

Exploration 9

Level III: Diverging from Known Information

With documentation from Levels I and II, an architect can now take the known and recorded information and use it as a point of departure, discover patterns or systems of organizations, and create new ideas or designs.

At Level III, we go beyond the known information to make predictions, formulate hypotheses, or detect organizing principles. We may ask to imagine and create original expressions of our experiences in written, verbal or artistic formats. To many of these kinds of questions, sometimes called divergent questions, there is no “right” or “wrong” answer. This type of questioning is the final step in the inquiry process through which a personal solution is reached. This provides a unique opportunity in the classroom—multiple responses. As in all design, there is no final answer!

For this level, we will investigate the Addison Toll House on the National Road.

Materials:

- Images of Addison Toll House
- Documentation from Level I and Level II activities
- Something to write and draw on
- Something to write or draw with

Objective:

After/before a visit to Addison Toll House, students will use visual and spatial analyses of the building within the context of the National Road to answer questions concerning the context, site, materials, structure, function, appearance and history.

Standards:

- Arts: NA-VA 1, 2, 3, 4, 6
- English: NL-ENG 1, 2, 3, 4, 5, 6, 7, 9, 11
- Mathematics: NM-NUM 1, 3; NM-GEO 2, 4; NM-MEA 1, 2; NM-PROB 1-4; NM-PROB.CONN 1, 3; NM-PROB.COMM 1, 2; NM-PROB, REA 2; NM-PRB.REP 1, 3;
- Science: NS 1, 2, 3, 4
- Social Studies: NSS-G 1, 5, 6; NSS-EC 5; USH 4

Procedures:

- Ask students to consider what they have learned from Levels I and II, add and augment information to answer the following.
- These could be used as a pre- or post-visit activity.

1. Context

- a. Make a site map. Indicate direction and scale, include a legend.
- b. What is the relationship of the building to the National Road? What does this suggest to you?
- c. Has the context changed from the time when the building was built? How can you tell? What caused this to happen?
- d. Imagine a day in the life of this town. What happens here? Who lives here? What do they do? Are there children here? Where do they go to school? Where do they play? What games do they play?
- e. Would you want to live in this town when the toll house was built? Why or why not?
- f. Would you want to live in this town now? Why or why not?

2. Materials

- a. What materials do you see? What other structures have you seen made of these materials? Are they new or old?
- b. Can you see any of the same materials used in surrounding buildings? What does this suggest to you?
- c. Why are they different? Where did these materials originate? How did they get here?
- d. Do you think these materials are appropriate for the original use of the building? Why or why not?
- e. What materials, if any, would you change? Why?
- f. Could you build this out of different materials? How would it change if you did?

3. Structure

- a. How is the building put together?
- b. Look at the roof. How does it keep water out?
- c. Look at the stones of the building. How do they keep the water out? Would they make it warmer or cooler inside? What could you do to change the inside temperature?
- d. Do you think this building had an architect? Why or why not?

4. Circulation

- a. Looking at pedestrian and vehicular traffic, who or what used this building? Did they all enter the building? If not, how would they interact with it?

- b. Indicate circulation on your site map. Make your own legend to indicate different kinds of transportation—pedestrian, wagon, livestock, etc.
- c. How does the building tell you how to approach it? How to move through it? How to leave it? Are there places you are meant to go? Places that you are not to? How do you know?
- d. Stand at the front door. What can you see from here? How many rooms do you see? What are they? How many directions do you see?

5. Function

- a. Imagine opening the door in 1836. Who or what would you find on the other side?
- b. Draw a floorplan of each story of the building. Indicate possibilities of the functions. What do you think they were initially? Why?
- c. Do you think they have changed? Are there any surprises? Any trap doors or hatches? Do you think children and adults would use these spaces differently?
- d. How do you feel in these spaces? How do you think children would feel in these spaces? Adults?
- e. How many people were meant to be here? How would that feel? How would it sound? Imagine being alone here. How would that feel?
- f. Do you think someone lived here? Would you want to? Why or why not?
- g. Do you think the building had an architect? Who was the client? What do you imagine the “program” of the building was to be? How did the client explain what he wanted to the architect? What did he/she say?
- h. Does the building have any secrets?

6. Appearance

- a. What shape is this building? Why? Do you think the shape has relationship to the materials from which it was constructed?
- b. Is there any evidence of the age of this building? In what ways? How old do you think it is? How old is it in relation to its neighbors?
- c. Imagine being here in summer and in winter. What do you hear? What do you see? How does it feel to be here? When would you rather be here?
- d. Was this building designed for adults or children? Why?

- e. Stand on the National Road and look at the building. How does the building tell you what to do? Does the building have a front? A back? What do you see to indicate that?
- f. Who do you think built this? Was there more than one person? Did they leave any personal touches? Where do you see them?
- g. Do you see any decoration on the building? Where? How much? Of what is it made? How would you describe it?
- h. Look at the windows? Why are some of them covered? Do you think they were always this way?
- i. Would you do anything to change the appearance of the building? If so, what would you do? What would you do it?

The information and images below are courtesy of the National Road Heritage Corridor's website. For additional photos and more information, please refer to <http://www.nationalroadpa.org/>

Addison Toll House (Petersburg)

The Addison Toll House is the only hand-cut native stone toll house in Pennsylvania; it is an authentic reflection of the structure as it existed in 1835, when toll collection began. The interior, with its original flooring and period furnishings convey a sense of what domestic life was like for the toll collector and his family. On the exterior



is a hand-made sign which lists the fees for traveling the Road in 1835.



A record remains of tolls collected in 1841. Toll Collector William Condon, who lived in the house with his family, reported income of \$1,758.87 for that year. His salary was \$200.00 plus free living quarters.