TECHNISCHE UNIVERSITÄT DRESDEN

Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie - Academic Skills in Computer Science (ASICS)

45. Coherence, Focus, and Unity

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2016-0.4, 16-6-18

http://st.inf.tu-dresden.de/teaching/asics

1) Revision for coherence

2) Revision for unity

1) Thrusting a thesis

(revision numbers > 1.0 contain improvements after the lecture)

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Solution to Homework of Chapter "Writing Sentences": Find the Sentence Types and Treppauf-Treppab in Schmidt

▶ Which Sentence Types in Schmidt's essay "Fünfzig Jahre nach dem Marshallplan: Was wird aus Europa?" Die Zeit, 6.6.1997 from "Einmischungen", p. 161ff.

- Thesis
- Pivot
- Transition

▶ Which Treppauf/ab does he write?

- Schmidt is a treppab-(downhill-)writer, he almost uses no treppaufs and no treppübers

▶ See also http://www.spd.de/presse/Pressemitteilungen/21498/20111204_rede_helmut_schmidt.html

Devlin on Microthreading

- ► [Devlin-Writing]

- ► Throughout the paragraph there must be some connection in regard to the matter under consideration,—a sentence dependency.

- ► For instance, in the same paragraph we must not speak of a house on fire and a runaway horse unless there is some connection between the two. We must not write consecutively:

- ► "The fire raged with fierce intensity, consuming the greater part of the large building in a short time." "The horse took fright and wildly dashed down the street scattering pedestrians in all directions." These two sentences have no connection and therefore should occupy separate and distinct places. But when we say—"The fire raged with fierce intensity consuming the greater part of the large building in a short time and the horse <synonym link in backgrounding>taking fright at the flames </> dashed wildly down the street scattering pedestrians in all directions,"—there is a natural sequence, viz., the horse taking fright as a consequence of the flames and hence the two expressions are combined in one paragraph.
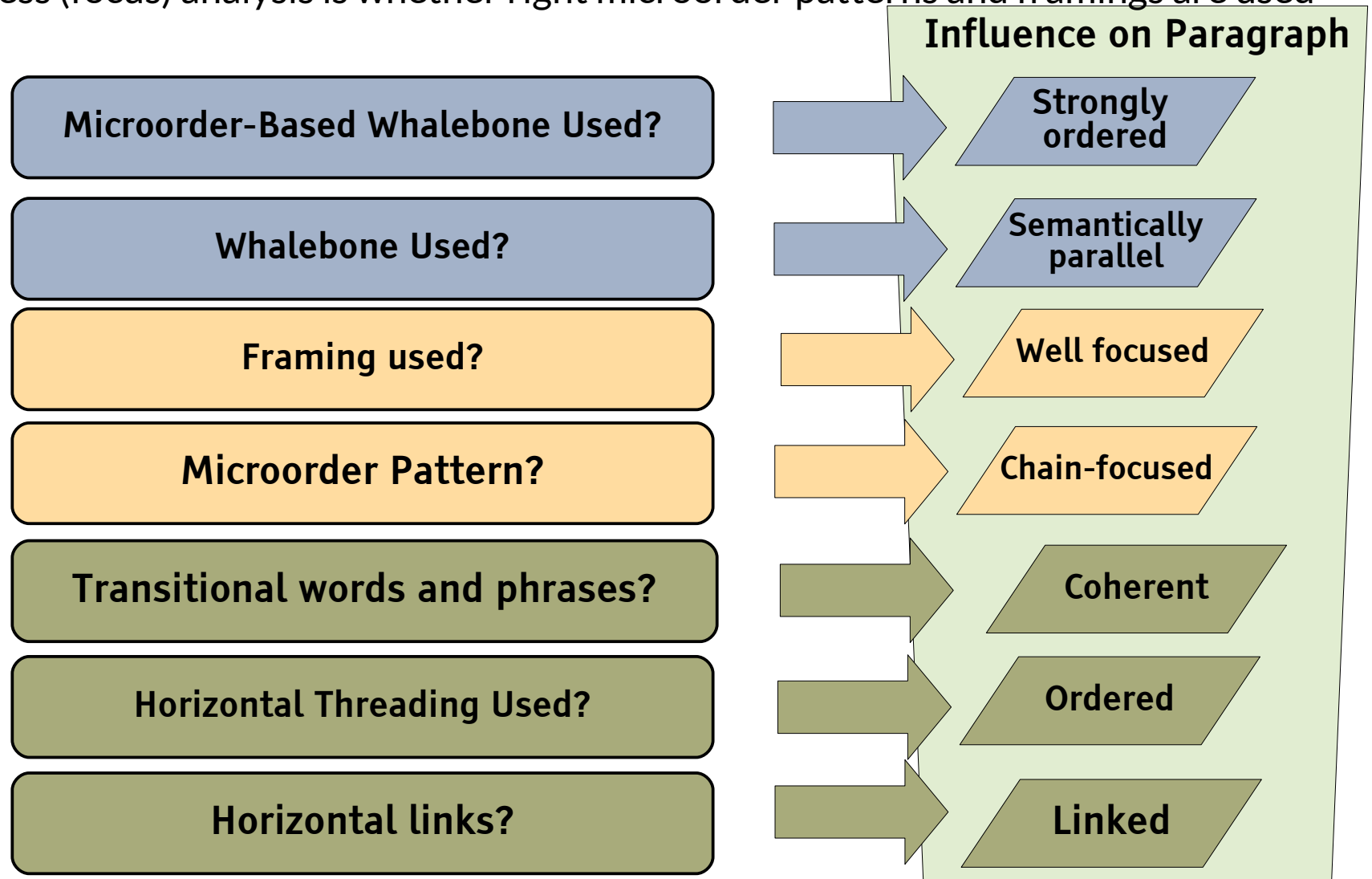
Devlin on Spiced Paragraphs

▶ [Devlin-Writing]

▶ The paragraph may be defined as a **group of sentences that are closely related in thought** and **which serve one common purpose**.
Not only do they preserve the sequence of the different parts into which a composition is divided, but they give a certain spice to the matter like raisins in a plum pudding.

45.1 Revising for Coherence

Writing for Coherence and Focus(Overview-Only)

▶ Coherence analysis is the process of investigation whether a sentence reminds on the previous sentences

▶ Stress (focus) analysis is whether right microorder patterns and framings are used

Influence on Paragraph

Microorder-Based Whalebone Used?	➔ Strongly ordered
Whalebone Used?	➔ Semantically parallel
Framing used?	➔ Well focused
Microorder Pattern?	➔ Chain-focused
Transitional words and phrases?	➔ Coherent
Horizontal Threading Used?	➔ Ordered
Horizontal links?	➔ Linked

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Coherence of Paragraphs

▶ A paragraph is ***coherent***, if all its sentences are linked well with the previous

- For instance, if all sentences are near sentences
- Horizontal links must be inserted (noun links, summary links, generalization links, conjunctional links)
- Threading patterns can be used, like climatic importance, or marker-based enumeration
- Microthreading can be used with micropatterns like Topic-First, or Stress-Last
- Transitional words and phrases (markers) can be used
- Vertical links can be used

▶ A paragraph is *focused* if it contains microorder pattern and focus framing clauses.

Why Does This Text Read Well?

▶   Einstein's text does have a controlling subject, but not a development scheme.

▶   How does he achieve coherence? How does he use markers and horizontal links?

▶   [Einstein The Meaning of Relativity. Four lectures delivered at Princeton University, May, 1921 http://www.gutenberg.org/files/36276/36276-pdf.pdf]

The exper ences of an nd v dual appear to us arranged n a ser es of events; n th s ser es the s ngle events wh ch we remember appear to be ordered accord ng to the cr ter on of "earl er" and "later", wh ch cannot be analysed further.

There ex sts, therefore, for the nd v dual, an I-t me, or subject ve t me. Th s n tself s not measurable.

I can, ndeed, assoc ate numbers w th the events, n such a way that a greater number s assoc ated w th the later event than w th an earl er one; but the nature of th s assoc at on may be qu te arb trary.

Th s assoc at on I can def ne by means of a clock by compar ng the order of events furn shed by the clock w th the order of the g ven ser es of events.

We understand by a clock someth ng wh ch prov des a ser es of events wh ch can be counted, and wh ch has other propert es of wh ch we shall speak later.

Microthreading By Microorder Patterns

Microthreading achieves coherence by threading all sentences step by step with the help of microorer patterns.
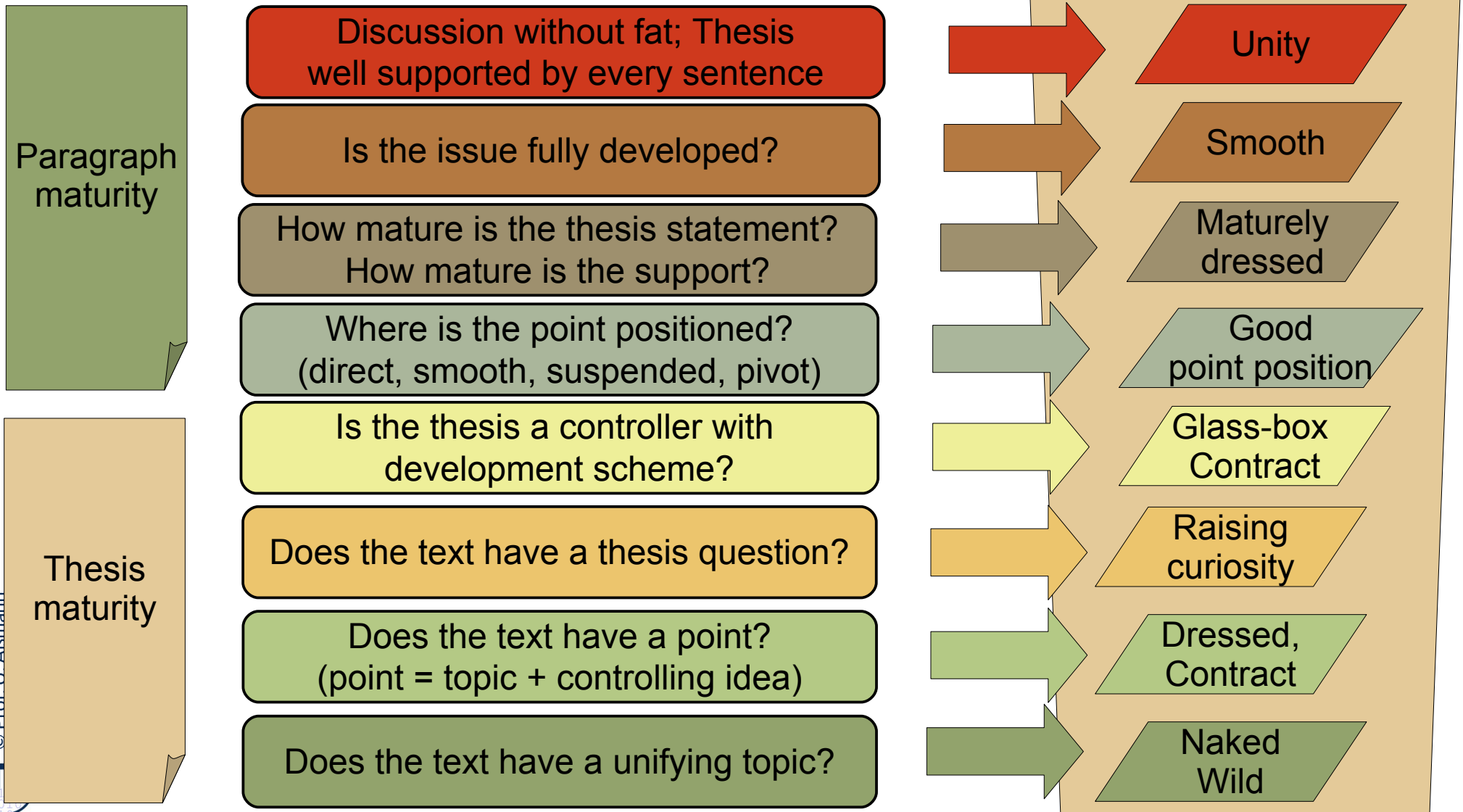
Microthreading is writing without controlling idea.

Microthreading can be done backward.
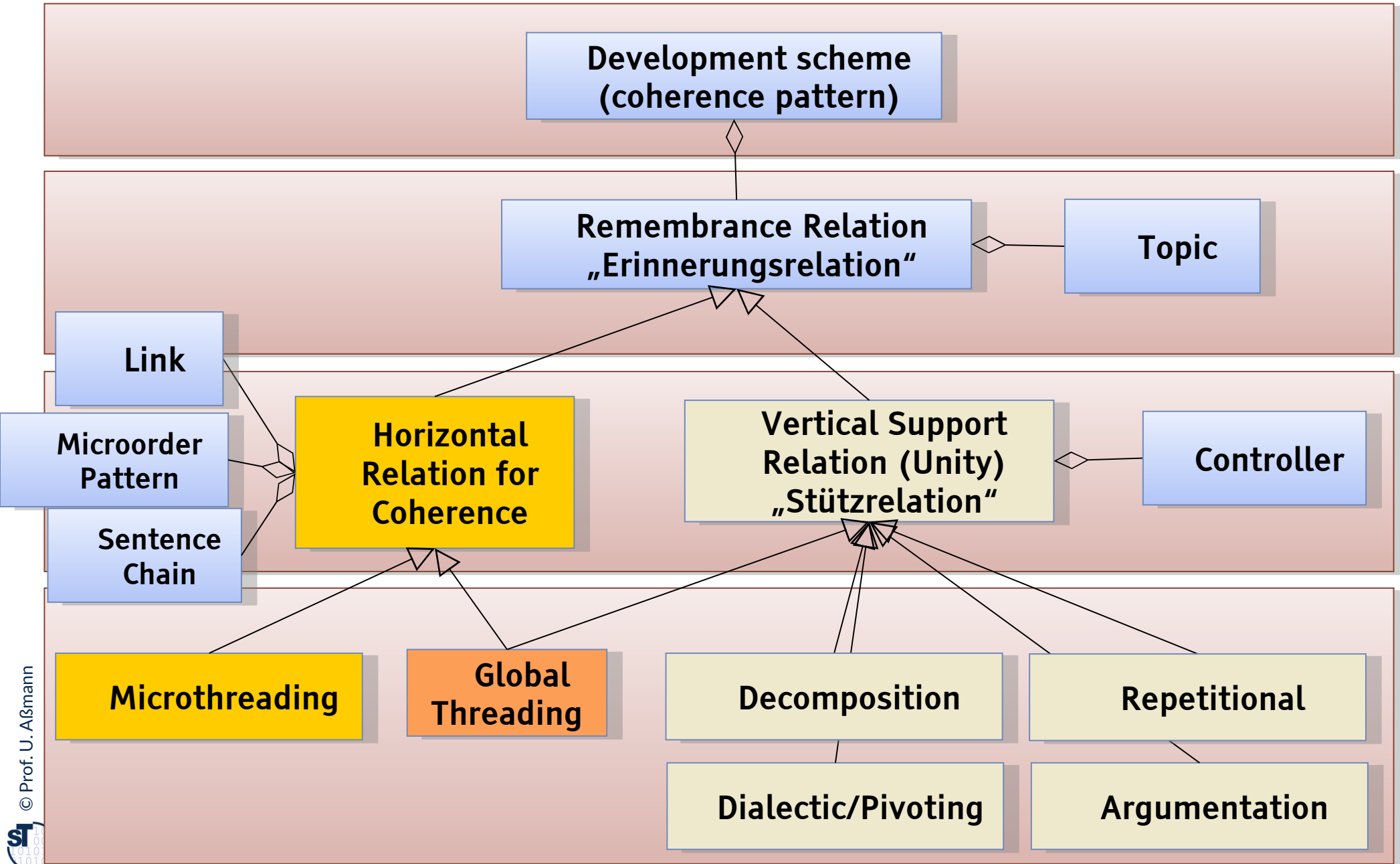
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45.2 Writing for Unity

Question-Oriented Writing for Unity (Overview-Only)

▶ **Directed writing analysis** is the process of investigation whether a text conforms to controlling ideas and a thesis questions.
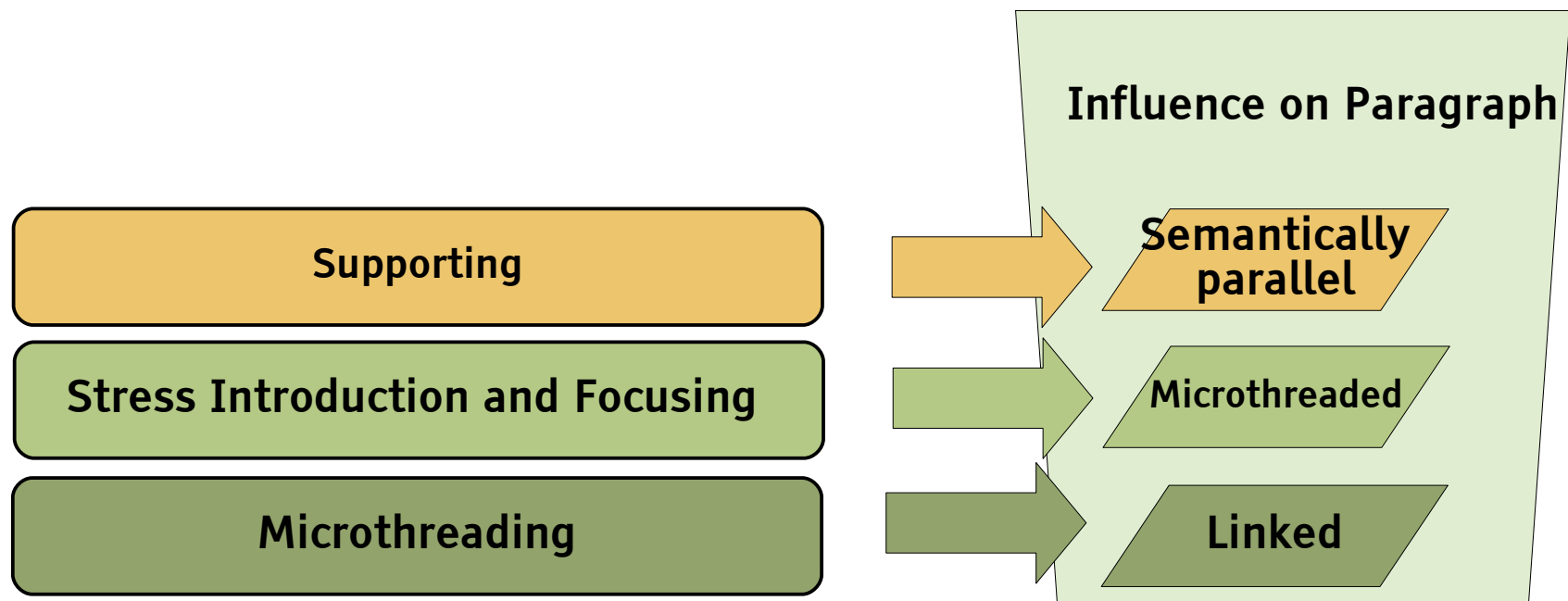
Paragraph maturity

	Paragraph Type
Discussion without fat; Thesis well supported by every sentence	→ Unity
Is the issue fully developed?	→ Smooth
How mature is the thesis statement? How mature is the support?	→ Maturely dressed
Where is the point positioned? (direct, smooth, suspended, pivot)	→ Good point position
Is the thesis a controller with development scheme?	→ Glass-box Contract
Does the text have a thesis question?	→ Raising curiosity
Does the text have a point? (point = topic + controlling idea)	→ Dressed, Contract
Does the text have a unifying topic?	→ Naked Wild

Thesis maturity

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Writing for Coherence, Unity, and Stress (Overview-Only)

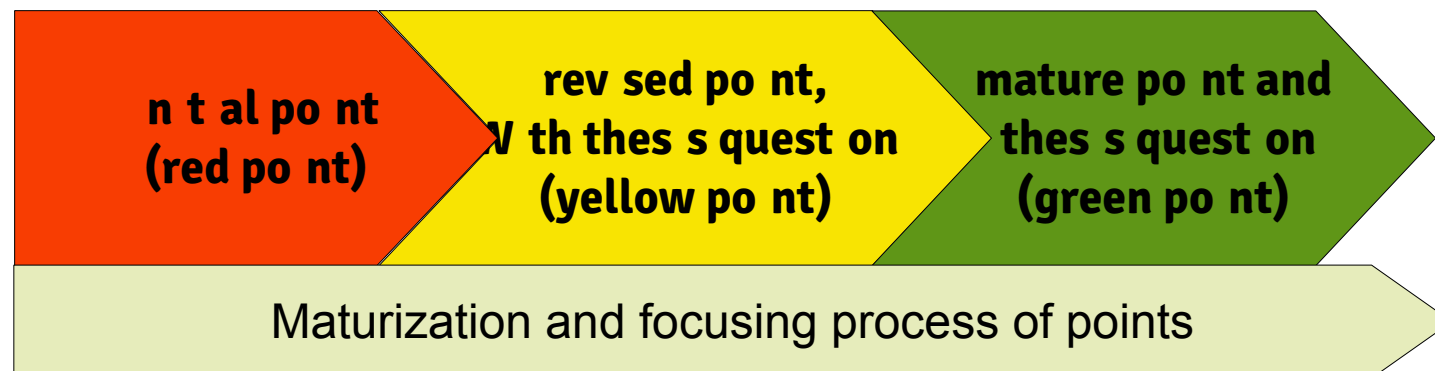▶ **Text maturity analysis** is the process of investigation whether a sentence has **unity, coherence, and stress**

Supporting	**Semantically parallel**
Stress Introduction and Focusing	**Microthreaded**
Microthreading	**Linked**

Influence on Paragraph

45.2.1. Thesis Maturization

▶ Maturing a point/thesis by a traffic light process:

- From red immaturity

- to yellow semi-maturity

- to green maturity

Point Revision Traffic Light Analysis (Point Maturization)

▶ The point of a paragraph can be red, yellow, or green (**point maturity**).

▶ **Maturing a thesis (point)** means to improve the benefit of controlling idea, to be more concrete:

▶ Ex. [Parks]:

  – My uncle, John Harter, was born and raised in Chikago. (Boring)

  – The fact that my uncle John Harter was born and raised in Chikago hat an important effect on his life. (much more interesting, because of "important effect" and "life")

▶ Often, focusing can be achieved by asking a question about the initial point:

  – Why is it important that John Harter was born and raised in Chikago?

  – What benefit did it have?

▶ A **yellow point** has a thesis question associated

| n t al po nt (red po nt) | rev sed po nt, W th thes s quest on (yellow po nt) | mature po nt and thes s quest on (green po nt) |

Maturization and focusing process of points

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Ex.: My uncle, John Harter, was born and raised in Chikago.

▶ Ex. Thesis questions [Parks]:

- Were John Harter's family life and education influenced by where he was born and raised? If so, how?

- Was his career influenced by where he was born and raised? If so, how?

- Might he have chosen a different career if he had been raised in a rural environment?

- How did Chikago shape his character?

- In what ways is John Harter a typical Chikagoman?

- Did his life in Chicage affect his health?

- Did he meed people in Chikago who changed his life?

Exercises – Focus the Following Points with Three Thesis Questions Each

▶ Dresden is a nice town.

▶ Since 2012, TU Dresden is an "university of excellence".

▶ The department of Computer Science is located in a beautiful building.

▶ The course ASICS is about writing practices.

▶ Until recently, the prime minister of Saxony has come from the West ("Wessi").

▶ 1945, many German towns, such as Bremen and Dresden, were destroyed.

▶ Germany has Ossis, Wessis, Northies and Southies.

▶ The Elbe river has got a new bridge, the Waldschlößchenbrücke.

▶ Semper Opera in Dresden is now 160 years old.

▶ Janine Jansen is a female violinist.

▶ Max Bruch was a German composer in the romantic area.

▶ If nessary, use Wikipedia to find material for creating questions.

45.2.2 Thrusting a Thesis Sentence

Thrust with Compound Thesis Sentences

▶ A thesis sentence is often nicer, if it is compound:

- treppauf or treppab (subclauses exert thrust)
- framing is used to foreground the thesis
- Standard emphasizers are used

▶ Examples from Tony Hoare. Process Algebra: A Unifying Approach. A.E. Abdallah, C.B. Jones, and J.W. Sanders (Eds.): CSP25, LNCS 3525, pp. 36–60, 2005. Springer-Verlag:

- "The divergence between CCS and CSP is not accidental, but reflects a slight difference in the primary purposes for which the two calculi were designed."
- "With such a range of applications, it is not surprising that there is now a wide variety of process algebras developed to meet differing needs."
- "In CSP and its variants, the standard comparison method is refinement, which in its simplest form is defined as inclusion of the traces of the observed behaviour of a more refined process in those of the refining process."

Subclause Thrusting for Compound Thesis Sentences

▶   A thesis can be foregrounded by an appropriate subclause (subclause thrusting):

Instead of buying cakes in supermarkets people should try to bake a cake themselve to experience that baking is a simple and fun activity.

While Mary continued to ignored him, John fell more and more in love with her.

Though Dresden has been destroyed almost completely by a bombing in 1945, today it is a lively and interesting town.

▶   [Albert Einstein. Sidelights on Relativity.
http://www.gutenberg.org/cache/epub/7333/pg7333.txt]

When in the first half of the nineteenth century the far-reaching similarity was revealed which subsists between the properties of light and those of elastic waves in ponderable bodies, the ether hypothesis found fresh support.

A thesis (point) has much more significance, if it is contrasted with a subclause, in particular, treppauf subclause.

[Dalton]

The English Racing Stroke is a great deal more difficult to learn than any of the advanced strokes that we have reached so far, but once the student is proficient, it is one of the prettiest strokes. My brother, Prof. F.E. Dalton, swims this stroke faster than some swimmers do the crawl, and in action he does it most gracefully (Fig. 24). _The Arm Movements_ should first be learned. Lie on the right side (but if the pupil prefers it can be done equally as well on the left). Hold the left arm at the left side. Then raise it out of the water, bending the elbow; the hand should enter palm out, and about six inches below the surface, then extending it as far forward as possible. Next sweep the left arm down to the side sharply. Extend the right arm straight ahead, drawing it in toward the body with a semi-circular scoop.

Point Sentence with Sting-Last by Subclause Thrust

[Russel-Problems] Treppauf-point (direct paragraph).

In daily life, we assume as certain many things which, on a closer scrutiny, are found to be so full of apparent contradictions that <point>only a great amount of thought enables us to know what it is that we really may believe.</> In the search for certainty, it is natural to begin with our present experiences, and in some sense, no doubt, knowledge is to be derived from them. But any statement as to what it is that our immediate experiences make us know is very likely to be wrong. It seems to me that I am now sitting in a chair, at a table of a certain shape, on which I see sheets of paper with writing or print. By turning my head I see out of the window buildings and clouds and the sun. I believe that the sun is about ninety-three million miles from the earth; that it is a hot globe many times bigger than the earth; that, owing to the earth's rotation, it rises every morning, and will continue to do so for an indefinite time in the future. I believe that, if any other normal person comes into my room, he will see the same chairs and tables and books and papers as I see, and that the table which I see is the same as the table which I feel pressing against my arm. All this seems to be so evident as to be hardly worth stating, except in answer to a man who doubts whether I know anything. Yet all this may be reasonably doubted, and all of it requires much careful discussion before we can be sure that we have stated it in a form that is wholly true.

What is the controlling idea? What the controlling development scheme?

Thrusting by Negated Dual Thesis Sentences

▶   A thesis can be foregrounded by a **negated dual pre-thesis** (negated duality thrusting):

[Rolland-The-Forerunners]

<negated dual point>Our epoch is not poor in the other energies, those energies which Tolstoy possessed in so full a measure. </negated dual point> <point>Our age is surfeited with passions and with heroism; in artistic capacity it is not lacking; the fire of religion, even, has not been withheld. God—all the gods there be—have cast burning brands into the vast conflagration that rages among the nations. Christ not excepted. There is not one among the countries, belligerent or neutral, including the two Switzerlands, the German and the Romance, which has failed to discover in the gospels justification for cursing or for slaughter.

A thesis (point) has much more significance, if it is contrasted with a negated dual thesis.

Thrusting by Parallelism in Thesis Sentences

▶ A thesis can be foregrounded by **parallelism**:

[Rolland-The-Forerunners]

<point>Rarer to-day than heroism, rarer than beauty, rarer than holiness, is a free spirit.</point> Free from constraint, free from prejudices, free from every idol; free from every dogma, whether of class, caste, or nation; free from every religion. A soul which has the courage and the straightforwardness to look with its own eyes, to love with its own heart, to judge with its own reason; to be no shadow, but a man.

A thesis (point) has much more significance, if it uses parallelism.

Appendix

► Some slides are courtesy to Florian Heidenreich, Christian Wende, Matthias Schmidt, Sebastian Cech

Microthreading

[Sieveking] Die Röntgenstrahlen. 82

Wir haben diese Tabelle so ausführlich wiedergegeben, weil sich aus ihr ein sehr wichtiges Resultat ablesen läßt. Der in der dritten Reihe stehende Quotient ist mit einer einzigen Ausnahme, die bei Wassersto☐ eintritt, konstant. Daraus folgt der Satz, daß, wenn man die Intensität der Sekundärstrahlung durch die Gasdichte dividiert, stets der gleiche Wert herauskommt. Mit anderen Worten: Gleiche Massen von den angeführten Gasen emittieren gleiche Sekundärenergie. Auffällig ist, daß das Atomgewicht aller in Frage kommenden Gase unter 32 liegt. Es deutet dies für diese leichten Gase auf eine Verwandtschaft zwischen dem Bau des Atoms und der Strahlung. Der Zerstreuungsfaktor läßt sich in Beziehung bringen zu der Energie der Primärstrahlung. Aus dem gemessenen Wert kann man dann ableiten, wieviel Elektronen in jedem einzelnen Atom der zerstreuenden Substanz vorhanden sein müssen. Bei dem großen Interesse, das der Chemiker heute den Theorien vom Aufbau der Atome verschiedener Sto☐e entgegenbringt, speziell bei der Wichtigkeit der Rolle, die dabei die Elektronen spielen, mag es gestattet sein, hierauf etwas näher einzugehen. Wir folgen dabei der Darstellung von Pohl, der ein äußerst lesenswertes Buch über die Physik der Röntgenstrahlen vor kurzem erscheinen ließ. In diesem Werk hat der Verfasser, der zusammen mit Walter und anderen auf diesem Gebiet selber erfolgreich tätig war, alles Wissenswerte in knapper aber doch erschöpfender Form dargestellt. Dadurch wird ein Überblick über den augenblicklichen Stand der Forschung auf diesem Gebiete ungemein erleichtert.

Microthreading with Horizontal Demonstrative Links

[Stifter]

Gott lenkt es schon so, daß die Gaben gehörig verteilt sind, so daß jede Arbeit getan wird, die auf der Erde zu tun ist, und daß nicht eine Zeit eintritt, in der alle Menschen Baumeister sind. In diesen Gaben liegen dann auch schon die gesellschaftlichen, und bei großen Künstlern, Rechtsgelehrten, Staatsmännern sei auch immer die Billigkeit, Milde, Gerechtigkeit und Vaterlandsliebe. Und aus solchen Männern, welche ihren innern Zug am weitesten ausgebildet, seien auch in Zeiten der Gefahr am öftesten die Helfer und Retter ihres Vaterlandes hervorgegangen.

▶

Microthreading: Answer to Exercise

▶ [Einstein The Meaning of Relativity. Four lectures delivered at Princeton University, May, 1921 http://www.gutenberg.org/files/36276/36276-pdf.pdf]

▶

▶ The experiences of an individual appear to us arranged in a series of events; in this series the single events which we remember appear to be ordered according to the criterion of "earlier" and "later", which cannot be analysed further.
There exists, therefore, for the individual, an I-time, or subjective time.
This in itself is not measurable. I can, indeed, associate numbers with the events, in such a way that a greater number is associated with the later event than with an earlier one; but the nature of this association may be quite arbitrary.
This association I can define by means of a clock by comparing the order of events furnished by the clock with the order of the given series of events.
We understand by a clock something which provides a series of events which can be counted, and which has other properties of which we shall speak later.