WHAT IS CLAIMED IS:

1. A method of video processing, comprising:

performing a conversion between a video comprising one or more pictures comprising one or more subpictures comprising one or more slices and a bitstream of the video according to a rule,

wherein the bitstream includes a number of coded units, and

wherein the rule specifies that a decoding order of coded units within a subpicture is in an increasing order of values of slice_address syntax elements in slice headers that specify slice addresses of slices corresponding to the coded units,

wherein when a slice mode is a rectangular slice mode, a value of a slice_address syntax element in a slice header is equal to a subpicture-level slice index, and

wherein the subpicture-level slice index specifies an index of a slice to a list of slices in a subpicture in an order as they are signaled in a picture parameter set.

2. The method of claim 1, wherein the coded units correspond to video coded layer (VCL) network abstraction layer (NAL) units.

3. The method of claim 1 or 2, wherein a value of a slice_subpic_id parameter is inferred upon a determination that the bitstream excludes the slice_subpic_id parameter, and

wherein the slice_subpic_id parameter specifies a subpicture identification (ID) of the subpicture that contains the slice.

4. The method of claim 3, wherein the value of the slice_subpic_id parameter is inferred to be equal to 0 upon the determination.

5. The method of any one of claims 1-4, wherein subpicture ID values of subpictures comprising the number of the coded units monotonically increase with subpicture index values of subpictures comprising the number of the coded units.

6. The method of any one of claims 1-5, wherein the decoding order of coded units within a picture including a first slice network abstraction layer (NAL) unit and a second slice NAL unit is specified such that the first slice NAL unit precedes the second

slice NAL unit in a case that i) a subpicture index value of the first slice NAL unit is less than a subpicture index value of the second slice NAL unit, or ii) the subpicture index value of the first slice NAL unit is equal to the subpicture index value of the second slice NAL unit and a value of the slice_address syntax element of the first slice NAL unit is less than a value of the slice_address syntax element of the second slice NAL unit.

7. The method of any one of claims 1-6, wherein the conversion includes encoding the video into the bitstream.

8. The method of any one of claims 1-6, wherein the conversion includes decoding the video from the bitstream.

9. An apparatus for processing video data comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to:

perform a conversion between a video comprising one or more pictures comprising one or more subpictures comprising one or more slices and a bitstream of the video according to a rule,

wherein the bitstream includes a number of coded units, and

wherein the rule specifies that a decoding order of coded units within a subpicture is in an increasing order of values of slice_address syntax elements in slice headers that specify slice addresses of slices corresponding to the coded units,

wherein when a slice mode is a rectangular slice mode, a value of a slice_address syntax element in a slice header is equal to a subpicture-level slice index, and

wherein the subpicture-level slice index specifies an index of a slice to a list of slices in a subpicture in an order as they are signaled in a picture parameter set.

10. The apparatus of claim 9, wherein the coded units correspond to video coded layer (VCL) network abstraction layer (NAL) units.

11. The apparatus of claims 9 or 10, wherein the decoding order of coded units within a picture including a first slice network abstraction layer (NAL) unit and a second slice NAL unit is specified such that the first slice NAL unit precedes the second slice NAL

unit in a case that i) a subpicture index value of the first slice NAL unit is less than a subpicture index value of the second slice NAL unit, or ii) the subpicture index value of the first slice NAL unit is equal to the subpicture index value of the second slice NAL unit and a value of the slice_address syntax element of the first slice NAL unit is less than a value of the slice_address syntax element of the second slice NAL unit.

12. A non-transitory computer-readable storage medium storing instructions that cause a processor to:

perform a conversion between a video comprising one or more pictures comprising one or more subpictures comprising one or more slices and a bitstream of the video according to a rule,

wherein the bitstream includes a number of coded units, and

wherein the rule specifies that a decoding order of coded units within a subpicture is in an increasing order of values of slice_address syntax elements in slice headers that specify slice addresses of slices corresponding to the coded units,

wherein when a slice mode is a rectangular slice mode, a value of a slice_address syntax element in a slice header is equal to a subpicture-level slice index, and

wherein the subpicture-level slice index specifies an index of a slice to a list of slices in a subpicture in an order as they are signaled in a picture parameter set.

13. The non-transitory computer-readable storage medium of claim 12, wherein the decoding order of coded units within a picture including a first slice network abstraction layer (NAL) unit and a second slice NAL unit is specified such that the first slice NAL unit precedes the second slice NAL unit in a case that i) a subpicture index value of the first slice NAL unit is less than a subpicture index value of the second slice NAL unit, or ii) the subpicture index value of the first slice NAL unit is equal to the subpicture index value of the second slice NAL unit and a value of the slice_address syntax element of the first slice NAL unit is less than a value of the slice_address syntax element of the second slice NAL unit.

14. A non-transitory computer-readable recording medium storing a bitstream of a video which is generated by a method performed by a video processing apparatus, wherein the method comprises:

generating the bitstream of the video comprising one or more pictures comprising

one or more subpictures comprising one or more slices according to a rule,

wherein the bitstream includes a number of coded units, and

wherein the rule specifies that a decoding order of coded units within a subpicture is in an increasing order of values of slice_address syntax elements in slice headers that specify slice addresses of slices corresponding to the coded units,

wherein when a slice mode is a rectangular slice mode, a value of a slice_address syntax element in a slice header is equal to a subpicture-level slice index, and

wherein the subpicture-level slice index specifies an index of a slice to a list of slices in a subpicture in an order as they are signaled in a picture parameter set.

15. The non-transitory computer-readable recording medium of claim 14, wherein the decoding order of coded units within a picture including a first slice network abstraction layer (NAL) unit and a second slice NAL unit is specified such that the first slice NAL unit precedes the second slice NAL unit in a case that i) a subpicture index value of the first slice NAL unit is less than a subpicture index value of the second slice NAL unit, or ii) the subpicture index value of the first slice NAL unit is equal to the subpicture index value of the second slice NAL unit and a value of the slice_address syntax element of the first slice NAL unit is less than a value of the slice_address syntax element of the second slice NAL unit.