Workshop of Scientific Evolutionary Writing

Writing and rewriting to improve your text

MARCH 1-4 2021
Online on Blue Meeting Platform

Vittorio Loreto also on behalf of Vittoria Colizza

Inserm Sony CSL SAPIENZA UNIVERSITÀ DI ROMA

Main teachers

Mark Buchanan

Mark Buchanan is a physicist and science writer based in Europe. A former editor with the international science journal Nature and also New Scientist, he is the author of four books and numerous articles exploring the ideas of modern physics. He writes regular columns for Bloomberg Opinion and Nature Physics.

Justin Mullins

Justin Mullins is a consultant editor at New Scientist where he has covered topics ranging from Chernobyl to the emergence of artificial intelligence. He was New Scientist's San Francisco bureau chief during the first dotcom boom and later its Boston Editor and Technology Editor. He is a former teaching fellow at the University of California, Berkeley.

Actors

Concept and coordination

Vittorio Loreto
Sony CSL Paris
Sapienza University of Rome
Complexity Science Hub, Vienna

Vittoria Colizza
INSERM

WeWrite development

Pietro Gravino
Sony CSL Paris

Elisabetta Falivene
Sapienza University of Rome

I-LAB

Scientific supervision

Vittorio Loreto
Sony CSL Paris
Sapienza University of Rome
Complexity Science Hub, Vienna

Vittoria Colizza
INSERM

Pietro Gravino
Sony CSL Paris

Ruggiero Lo Sardo
Sapienza University of Rome

Remi Van Trjip
Sony CSL Paris

Martina Galletti
Sony CSL Paris

Additional Teachers

Pietro Gravino
Sony CSL Paris

Elisabetta Falivene
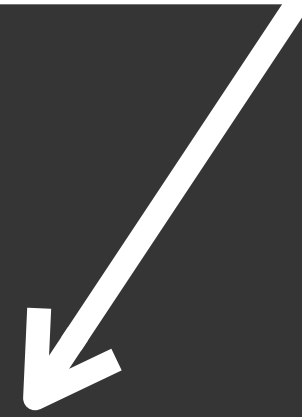Sapienza University of Rome

Webmaster

Elisabetta Falivene
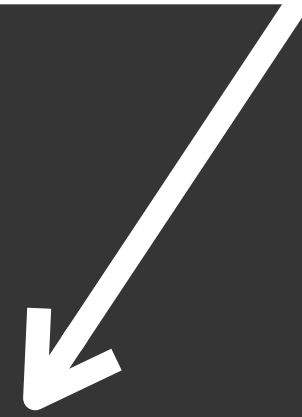Sapienza University of Rome

Scientific Evolutionary Writing

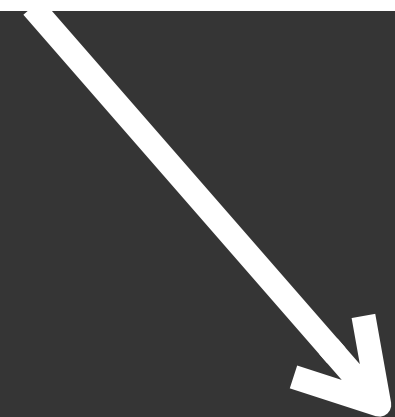# Scientific Evolutionary Writing

you'll be writing a scientific piece!

Scientific Evolutionary Writing

you'll be writing a scientific piece!

self-explaining

Scientific Evolutionary Writing

you'll be writing a scientific piece!

Why ?

self-explaining

Phylogeny problem

Phylogeny problem

AAGACTT

AAGGCCT

TGGACTT

-3 mil yrs

-2 mil yrs

-1 mil yrs

today

Phylogeny problem

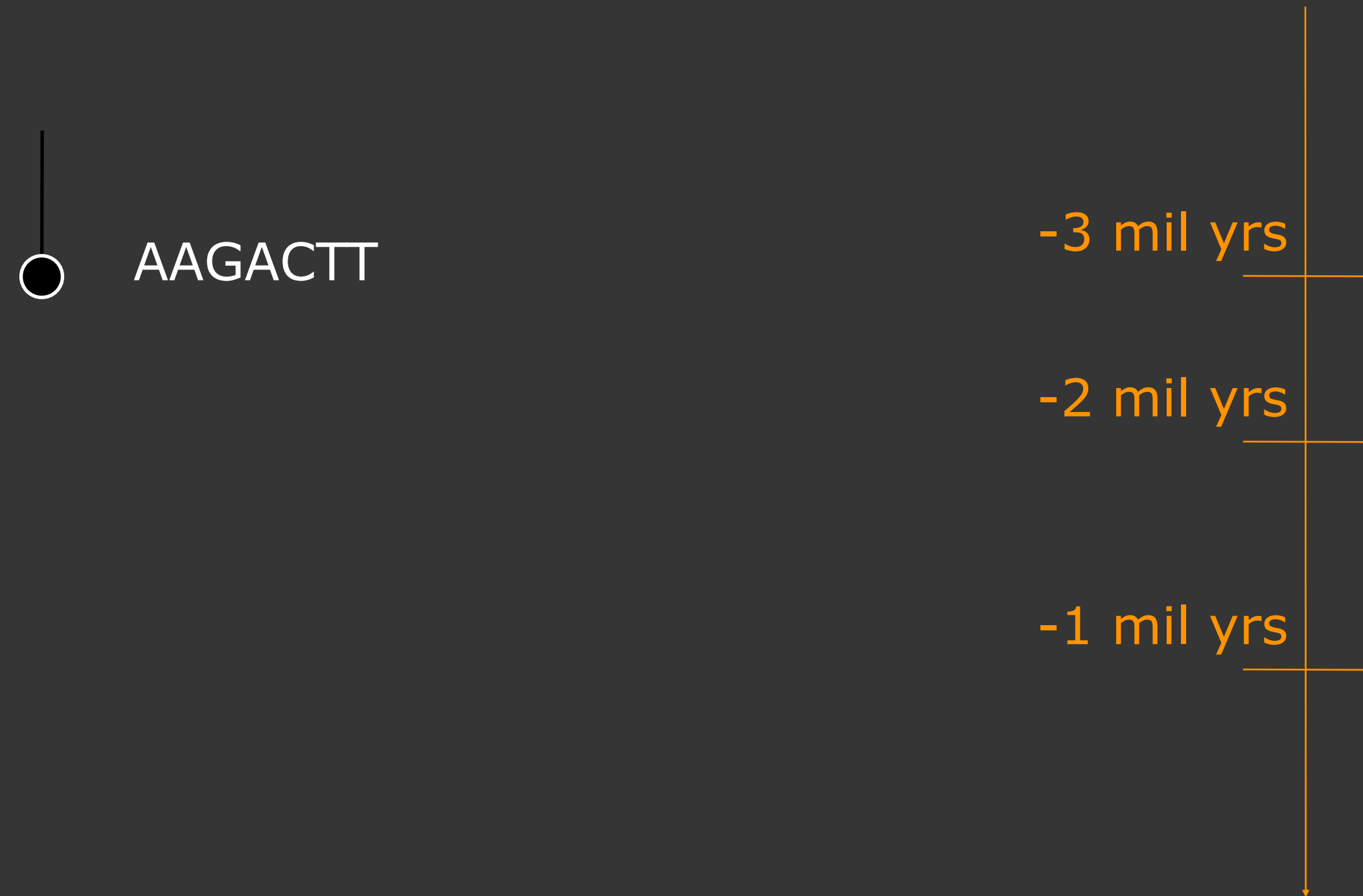

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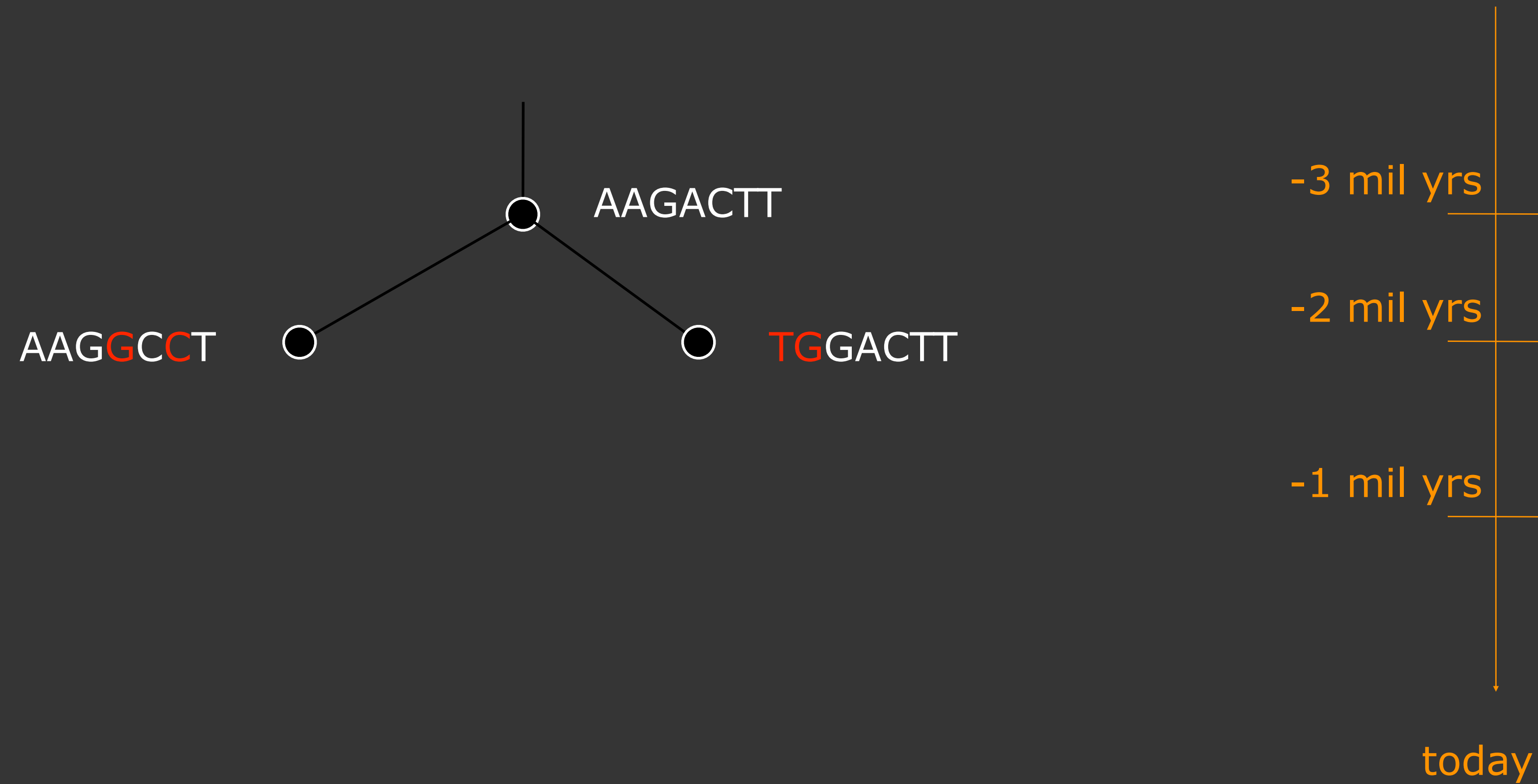AAGGCCT

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TAGCCCT

AGCACTT

AGGGCAT

TAGCCCA

TAGACTT

AGCACAA

AGCGCTT

U   V   W   X   Y

-3 mil yrs

-2 mil yrs

-1 mil yrs

today

Phylogeny problem

U AGGGCAT

V TAGCCCA

W TAGACTT

X TGCACAA
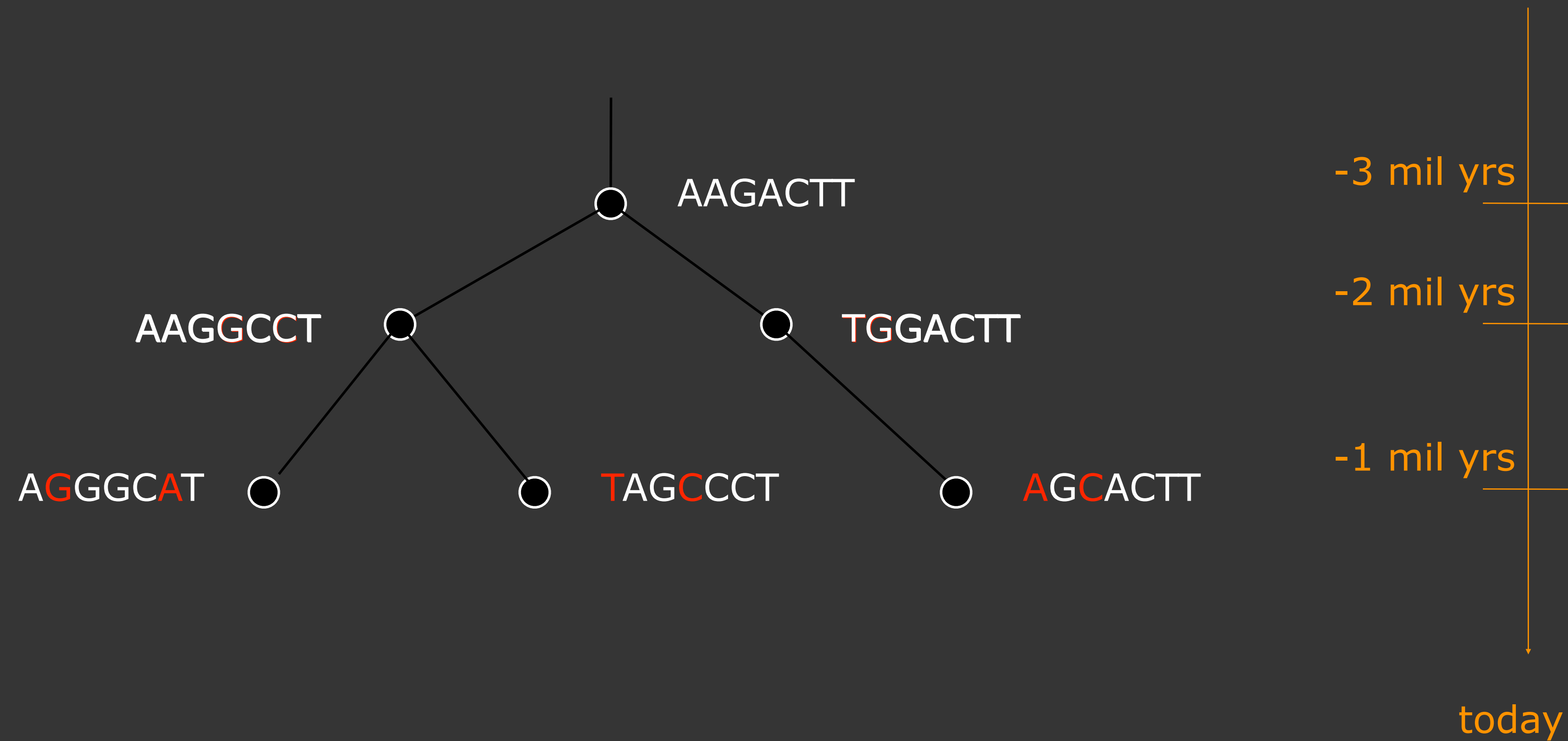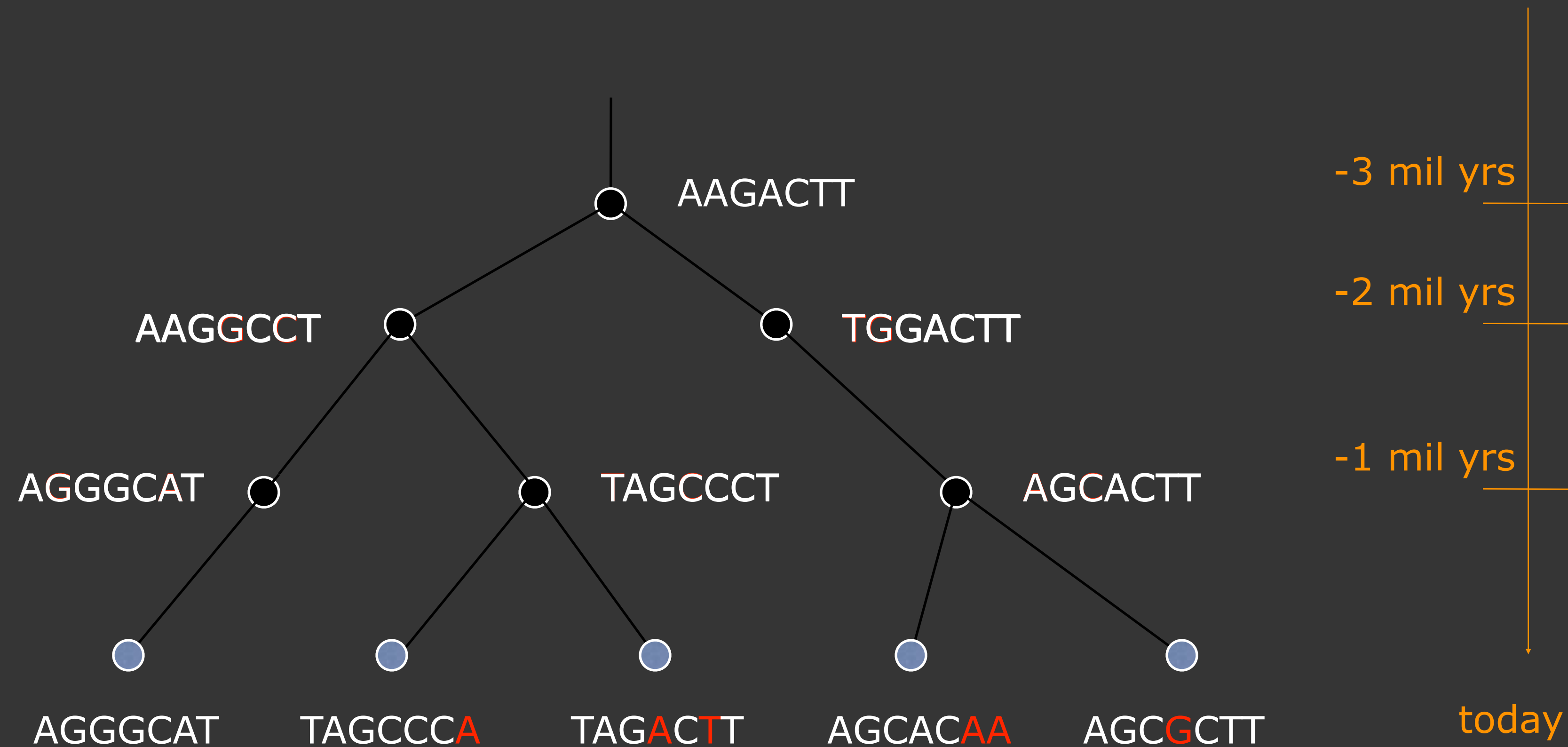
Y TGCGCTT
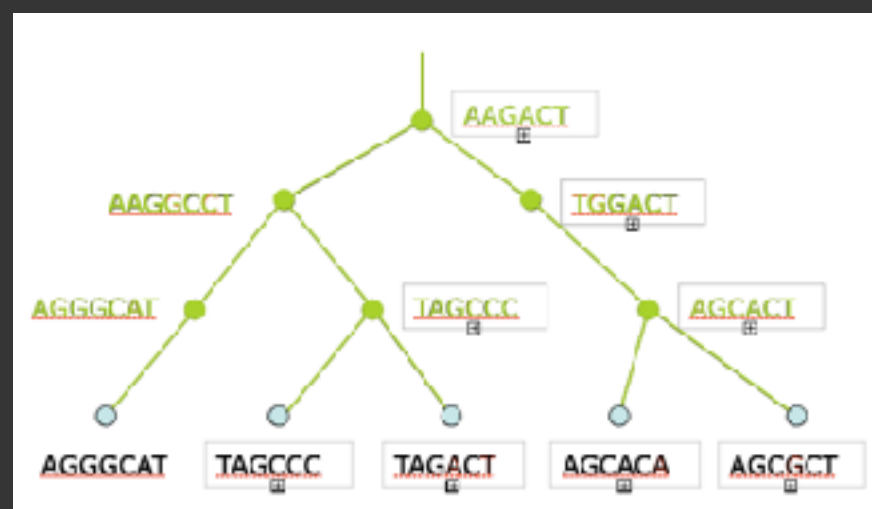
Temporal bifurcations

Temporal bifurcations

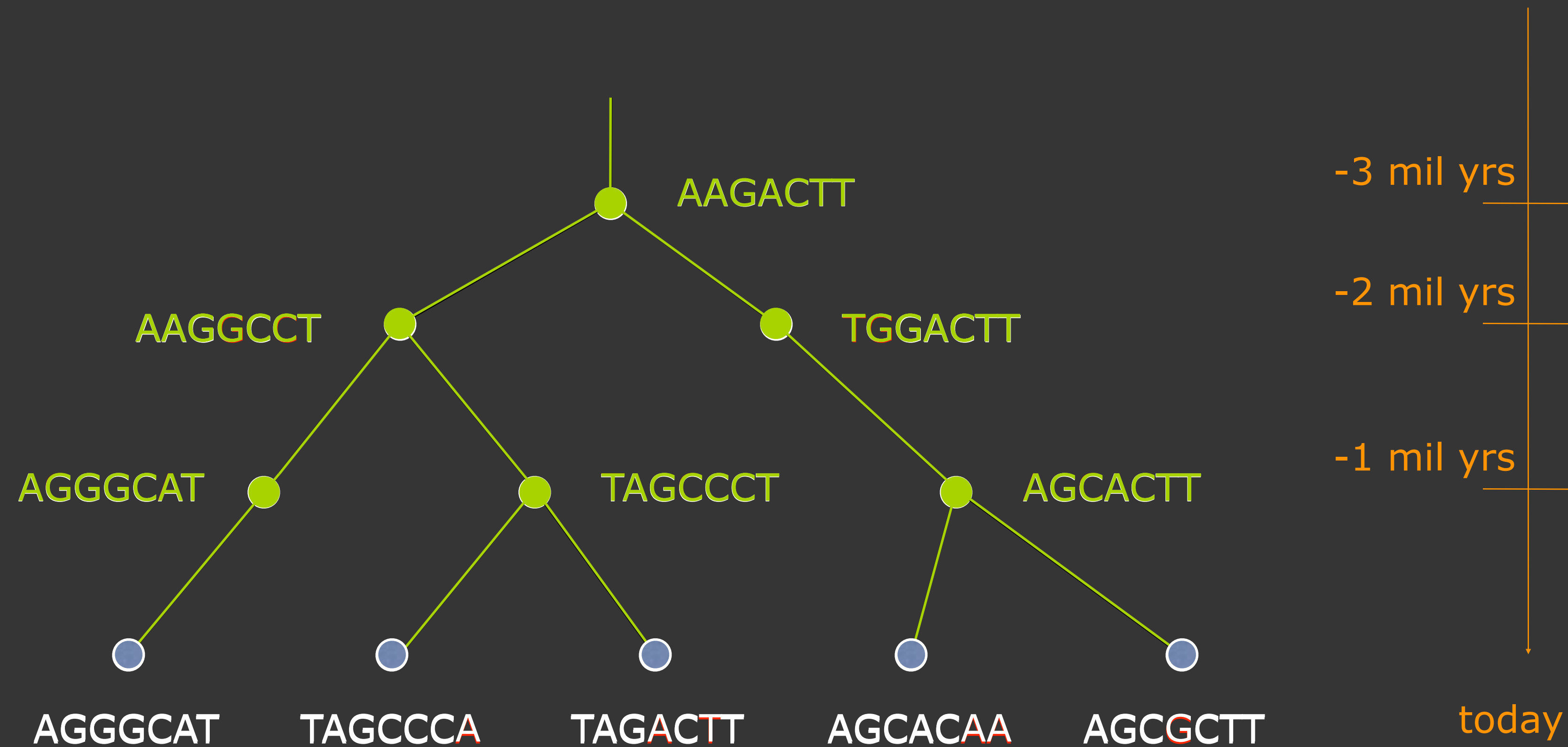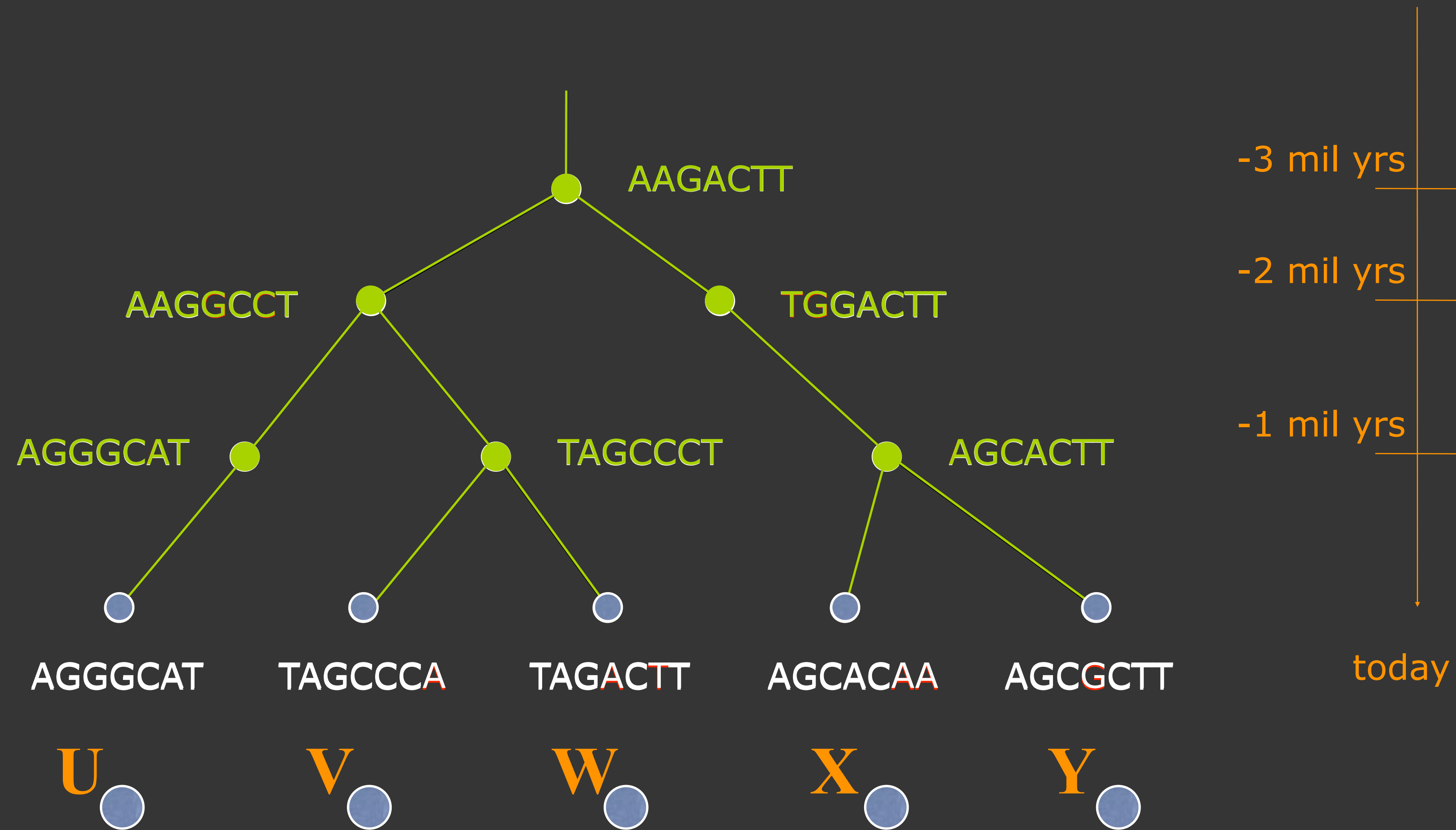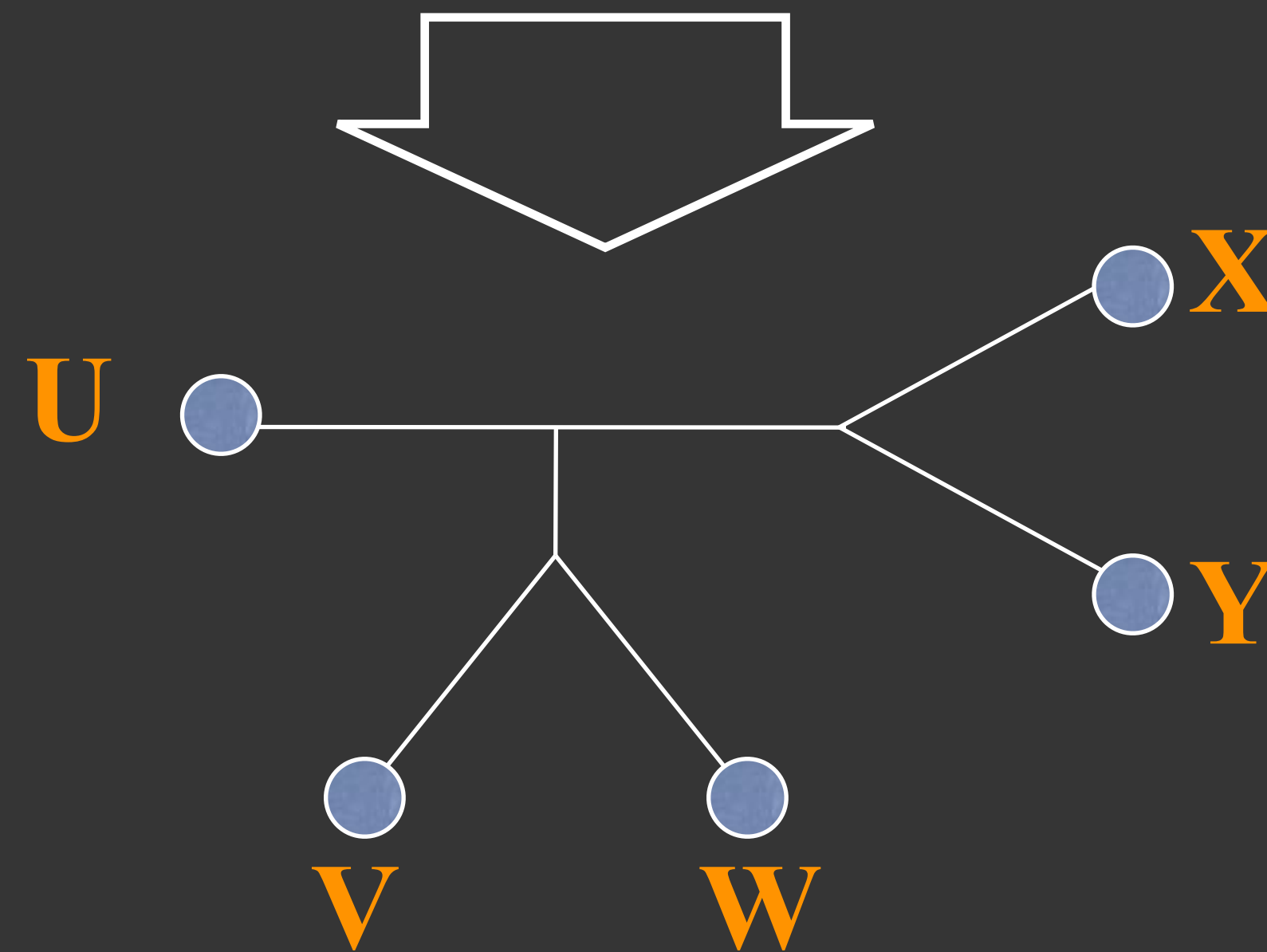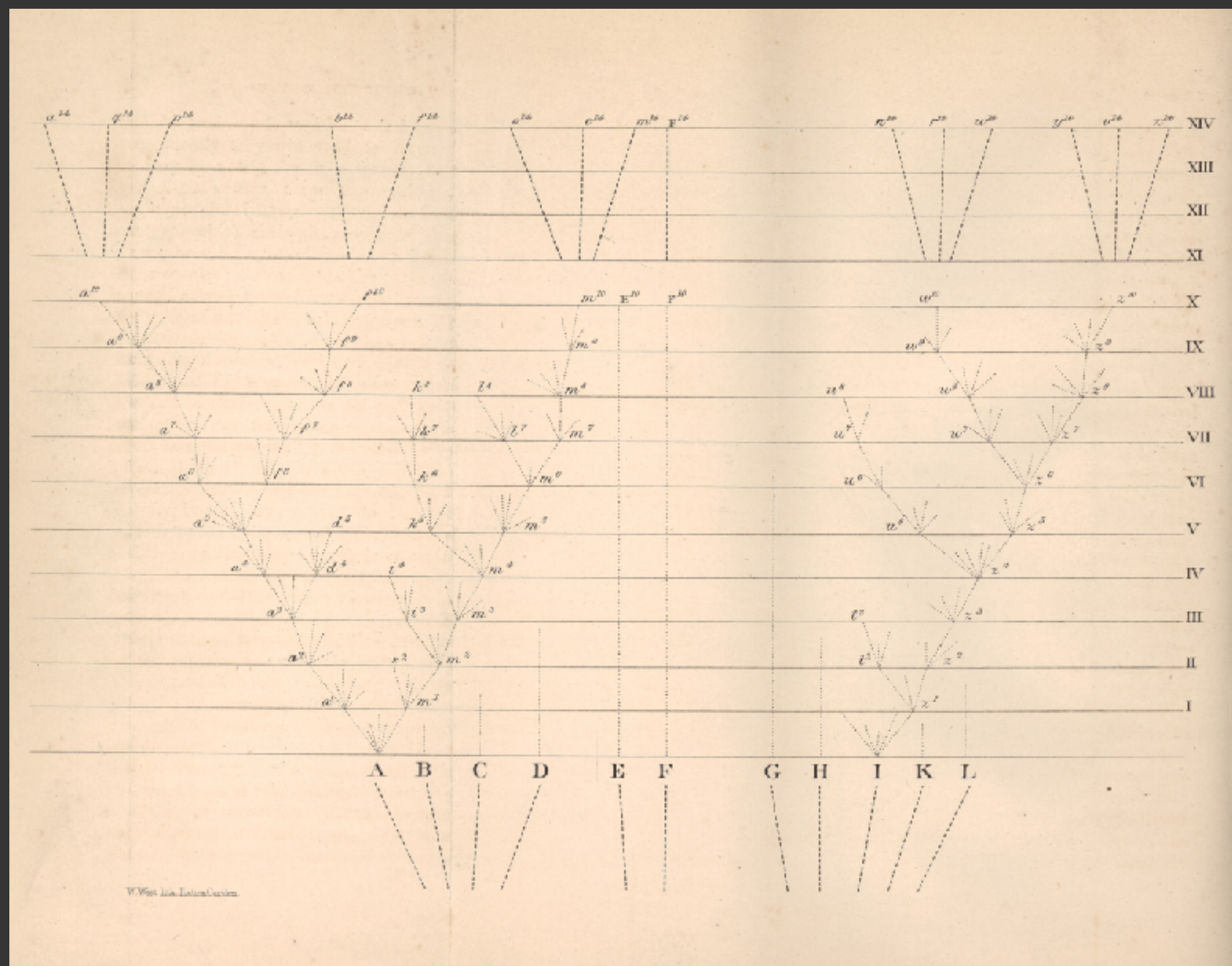The instructions to turn always to the left reminded me that such was the common procedure for discovering the central point of certain labyrinths. I have some understanding of labyrinths: not for nothing am I the great grandson of that Ts'ui Pên who was governor of Yunnan and who renounced worldly power in order to write a novel that might be even more populous than the Hung Lu Meng and to construct a labyrinth in which all men would become lost. Thirteen years he dedicated to these heterogeneous tasks, but the hand of a stranger murdered him—and his novel was incoherent and no one found the labyrinth. Beneath English trees I meditated on that lost maze: I imagined it inviolate and perfect at the secret crest of a mountain; I imagined it erased by rice fields or beneath the water; I imagined it infinite, no longer composed of octagonal kiosks and returning paths, but of rivers and provinces and kingdoms... I thought of a labyrinth of labyrinths, of one sinuous spreading labyrinth that would encompass the past and the future and in some way involve the stars. Absorbed in these illusory images, I forgot my destiny of one pursued. I felt myself to be, for an unknown period of time, an abstract perceiver of the world.
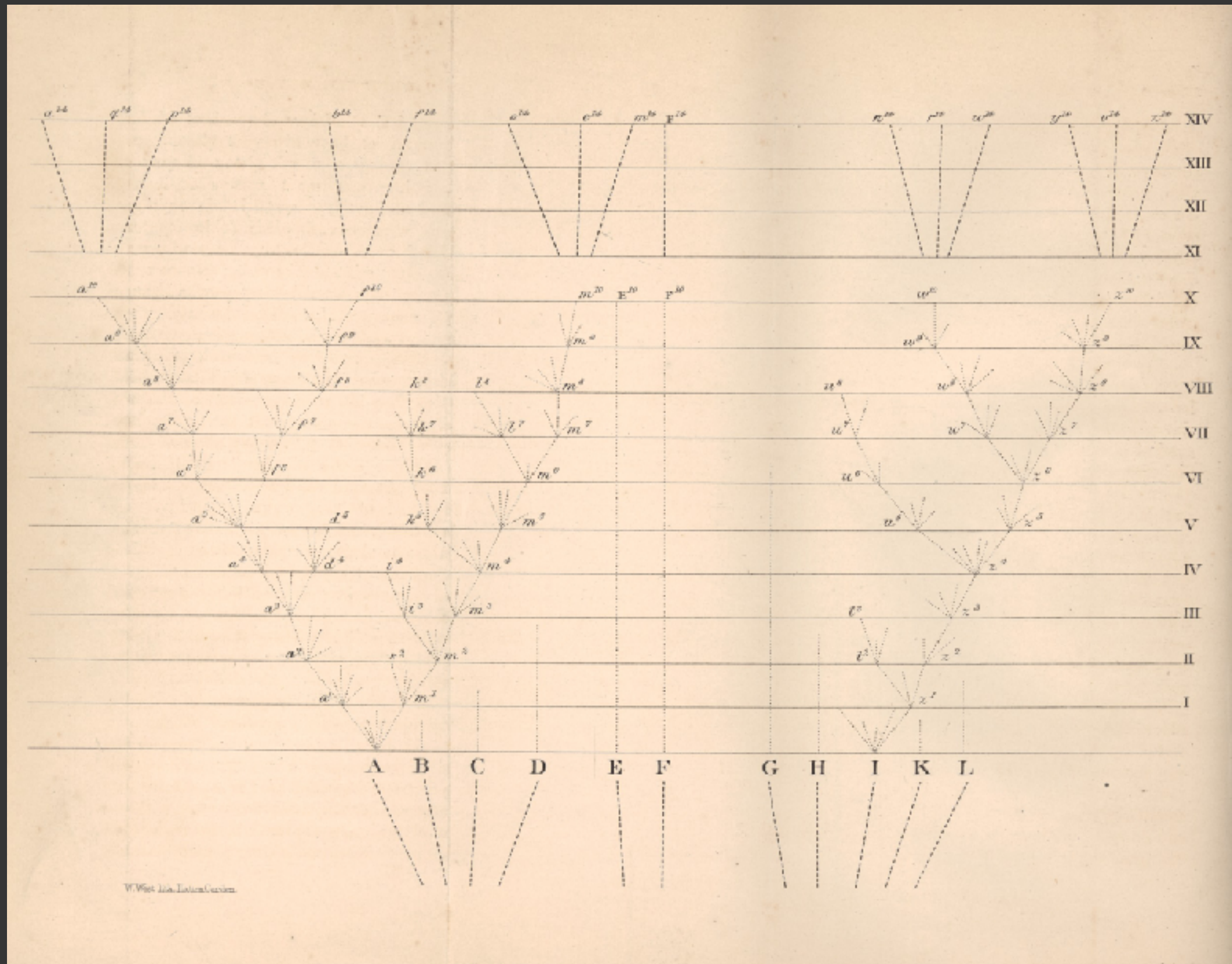
Temporal bifurcations

Linear structure ??
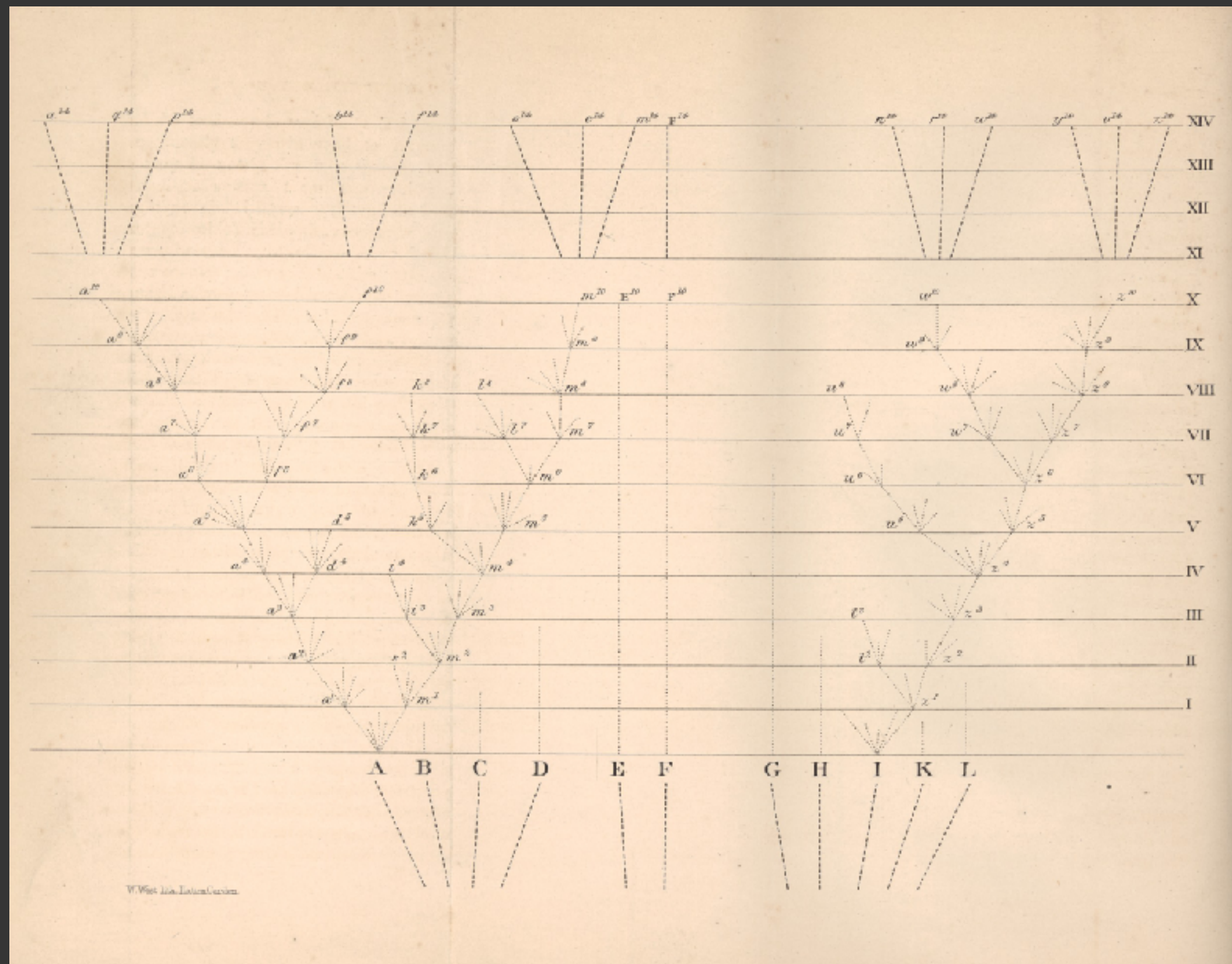
The instructions to turn always to the left reminded me that such was the common procedure for discovering the central point of certain labyrinths. I have some understanding of labyrinths: not for nothing am I the great grandson of that Ts'ui Pên who was governor of Yunnan and who renounced worldly power in order to write a novel that might be even more populous than the Hung Lu Meng and to construct a labyrinth in which all men would become lost. Thirteen years he dedicated to these heterogeneous tasks, but the hand of a stranger murdered him—and his novel was incoherent and no one found the labyrinth. Beneath English trees I meditated on that lost maze: I imagined it inviolate and perfect at the secret crest of a mountain; I imagined it erased by rice fields or beneath the water; I imagined it infinite, no longer composed of octagonal kiosks and returning paths, but of rivers and provinces and kingdoms… I thought of a labyrinth of labyrinths, of one sinuous spreading labyrinth that would encompass the past and the future and in some way involve the stars. Absorbed in these illusory images, I forgot my destiny of one pursued. I felt myself to be, for an unknown period of time, an abstract perceiver of the world.

Eye-tracking of a reader
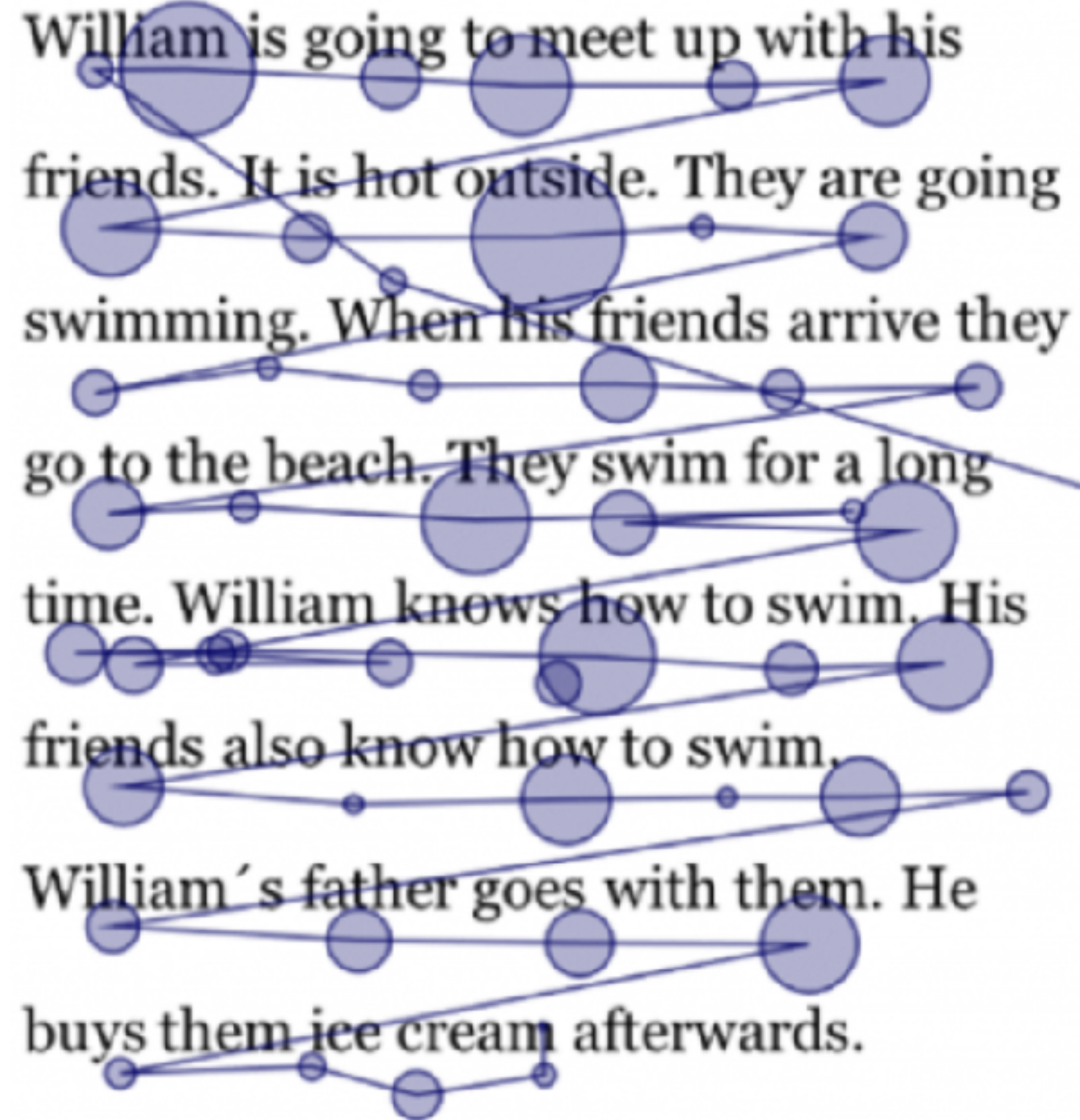

Stronger Reader

Weaker Reader

across a lonely mountain. The horror of the rocks and shadows makes the men undervalue their lives

and they gain an easy victory.

Thus fought the heroes, tranquil their admirable hearts, violent their swords, resigned to kill and to die.

traverses a palace where a great festival is taking place; the resplendent battle seems to them a continuation of the celebration

and they win the victory.

Map of the forking paths

Background image: bifurcation diagram of the logistic map.
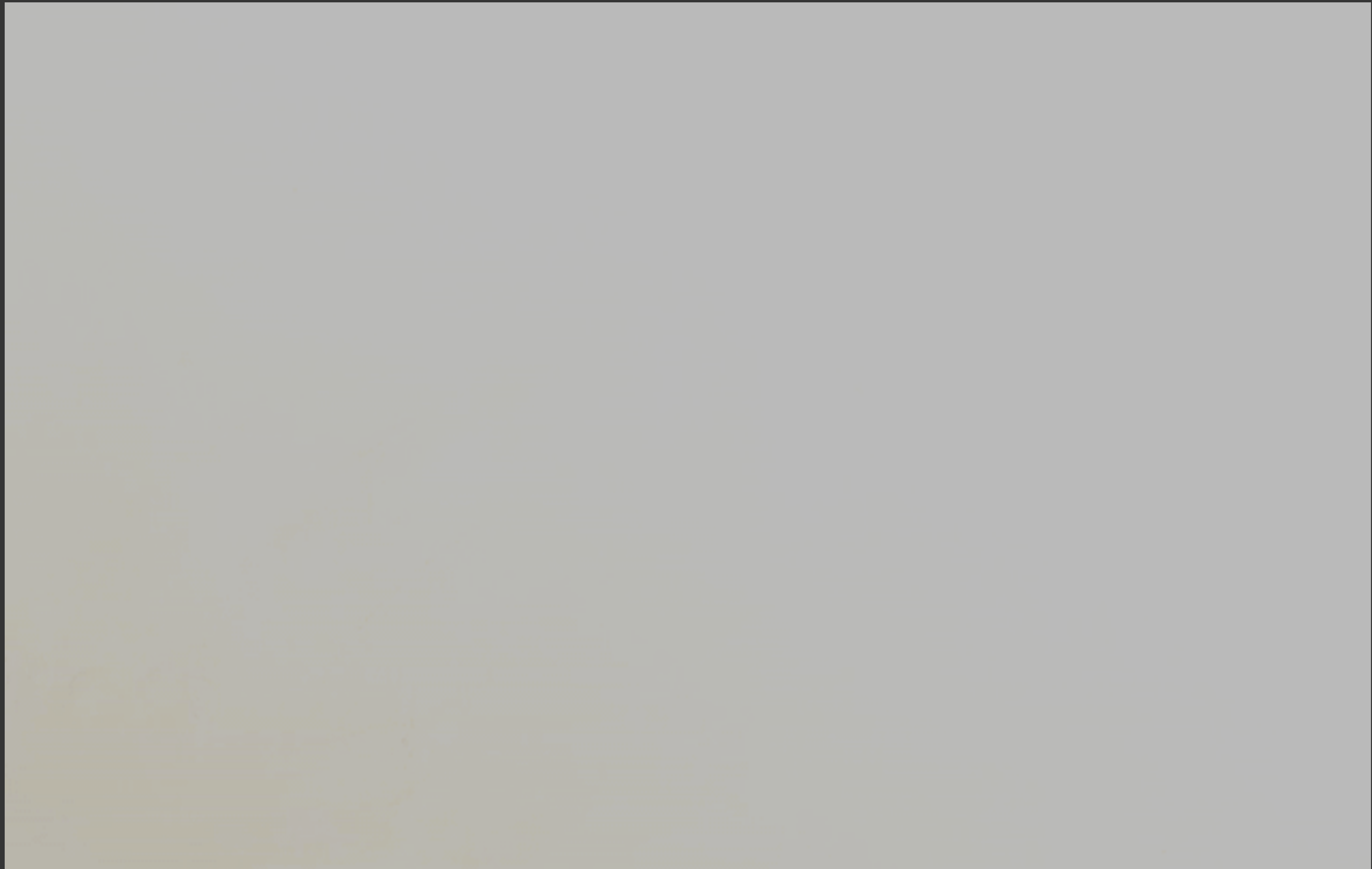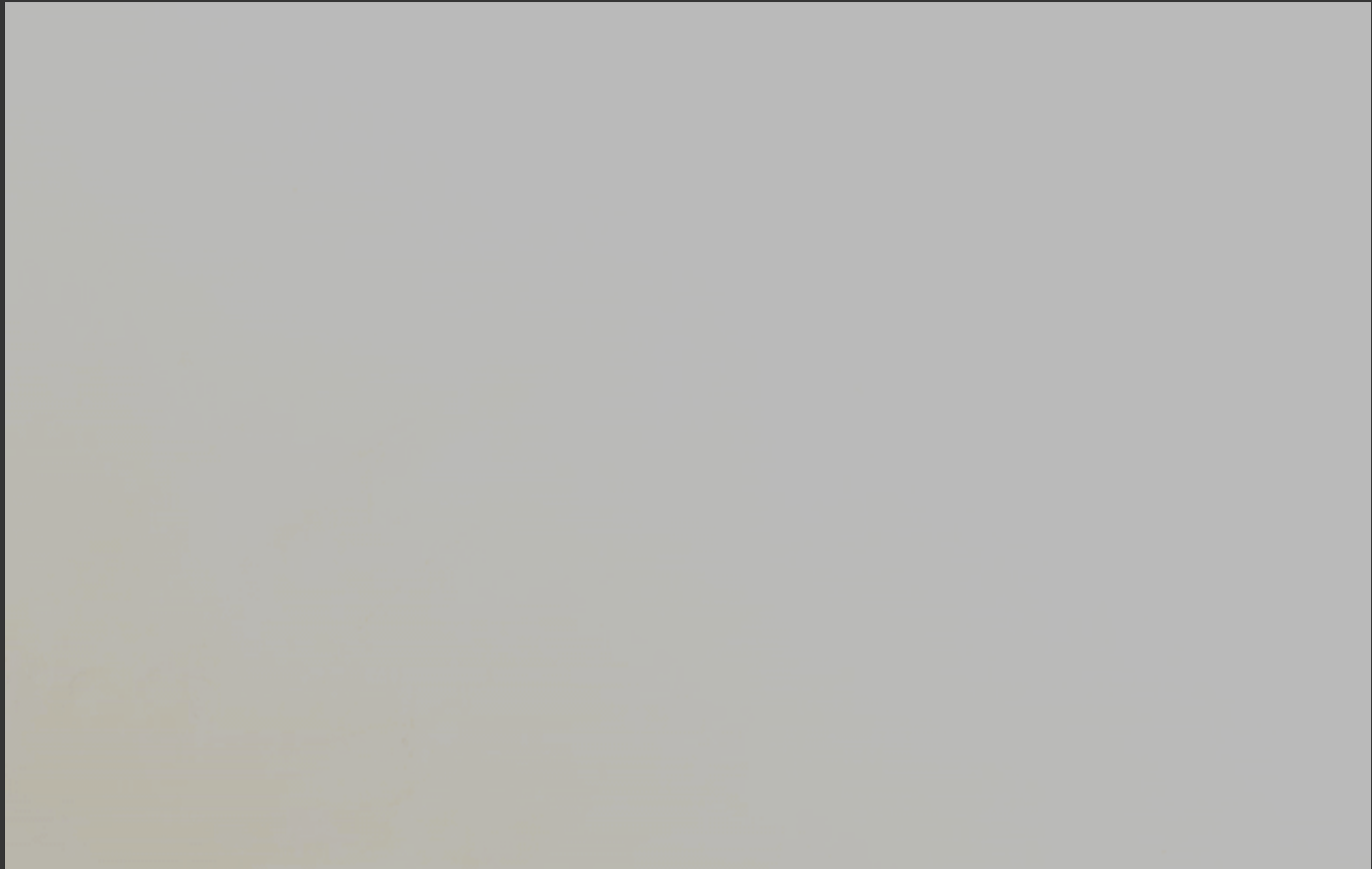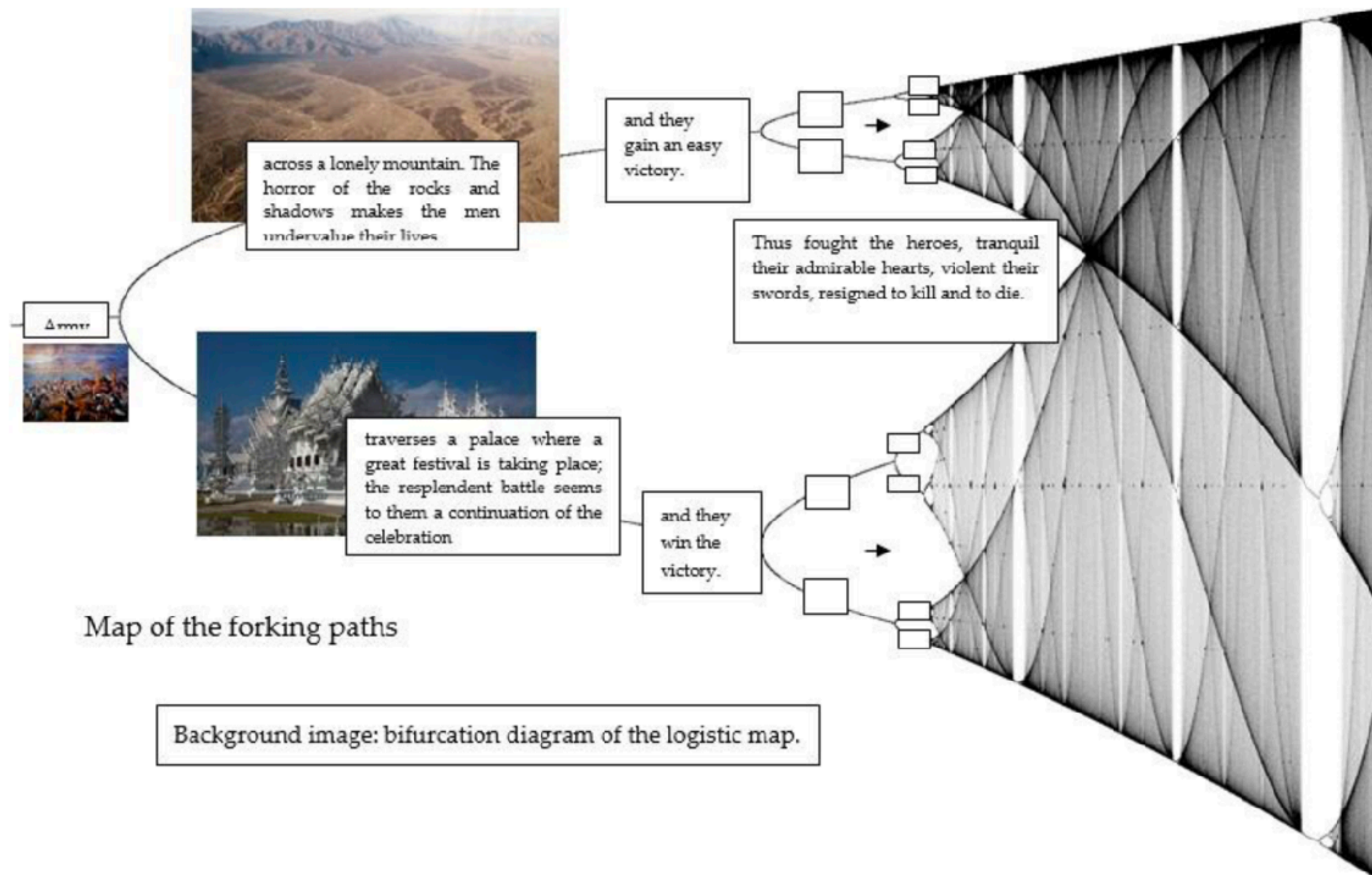
"In "The Garden", **Borges** describes a novel by Ts'ui Pên whose plot bifurcates at every point in time, with all the possible worlds coexisting in some sort of 'super-space' and 'super-time' coalescing in a moment."

Infinite bifurcations

CHAOS AND BORGES: A MAP OF INFINITE BIFURCATIONS

GEMMA CURTO
University of Sheffield
g.curto@sheffield.ac.uk

Horizontal transfers

New editor for evolutionary writing

We Write

START

END

PROJECTS   EDITOR   LOGOUT

NODE ▾   SEQUENCE ▾   HIDE ▾   TOOLS ▾   SAVE LOG   WeWrite Doc

Guide and tutorials

WARNING: This guide is still to be completed and it is constantly updated. For any question, please contact us!
§
Before you start …

WeWrite is a new experimental text editor with an innovative philosophy, developed as part of a scientific project, and it offers a brand new writing experience. If you do not want to experiment, you can always use it as a pretty basic standard editor. In order to do so, all you have to do is … write.
§
Quickstart

There few things you really need to know before you start using WeWrite:

   Nodes are parts of text. You create them by adding a separator (the special character you chose when you create the project, e.g. we choose '§' in this text) or by right clicking on the graph. They are represented as circles in the graph.
   Links bind subsequent nodes. They define the (possible) flows of your text. They are represented with arrows in the graph.
   The Selection is the focus of your work, and allows you to edit a piece of text, that is a path through linked nodes. It is highlighted with blue lines and countours in the graph. Left click on the first or on the last node of the selection to deselect them.
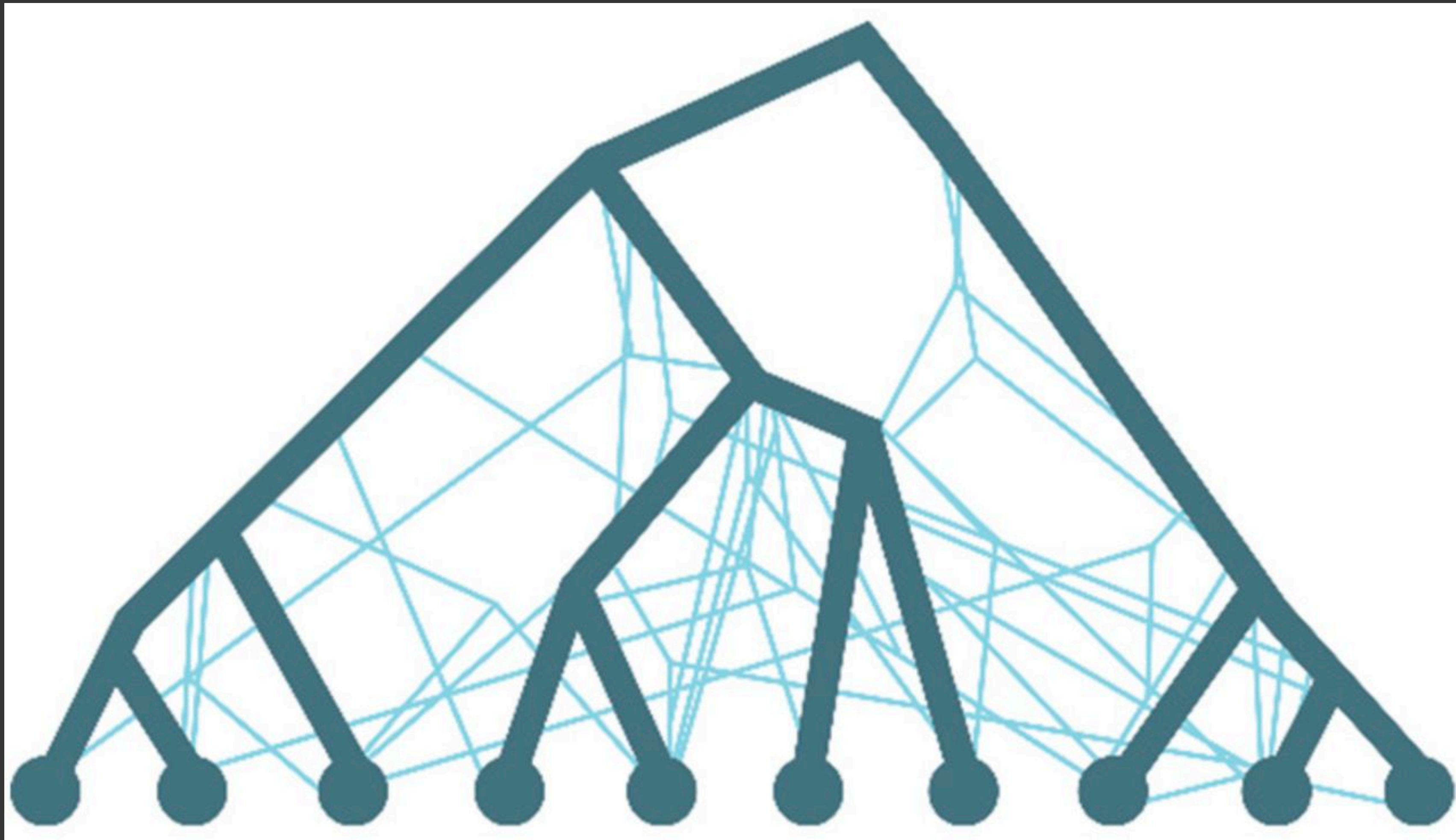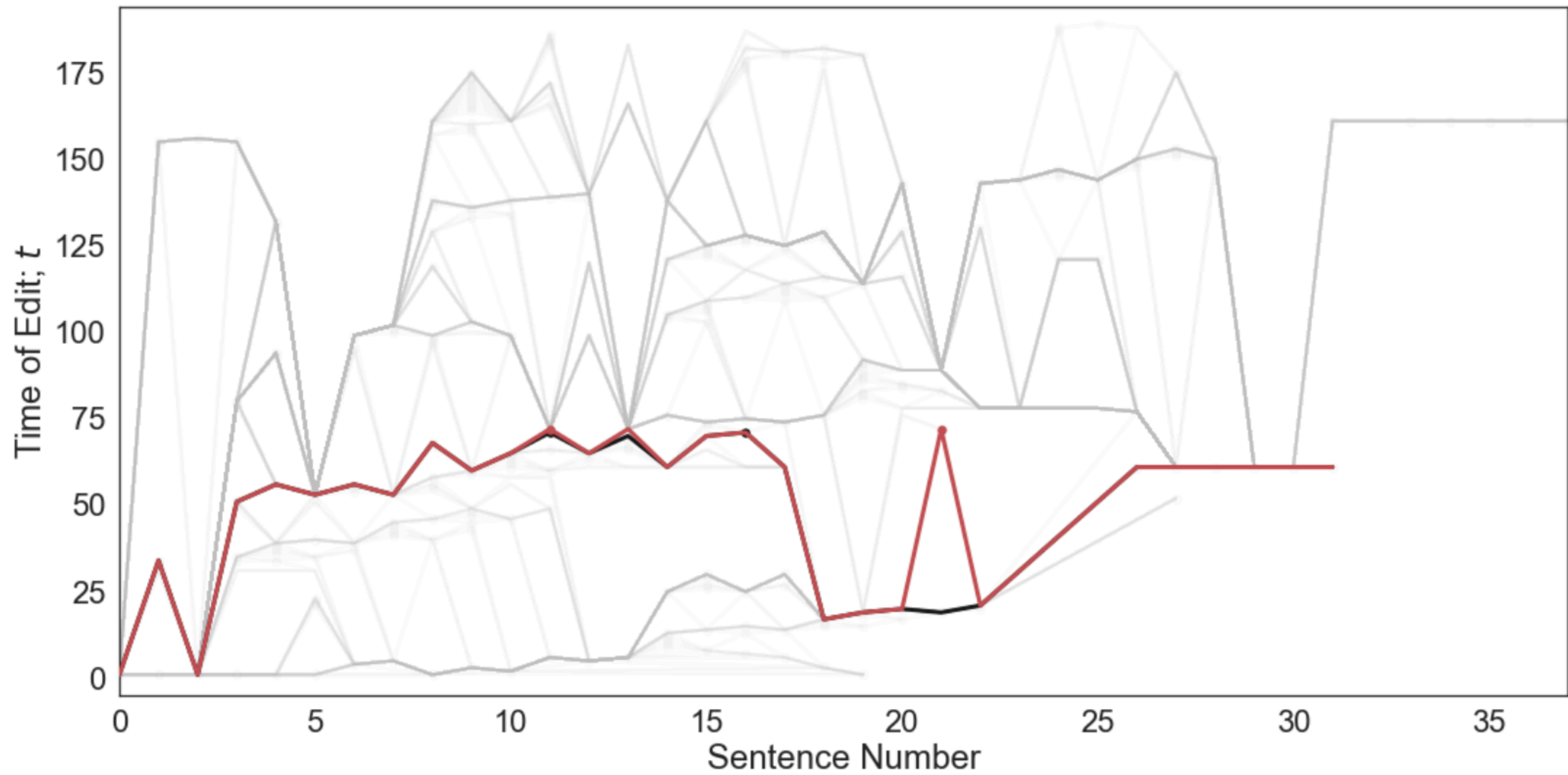   A Sequence is a selection that has been saved (through the menu "Sequence"). It is useful to avoid selecting by hand, and to save important milestones in your work (a particular version you want to keep or a subsection, a chapter, etc). Nodes and links belonging to saved sequences are bolder, in the graph.
   The Main Sequence is a special saved sequence meant to be the most up-to-date version of your work. You can set which saved sequence has to be the main in the Sequence Manager (in menu "Sequence") or when saving a sequence. Nodes belonging to the Main Sequence have a star.
   You can hide nodes or links from the graph that you do not like by right clicking on them or through the "Hide" menu. Beware: the Main sequence cannot be hidden, but you can always hide all, from the "Hide" menu: everything will be hidden and a new main sequence with a single, empty node will be automatically created.

§

Starting situation

Working sequences
Click on ✳ and edit the text to create an alternative version

Correzioni_Ruggiero

SEPARATOR IS §   ADD   ZOOM + −   10731 CHARS

GUIDE AND
BEFORE YO
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Aim of the workshop

Let you **explore** the (almost) infinite possibilities of expression and learn how to **improve** your writing.

Enjoy the journey!

Thanks