Programming Languages: Principles and Paradigms
11.3, 11.4, 11.5, *11.6 (extra credit)

3.

1. Index out of range
2. Heap overflow
3. Stack overflow

4.
What he seems to be describing is all included within meaning rule 11.2. Am I missing something about the question?

5.
1. ... in the case of an array, add the three undefined dope vector fields to the activation record.
2. ... in the case of an array, perform meaning rule 11.1. Assign the array's address to new(array.size), assign the array's size to array.size, and assign the array's type to array.type
4. ... in the case of an array, also perform delete(array.address, array.size-1) before popping AR from the stack

6.
If an array were stored within the stack, a dope vector would still be used. The meaning of an array would still be the list of values beginning at array.address and ending at array.size-1. However, the pointers in that dope vector would have to be changed every time the stack is expanded, or, more simply, they would have to be relative to the beginning of the current activation record.