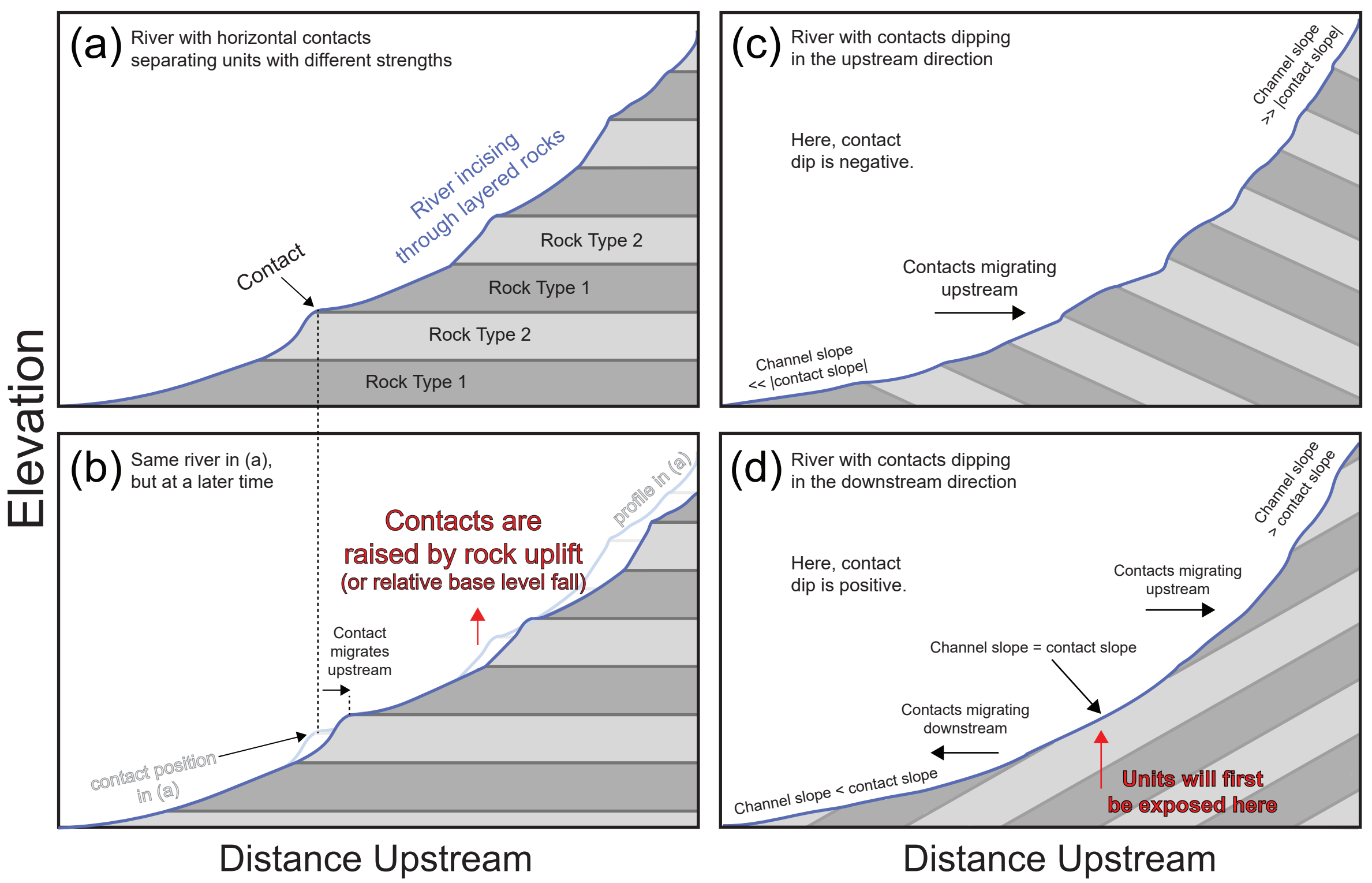
(a)
River with horizontal contacts
separating units with different strengths
River incising
through layered rocks
Contact
Rock Type 2
Rock Type 1
Rock Type 2
Rock Type 1
(b)
Same river in (a),
but at a later time
Contacts are
raised by rock uplift
(or relative base level fall)
profile in (a)
Contact
migrates
upstream
contact position
in (a)
(c)
River with contacts dipping
in the upstream direction
Here, contact
dip is negative.
Channel slope
>> |contact slope|
Contacts migrating
upstream
Channel slope
<< |contact slope|
(d)
River with contacts dipping
in the downstream direction
Here, contact
dip is positive.
Channel slope
> contact slope
Contacts migrating
upstream
Channel slope = contact slope
Contacts migrating
downstream
Channel slope < contact slope
Units will first
be exposed here
Elevation
Distance Upstream
Distance Upstream