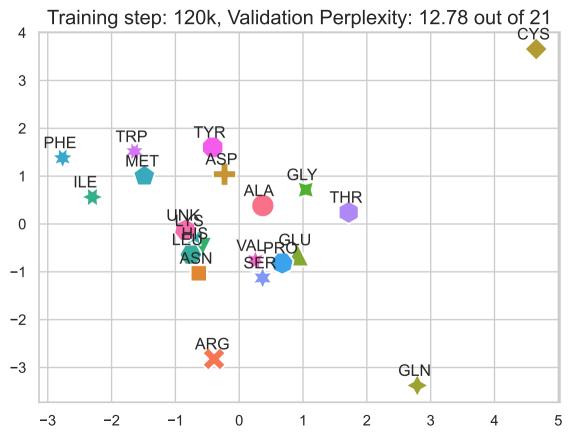
Training step: 70k, Validation Perplexity: 13.08 out of 21 4 3 2 PHE **GLY** 1 **ALA** ILE THR 0 **ARG** -3GLN

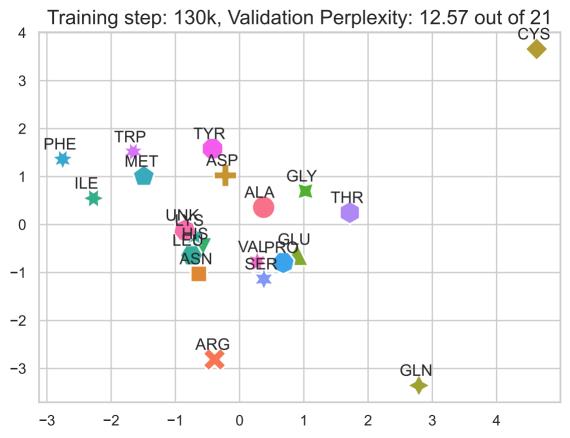












Training step: 140k, Validation Perplexity: 12.56 out of 21 3 2 TRP  $\mathsf{TYR}$ PHE MET **ASP** 1 **GLY ALA THR** 0 ASN SER -2**ARG** -3 **GLN** 

Training step: 150k, Validation Perplexity: 12.46 out of 21 3 2 TRP TYR PHE MET ASP 1 **GLY** ILE **ALA THR** 0 ASN SER -2 **ARG** -3 **GLN** 

Training step: 160k, Validation Perplexity: 12.47 out of 21 3 2 TRP TYR PHE MET ASP 1 ILE GLY **THR** 0 VALPRO LEUS ASN -2**ARG GLN** -3

Training step: 170k, Validation Perplexity: 12.36 out of 21 3 2 TRP **TYR** PHE MET ASP 1 GLY ILE ALA THR 0 EUS, ASN **ARG GLN** -3

Training step: 180k, Validation Perplexity: 12.42 out of 21 3 2 TRP TYR PHE MET ASP 1 ILE GL' THR 0 VAL PRO LEUS. ASN **ARG GLN** -3

Training step: 190k, Validation Perplexity: 12.35 out of 21 TRP **TYR** PHE MET ASP ILE ALA **THR** VAL PRO ELS. ASN **ARG GLN** 

3

2

1

0

Training step: 200k, Validation Perplexity: 12.25 out of 21 2 TRP **TYR** PHE MET ASP ILE THR VAL PRO ELS. ASN **ARG GLN** -3

3

1

0

Training step: 210k, Validation Perplexity: 12.22 out of 21 TRP **TYR** PHE MET ASP ILE **GLY** ALA **THR** VAL PROV .HUS ASN **ARG GLN** 

3

2

1

0

-2

Training step: 220k, Validation Perplexity: 12.19 out of 21 TRP **TYR** PHE MET ASP ILE **THR** VAL PRO LHUS. ASN **ARG GLN** 

3

2

1

0

-2

Training step: 230k, Validation Perplexity: 12.15 out of 21 TRP **TYR** PHE MET ASP ILE THR VAL PRO LHUS ASN **ARG GLN** 

3

2

1

0

-2

Training step: 240k, Validation Perplexity: 12.13 out of 21 TRP **TYR** PHE MET ASP ILE **GLY THR** VAL PORODI LHLS ASN **ARG GLN** 

3

2

1

0

-2

Training step: 250k, Validation Perplexity: 12.08 out of 21 3 2 TRP **TYR** PHE MET **ASP** 1 ILE THR 0 VAL PRO LHUS ASN -2**ARG GLN** -3

Training step: 260k, Validation Perplexity: 12.06 out of 21 3 2 TRP **TYR** PHE **MET ASP** 1 ILE **THR** 0 VAL PORD LHIS AŚN -2 **ARG GLN** -3 3

Training step: 270k, Validation Perplexity: 12.05 out of 21 3 2 TRP **TYR** PHE MET **ASP** 1 ILE THR 0 VAL PORD LHUS AŚN -2**ARG GLN** -3

Training step: 280k, Validation Perplexity: 12.02 out of 21 3 2 TRP **TYR** PHE MET **ASP** 1 ILE **THR** YNK 0 LHIS PERCO VAL SER ASN -2 **ARG GLN** -3