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Selective Permeability and Multicultural Visuality

Originally used to demonstrate how a single urban setting is accessible, restricted, safe or dangerous to different individuals, we extend the concept of “selective permeability” to visual learning in multicultural classrooms. Though focusing primarily on Eastern and Western students, our findings have broader implications for teaching diverse groups.

Let’s begin by examining three experiments from cultural psychology. In the first, Takahiko Masuda and Richard Nisbett showed students fish pictures. East Asian students had better recall when the scene included a background, Westerners when it did not (Figure 1).



**Fish with Original
Background**



**Fish with No
Background**

Figure 1

The second experiment, by Liang-Hwan Chiu, asked students to pair items. Chinese pupils typically focused on relationships (e.g., the cow eats the grass), Americans on discrete classifications (e.g., cows and chickens are both animals, see Figure 2).



Figure 2: Does the chicken or grass go with the cow?

The third experiment, conducted by Shinobu Kitayama's research team, found that Japanese students excelled at drawing lines in proportion to different-sized shapes, Americans at reproducing absolute lengths (Figure 3).

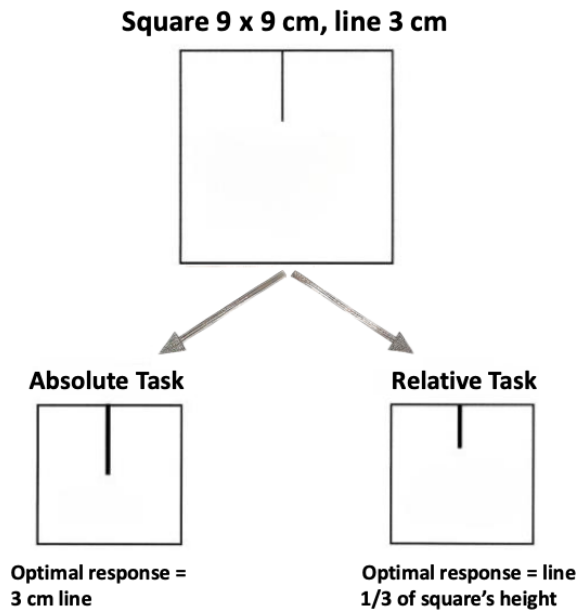


Figure 3

In his book, *The Geography of Thought*, Nisbett notes that East Asians often situate personality traits (e.g., “I’m fun-loving at parties”), whereas Westerners incline towards absolute expressions (e.g., “I’m fun-loving”). From this and the earlier studies, such as the one with fish scenes, we might expect Westerners, when asked about their perception of Figure 4, to respond, “I see a yield sign”, Easterners to remark, “I see a yield sign on a country road”.



Figure 4

While there are differences both between and within cohorts from countries like China, Japan, and Korea, psychologists' findings generally align with regional philosophical traditions. Eastern ontologies often emphasize the relational nature of social and physical realities, as with the Daoist characterization of a valley as a unity of absence and presence. Such ideas have been echoed by non-classical physicists who assert, for instance, that an object's length is only determinable relative to the observer's velocity. In contrast, and with exceptions like process philosophy, Western traditions have historically focused on individual entities as the fundamental units of reality.

These Eastern outlooks are reflected in the arts from those regions. However, it's also possible that these philosophical traditions partly mirror local environments. Consider two views of a South Korean neighborhood, captured from the rooftop of one of the authors of this piece (Figure 5). The buildings are jumbled at different levels and tightly packed in non-aligned directions. Mist rolls down the mountain, altering the landscape's appearance in short intervals. These environments are complex with few focal points, and while similar settings can be found in the West, they are less common there for a reason: Asia tends to be mountainous and densely populated, largely compelling some of the design choices.



Figure 5

Whatever the reasons, relational or contextualized perspectives seem central to East Asian visual culture. The situated versus focal-oriented photos of the Eastern and Western authors of this piece (shown in Figure 6) exemplify this. There is variation within each culture; for example, most of the Western authors' profile pictures are contextually oriented. The next figure, however, provides further explanation.



Figure 6

Even for contextualized Western vs. Eastern profile pics, differences are often there. For Figure 7, guess which photographer is Dutch and which is Korean. Though Westerners may increasingly pose in front of splendid backdrops (maybe partly as an offshoot of selfie culture), the Dutch photographer (right) emphasizes the woman as a protruding focal point, whereas the Korean photographer (left) blends the woman harmoniously into the scene – harmony being a key East Asian virtue and a contextually oriented one.



Figure 7

Similar to the above, Eastern cinema is often – but not always – more layered and less oriented around focal points (see Figure 8). This is in addition to having more camera movement and motion within the frame.



Figure 8: Stills from Chariots of Fire (1981) and Farewell My Concubine (1993)

Our next illustration is an episode in *Casablanca* (1942) where characters perform “La Marseillaise” (Figure 9). Anglo-Europeans are usually moved by this reaction to the Nazi occupation of French territories. North Africans often find the scene less powerful since the territory in question was in that region and brutally colonized by the French. (Moroccan Jews may have mixed feelings). An example like this encourages perspective pluralism, helping students appreciate that varying contexts reveal an assortment of legitimate values.



Figure 9: A French character from Casablanca emotionally singing “La Marselliaise” in Rick’s Café.

A last example relates to a finding documented by the education theorist Jo Boaler, who suggests that girls/women get more frustrated than boys/men when taught mathematical question-answering proficiency without explanations of the underlying reasoning. Here, it can help to visually demonstrate claims, such as $A^2 + B^2 = C^2$, as in Figure 10.

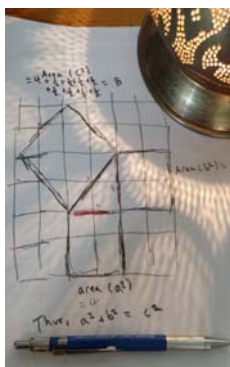


Figure 10

Here we see that the Pythagorean theorem literally expresses that the area of two squares (as in the shapes) adds up to the area of a third larger square.

This chapter is obviously short and just scratching the surface of visuality, culture and how the two can intersect to limit or enhance the learning of some students. But we hope to have highlighted the intricacies of visual learning in today's multicultural classrooms.