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# From VR to a Multimodal Task - Developing VR Experiences for the Multimodal Language Classroom

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# What you will need

## Hardware

- Laptop
- Smartphone
  - Unmuted
  - Switch off the notifications
- Headset

## Software

- A Google Account (login and password)
  - Google Chrome web browser
  - Phone Apps
    - Google Cardboard
    - Google Cardboard Camera
    - Google Expeditions
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Hallo, ich heie Simon Zuberek.

Ich arbeite bei Columbia.

Ich freue mich diesen Workshop zu leiten.

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## Embodied cognition and language learning in virtual environments

- Vygotsky, L. (1978). *Mind in society: The development of higher psychological process*. Cambridge: Harvard University Press.
  - Swain, M. (2000). The output hypothesis and beyond: mediating acquisition through collaborative dialogue. In J. Lantolf (Ed.), *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
  - Ellis, R. (2008). *The study of second language acquisition* (2nd ed.). New York: Oxford University Press.
  - **Embodied Learning**
  - Brecht, Richard D., Dan Davidson, and Ralph B. Ginsberg. 1995. Predictors of Foreign Language Gain during Study Abroad. *Second Language Acquisition in a Study Abroad Context* 9: 53–82.
  - MacWhinney, Brian. 2012. The Logic of the Unified Model. In *Handbook of Second Language Acquisition*. London: Routledge, pp. 211–27.
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Not very immersive...

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ANDERTOONS



"I appreciate the text, Kate, but next time you can just raise your hand."

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# VR and curricular design

## VR Features

- Visual
- Auditory
- Linguistic
- Spatial
- Gestural

## Available Designs

- Visual
  - Audio
  - Linguistic
  - Spatial
  - Gestural
  - Schematic
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## What are available designs?

The linguistic, cultural, and social resources a person uses to understand and create texts, as well as resources that comprise and characterize texts themselves. These are different across different texts and for different students, as they are defined by students' experience. They may be targeted by instructors in designing learning activities. **(Paesani, Willis-Allen, and Dupuy, 2016)**

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# Available Designs

## Types of available designs:

- **Linguistic** (writing system, sound system, vocab, syntax, grammar, etc.)
  - **Schematic** (organizational patterns, genre/style, stories, content schemata, background knowledge, etc.)
  - **Visual** (colors, view, shapes, camera effects, filters, emoji, memes, movement, etc.)
  - **Audio** (sounds, music, background noises, silence)
  - **Gestural** (body postures, hand and arm gestures, facial expressions, hairstyle, clothing, eye movements)
  - **Spatial** (size, proximity, layout, perspective, spacing, landscape, semiotics, etc.)
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## What is a text?

In the multiliteracies framework a text is a written, oral, audio, visual, or digital artifact combining multiple features such as words, sounds, images, hypertext, gestures, memes, etc. **(Paesani, Willis-Allen, and Dupuy, 2016).**

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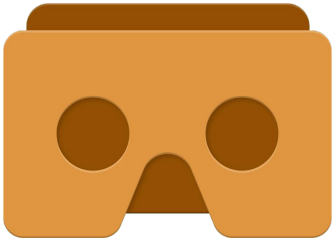
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**Can a city be a text?**

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## Google Cardboard

1. Open the Google Cardboard app.
2. To pair your phone with your viewer, on the right, tap the Right arrow.
3. Use your phone's camera to scan the QR code on the Cardboard viewer.



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## A guided tour with Google Expeditions

1. Open the Google Expeditions App.
2. Log in with your Google Account.
3. Tap **Discover** and search for **My Harlem**.
4. Download the tour to your smartphone.
5. Tap **View in VR** and follow the directions on the screen.



Google Expeditions

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## My Harlem

Which available designs can you identify in this scene?

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## 360° images with Google Cardboard Camera

1. Open the Google Cardboard Camera App.
2. In the bottom right corner tap **Take Picture**.
3. Tap **Record**.
4. With your arms outstretched, move your device slowly in a circle to the left or right.
5. The camera will stop recording automatically once you complete a full 360° turn. To finish before then, tap **Done**.

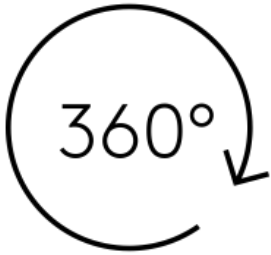




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## Creating a 360° image

1. Go outside and take two or three 360° photos with your phone, documenting your path back to this room.
  2. **Come back in 10 minutes.**
  3. Save the photos to your phone:
    - a. Open the Cardboard Camera App.
    - b. Tap the photo you want to save.
    - c. **iPhone** On the bottom left, tap **Share**. To confirm and save the picture to your camera roll, tap **OK**. Open your Photos app and share the picture.
    - d. **Android** To the right of the photo tap **More (three vertical dots) > Open in Gallery**. Follow instructions from your photos app.
  4. Email the images to yourself and save them locally.
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## Creating a 360° scene

1. In your Chrome browser navigate to [vr.google.com/tourcreator](https://vr.google.com/tourcreator).
2. Log in if prompted (use your Google account login and password).
3. Click **+ New Tour**.
4. Enter the title of your tour.
5. Enter a description and assign the category.
6. Add a cover photo ([photosforclass.com](https://photosforclass.com) has some good ones).
7. Hit **Create**.
8. Click **Add Scene**.
9. To add an image, choose **Upload** and select a 360-degree image for your first scene.
10. Click **Add Scene** to create the first stop on your tour.
11. Add the title and the description of your scene.
12. Publish the tour with the blue **Publish** button.



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**Let us return to the Harlem tour and move to its second scene.**

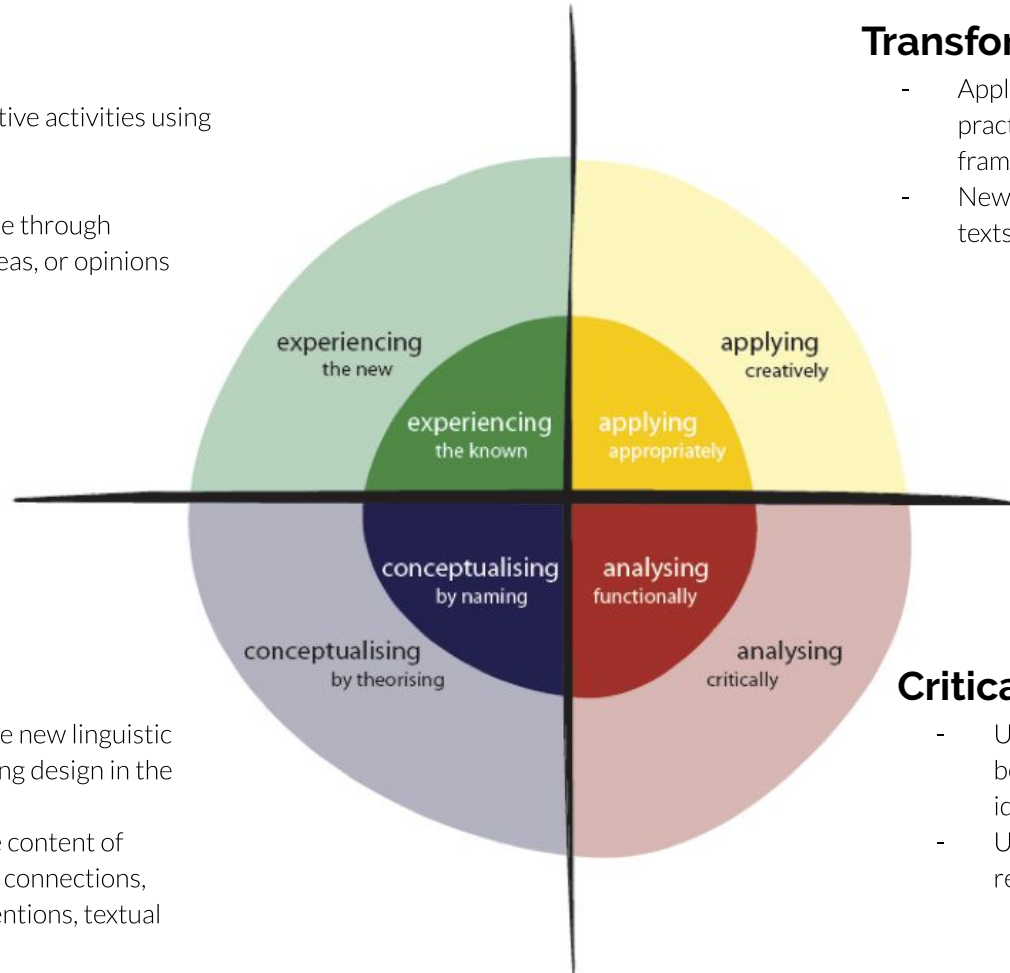
**Reflect on the activities in the second scene. What learning processes do they entail?**

## Situated Practice

- Immersion, communicative activities using TL texts
- No reflection on form
- Experience language use through expressing thoughts, ideas, or opinions

## Transformed Practice

- Apply what you have learned through practice, overt instruction, and critical framing activities
- New knowledge is used for creating new texts or reshaping the existing ones.



## Overt Instruction

- Identify and learn the new linguistic resources for meaning design in the TL.
- Learners unpack the content of texts, form-meaning connections, recognition of conventions, textual organization.

## Critical Framing

- Understand the context of the text, be it cultural, social, historical, ideological, etc.
- Understand how language rules relate to the context

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**Let's make our scenes more  
interactive.**

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## Adding static images to your scene

1. Go back to your tour.
  2. Click **Add Scene** to add another scene to your trip.
  3. Upload your own 360° image, give it a title and a short description.
  4. **What in this scene could serve as a point of interest? How could it be labeled and described? Would it benefit from an added image?**
  5. **Leave the room and take a picture to label your point of interest. Email it to yourself and save locally.**
  6. Click on the **Point of Interest** on the right under the description. A blue **+ in a circle** will appear. Drag it around to adjust the location.
  7. Add the title and a short description. Keep it one paragraph.
  8. Below the description you will see two icons. The first one allows for adding static overlay images. Click it to add your photo. Adjust its size and position as you see fit.
  9. **Publish** when ready.
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## Adding sound to your scene

1. Go back to your tour.
2. Click **Add Scene** to add third scene to your trip.
3. Upload your own 360° image, give it a title, and a short description.
4. Think of a point of interest that may benefit from added sound.
5. Create the point of interest, add its title and a short description.
6. Below the description click on the **Add Narration Icon**.
7. You will need to upload a sound. Go to **soundbible.com** or **soundgator.com** for free sounds.
8. You may also record your own narration (**vocaroo.com**).
9. Upload the sound you have prepared. You can also upload an image if you think it is needed.
10. Publish your tour and update it on your smartphone.



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To experience what Harlem sounds like, let's get back to the tour.

What pedagogical acts are present in this scene? Are there any obvious ones that are missing? How would you include them?

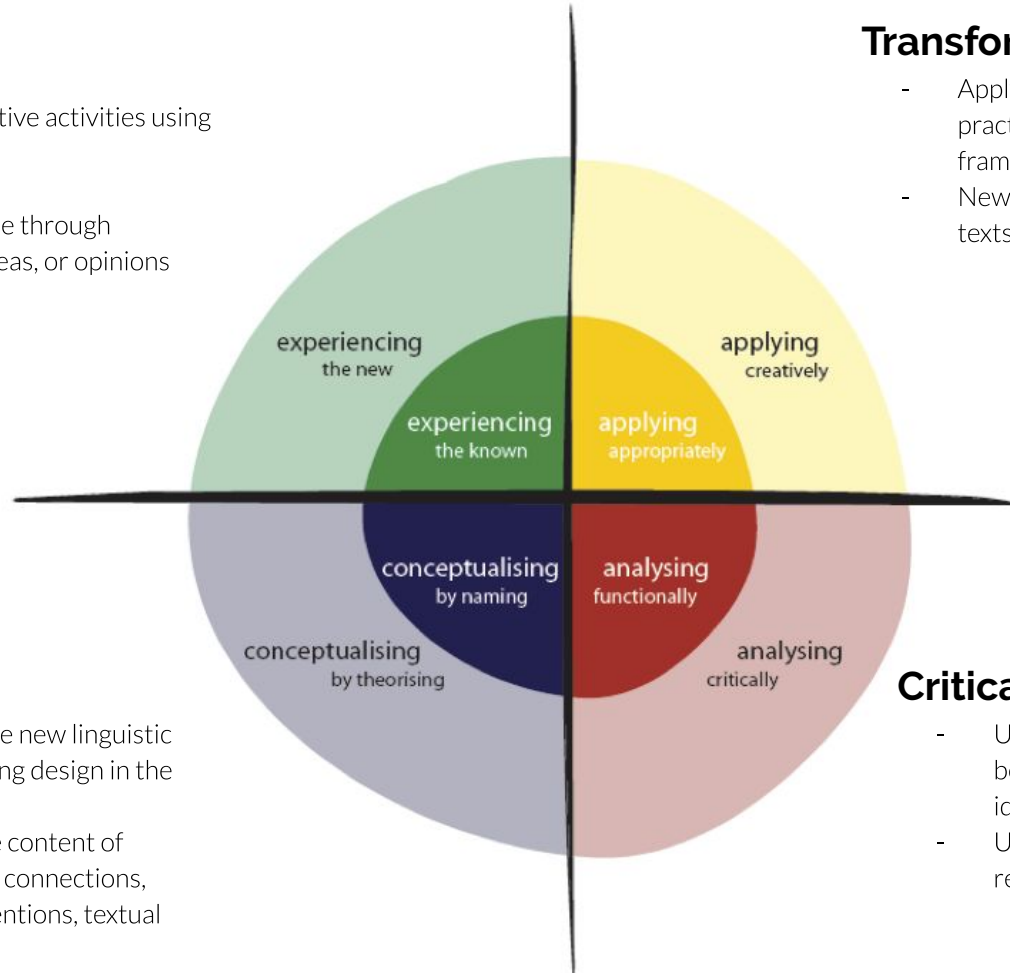


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## Sharing your experience

- All tours could be viewed on all internet-enabled devices:
    - On smartphones and tablets use the **Google Expeditions** app.
    - On computers go to [poly.google.com/tours](https://poly.google.com/tours) and search for the tour in the search bar.
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## Guiding a tour

1. Open your Google Expeditions app:
  2. Go to **Class > Guide > Start Guided Session**.
  3. You'll see details of your name, tour number, and the network. Make sure all your students are on the same network.
  4. **Tap Got it**. You will see all tours you have downloaded.
  5. Tap the VR tour you want to guide and select **Guide**.
  6. Tell students to join the tour with your name and the tour number, and to place their mobile devices in their viewer.
  7. Tap **Start** on the first scene to send it to your students.
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**Your new tour should now be  
available in your Google Expeditions  
App under Library > My Tours**

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**Go to Library > Downloads to see  
how the Harlem tour ends.**

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**Questions?**

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# Let's Connect

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[twitter.com/ColumbiaLRC](https://twitter.com/ColumbiaLRC)

[youtube: Columbia LRC](https://youtube.com/ColumbiaLRC)



End