What is Language Change?

- Languages naturally change slowly over time.

  - E.g. English used to have five cases and three genders, similar to German.

- The song to the right is written in Yola, an language closely related to English that was at one point spoken in parts of southern Ireland.

Fade teil thee zo lournagh, co Joane, zo knaggee?

Th' weithest all curcagh, wafur, an cornee.

Lidge w'ouse an a milagh, tis gaay an louthee:

Huck nigher; y'art scuddeen; fartoo zo hachee?

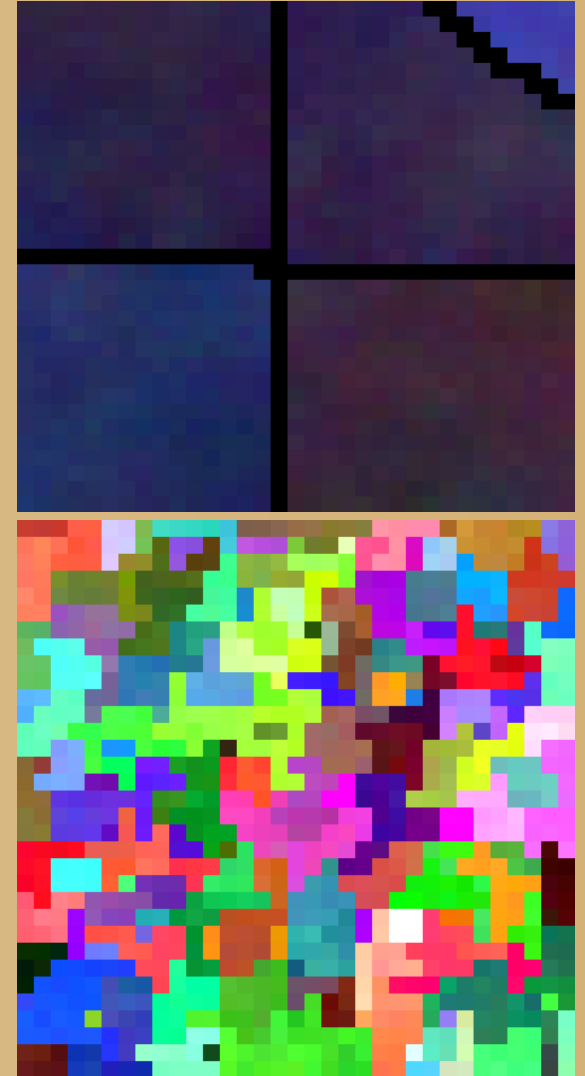(Translation: What ails you so melancholy, quoth John, so cross?

You seem all snappish, uneasy, and fretful.

Lie with us on the clover, 'tis fair and sheltered:

Come nearer; you're rubbing your back; why so ill tempered?)

Model of Language Change

- Many properties which change model behavior
  - Mutation rate (15 vs 10)
  - Influence factor (25% vs 100%)
  - Threshold of Intelligibility
  - Number of Interactions per tick
  - Obstacles

Model of Language Change

- Can reproduce many real-world properties of language change.

  - Dialect continuum: a situation where A can talk to B and B can talk to C but A can't talk to C

  - In the picture, purple can't talk to cyan.