The point is that covariant derivative (or parallel transport, or connection) is not uniquely defined.

Everyone is free to define its own covariant derivative $\nabla \boldsymbol{T}$ of a tensor $\boldsymbol{T}$ as he wants, provided that definition satisfies the formal properties of derivative, listed in chapter 14.3:

a) $\nabla(\boldsymbol{T}+\boldsymbol{U})=\nabla \boldsymbol{T}+\nabla \boldsymbol{U}$ additivity
b) $\nabla(\boldsymbol{T}\cdot\boldsymbol{U})=(\nabla \boldsymbol{T})\cdot\boldsymbol{U}+\boldsymbol{T}\cdot(\nabla \boldsymbol{U})$ Leibniz's rule
c) $\nabla \boldsymbol{\Phi}=\frac{\partial \Phi}{\partial x^a}$ when $\boldsymbol{\Phi}$ is a scalar

For instance I can define my own "Roberto's derivative" for a vector and a covector according to the following definitions:

$$\overset{R}{\nabla}\boldsymbol{T}=\overset{R}{\nabla}_{\boldsymbol{b}}T^a=\frac{\partial T^a}{\partial x^b}+R^a_{bc}T^c$$

$$\overset{R}{\nabla}\boldsymbol{U}=\overset{R}{\nabla}_{\boldsymbol{b}}U_a=\frac{\partial U_a}{\partial x^b}-R^c_{ba}U_c$$

where R^a_{bc} is my favourite three-indices smooth function of the point. This satisfies a) for vectors:

$$\overset{R}{\nabla}(\boldsymbol{T}+\boldsymbol{U})=\frac{\partial(T^a+U^a)}{\partial x^b}+R^a_{bc}(T^c+U^c)=(\frac{\partial T^a}{\partial x^b}+R^a_{bc}T^c)+(\frac{\partial U^a}{\partial x^b}+R^a_{bc}U^c)=\overset{R}{\nabla}\boldsymbol{T}+\overset{R}{\nabla}\boldsymbol{U}$$

and same for covectors. It satisfies also b):

$$(\overset{R}{\nabla}\boldsymbol{T})\cdot\boldsymbol{U}+\boldsymbol{T}\cdot(\overset{R}{\nabla}\boldsymbol{U})=(\frac{\partial T^a}{\partial x^b}+R^a_{bc}T^c)U_a+T^a(\frac{\partial U_a}{\partial x^b}-R^c_{ba}U_c)=$$

$$=(\frac{\partial T^a}{\partial x^b}U_a+T^a\frac{\partial U_a}{\partial x^b})+(R^a_{bc}T^cU_a-T^aR^c_{ba}U_c)=(\frac{\partial(T^aU_a)}{\partial x^b})+0=\overset{R}{\nabla}(\boldsymbol{T}\cdot\boldsymbol{U})$$

Using Leibniz rule (b) one could then extend the definition to any tensor.

You can select your favourite three-indices smooth function of the point D^a_{bc} and define your own "DimBulb's derivative":

$$\overset{D}{\nabla}\boldsymbol{T}=\overset{D}{\nabla}_{\boldsymbol{b}}T^a=\frac{\partial T^a}{\partial x^b}+D^a_{bc}T^c$$

$$\overset{D}{\nabla}\boldsymbol{U}=\overset{D}{\nabla}_{\boldsymbol{b}}U_a=\frac{\partial U_a}{\partial x^b}-D^c_{ba}U_c$$

that is as good as mine.

Note that the difference between my and your derivative is

$$\overset{R}{\nabla}\boldsymbol{T}-\overset{D}{\nabla}\boldsymbol{T}=(R^a_{bc}-D^a_{bc})T^c=\Gamma^a_{bc}T^c$$

Exercise 14.5, first part, asks to proof that the difference between **any two possible definitions** of covariant derivative of a vector **T** has this form $\Gamma^a_{bc}T^c$.