

20220304WAorso

To Tivon: some notes on the simplification of language

The simplification of language: larger groups may be addressed

The privatization of language: groups may be divided

Simplification:

'American' (success)

Hangul (success)

ᠮᠤᠯᠠᠭ ᠤᠯᠤᠰ Phags Pa's Square Mongolian (failed)

繁体 / 简体 Traditional and Simplified Chinese (success)

Mongolian to Cyrillic (success)

People seem to switch languages when it benefits them. This is a big topic.

Something I have been looking at the last two years -

thermodynamic requirements for communication

From the thermodynamic perspective, a specialized communication which is repeated will eventually reach equilibrium - everyone gets it. Let us view a population as a medium, a gas of large particles (though it might be better modeled as a liquid).

Languages which are used, and which have interaction with people, will reach thermodynamic equilibrium as opposed by whatever barriers exist in the medium.

The barriers to this are at least:

Communication efficiency which we define this in terms of encoder decoder and symbol quantity. We can see then that this is a big barrier for entirely new languages for which the receiver has no decoder or encoder.

signal * encoder states → transmitted symbol quantity → received symbol quantity
→ decoder states

Maybe it looks like :

signal / enc / q_{Trans} * q_{Rec} / dec

Sensitivity (language learning affinity in people), then resource requirements (food, time, attention).

This does not happen when the transmitters and receivers are specialized (differentiation as a subset). The communication barriers for specialized $q_{\text{Trans}} * q_{\text{Rec}}$ are exactly their specialization.