(R) A Make-Shift Code (1/1)

R1.a. UFO
R1.b. USA
Explanation: This sentence has two possible parses--either SSSSSRRRSSSRRRR (UFO) or SSSSSRRSSSRRRRR (USA)--due to prepositional phrase attachment ambiguity.

R2.a. Egypt
R2.b. China
Explanation: This sentence has two possible parses--either SSRSSSSSRSSRRRSSRSSRRRRR (CHINA) or SSSRRSSSSRSRRSRRRSSRSSRRR (EGYPT)--due to ambiguity in the parts of speech of individual words. The two possible parse could be paraphrased as "The saw (cutting tool) that was made out of glass and that was felt by the really soft orange (fruit) really heard the giraffe" and "The (drinking) glass saw (observed) that the really soft, orange-colored felt (fabric) really heard the giraffe."

R3.a. Quito
R3.b. There are multiple possible reasons why the cities other than Quito wouldn't work; providing any of the answers is fine. Here are the specific problems with the other cities:
- All five of them would require an R before there have been two S's, which is impossible (Fez and Perth start with R, but you cannot reduce without anything on the stack; and Ottawa, Oslo, and Irkutsk start with SR, but you cannot reduce with only one thing on the stack).
- For the sequence of S's and R's to work, the number of S's must be exactly one more than the number of R's. This is not true for any of the five cities.
- Ottawa and Oslo have an even number of letters, which is impossible in this code.
- Fez, Irkutsk, and Perth end with a S, which is impossible.

R3.c. Some possible sentences:
- the giraffe here heard the really really really soft orange glass saw extraordinaire
- the giraffe here heard the really really really glass soft orange spots extraordinaire