WHAT IS CLAIMED IS:

1. A decoder configured to:

receive a bitstream comprising a reference picture, a current picture having a resolution different from the reference picture and including a first block and a second block, a signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled, and information including an index to a set of predetermined values useful for determining a scaling constant, wherein the scaling constant is one of a vertical scaling constant and a horizontal scaling constant;

determine a scaling constant using the information in the bitstream including the index;

determine a scaled prediction block by scaling a prediction block of the reference picture using the scaling constant and by applying a filter determined specifically for the prediction block and not determined for the whole reference picture;

utilize the scaled prediction block to reconstruct the first block; and

reconstruct the second block without using a scaled prediction block of a reference picture.

2. The decoder of claim 1, wherein the signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled is signaled in a sequence parameter set in the bitstream.

3. A decoder configured to:

receive a bitstream including information for determining a scaling constant, a signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled, a coded reference picture having a first resolution, and a coded current picture having a second resolution different than the first resolution and including a coded first block and a coded second block;

when the signal indicates that the mode when a reference picture and a current picture have different resolutions is enabled:

determine, using the information in the bitstream, a scaling constant associated with the first block of the current picture, the scaling constant being one of a vertical scaling constant and a horizontal scaling constant;

determine a scaled prediction block by altering the resolution of a block of the reference picture using the scaling constant and using a resolution changing filter determined individually for the block of the reference picture and not determined for the whole reference picture;

reconstruct pixel data of the first block using the scaled prediction block; and

reconstruct the second block without using a scaled prediction block of a reference picture.

4. The decoder of claim 3, wherein, the first resolution is higher than the second resolution and the resolution changing filter is a downsampling filter.

5. The decoder of claim 3, wherein the first resolution is lower than the second resolution and the resolution changing filter is an upsampling filter.

6. The decoder of claim 4, wherein the information includes an index to a set of predetermined values.

7. The decoder of claim 5, wherein the information includes an index to a set of predetermined values.

8. The decoder of claim 3, wherein the signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled is signaled in a sequence parameter set in the bitstream.

9. A decoder configured to:

receive a bit stream including information for determining a scaling constant, a signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled, a current coded picture comprising a first plurality of coded blocks and a second plurality of coded blocks;

when the mode is enabled, decode each of the blocks of the first plurality by:

determine a scaling constant using information in the bitstream, the scaling constant being one of a vertical scaling constant and a horizontal scaling constant;

determine, from a reference picture having a different resolution than the current picture, a scaled prediction block by scaling a prediction block from the reference picture using the scaling constant and by applying a filter determined individually for the prediction block; and

decode each block of the first plurality using its scaled prediction block; and

when the mode is enabled, decode each of the blocks of the second plurality without scaling a prediction block of a reference picture and without applying a resolution changing filter specifically determined for a block of a reference picture.

10. The decoder of claim 9, wherein the signal indicating that a mode when a reference picture and a current picture have different resolutions is enabled is signaled in a sequence parameter set in the bitstream.