§ The Goals

1. To argue for the logical possibility of spectrum inversion.

2. To defend functionalism against the arguments from inverted spectrum.

3. To give a functionalistic analysis of qualia.

§ Qualia and Functionalism

"Qualia":
___ The qualitative or phenomenal features of sense-experience, in virtue of which they resemble and differ from each other, qualitatively, in the ways they do.

"Functionalism":
___ Mental states are definable in terms of their causal relations to sensory inputs, behavioral outputs, and other mental states.

* The Claim (made by others):
___ Qualia are not functionally definable, as seen from the possibility of qualia inversion. But qualia are real; thus, functionalism is insufficient.

§ Note: Block and Fodor's Arguments against Functionalism: (from Shoemaker, 'Functionalism and Qualia')

[A] The Inverted Qualia Argument
___ 1. It is possible that every person does, in fact, have slightly different qualia.
___ 2. If (1), then qualia inversion is also possible.
___ 3. But nothing would be a token of the type 'red sensation' unless it is a quale of red sensation.
___ 4. So in cases of qualia inversion, the two functionally identical states that are felt differently cannot be states of the same type.
___ 5. And yet, under functionalism, those two states would be of the same type.
___ 6. Therefore, functionalism is false.

[B] The Absent Qualia Argument
1. Under functionalism, it is possible that two functionally identical states do not share a given qualitative content.
2. If it is possible that two functionally identical states do not share a given qualitative content, then it is also possible that only one of them has a qualitative content.
3. But such a possibility (that a state can be functionally identical to a state having a qualitative character without itself having a qualitative content) is untenable.
4. Therefore, functionalism is untenable as well.

§ Back to Shoemaker: Intrasubjective Spectrum Inversion vs. Intersubjective Spectrum Inversion

"Intrasubjective Spectrum Inversion"
Imagine that there should be a systematic difference between the character of someone's color experience at a certain time and the character of that same person's color experience at another time.

[Question]: Is this logically possible?

"Intersubjective Spectrum Inversion"
Imagine that there should be systematic difference between the character of someone's color experience and the character of someone else's color experience; that one section of mankind could have one sensation of red and another section another.

[Question]: Is this logically possible?

* Shoemaker's Claim:
If intrasubjective spectrum inversion is logically possible, then so is intersubjective spectrum inversion.

§ From Inverted Spectrum to Other Minds

[Question]:
If we grant the logical possibility of spectrum inversion, are we then committed to skepticism of other minds?

[Shoemaker's answer]:
No.

§ The Frege-Schlick View vs. the Commonsense View
The Frege-Schlick View:
___ We can never compare the qualia of different people. It is even meaningless to talk about how your red quale is similar to mine since there is no way we can compare the two. Comparison of qualia is only possible for the subject herself. Therefore, qualitative similarity is only possible in the intrasubjective case.

The Commonsense View:
___ A visual experience of mine can be like a visual experience of yours in exactly the way it can be like another visual experience of mine, even though this intersubjective similarity differs from intrasubjective similarity in not being directly experienceable or rememberable by anyone.

§ Shoemaker: Functionalism + The Commonsense View

[A] Qualia must be sharable

1. The word 'qualia' is intended to refer to those features of sensory states in virtue of which they stand to one another in relationships of qualitative similarity and difference.

2. Qualia are properties, and therefore, universals.

3. Qualia can be shared by experiences of different persons in virtue of their being "realized" in other properties, presumably physical properties, that can be shared by experiences of different persons.

[B] Qualia are functionally definable in a sense.

1. The similarity and identity conditions of qualia are functionally definable.

2. Functional states and properties can be said to have physical "realizations." A physical state or property realizes a functional state or property in a particular creature if in the workings of that creature it plays the "causal role" definitive of that functional state or property.
3. Given the sense in which they are functionally definable, qualia too can be said to have physical realizations.

4. The physical properties that realize qualia will be properties that can be instantiated in different people.

5. Therefore, it is possible for the same qualia to be instantiated in different people.

* The implications of such a theory [functionalism + identity theory]:
  ___ 1. Qualia can only be shared among creatures of the same physical build-up (The color experiences of two different creatures will be qualitatively comparable only if those creatures are capable of having states having the same qualia).
  ___ 2. Martians, for example, can have the same mental states (functionally defined) that we do, but they cannot share our qualia or our experiences since their physical properties are different from ours.

§ Conclusion

1. We can discover similarities and differences between different creatures' qualia by looking at (empirical investigation) their physiological similarities and differences.

2. Qualia do not pose a problem for functionalism since differences in qualia can be traced to differences in the physiological states that realize the qualia.

3. Furthermore, even if qualia may not be identifiable singularly, a pair of qualia can be identified through their similarities and differences -- as long as the two creatures are sufficiently alike.

4. By and large, different members of our own species have color-quality spaces having the same structure. The existence of this uniformity can scarcely be a coincidence, and it calls out for an explanation in terms of our shared genetic endowment.

5. The shared genetic endowment can be explained in this way: We are all "wired" in such a way that the same environmental stimuli give rise to the same color qualia in our visual experiences.

6. For creatures who are sufficiently different, qualia cannot be compared.