Michael Kimber 12 N. Mount Vernon Drive Iowa City, IA 52245-3707

May 2014

Dear Violinist, Violist, or Cellist:

I'm planning to write a short book tentatively entitled *Understanding Intonation*. It will include some musical examples that may—or may not—enable you to experience some subtle pitch differences of the "same" note in different contexts.

In order to test the validity and effectiveness of the musical examples, I am surveying a number of professional and advanced student string players who are accomplished musicians.

I hope you might be willing to participate. I also invite you to pass this survey on to other accomplished violinists, violists, or cellists; the more participants, the more meaningful the survey.

To participate, simply play the examples on one of the following pages several times, *without vibrato*, answer the questions about what you hear, and send your answers to me at mkimber@centurylink.net. You may send your answers in the body of an e-mail or as an attachment.

After receiving your answers, I will write back to you with an explanation of what the examples are designed to illustrate. I will be interested to know how well or poorly they succeed in doing this. I will also let you know how consistently your results agree with expectations.

Please do not attempt to play or report what you think you "should" hear; simply report on the basis of what really sounds in tune to you. I fully expect that results will vary somewhat from player to player; it is overall patterns that interest me, not individual results.

You have my assurance that you will not be graded on your answers, nor will your identity as a participant in this survey be revealed (unless you tell me that you would be happy to see your name in print in the Acknowledgements).

Thank you.

Michael Kimber

Michael Kimlin

INTONATION SURVEY

(violin or viola)

Play each example several times, without vibrato, answer the questions, and return your answers to Michael Kimber at mkimber@centurylink.net. Thank you.

EXAMPLE 1

Tune your open strings carefully; then tune the E perfectly to each open string in this example.



- 1a) Did you have to adjust the pitch of E from one measure to the next to be perfectly in tune?
- 1b) If the two E's were different, which E was higher—the first or the second?
- 1c) If the two differed, which more closely matches the E you usually play in a scale (without double stops)?
- 1d) Does your tuning of E depend on the key of the scale, or is it reasonably consistent?

EXAMPLE 2



- 2a) Did you need to adjust the pitch of B to make it sound in tune as a double stop with open D?
- 2b) If so, did you have to raise the pitch or lower it?
- 2c) Did you need to adjust the pitch of C flat to make it sound in tune as a double stop with open D?
- 2d) If so, did you have to raise the pitch or lower it?
- 2e) Did you find B and C flat to be fairly consistently identical in pitch to each other, or different?
- 2f) If different, which note was generally higher?

EXAMPLE 3



- 3a) Did you need to adjust the pitch of F sharp to make it sound in tune as a double stop with open D?
- 3b) If so, did you have to raise the pitch or lower it?
- 3c) Did you need to adjust the pitch of G flat to make it sound in tune as a double stop with open D?
- 3d) If so, did you have to raise the pitch or lower it?
- 3e) Did you find F sharp and G flat to be fairly consistently identical in pitch to each other, or different?
- 3f) If different, which note was generally higher?

INTONATION SURVEY

(cello)

Play each example several times, without vibrato, answer the questions, and return your answers to Michael Kimber at mkimber@centurylink.net. Thank you.

EXAMPLE 1

Tune your open strings carefully; then tune the E perfectly to each open string in this example.



- 1a) Did you have to adjust the pitch of E from one measure to the next to be perfectly in tune?
- 1b) If the two E's were different, which E was higher—the first or the second?
- 1c) If the two differed, which more closely matches the E you usually play in a scale (without double stops)?
- 1d) Does your tuning of E depend on the key of the scale, or is it reasonably consistent?

EXAMPLE 2



- 2a) Did you need to adjust the pitch of B to make it sound in tune as a double stop with open D?
- 2b) If so, did you have to raise the pitch or lower it?
- 2c) Did you need to adjust the pitch of C flat to make it sound in tune as a double stop with open D?
- 2d) If so, did you have to raise the pitch or lower it?
- 2e) Did you find B and C flat to be fairly consistently identical in pitch to each other, or different?
- 2f) If different, which note was generally higher?

EXAMPLE 3



- 3a) Did you need to adjust the pitch of F sharp to make it sound in tune as a double stop with open D?
- 3b) If so, did you have to raise the pitch or lower it?
- 3c) Did you need to adjust the pitch of G flat to make it sound in tune as a double stop with open D?
- 3d) If so, did you have to raise the pitch or lower it?
- 3e) Did you find F sharp and G flat to be fairly consistently identical in pitch to each other, or different?
- 3f) If different, which note was generally higher?