Practice with basic OT formalism

These exercises are excerpted from McCarthy (1999). Copyright information is given at the end of the handout.

I. Which of the following tableaux, if any, provides a valid argument that B >> C?

(1)

/in/	B	C
a. ☞ out1	*	
b. out2	*	*

(2)

/in/	B	C
a. ☞ out1		
b. out2	*	*

(3)

/in/	B	C
a. ☞ out1		*
b. out2	*	*

(4)

/in/	B	C
a. ☞ out1	**********	*******
b. out2	***********	******

(5)

/in/	B	C
a. ☞ out1		
b. out2		*

(6)

/in/	A	B	C
a. ☞ out1			*
b. out2	*	*	

(7)

/in/	A	B	C
a. ☞ out1	*		*
b. out2	*	*	

(8)

/in/	B	C	A
a. ☞ out1		*	
b. out2	*		*

(9)   How would you add shading to the tableaux above?

II. Strategies in OT phonology

(10)   You're halfway through working on a problem. You've come up with the following tableau:

/in/	A	B
a. ☞ out1		*
b. out2		*

What does your analysis need?

(11)   A particular input *in* has exactly three candidates associated with it: *out1, out2, out3*. UG contains exactly three constraints: *A, B, C.* Suppose after analyzing other examples, you come up with the following tableau in language L1:

/in/	A	B	C
a. ☞ out1			*
b. out2	*	*	
c. out3		*	*

So L1 has the mapping /in/ → *out1*.
Do you predict that there will be a language L2 with the mapping /in/ → *out2*?
Do you predict that there will be a language L3 with the mapping /in/ → *out3*?
If either of your predictions turned out to be false, how would you improve the theory?