

Close reading plan

How a Seed Grows By Helene Jordan

Barbara McLean, 2014 Connecticut Dream Team Teacher

What makes this text complex?			
Text and Author	How a seed Grows By Helene J. Jordan	Where to Access Text	http://amazon.com/How-a-seed-grows-Helene-Jordan
Text Description			
How a seed grows uses a clear sequence, content specific illustrations and vocabulary to demonstrate the process of the life cycle of plants. This book offers an excellent opportunity for inquiry based learning by including an experiment that students can complete to aid in their understanding of the text.			
Quantitative			
Lexile and Grade Level	Lexile 400 Gr. k,1,2	Text Length	31 pages
Qualitative			
Meaning/Central Ideas		Text Structure/Organization	
The text describes three main ideas: <ul style="list-style-type: none"> • Small seeds grow into big plants. • Some seeds grow fast and some take longer. • A seed needs soil, water and sun to grow. 		The structure is an expository, nonfiction text including an explicit sequence of steps in the experiment to support overall comprehension of the life cycle of a plant. Content specific illustrations support text comprehension.	
Prior Knowledge Demands		Language Features	
Students may need additional support sequencing events and summarizing the process of growing a bean plant. Also, students should also be familiar with content domain specific vocabulary.		Science vocabulary	
Vocabulary			
Tier Two Words (General academic vocabulary)		Tier Three Words (Domain-specific words)	
<i>“Words that are far more likely to appear in written texts than in speech. [They] often represent subtle or precise ways to say relatively simple things—saunter instead of walk, for example.” (CCSS ELA Appendix A)</i>		<i>“[Tier Three words]...are specific to a domain or field of study (lava, carburetor, legislature, circumference, aorta) and key to understanding a new concept within a text.” (CCSS ELA Appendix A)</i>	
<ul style="list-style-type: none"> • sprinkle • eggshell • container • soak • windowsill 	<ul style="list-style-type: none"> • soft • skin • loose 	<ul style="list-style-type: none"> • shoot • root • seed • root hair • bean 	<ul style="list-style-type: none"> • plant • flower • pale
Potential Reader/Task Challenges			
Overall, the text is fairly straightforward however, some students may need additional support sequencing and summarizing the process of growing a bean plant. Also, the text content vocabulary can be challenging.			

Text-dependent questions		
Question	Standard alignment	Page of this document
TDQ #1 <i>Based on the text, what are the 3 things a plant needs to grow?</i>	Standard 2.1	Pg 5
TDQ #2 Using the words and pictures on pages 18 -22 describe the process of a bean becoming a plant.	Standard 2.3	Pg. 8
TDQ #3 How do the illustrations and words on page 9 help the reader understand how to grow a seed?	Standard 2.7	Pg. 13
TDQ # 4 Why does the author say you might be a grandparent by the time the oak tree is fully grown?	Standard 2.8	Pg. 16
TDQ #5 How can you tell a seed has become a plant? Use the text to support your answer.	Standard 2.6	Pg. 19
<u>Target Standards</u>		
<u>CCSS.ELA-LITERACY.RI.2.1</u> Ask and answer such questions as <i>who, what, where, when, why, and how</i> to demonstrate understanding of key details in a text.		
<u>CCSS.ELA-Literacy.RI.2.3</u> Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.		
<u>CCSS.ELA-Literacy.RI.2.6</u> Identify the main purpose of the text, including what the author wants to answer, explain or describe.		
<u>CCSS.ELA-Literacy.RI.2.7</u> Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.		
<u>CCSS.ELA-LITERACY.RI.2.8</u> Describe how reasons support specific points the author makes in a text.		

Question 1

Question #1	TDQ #1 <i>Based on the text, what are the 3 things a plant needs to grow?</i>	
Standard(s) covered:	CCSS 2.1 Ask and answer such questions as <i>who, what, where, when, why, and how</i> to demonstrate understanding of key details in a text.	
	Example response that meets standard	Look-fors
	<p><i>In the text, it says plants need 3 things to grow. The 3 things a plant needs to grow are soil, water and sun.</i></p>	<ul style="list-style-type: none"> • Student refers back to the text to locate the answer. (Answer can be found on pg. 29) • Accurately answers the question stating the three key details from the text. (A plant needs 3 things to grow: soil, water and sun.)
If students are struggling to answer the text-dependent question, use this follow-up plan for modeling and practice:		
Objective	In this lesson, you will learn to answer a question by locating key details in the text.	
Prior knowledge to review	Key details of the text relate to the main topic.	
Steps to achieve objective	Think aloud for direct instruction	
1) Skim the text, looking for key words from the question.	<ul style="list-style-type: none"> • Hmm... I wonder what key words I should be looking for in the text. • The question tells me I need to find 3 key details. The question asks me to find 3 things a plant needs to grow. So, I need to find the 3 three things a plant needs to grow. • Next, I am going to look for pictures or illustrations in the text that show me what a seed needs to grow. • When I come to a page where I see what seeds need to grow I will STOP! • Model turning pages and scanning text and illustrations. 	

<p>2) Highlight the key words and details that help answer the question.</p>	<ul style="list-style-type: none">• Stop! Here it is on page 29! I see soil, a watering can sprinkling water, and a sun.• I am going to take my highlighter and highlight the words soil, water, and sun.• Let's reread the words soil, water, and sun. The text says those are the three things that a plant needs to grow.
<p>3) Record the answer to your question referencing key parts of the text.</p>	<ul style="list-style-type: none">• Now that we went back and found the key details we are ready to write our answer.• First, I am going to restate the question by writing it as a statement, "In the text it says, we need 3 things for a plant to grow."• Now let's look at our post its and write a sentence that will tell us what the 3 things we need for a plant to grow.• So now I will write: <i>Plants need soil, sun, and water to grow.</i>

Extension and practice

- Students can read the new text *From Seed to Plant* by Gail Gibbons and work with a partner to locate key details about seeds. For example, locate three ways seeds travel. Students can write the 3 facts on post it notes.
- If students are having difficulties locating and highlighting appropriate key details from the text, show them “Answer a Question about a Text by Finding Evidence” at: <http://ctdreamteam.learnzillion.com/lessons/1991-answer-a-question-about-a-text-by-finding-evidence>. Have students work together in partnerships to read through and locate key details in shorter passages (paragraphs or small sections of a familiar text).
- If students are having difficulty, have them work in partnerships to point to the pictures of seeds and then draw pictures of how the seeds travel and label them.

What next?

For additional practice, with students or for students' independent work, apply this learning objective and set of steps to (name type of text and skill/standard)

See more examples of how to teach (name skill and standard)

Objective: In this lesson you will learn to answer a text dependent question by locating key details in the text.

1. Locate the part of the text that contains key words stated in the question.
2. Ask yourself, what words and illustrations in the book will help me answer the question.
3. Write the answer to your question referencing key parts of the text.

<http://learnzillion.com/lessons1955-answer-a-question-about-a-text-by-finding-facts-and-details>

Question 2

Question #2	TDQ #2 Using the words and pictures on pages 18 -22 describe the process of a bean becoming a plant.	
Standard(s) covered:	CCSS 2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	
Example response that meets standard		
First, a seed is in the soil growing. Next, a root grows out of the side of a bean. Then, the root hairs push down and the seeds are pushed up. Last, the leaves come out and your bean seed is a plant!		<ul style="list-style-type: none"> References specific scientific ideas or concepts within the text and illustrations on pages 18-26 and describes how each step is connected. For example, first a seed is in the soil. Next, a root grows out of the side of the bean.
If students are struggling to answer the text-dependent question, use this follow-up plan for modeling and practice:		
Objective	In this lesson you will learn to describe a process by picturing each part and then retelling it step by step.	
Prior knowledge to review	Sequence of events Connection- linking two or more things together	
Steps to achieve objective	Think aloud for direct instruction	
1) Reread the parts of the text that contain key words and illustrations.	<ul style="list-style-type: none"> The question asks me to use the pictures and words on pages 18-22 to describe the process of a bean becoming a plant. Let's take a picture walk through the text, skimming the pages to find key words and pictures that help us understand the process of a bean turning into a plant. So, as I scan the text I am looking for words from the question. Words like "bean" and "plant." Oh, look, I found seed. Here is a picture of seed. On page 20, here is the word root and a picture of a root. 	

<p>2) Picture each part of the process as a movie in your mind.</p>	<ul style="list-style-type: none"> • I can use post it notes on each page that shows an important step in the bean to plant process. • Now, let's go back and look at the illustrations and words with the post it notes. Let's start with the first post it on page 18. • Let's use the pictures and words from the text to answer the question: How does each step connect to a bean becoming a plant? • On pg. 18 post it #1 I see a bean in the soil and the words "the seed will grow fat." How does this connect to a bean becoming a plant? (Record on post it- A bean in the soil is the first step in the growing process.) • On page 20, post it # 2 I see a root is starting to grow from the seed. How does this connect to a bean becoming a plant? (Record on a post it - the root starting to grow is the second step in the process.) • Post it # 3 I can see that a root is pushing down into the soil and the seed is pushing up. How does this connect to a bean becoming a plant? (Record on post it-This is the third step in the process.) • On page 22, post it # 4 The bean seed is pushed all the way out of the ground it is now a plant. How does this connect to a bean becoming a plant? (Record on a post it - This is the last step in the process.)
<p>3) Explain the process using images from the text</p>	<ul style="list-style-type: none"> • Now that we identified the steps of how a bean becomes a plant we need state how we can describe the process of a bean becoming a plant? • Point to the picture and post it 1 • Point to the picture and post it 2 • Point to the picture and post it 3 • Point to the picture and post it 4 <p>• The text says the seed will grow so fat that its skin will pop off. The picture shows a seed in the soil. So, I am imagining the seed getting really fat. That is the first part of the process. Now, I need to keep reading to find the next part of the process. Oh, it says that the root starts to grow. The picture shows the root growing out of the seed. So, the next step is that the root starts to grow. Let's keep reading to find the third step. Here it is, it says the root pushes down into the soil, down, and down. The picture shows that the root is pushing down and the seed is pushing up. In my mind, I can imagine the seed starting to push up through the soil. Let's look for the last step, on page 22 it says, Day after day the bean seeds are pushed up and the soil is pushed aside. In the picture, I see the bean seed is out of the ground and is now a plant!</p> <ul style="list-style-type: none"> • I can see that as the bean begins to grow and that each step in the process is connected. • I am going to restate the question by writing it as a statement, "The words and pictures on pages 18-22 show me the steps in how a bean turns into a plant. • Now that we have our pictures in order, let's use our sequence words to describe the process of a bean becoming a plant. First, a bean grows in the soil. Next, a root begins to grow from the bean seed. Then, the root pushes down into the soil and the bean pushes up. Last, the bean is pushed all the way out of the ground and is now a plant.

Extension and practice

- Students who are struggling can work together in partnerships or small groups to use pictures to sequence the step by step process from seed to plant into a sequence graphic organizer. A visual will help to support their understanding of the process of growth from bean to plant.
- Students can refer to this graphic organizer as they are reading other nonfiction text about plants to help them better understand the concept.

What next?

For additional practice, with students or for students' independent work, apply this learning objective and set of steps to (name type of text and skill/standard)

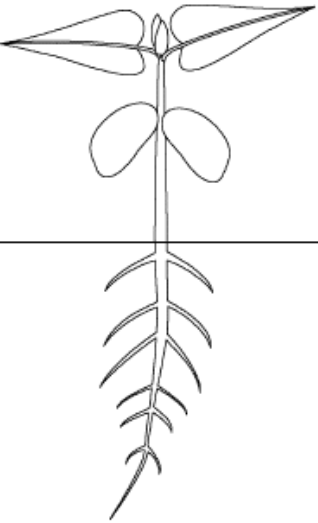





See more examples of how to teach (name skill and standard)

Objective: In this lesson, you will be able to describe the process of a bean becoming a plant by making connections between a series of scientific ideas.

1. Reread the parts of the text that contain key words and illustrations
2. Stop and jot the series of scientific steps on post its.
3. State the process of a bean becoming a plant.

<http://learnzillion.com/lessons1955-answer-a-question-about-a-text-by-finding-facts-and-details>

Sprouting Bean Sequence Cards: Enchantedlearning.com

<p>Sprouting Bean Sequencing Card</p> 	<p>Sprouting Bean Sequencing Card</p>
	
<p>Sprouting Bean Sequencing Card</p>	<p>Sprouting Bean Sequencing Card</p> 
	 <p>©EnchantedLearning.com</p>

Sequence Graphic Organizer

1	2
3	4

Question 3

Question #3	How do the illustrations and words on page 9 help the reader understand how to grow a seed?
Standard(s) covered:	CCSS 2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

Example response that meets standard	Look-fors
<p>You can plant different kinds of seeds like lima beans and bush beans and you can use different kinds of containers to grow your seeds in like an old cup or an eggshell with a hole at the bottom. The picture shows me that you can plant different kinds of seeds using different containers.</p>	<ul style="list-style-type: none"> • Identifies at least two different types of seeds that can be planted. For example: lima beans and bush beans • Identifies at least two types of containers. For example: eggshell and old cup. • Concludes how the pictures contribute to and clarifies the text. • For example, the picture shows that you can plant different kinds of seeds using different containers.

If students are struggling to answer the text-dependent question, use this follow-up plan for modeling and practice:

Objective	In this lesson you will learn to describe how an image clarifies a text by asking what information the image provides and noting its connection to written ideas.
Prior knowledge to review	Utilize illustrations to clarify the text.
Steps to achieve objective	Think aloud for direct instruction
1) Examine the picture or diagram.	<ul style="list-style-type: none"> • The question references page 9.... So, I am going to turn to page 9 in the text. • Now I am going to locate the illustrations and ask myself, "I see beans that are small and some that are large. I can also see that beans come in different colors: some are spotted, some are brown and some are green. Reading the text, I can see that the beans have different names such as pole beans, bush beans, and lima beans. • In the bottom illustration, I can see many different containers such as egg shells, old cups, and little flower pots. • I'm going to write the names of two of these kinds of beans and two of the different containers I can use to grow the beans in on my post-it. (Record on post-it)

<p>2) Ask yourself, "What information can I gather from this image."</p>	<ul style="list-style-type: none"> • Now, I am going to ask myself, "What information can I gather from the illustrations of the beans and containers?" • The top illustration tells me that there are many different kinds of beans to plant. • The bottom illustration tells me that I can use many different containers to grow my bean seeds in. • So, the pictures are showing me examples of what the types of seeds and containers I am using.
<p>3) Explain how the image clarifies what is in the text.</p>	<ul style="list-style-type: none"> • Looking at my post-its, I say to myself, "I must read on to determine how these illustrations contribute to or clarify the text." • Read pages 9-11 and ask yourself, "What do these pictures tell me about the process of planting a bean seed?" • On page 9, the images show the different kinds of seeds and container options someone has when planting seeds. • By showing the different kinds of seeds and container options, the author is helping me understand that there are lots of different kinds of seeds and lots of different ways to plant seeds. • Now I'm going to record my answer on a new post-it. (The images in the text helped me to understand that I can plant many different kinds of seeds and I can use different kinds of containers to grow seeds in like an old cup or an eggshell with a hole at the bottom. I know this because in the text the author shows pictures of all different kinds of seed and containers.)

Extension and practice

- Students can use the book *“From Seed to Plant”* by Gail Gibbons to locate the diagram of the flower and discuss with their partner how pictures and diagrams can help a person better understand a concept.
- Students can Think, Pair, Share their responses on sticky notes.
- If students are having difficulties, watch the video lesson on how an author helps the reader identify the main topic by checking out: <http://learnzillion.com/lessons/1958-explain-how-an-author-helps-the-reader-identify-the-main-topic>.
- Have students work together in partnerships to read through other nonfiction texts to locate main topics (paragraphs or small sections of a familiar text).
- As an enrichment activity, students can brainstorm a list of possible containers to grow seeds in and draw their own illustrations of a container they would like to grow a seed in. Ex: Milk Carton.

What next?

For additional practice, with students or for students' independent work, apply this learning objective and set of steps to (name type of text and skill/standard)

See more examples of how to teach (name skill and standard)

Objective: In this lesson you will learn how to draw conclusions about a text by examining specific images.

1. Locate the part of the text that contains key words stated in the question.
2. Ask yourself, “What information can I gather from this image?”
3. Read to determine how the image clarifies the text.

<https://ctdreamteam.learnzillion.com/lessons/1910-explain-how-a-diagram-contributes-to-the-meaning-of-a-text>

Question 4

Question #4	Why does the author say you might be a grandparent by the time the oak tree is fully grown?	
Standard(s) covered:	CCSS 2.8 Describe how reasons support specific points the author makes in a text.	
	Example response that meets standard	Look-fors
	The author says you might be a Grandparent by the time an oak tree is fully grown because oak tree seeds grow very slowly.	<ul style="list-style-type: none"> • Reread and highlight part of the text that refers to oak trees pg. 6 • References specific evidence from the text. For example, an oak tree grows very slowly. You could be a Father or Grandfather and the oak tree will still be growing. • Describe reasons to support why the author says you might be a Grandfather by the time an oak tree is fully grown. For example, some seeds grow slowly like oak tree seeds.
If students are struggling to answer the text-dependent question, use this follow-up plan for modeling and practice:		
Objective	In this lesson you will be able to explain an author's point of view by locating reasons.	
Prior knowledge to review	Recall information from the text. Author's purpose	
Steps to achieve objective	Think aloud for direct instruction	

<p>1) Reread and locate part of the text that refers to the point the author is making.</p>	<ul style="list-style-type: none"> • The question refers to a person being a Grandparent by the time a oak tree is fully grown. So I am going to find the page with a picture of an oak tree and a family. Oh look on pages 6 and 7 I see a baby, a child, a man and an older man that looks like he could be a Grandparent. • Now I am going to reread page 6 and look for reasons why the author would say you may be a Grandparent by the time an oak tree is fully grown. • Look the first sentence on page 6 says, “some seeds grow slowly.” and the third sentence says, “An oak tree grows very very slowly.”
<p>2) Ask, “What does the author want me to understand?”</p>	<ul style="list-style-type: none"> • Hmm... I wonder why the author would say you would be a Father or a Grandfather and the oak tree would still be growing? • Let’s think for 2 minutes and write down why you think the author wants us to know that the oak tree will still be growing even when you are a Grandfather. • Now that you had a few minutes to think, let’s pair with our thinking partner and talk about what you wrote down. • Let’s share our thoughts. • The text says, some seeds grow slowly and an oak tree grows very very slowly. I notice that the illustration shows a picture of a family starting with a baby, a child, a man and grandparents. I think the author is showing us through the people how long it can take for the tree to grow. You plant the seed when your are a baby and the tree grows so slowly that you will be an old man or woman and it still won’t be done growing. I can actually picture in my mind the baby and the seed and then the Grandfather and the oak tree that is still growing.
<p>3) Using evidence from the text write your response.</p>	<ul style="list-style-type: none"> • Using the words and ideas from the text, I am going to write my answer. • I think the author says you might be a Grandparent by the time an oak tree is fully grown because oak tree seeds grow very slowly and you can be an old man like and Grandfather and the oak tree would still be growing.

Extension and practice

- Students observe plant growth by watching time-lapse videos and by observing the growth of their own bean plants vs. time lapsed videos of plants growing. <http://www.schooltube.com/video/11fca602629059a86861/Time-lapse-photography-of-plant-growing>
- Tomato plant: <http://youtu.be/LICDb8nM5rs>
- Students can complete a Venn Diagram to compare and contrast growing a bean seed to growing a tomato plant.
- Students can observe and reflect in writing about their observations.
- If students are struggling, they can work in small groups to create a T chart to show things that are fast and things that are slow. For example, walking up a big hill vs. running down a hill or a jaguar vs. a turtle.
- Students can refer to their chart when rereading the parts of the text that reference plants that grow quickly vs. the slow oak tree.

What next?

For additional practice, with students or for students' independent work, apply this learning objective and set of steps to (name type of text and skill/standard)

See more examples of how to teach (name skill and standard)

Objective: In this lesson you will be able to explain why the author would include certain information in the text.

1. Reread and locate part of the text that refers to the point the author is making.
2. Ask, "What does the author want me to understand?"
3. Reference evidence from the text write your response.

Link to corresponding LearnZillion lessons and/or other sources. Or delete this box.

Question 5

Question #5	What is the purpose of <i>How a Seed Grows</i> by Helene Jordan?
Standard(s) covered:	Standard(s) 2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

Example response that meets standard	Look-fors
<p>The main purpose of the text is that the author is giving us information on how a seed can grow into a plant. I know this because in the text the author shows the process of a seed becoming a plant. Also, on Pg. 29 the author explains that if a seed has soil, water, and sun it will grow into the same kind of plant that the seed came from such as an apple tree or a daisy.</p>	<ul style="list-style-type: none"> • Makes observations pages 18, 20, 22 26 and 29 show the process of a seed becoming a plant. • Discovers what the author wants to explain or describe For example, Seed becomes a plant. • References specific evidence from the text. For example, Seed in soil • Root starts to grow • Root pushes seed up out of soil • Shoots turn green and leaves come out. • On page 29 if a seed has soil, water and sun it will grow into a plant.

If students are struggling to answer the text-dependent question, use this follow-up plan for modeling and practice:

Objective	In this lesson you will learn to identify the purpose of an informational text by identifying the question the author is asking.
Prior knowledge to review	Purpose- The reason why something is done.
Steps to achieve objective	Think aloud for direct instruction

<p>1) Skim the text, noting the major ideas the author discussed and that you jotted down.</p>	<ul style="list-style-type: none"> • The question asks me “What is the purpose of <i>How a Seed Grows</i>?” • Let’s go back and find all the important ideas from this text. (Skim the text.) Let’s see... Here on pg. 9, we learned that there are different kinds of seeds and that we can grow them in different containers. I will put a sticky note on this page because I think the author wants us to know that there are different kinds of seeds and ways to grow them. Keep skimming, STOP! On Pg. 18-22 the process of a seed becoming a plant is shown. Let’s put a sticky note on those pages because the author wants us to know all about a seed turning into a plant. • “Oh, and here on pages 28 and 29 the author tells us the three things a plant needs to grow: soil, sun, and water.” Let’s add another sticky note here because the author wants us to remember the important things a seed needs to grow. • Let’s write the words, “Author’s Purpose” on my chart paper. • Now, I’m going to list the main ideas from the text: • <i>There are many different kinds of seeds/containers for growing.</i> • <i>Seeds grow in stages and have roots that push them up and eventually turn into plants.</i> • <i>Seeds need soil, sun, and water to grow.</i>
<p>2) Ask yourself, “What question is the author trying to answer?”</p>	<ul style="list-style-type: none"> • All of my main ideas have to do with growing seeds. • The title of the book is <i>How a Seed Grows</i>. “Hmmm. I wonder what question the author wants to answer.” • It seems like the author wants to give us information on how seeds grow, what they need to grow and how that process works.
<p>3) Describe the books main purpose.</p>	<ul style="list-style-type: none"> • Now I must ask myself, “What is the books main purpose?” • Well, based on our list the author is trying to give us information on seeds and how they grow. I’ve got it! The author wants to describe how a seed grows into a plant. (Record your answer on a post it) The author’s purpose in writing <i>How a Seed Grows</i> is to give the reader information on the process of a seed growing into a plant and what a seed needs to grow. For example, in the text the author explains that a seed grows in stages starting out as seeds, growing roots, then shoots and finally a plant with leaves. The author also shows that you can grow many different kinds of seeds using many different containers and your seeds will grow into plants as long as they have soil, water and sun.

Extension and practice

Using the *How a Seed Grows* project at the end of the book, grow your own plant, following the steps in the procedure. (Reflect in writing how the description helped with completing the project.)

Students can work with a partner to write their own “how to book,” by describing a step-by-step process for something they know how to do well. For example, they could write about how to hit a baseball or how to draw a cartoon character.

What next?

For additional practice, with students or for students' independent work, apply this learning objective and set of steps to (name type of text and skill/standard)

See more examples of how to teach (name skill and standard)

Objective: In this lesson you will learn to identify the purpose of an informational text by identifying the question the author is asking.

1. Skim the text, noting the major ideas the author discussed and that you jotted down.
2. Ask yourself, “What question is the author trying to answer?”
3. Describe the main purpose of the book.

<https://ctdreamteam.learnzillion.com/lessons/1958-explain-how-an-author-helps-the-reader-identify-the-main-topic>

<https://ctdreamteam.learnzillion.com/lessons/1939-describe-how-reasons-support-specific-points-the-author-makes>