Discussion Point 1, Chapter 4

According to traditional music theory, what is the mode of a musical scale?

Discussion Point 2, Chapter 4

What is the architecture of the network trained to identify scale mode? What does this architecture tell us about this task in comparison to the Chapter 3 task involving scale tonic?

Discussion Point 3, Chapter 4

What is a hidden unit space? Why might visualizing such a space help us interpret how a network solves the task that it was trained on?

Discussion Point 4, Chapter 4

How might inspecting the connection weights from input units to hidden units help us interpret how a network solves a particular problem?

Discussion Point 5, Chapter 4

What is tritone balance, and how does the network use it to identify the mode of an input scale? Why is 'balance' an important property for dealing with a value unit?

Discussion Point 6, Chapter 4

What is the logic of thinking about the relationships between musical scales in terms of geometry?

Discussion Point 7, Chapter 4

How do the detailed set of properties provided in Table 4-1 illustrate using geometry to make sense of how a network is solving a musical problem?

Discussion Point 8, Chapter 4

How can multidimensional scaling be used to generate a geometric understanding of how networks function?

Discussion Point 9, Chapter 4

What is important about the 'missing balanced tritone' for understanding how the network works? Why is this idea different from traditional formal accounts of music?

Discussion Point 10, Chapter 4

What is the relationship between more traditional geometric representations of scales, like the Tonnetz, and the geometric understanding of network function?