$$\frac{d}{dt_j} R(t,s)$$

$$\frac{d}{dt_j} R(t,s) = \frac{d}{dt_j} E\left[(X(t)-\mu)(X(s)-\mu)\right]$$

$$= E\left[X_j'(t)\,(X(s)-\mu)\right]$$

at $t=0$ get

$$E\left[X_j'(0)\,(X(s)-\mu)\right]$$

so cov(

$$\text{cov}\left(X_j'(0), X(t)\right) = E\left[X_j'(0)\,(X(t)-\mu)\right]$$

$$= E\left[\left(\frac{d}{ds} X_j(s)\Big|_{s=0}\right)(X(t)-\mu)\right]$$

$$E\left[X_j'(t)\,(X(s)-\mu)\right]$$