Lesson 9: The Map is not the Territory

Context

This lesson is effective following discussions of the capacity of language to map the world symbolically. When Alfred Korzybski declared that the map is not the territory he was referring to language, whose representation of the world is not to be confused with reality itself.

Aims

- To consider the nature of symbolism and conventions for representing the world.
- To recognize assumptions that may arise from past structures of power.

Class Management

Two hours are required. First allow the class to take a good look at wall maps of the world. Raise questions of projections and centring. The following should emerge.

- A flat map is a distortion of a sphere, and a wall map is inevitably a simplification of the world's detail.
- Particular representations carry hidden assumptions and values.
- Maps, like languages and theoretical models, are conceptual tools.

The teacher should take on primarily a questioning role, with students doing their own analysis. However, the teacher may wish to introduce passages for reading, or give historical background.

Focus Activity

1 Display a minimum of three wall maps of the world that differ in their projections and their placement of particular regions in their centre. Ideal maps are a Mercator projection centred on Europe, a Peters equal-area projection, and a map which appears to be upside-down, with south at the top. Also valuable are maps which centre on the United States, with India repeated at both sides of the maps to allow the symmetry, any Asian or Middle Eastern maps with their own areas at the centre, and satellite pictures of the earth from space.

2 Have ready, on handouts or overheads, a few examples of conceptual maps, in which the size or shape of the countries is determined not by geographical size, but by other criteria such as population, trade balance, or incidence of a disease.

3 Have ready, on handouts or overheads, maps which are supplemented with graphics—pictures of nature or recreation (from tourist brochures), bold concentric circles for indication of ripple impact, arrows for movement of armies (from a history text or newspaper).

Use these visual examples to raise questions about conceptual schemes which influence representation. Each category raises slightly different questions.
Having established that maps are not simply perceptual records, move to overt conceptual maps to raise questions of statistics, and then to maps embellished with graphics, to consider the fine distinction between clarification and persuasion.

**Discussion Questions**

**Part 1: Geographical and Political World Maps**

- Which wall map looks to you most natural? Why? As you look at all three of them, do they suggest different things to you?
- Which region is in the centre? Why?
- Which region appears largest? How much is Scandinavia or Australia affected by the projection? Which map takes as its goal the showing of regions according to their relative size?
- Is it necessary for north to be at the top? What distinguishes north from south when there is no up or down in space? If the poles are determined by the earth’s rotation, what then divides east from west?
- Is the prime meridian placed by geographical necessity—or by a decision that could be otherwise? Do we have associations other than geographical designations with west, east, north and south?
- Are borders part of nature? Are they visible if the world is viewed from space? What do borders and naming represent on a world map?

**Part 2: Conceptual Maps**

- When the size and shape of countries on the map represent not their geography, but another concept, what is the difference between a map and a pictorial graph? Why use a world map?
- How do we know that the statistics behind the representation are accurate? What is the source of the statistics? How are the terms defined? What is the significance of sampling techniques—representative samples, adequate samples?

**Part 3: Graphic Enhancement of Maps**

- To what extent do symbols drawn from elsewhere combine with maps solely for purposes of clarification? How do arrows or concentric circles help us to visualize movement across space? Can those graphics be drawn differently to imply benefit or menace?
- Can colour on a map create an emotional impact? What do you associate with countries coloured red? If a country coloured white is surrounded by countries coloured black, does the colour distinction carry any emotional impact?
- Why include pictures on a map? What non-geographical ideas are being conveyed?

**Links to Other Areas of TOK**

Apart from obvious connections with symbolism, this lesson can raise discussions of value judgments, contrasting conceptual schemes around the world, the legacy of history in our knowledge of today, and the association of knowledge with power.
From Other Times and Places

An examination of our maps of the world is an examination of our conceptions of the world and our place in it; this lesson should bring out shifting perspectives. In considering the way maps can be conceptual tools—or tools of power—it is fruitful to bring in whatever history seems relevant to the particular group of students. For example, you could consider association of the Mercator projection with European imperialism, ways in which European powers influenced reality by drawing from afar borders in Africa, why the Kenya / Tanzania border is diverted around Kilimanjaro, map-based land claims which exclude aboriginal concepts of land as something which cannot be owned, maps which play for sympathy for an encircled country (for example, Israel in the Arab world), or the use of maps in combination with technology to fix a wartime target without face-to-face contact with the enemy.

Quotation

The map is not the territory. Alfred Korzybski

References


Peters equal-area projection wall map available from the Friendship Press, P.O. Box 37844, Cincinnati, Ohio 45222, USA
Student Handout

Map Knowledge
So how do we know the earth is round? We know the earth is round because (almost) everybody says it's round, because in geography class our teachers tell us it is round, because it is round on map after map... Ultimately, the map presents us with the reality we know as differentiated from the reality we see and hear and feel. The map doesn't let us see anything, but it does let us know what others have seen or found out or discovered, others often living but more often dead, the things they learned piled up layer on top of layer so that to study even the simplest-looking map is to peer back through ages of cultural acquisition.


CARTOGRAPHY: KNOWLEDGE & POWER

Cartography, whatever other cultural significance may have been attached to it, was always a 'science of princes'. In the Islamic world, it was the caliphs in the period of classical Arab geography, the Sultans in the Ottoman Empire, and the Mogul emperors in India who are known to have patronised map-making and to have used maps for military, political, religious, and propaganda purposes. In ancient China, detailed terrestrial maps were likewise made expressly in accordance with the policies of the rulers of successive dynasties and served as bureaucratic and military tools and as spatial emblems of imperial destiny. In early modern Europe, from Italy to the Netherlands and from Scandinavia to Portugal, absolute monarchs and statesmen were everywhere aware of the value of maps in defence and warfare, in internal administration linked to the growth of centralised government, and as territorial propaganda in the legitimation of national identities... With national topographic surveys in Europe from the eighteenth century onwards, cartography's role in the transaction of power relation usually favoured social elites.


Eurocentrism, like Renaissance perspectives in painting, envisions the world from a single privileged point. It maps the world in a cartography that centralizes and augments Europe while literally 'belittling' Africa. The 'East' is divided into 'near', 'Middle', and 'Far', making Europe the arbiter of spatial evaluation, just as the establishment of Greenwich Mean Time produces England as the regulating center of temporal measurement. Eurocentrism bifurcates the world into the 'West and the Rest' and organizes everyday language into binaristic hierarchies implicitly flattering to Europe: our 'nations', their 'tribes'; our 'religions', their 'superstitions'; our 'culture', their 'folklore'; our 'art', their 'artifacts'; our 'demonstrations', their 'riots'; our 'defense', their 'terrorism'.


Map Knowledge
Maps made it easy for Euro- pean states to carve up Africa and other heathen lands, to lay claim to land and resources, and to ignore existing social and political structures... That maps drawn up by diplomats and generals became a political reality lends an unintended irony to the aphorism that 'the pen is mightier than the sword.'

Monmonier, How to Lie with Maps, Univ. of Chigago 1991.

Map Knowledge: A Pragmatic Approach
Aboriginal maps can only be properly read or understood by the initiated, since some of the information they contain is secret. This secrecy concerns the ways in which the map is linked to the whole body of knowledge that constitutes Aboriginal culture. For Aborigines, the acquisition of knowledge is a slow ritualized process of becoming initiated in the power-knowledge network, essentially a process open only to those who have passed through the earlier stages. By contrast, the Western knowledge system has the appearance of being open to all, in that nothing is secret...

In the light of these considerations we should perhaps recognize that all maps, and indeed all representations, can be related to experience and instead of rating them in terms of accuracy or scienticity we should consider only their 'workability'—how successful they are in achieving the aims for which they were drawn.

Lesson 10: Thinking Logically?

Context

This lesson can be done after a consideration of the nature of reasoning, or before looking at fallacies. It links into work on scientific methodology.

Aim

- To investigate the extent to which logical thinking is influenced by the subject matter.

Class Management

This lesson can be completed in 40 minutes, or longer if necessary.

In advance of the lesson, photocopy the two Logic Tests overleaf. You will need one copy of the two tests for each student. Students may be given the two problems at the same time (on the same sheet of paper), or one following the other.

Ask the students to work out and write down their answers without collaborating, and then to report them back to the whole class. Compile a list of votes for each card on the blackboard.

Overwhelmingly, students fail to identify the 7 as one of the correct responses in Logic Test 1. Explain to the class why 7 is correct (this card is capable of falsifying the rule) and why 2 is wrong (this card is irrelevant to the rule).

Students normally identify the correct answers for Logic Test 2.

Discussion can then proceed as to why, given that the two problems are formally identical, one is so much easier to solve correctly than the other. Reference can be made to the importance of form and content in logical reasoning, and how this may affect the building of knowledge.