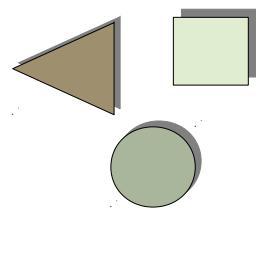


16. Structuring Sections and Essays

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2013-1.0, 13-7-9
<http://st.inf.tu-dresden.de/acse>

- 1) Skeletons
- 2) Outlining Essays



1

Academic Skills for Software Engineers, © Prof. Uwe Aßmann

Obligatory Literature

- ▲ [Parks] Franklin-Parks. Writing Structured Paragraphs and Essays.
- ▲ [Schaum] Molly McClain, Jacqueline D. Roth. Schaum's Quick Guide to Writing Great Essays. McGraw-Hill.
- ▲ [Turner] Adam Turner. English Solutions for Engineering and Sciences Research Writing: A guide for English learners to publish in international journals. English Writing Lab Center for Teaching and Learning and College of Engineering, Hanyang University, Seoul, Korea
 - www.hanyanggowl.org
- ▲ Erlyn Baack. Advanced Composition for Non-Native Speakers of English. eslbee.com Website



2

Academic Skills for Software Engineers, © Prof. Uwe Aßmann

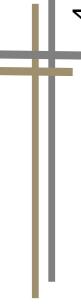
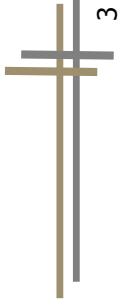
Literatur

- ▶ Walter Dubislav. Die Definition. Felix-Meiner-Verlag
 - Formale Logik (Syllogismus) und formale Definitionen wurden als Forschungsgebiete von Aristoteles entdeckt. Aber nur ersteres hat sich stark entfaltet.
- ▶ Definitionen nach Bünting (Schreiben im Studium, Cornelsen)
 - ▶ [Mills-Logic] John Stuart Mills. A System of Logic. 1882.
Harper&Mills. eBooks@Adelaide. The University of Adelaide Library



Literature

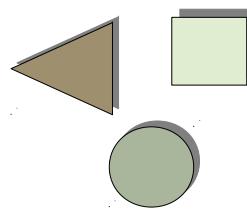
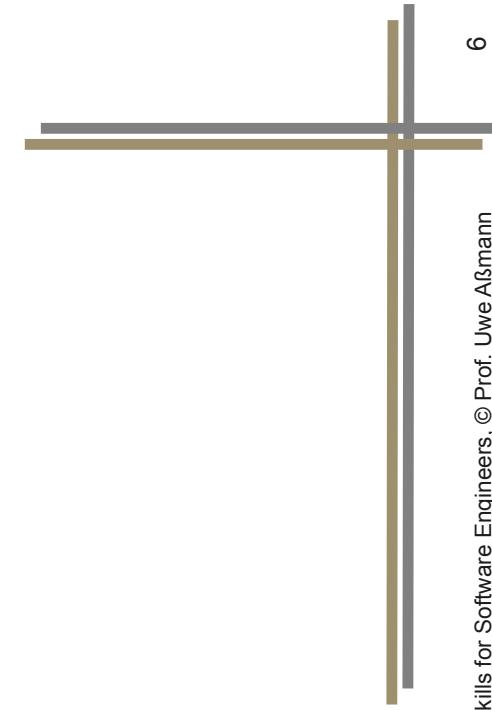
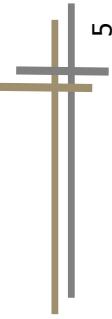
- ▶ [Newman] William Newman. A preliminary analysis of the products of HCI research, using pro forma abstracts. In Proceedings of the SIGCHI conference on Human factors in computing systems: celebrating interdependence, CHI '94, pp 278-284, New York, NY, USA, 1994. ACM.
<http://dl.acm.org/citation.cfm?id=19176>
- ▶ [ShawGR] Mary Shaw. What makes good research in software engineering? Int. Journal of Software Tools for Technology Transfer (STTT), 4(1):1-7, 2002.
<http://dx.doi.org/10.1007/s10009-002-0083-4>
- ▶ [Shaw-Slides] Mary Shaw. Writing Good Software Engineering Research Papers. Slides from and ETAPS 2002, keynote speech, and a newer version from <http://spoke.compose.cs.cmu.edu/ser04/L02/L2-0113-se-strat.pdf>



Gutenberg.org References

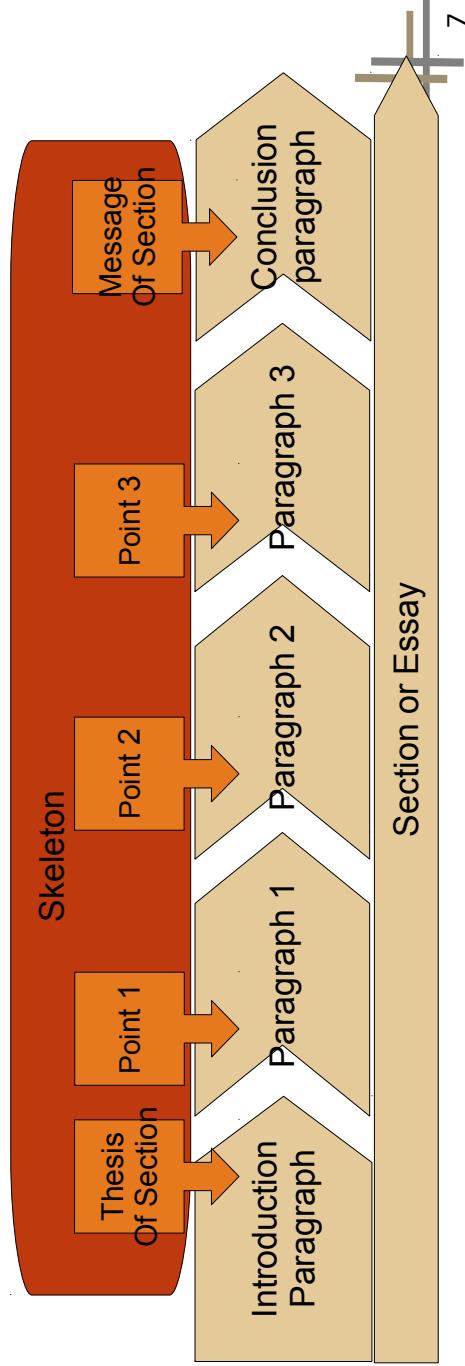
- [Abbot-NavalHistory] Author: Willis J. Abbot. The Naval History of the United States. Volume 1 (of 2).
<http://www.gutenberg.org/2/2/3/0/22305/>

16.1 Skeletons of Texts and Skeleton Revision



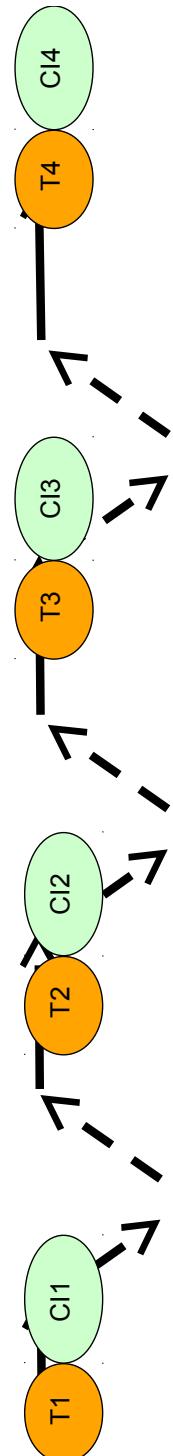
Skeletons

- ▶ The **Skeleton** of a section is the sequence of all points of all paragraphs.
 - The skeleton is an abstraction of the text
- ▶ If it is marked and extracted from the section, it forms the **skeleton paragraph**.
- ▶ The skeleton results from Point maturization, Support analysis, and Skeleton maturization
- ▶ A section (or essay) has **unity** if all points of the paragraphs support its thesis.



Section Coherence by Grouping the Controlling Ideas

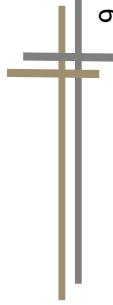
- ▶ Development schemes can be applied in a paragraph, but also on the section and chapter level. Then, a paper gets a Bush structure (chapter – section – paragraph)
 - If all paragraphs are direct paragraphs (point first), their controlling ideas can be seen *like a dispersed paragraph (the section skeleton)*
- ▶ Then, all transition sentences (T) and all controlling ideas (CI) of all paragraphs in a section need to be linked.
 - They need to form a development scheme with Support and Threading relation
 - With ascendance and a conclusion



Multi-Paragraph Topic (Direct Skeleton)

[Garden Ash, S. 10] What do you recognize?

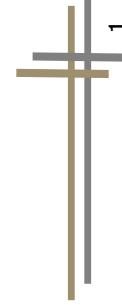
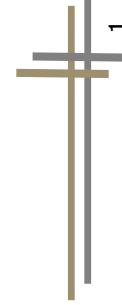
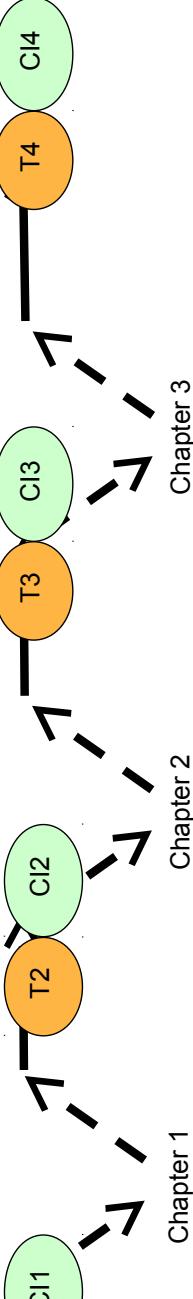
- ▶ Das Buch soll als »Geschichte der Gegenwart« verstanden werden. Dementsprechend wurde der Haupttext unmittelbar während oder nach den Ereignissen, die er behandelt, niedergeschrieben. Die Beiträge wurden, um Wiederholungen zu vermeiden, leicht gekürzt, es wurde aber nichts Entscheidendes hinzugefügt oder weggelassen. Die Chronik und einige kurze Skizzen sind später hinzugekommen, ebenso wie mancher Kurzkommentar am Ende eines Beitrags.
- ▶ Ich möchte noch ein wenig bei dem Begriff »Geschichte der Gegenwart« verweilen. Er stammt nicht von mir. Soweit mir bekannt ist, hat ihn George F. Kennan, amerikanischer Veteran der Diplomatie und Historiker, in einer Rezension meines Buches über Mitteleuropa der 70er Jahre, The Use of Adversity (dt. Ein Jahrhundert wird abgewählt), geprägt. Für mich ist dies die beste Charakterisierung dessen, was ich in den vergangenen zwanzig Jahren geschrieben habe, indem ich die Fertigkeiten des Historikers mit denen des Journalisten zu verbinden versuchte.
- ▶ Doch reizt dieser Begriff auch gleich zur Kontroverse. Geschichte der Gegenwart? Offensichtlich ein Widerspruch in sich. Geschichte hat sich per Definition mit Vergangenem zu beschäftigen. Geschichte - darunter versteht man Bücher über Caesar, den Dreißigjährigen Krieg oder die Russische Revolution.



Chapter Coherence

- ▶ All transition sentences (T) and all controlling ideas (CI) of all paragraphs need to be linked.

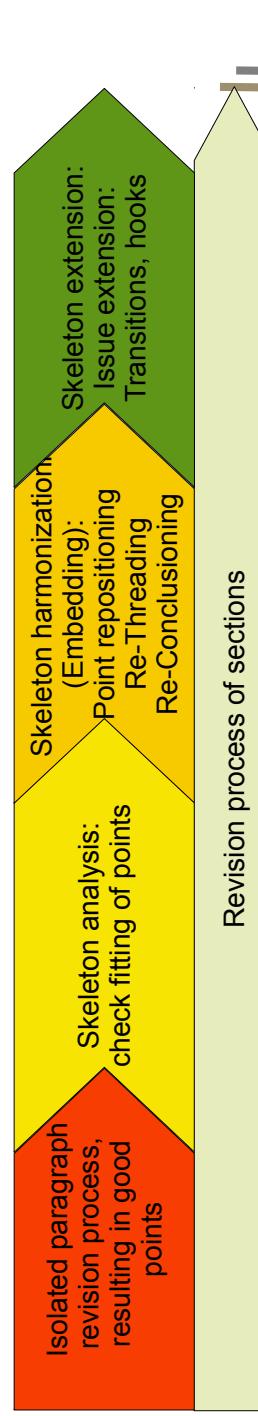
- They need to form a Fünfschritt with
 - Support and Threading relation
 - With ascendance and a conclusion



Section Revision Process for Section Unity (Skeleton Maturation)



- ▶ The maturity of the skeleton of a section can be red, yellow, green.
- ▶ Isolated paragraph revision results in a *red skeleton*.
- ▶ Skeleton analysis finds out all points and checks whether they fit to each other.
- ▶ Skeleton revision creates a *yellow skeleton*:
 - increase the embedding of the points (harmonize skeleton)
- ▶ Skeleton extension finally creates *green skeletons*:
 - write transitions
 - write curiosity hooks



Different Kinds of Skeletons of Sections

- ▶ A **direct skeleton** is a sequence of direct paragraphs
- ▶ An **immediate skeleton** is a sequence of immediate paragraphs
- ▶ A **smooth skeleton** is a sequence of smooth paragraphs



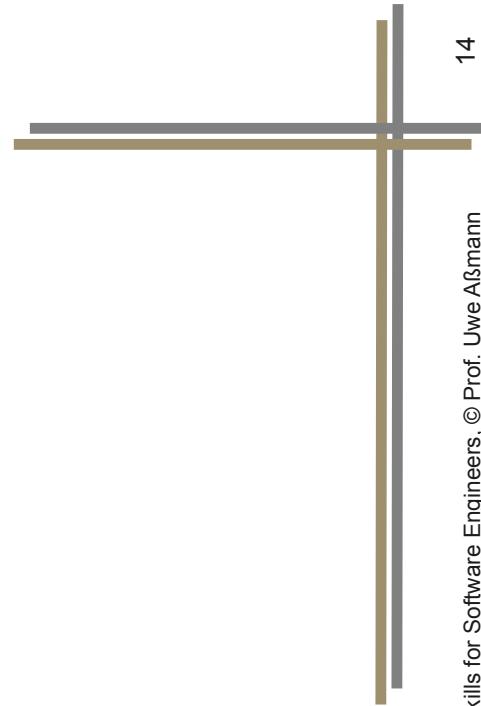
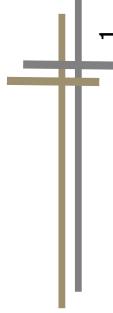
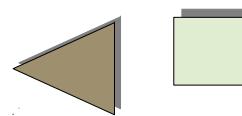
- ▶ Direct skeletons have the advantage that they let the reader walk from point to point. All points are arguments/supports for the section point.
 - They create interest in the reader because the benefits of the controlling ideas keep the interest alive
 - They create the interest early on in reading, because readers do not have to wait for the points.



Coherence of Sections by Microthreading Paragraphs

- ▶ A section is **coherent** if all its paragraphs are linked with the previous.
 - Threading patterns can be used, like climatic importance of the paragraph points
 - Microthreading can be used, like Topic-First or Stress-Last
 - Transitional words can be used
 - Conjunctions at the beginning of the paragraph
 - ... But However, Nevertheless, ...
 - Vertical links can be used, as within a paragraph
 - Summary links at the beginning of the paragraph
 - Subject links, Q+A links
 - Through a section, multiple thematic strings may run

16.1.2. Transitions between Paragraphs with Tension



Transitional Sentences with Thrust

- ▶ A transitional sentence for a paragraph needs a *horizontal link* to the previous paragraph
- ▶ Use Subclause thrusting for transitions:
 - Use a pivotal complex sentence, e.g., concessive:
 - “Obgleich <link>**diese Technik**</> ihre Vorteile auszuspielen scheint, verhindert ihre Schwerfälligkeit dennoch ihren Einsatz.”



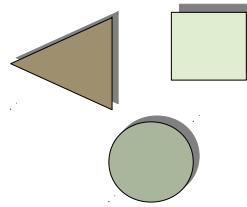
Fragment as *Introduction and Transition; Wrapped Paragraph*

[Russel-Problems] Wrapped paragraph with repeated point

To return to the table. It is evident from <link>what we have found</>, that <point>there is no colour which pre-eminently appears to be _the_ colour of the table, or even of any one particular part of the table</>—it appears to be of different colours from different points of view, and there is no reason for regarding some of these as more really its colour than others. And we know that even from a given point of view the colour will seem different by artificial light, or to a colour-blind man, or to a man wearing blue spectacles, while in the dark there will be no colour at all, though to touch and hearing the table will be unchanged. This colour is not something which is inherent in the table, but something depending upon the table and the spectator and the way the light falls on the table. When, in ordinary life, we speak of _the_ colour of the table, we only mean the sort of colour which it will seem to have to a normal spectator from an ordinary point of view under usual conditions of light. But the other colours which appear under other conditions have just as good a right to be considered real; and therefore, to avoid favouritism, we are compelled to deny that, in itself, the table has any one particular colour.

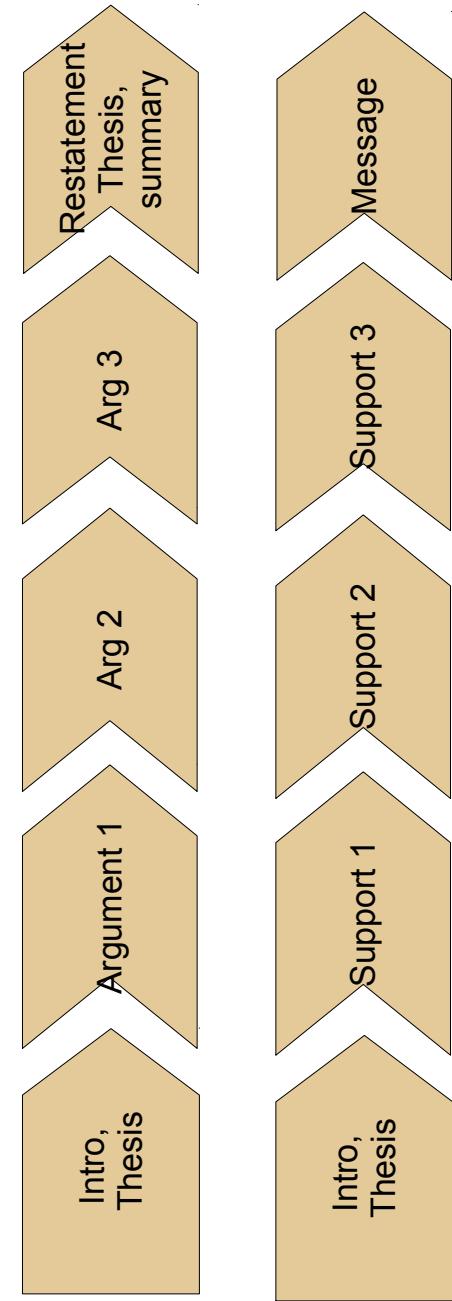


16.2 Outlining Essays with Rhombi



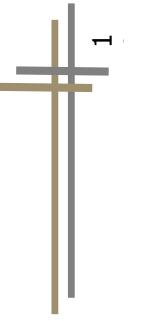
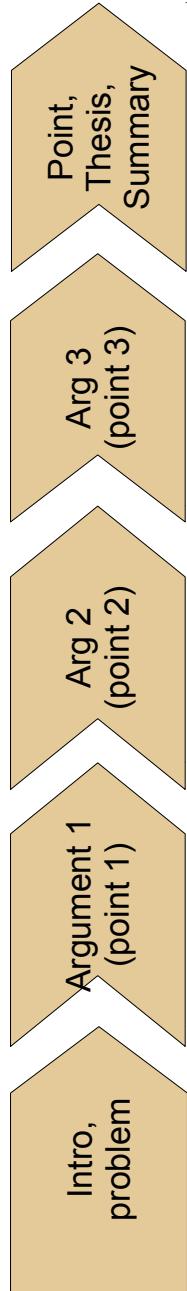
1-3-1-Essay (Fünfschritt, Direct Essay)

- ▶ The standard English essay is a *direct wrapped essay with repetition of the thesis* [Franklin-Parks]
 - ▶ Its structure is a rhombus or 5-chain, flat or deep (comb or bush)

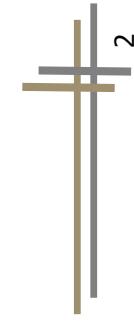


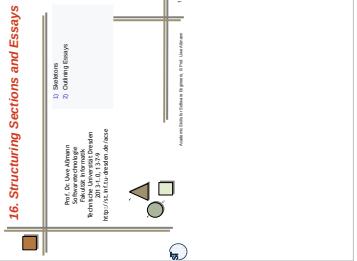
Suspended Essay

- The suspended essay has the point at the end



The End





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Obligatory Literature

[Parks] Franklin-Parks. Writing Structured Paragraphs and Essays.

[Schraum] Molly McClain, Jacqueline D. Roth. Schraum's Quick Guide to Writing Great Essays. McGraw-Hill.

[Turner] Adam Turner. English Solutions for Engineering and Sciences Research Writing: A guide for English learners to publish in international journals. English Writing Lab Center for Teaching and Learning and College of Engineering, Hanyang University, Seoul, Korea

- www.hanyang.edu/~estbee.com Website

2

Literatur

- ▲ Walter Dubislav. Die Definition. Felix-Meiner-Verlag
 - Formale Logik (Syllogismus) und formelle Definitionen wurden als Forschungsspiele von Aristoteles einbeckt. Aber nur erstes hat sich stark entfaltet.
- ▲ [Mills-Logic] John Stuart Mills. A System of Logic. 1882. Harper & Mills. eBook@Adelaide. The University of Adelaide Library

3

Literatur

- ▲ [Newman] William Newman. A preliminary analysis of the products of HCI research using pro forma abstracts. In Proceedings of the SIGCHI conference on Human factors in computing systems: celebrating interdependence. CHI '94, pp 278–284. New York, NY, USA, 1994. ACM.
<http://dl.acm.org/citation.cfm?id=191766>
- ▲ [ShawGRI] Mary Shaw. What makes good research in software engineering? int. Journal of Software Tools for Technology Transfer (STTT), 4(1):1–7, 2002.
<http://dx.doi.org/10.1007/s10009-002-0083-4>
- ▲ [Shaw-Slides] Mary Shaw. Writing Good Software Engineering Research Papers. Slides from and ETAPS 2002, keynote speech, and a newer version from <http://spoke.compose.cs.cmu.edu/ser04/L02/L2-0113-se-strat.pdf>

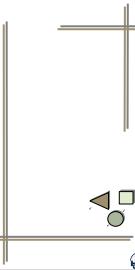
4

[Abbot:NavalHistory] Author: Willis J. Abbot. The Naval History of the United States. Volume 1. (of 2).
<http://www.gutenberg.org/2/2/3/0/22305/>

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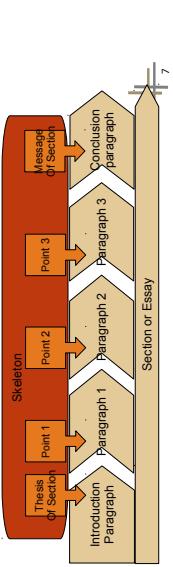
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**16.1 Skeletons of Texts
and Skeleton Revision**



Skeletons

- ▲ The **skeleton** of a section is the sequence of all points of all paragraphs.
 - The skeleton is an abstraction of the text
- ▲ If it is marked and extracted from the section, it forms the **skeleton paragraph**.
- ▲ The skeleton results from Point maturation, Support analysis, and Skeleton maturation
- ▲ A section (or essay) has **unity** if all points of the paragraphs support its thesis.



Section Coherence by Grouping the Controlling Ideas

- ▲ Development schemes can be applied in a paragraph, but also on the section and chapter level. Then, a paper gets a Bush structure (chapter – section – paragraph)
- ▲ If all paragraphs are direct paragraphs (point first), their controlling ideas can be seen like a *dispersed paragraph* (the **section skeleton**)
- ▲ Then, all transition sentences (T_i) and all controlling ideas (C_i) of all paragraphs in a section need to be linked.
 - They need to form a development scheme with Support and Threading relation
 - With ascendance and a conclusion



Multi-Paragraph Topic (Direct Skeleton)

[Carden Ash, S. 10] What do you recognize?

- ▲ Das Buch soll als „Geschichte der Gegenwart“ verstanden werden. Damit anschließend wurde der Haupttext unmittelbar während oder nach den Ereignissen, die es behandelt, niedergeschrieben. Die Beiträge könnten, um Wiederholungen zu vermeiden, nicht gekürzt, es wurde aber nichts Entscheidendes hinzugefügt oder weggelassen. Die Chronik und einige kurze Sätze sind später hinzugekommen, ebenso wie mancher Kurzkommunikation am Ende eines Beitrags.
- ▲ Ich möchte noch ein wenig bei dem Begriff „Geschichte der Gegenwart“ verweilen. Er stimmt nicht von mir. Soviel ist bekannt, hat Hugo George F. Kennan, amerikanischer Veteran des Diplomatie und Historiker, in einer Rezension seines Buches über Mittlerer Oste der 70er Jahre, The Use of Adversity (dt. Ein Jahrhundert wird abgewältigt), geprägt. Für mich ist dies die beste Charakterisierung dessen, was ich in den vergangenen zweizig Jahren geschrieben habe, indem ich die Erfahrungen des Historikers mit denen des Journalisten zu verbinden versuche.
- ▲ Doch zurück zu dieser Kontroverse. Geschichte der Gegenwart? Offensichtlich ein Widerspruch in sich. Geschichte hat sicher eine Definition mit Vergangenem zu beschäftigen. Geschichtliche - darunter versteht man Bücher über Caesar, den Dreißigjährigen Krieg oder die Russische Revolution.

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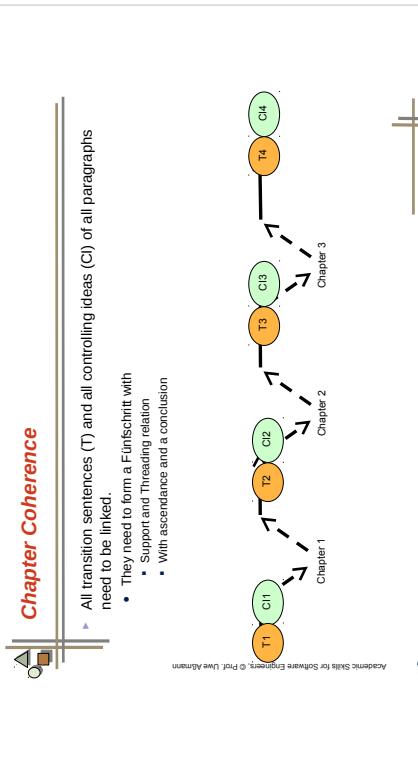
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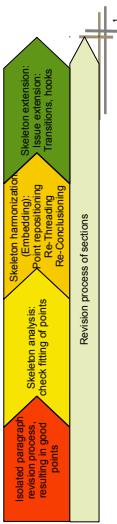
9

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Section Revision Process for Section Unity (Skeleton Maturation)

- The maturity of the skeleton of a section can be red, yellow, green.
- Isolated paragraph revision results in a red skeleton.
- Skeleton analysis finds out all points and checks whether they fit to each other.
- Skeleton revision creates a yellow skeleton:
 - increase the embedding of the points (harmonize skeleton)
- Skeleton extension finally creates green skeletons:
 - write transitions
 - write curiosity hooks



1

Different Kinds of Skeletons of Sections

- A **direct skeleton** is a sequence of direct paragraphs
- An **immediate skeleton** is a sequence of immediate paragraphs
- A **smooth skeleton** is a sequence of smooth paragraphs

- Direct skeletons have the advantage that they let the reader walk from point to point. All points are arguments/supports for the section point.
 - They create interest in the reader because the benefits of the controlling ideas keep the interest alive
 - They create the interest early on in reading, because readers do not have to wait for the points.

1

Coherence of Sections by Microreading



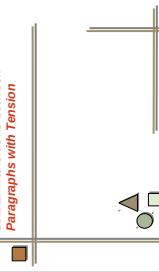
- Paragraphs**
 - ▲ A section is **coherent** if all its paragraphs are linked with the previous.
 - Threading patterns can be used, like elinatic importance of the paragraph points
 - Microreading can be used, like Topic-First or Stress-Last
 - ▲ Transitional words can be used
 - Conjunctions at the beginning of the paragraph
 - ... But However, Nevertheless, ...
 - ▲ Vertical links can be used, as within a paragraph
 - Summary links at the beginning of the paragraph
 - Subject links, Q+&links
 - Through a section, multiple thematic strings may run

Academic Skills for Sustainable Development

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16.1.2. Transitions between Paragraphs with Tension



Academic Skills for Sustainable Development

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Transitional Sentences with Thrust

- ▲ A transitional sentence for a paragraph needs a horizontal link to the previous paragraph
- ▲ Use Subclause thrusting for transitions:
 - Use a pivotal complex sentence, e.g., concessive:
 - "Obgleich [link](#) die [Technik](#) ihre Vorteile auszuspielen scheint, verhindert ihre Schwerfälligkeit dennoch ihren Einsatz."

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Fragment as Introduction and Transition; Wrapped Paragraph

[Russel-Problems] Wrapped paragraph with repeated point

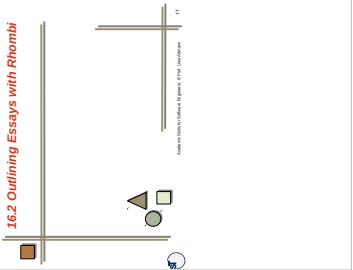
To return to the table. It is evident from [link-who we have found](#), that -points- there is no colour which pre-eminently appears to be... the... colour of the table, or even of any one particular part of the table/-/ it appears to be of different colours from different points of view, and there is no reason for regarding some of these as more really its colour than others. And we know that even from a given point of view the colour will seem different by artificial light, or to a colour-blind man, or to a man wearing blue spectacles, while in the dark there will be no colour at all; though to touch and hearing the table will be unchanged. This colour is not something which is inherent in the table, but something depending upon the table and the spectator and the way the light falls on the table. When, in ordinary life, we speak of... the... colour of the table, we only mean the sort of colour which it will seem to have to a normal spectator from an ordinary point of view under usual conditions of light. But the other colours which appear under other conditions have just as good a right to be considered real; and therefore, to avoid favouritism, we are compelled to deny that, in itself, the table has any one particular colour.

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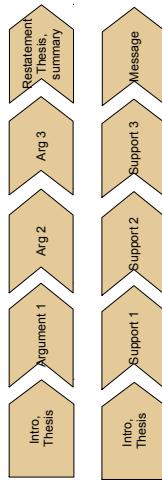
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16.2 Outlining Essays with Rhombi



1-3-1-Essay (*Fünfschritt, Direct Essay*)

- The standard English essay is a *direct wrapped essay with repetition of the thesis* [Franklin-Parks]. Its structure is a rhombus or 5-chain, flat or deep (comb or bush)



Suspended Essay

► The suspended essay has the point at the end



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5

The End

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5