CLAIMS

1. A method of coding a current block of video data, the method comprising:

obtaining a parameter value that is based on one or more corresponding parameter values associated with one or more neighbor blocks of the video data positioned within a spatio-temporal neighborhood of the current block, wherein the spatio-temporal neighborhood includes one or more spatial neighbor blocks that are positioned adjacent to the current block and a temporal neighbor block that is pointed to by a disparity vector (DV) associated with the current block, and wherein the obtained parameter value is used to modify residual data associated with the current block in a coding process; and

coding the current block of the video data based on the obtained parameter value.

2. The method of claim 1, wherein the obtained parameter value comprises a quantization parameter (QP) value, and wherein coding the current block based on the obtained parameter value comprises decoding the current block at least in part by dequantizing samples of the current block using the QP value.

3. The method of claim 2, wherein obtaining the QP value comprises:

receiving, in an encoded video bitstream, a delta quantization parameter (QP) value;

obtaining a reference QP value for samples of the current block based on samples of the spatio-temporal neighborhood; and

adding the delta QP value to the reference QP value to derive the QP value for dequantizing the samples of the current block.

4. The method of claim 1, wherein the obtained parameter value comprises a scaling parameter value, and wherein coding the current block based on the obtained parameter value comprises decoding the current block at least in part by inverse scaling transform coefficients of the current block using the scaling parameter value.

5. The method of claim 4, wherein inverse scaling the transform coefficients of the current block comprises:

applying a first inverse scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block to obtain a plurality of inverse-scaled DC transform coefficients; and

applying a second inverse scaling derivation process to the plurality of inverse-scaled DC transform coefficients of the transform coefficients of the current block to obtain a plurality of inverse-scaled AC transform coefficients.

6. The method of claim 1, wherein obtaining the parameter value comprises obtaining a quantization parameter (QP) value, comprising:

selecting neighbor QP values associated with samples of two or more of the spatial neighbor blocks or the temporal neighbor block;

averaging the selected neighbor QP values to obtain an average QP value; and

deriving the QP value for the current block from the average QP value,

wherein coding the current block based on the obtained parameter value comprises encoding the current block at least in part by quantizing the current block using the QP value.

7. The method of claim 6, further comprising:

obtaining a reference QP value for samples of the current block based on samples of the spatio-temporal neighborhood;

subtracting the reference QP value from the QP value to derive a delta quantization parameter (QP) value for the samples of the current block; and

signaling, in an encoded video bitstream, the delta QP value.

8. The method of claim 1, wherein the obtained parameter value comprises a scaling parameter value, and wherein coding the current block based on the obtained parameter value comprises encoding the current block at least in part by scaling transform coefficients of the current block using the scaling parameter value.

9. The method of claim 8, wherein scaling the transform coefficients of the current block comprises:

applying a first scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block; and

applying a second scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block.

10. The method of claim 1, wherein the obtained parameter value comprises a global parameter value that is applicable to all blocks of a slice that includes the current block.

11. A device for coding video data, the device comprising:

a memory configured to store video data including a current block; and

processing circuitry in communication with the memory, the processing circuitry being configured to:

obtain a parameter value that is based on one or more corresponding parameter values associated with one or more neighbor blocks of the video data stored to the memory, the one or more neighbor blocks being positioned within a spatio-temporal neighborhood of the current block, wherein the spatio-temporal neighborhood includes one or more spatial neighbor blocks that are positioned adjacent to the current block and a temporal neighbor block that is pointed to by a disparity vector (DV) associated with the current block, and wherein the obtained parameter value is used to modify residual data associated with the current block in a coding process; and

code the current block of the video data stored to the memory.

12. The device of claim 11, wherein the obtained parameter value comprises a quantization parameter (QP) value, and wherein to code the current block based on the obtained parameter value, the processing circuitry is configured to decode the current block at least in part by dequantizing samples of the current block using the QP value.

13. The device of claim 12, wherein to obtain the QP value, the processing circuitry is configured to:

receive, in an encoded video bitstream, a delta quantization parameter (QP) value;

obtain a reference QP value for samples of the current block based on samples of the spatio-temporal neighborhood; and

add the delta QP value to the reference QP value to derive the QP value for dequantizing the samples of the current block.

14. The device of claim 11, wherein the obtained parameter value comprises a scaling parameter value, and wherein to code the current block based on the obtained parameter value, the processing circuitry is configured to decode the current block at least in part by inverse scaling transform coefficients of the current block using the scaling parameter value.

15. The device of claim 14, wherein to inverse scale the transform coefficients of the current block, the processing circuitry is configured to:

apply a first inverse scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block to obtain a plurality of inverse-scaled DC transform coefficients; and

apply a second inverse scaling derivation process to the plurality of inverse-scaled DC transform coefficients of the transform coefficients of the current block to obtain a plurality of inverse-scaled AC transform coefficients.

16. The device of claim 11,

wherein the parameter value comprises a quantization parameter (QP) value,

wherein to obtain the QP value, the processing circuitry is configured to:

select neighbor QP values associated with samples of two or more of the spatial neighbor blocks or the temporal neighbor block;

average the selected neighbor QP values to obtain an average QP value; and

derive the QP value for the current block from the average QP value, and

wherein to code the current block based on the obtained parameter value, the processing circuitry is configured to encode the current block at least in part by quantizing the current block using the QP value.

17. The device of claim 16, wherein the processing circuitry is further configured to:

obtain a reference QP value for samples of the current block based on samples of the spatio-temporal neighborhood;

subtract the reference QP value from the QP value to derive a delta quantization parameter (QP) value for the samples of the current block; and

signal, in an encoded video bitstream, the delta QP value.

18. The device of claim 11, wherein the obtained parameter value comprises a scaling parameter value, and wherein to code the current block based on the obtained parameter value, the processing circuitry is configured to encode the current block at least in part by scaling transform coefficients of the current block using the scaling parameter value.

19. The device of claim 18, wherein to scale the transform coefficients of the current block, the processing circuitry is configured to:

apply a first scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block; and

apply a second scaling derivation process to a plurality of DC transform coefficients of the transform coefficients of the current block.

~~20. The device of claim 11, wherein the obtained parameter value comprises a global parameter value that is applicable to all blocks of a slice that includes the current block.~~

~~21. An apparatus for coding video data, the apparatus comprising:~~

~~means for obtaining a parameter value that is based on one or more corresponding parameter values associated with one or more neighbor blocks of the video data positioned within a spatio-temporal neighborhood of a current block of the video data, wherein the spatio-temporal neighborhood includes one or more spatial neighbor blocks that are positioned adjacent to the current block and a temporal neighbor block that is pointed to by a disparity vector (DV) associated with the current block, and wherein the obtained parameter value is used to modify residual data associated with the current block in a coding process; and~~

~~means for coding the current block of the video data based on the obtained parameter value.~~

~~22. A non-transitory computer-readable storage medium encoded with instructions that, when executed, cause processing circuitry of a video coding device to:~~

~~obtain a parameter value that is based on one or more corresponding parameter values associated with one or more neighbor blocks of the video data positioned within a spatio-temporal neighborhood of a current block of the video data, wherein the spatio-temporal neighborhood includes one or more spatial neighbor blocks that are positioned adjacent to the current block and a temporal neighbor block that is pointed to by a disparity vector (DV) associated with the current block, and wherein the obtained parameter value is used to modify residual data associated with the current block in a coding process; and~~

~~code the current block of the video data based on the obtained parameter value.~~

1. An invention not claimed in any divisional application.