

**Transcription of interview with Professor Willis Bodine
and Dana Hill, host of *Magnum Opus* on WUFT-FM -- March 26, 2025**

DH I want to start by asking you: how is it that we are still so drawn to this composer, whose works continually surprise us, centuries later?

WB Oh, we could have a seminar on this for the whole semester. Bach's music is essentially at the nexus of Western classical music. Before Bach, music was thought of very horizontally. And then composers began to combine lines against lines, and they called it "counterpoint." And around the time of Bach, musicians began to think of music vertically also. And so, they would think about how several notes sounded together and they call it a chord, and we categorize that as "harmony." So, music up until Bach was more contrapuntal and music after Bach was more harmonic. That's the 101 version of why Bach is so important to us.

DH In Bach -- and you'll know this -- he's somebody who, if you listen for 5-10 bars, something will surprise you. He's gonna do something a little bit unexpected.

WB Yeah.

DH This is endlessly fascinating to me. It makes Bach's music always interesting.

WB Well, he has a characteristic style that is instantly recognizable. If -- if (I happen to be sitting in front of a grand piano, by some good fortune) -- so, if I played [*plays "Jesu, Joy* from Cantata 147], you would say, Oh yes, that's the such-and-such movement out of such-and-such a cantata of Bach.

DH Yeah.

WB Or you might identify it as a popular song [*Joy*, 1971 song by Apollo], because it's been adapted and used in various ways by pop musicians in our own time.

DH With Bach -- we know Bach to have had several different periods in his life, in which he was focused primarily on a certain kind of writing.

WB They were his jobs. His first job was as a violinist. His next job was as a city organist or a parish organist, and then he got another violin job, and then it graduated to be a conductor. And then he went on to be a concertmaster in a court. Eventually he ended up as the city musician and musician for St Thomas Church in Leipzig. So, each time he was writing music he was writing it for a purpose, not just to please himself.

DH Later in his life he worked on this monumental piece, the Art of Fugue. Can you give us some background about that piece of music? What was it that prompted him to begin writing something like that?

WB Oh, Bach had published the first group of keyboard pieces, his partitas, in 1731, and then he published some more music for keyboard in 1735. So, he published the third group [*in 1739*] which is an organ group -- and I know it well -- I've played it a couple of times. By the 1740s he was 55 (that's

pretty old in mid-18th century) and he was starting to sum up his career. And so he wrote one more brilliant keyboard set, which is the “Goldberg” Variations [*in 1741*]. And then took up some notes out of a counterpoint exercise that he had put together for his oldest son, Wilhelm Friedemann, and he tried those notes [*plays d-minor triad outline*] and so his counterpoint exercise went on. But about five years later he apparently grew more interested in those notes and he put together a set of 12 fugues and numbered them one through 12 and set it aside [*Mss. P 200, Berlin Library*]. And then as he was really getting to the end of his life -- in 1747 he had visited Frederick the Great and that whole episode with the Musical Offering -- and then he was still summing up. He would put together the score for what we call the B-minor Mass, and he was then intent on publishing one more set of keyboard pieces. He did not call it *Clavier-Übung* because it would have been the 5th part and there had not been a 4th part. [*sounding professorial now*] But the 4th part couldn't be numbered 4 because 4 is not a prime number, and Bach did not use numbers that were not prime at critical locations like that. So, the “Goldberg” [*Variations, BWV 988*] is not “part 4” of the *Clavier-Übung*. But the Art of Fugue might have been “part 5.”

So, he then started in on revising, extending, and started publishing [*I'm giving my lecture for Friday, sort of, here*]. But his workroom must have been a mess, because he was also growing blind. He was growing infirm, and he continued. Of course he was an energetic guy, so he continued, and was putting all of these things together. He had published and gotten the proofs back from his printer for the first 11 or so fugues. And he'd put together [*Fugues*] 12 and 13 and then he was doing [*Fugue*] 14. Fourteen is a critical number for Bach [*and here I'm again professorial*]. B is 2, A is 1, C is 3, and H is 8. The sum of those numbers is 14. So, 14 is Bach's number. It's not a coincidence that $4 + 1$ is 5, and that's how many fingers you have on your left hand. You also have 5 fingers on your right hand, and so 55 is also important for Bach. So, he put together this. He began working on this 14th fugue for the Art of Fugue. He outlined the work, figured out where everything would go, figured out it would have 4 sections. The third section of the “Contrapunctus 14,” it was called, would have 55 measures. He would introduce the notes B-A-C-H in German. [*plays each note*] B. (B flat), so A., C., H. (that's B natural in our terminology).

Well, that's a rather weird group of notes, quite frankly [*plays again*]. It would have been a wonderful piece in the late 19th century because all sorts of composers could do wonderful things with that, and they did. But Bach was faced with it here, in the 55 measures of the third section of Contrapunctus 14 and 1849

DH ... in 1749.

WB In 1749 -- good for you.

DH I wonder if we maybe got a little bit ahead of ourselves and I wonder if you can explain for the audience what a fugue is.

WB A fugue is a work in which the composer starts with one tune, and then after a moment the same tune comes back in a different key. Specifically, it comes back in the dominant. Would you like to hear the beginning of a Bach fugue?

DH Please.

WB *[plays subject of organ fugue in B-minor, BWV 544b]* Now listen to what happens. *[continues with fugal answer and countersubject]* Yeah, what happened? The first voice came in with a tune and the second voice came in with the tune in the dominant key and so we're off and running. That's the fugue -- keeps on going . . .

DH And it will sometimes build layer upon layer of complexity.

WB We have more voices . . .

DH More voices . . .

WB It's actually two I've played. I only don't have any pedals, so I can't play the third entry, or the fourth entry.

DH With the Art of Fugue -- something that people who have heard of this might know -- is that he doesn't specify how it is to be played. There, each line is on its own staff. Right?

WB Exactly. It's in what we call open score.

DH So one might surmise that Bach could have imagined an organ playing this piece of music . . .

WB . . . or the harpsichord . . .

DH . . . and yet that is not always how it is presented. There's been many creative interpretations of the Art of Fugue because it can be different things.

WB And like most counterpoint, it's very malleable. It's usable by all sorts of instrumental and indeed vocal combinations. There's a terrific performance of one of the fugues from the Art of Fugue by The Swingle Singers -- I won't try to imitate that one for you -- *[laughter]*

DH And if somebody knows anything else about Art of Fugue is that it was not completed.

WB That's right.

DH Why?

WB Bach was growing infirm, as I said. He was blind. He had an operation on his eyes which failed, and he did not lose interest -- because there's a manuscript that sort of trails off at one point. But it's very clear that he was on his way toward finishing this magnificent quadruple fugue, a fugue on 4 subjects. The third subject and the third section would have been on his own name. Eventually the 4th subject would have been the Art of Fugue subject, which had been building up. The curious part is that this manuscript that I just spoke of *[Mss. P 200, Berlin Library]* was not recognized for 130 years as belonging to the Art of Fugue. It took a German musicologist, Gustav Nottebohm, to recognize that the Art of Fugue fit with this manuscript.

And so this manuscript -- which starts out with a very miscellaneous tune and then it's sort of a jiggly tune, and then the B.A.C.H. melody, and then it trails off -- it took this musicologist 130 years later to point out to everyone that, Oh, the Bach Art of Fugue subject, the main subject, will fit with this --

and here is the quadruple fugue. The quadruple fugue had been talked about in some of the documents. His obituary mentions it, but it was never completed.

DH And so that leads us to your presentation.

WB Well, what I've done -- I spoke about this in January during our on-campus Organ Centennial -- I've made a discovery which is jointly with the mathematical silo of information. And that is that Western classical composers have used the sequence of prime numbers to lay out their compositions, to decide what goes where, to arrange the number of notes, to plan things out. For six centuries nobody's ever known this. It's been completely concealed, and it surprises me that no one's ever figured this out. But here it is. That has enabled me to look at the manuscript -- the remaining portion, the 80% that Bach did finish -- and figure out what his plan was, because he was following the sequence of prime numbers. The number of notes in every subject is a prime number. The number of bars in every section is a prime number, and so forth and so forth.

DH I don't mean to sound skeptical . . . just for the sake of our audience right now who might be listening and thinking: how can this be? It almost seems too antiseptic, right, it's almost to think that, Oh, well, it's just numbers -- when you're talking about the work of real creative brilliance.

WB That's the marvelous thing about Bach's music -- and that of so many other composers -- that there are so many layers of understanding. There's the immediate hearing of this work. Then there's the emotional reaction to it. And then there's the repeated hearing, where you often hear more in the piece than you did the first time around. So, it's not a paint-by-numbers scheme, and I hasten to say, it's not like that. You can't go to the Walmart and find a plan to write music. At least not any good.

DH What would you say to somebody who might, you know, superficially know Bach and appreciate some of the melodies, like the melody from the cantata that you played earlier? What would you say to that person about Bach's music that might surprise them, and maybe point them in a new direction for appreciation?

WB I would probably suggest that they listen to some different kinds of Bach. We could think of a chorale [*plays first phrase of Jesu, meine Freude, BWV 358*] That's appropriate for Lent. But it's very solemn, and that's a completely different world from other things in Bach. It's very different from the "Jesu, joy of man's desiring" that I played. [*plays phrase from "Badinerie," B-minor Suite for Flute and Orchestra, BWV 1067*]

DH Right.

WB That's a completely different world. So, there are so many wonderful worlds of Bach's music alone. And of course we look to his predecessors: Buxtehude, Reincken -- we look to his followers, the two sons Wilhelm Friedemann and Carl Phillip Emmanuel -- we look to the composers who studied him closely, with Beethoven, Brahms who worshipped him, to contemporary composers who understand that his is the nexus (I was saying this earlier), is the point from which and really in some ways to which most of Western music returns.

DH I should have asked this earlier: Bach dies in 1750. Art of Fugue is left unfinished. Sometimes when you hear a recording of it, it just quits. After that, music doesn't sound like Bach anymore.

WB That was a profound change in musical styles around the middle of the 18th century. Bach's two sons considered him "old hat." It's surprising to me that they actually published the Art of Fugue, because this was completely different from what they were doing at the court of Frederick the Great. Music became more harmonic. It became simpler. It became . . . Mozart.

DH Right!

WB We can't argue with that, can't we?

DH We can't, but there becomes this kind of formality, a kind of a balance in the music that follows where you hear a phrase and you kind of know what the next phrase has to be . . .

WB Indeed.

DH . . . and with Bach -- I don't know it as well as you -- but if I were to hear a piece by Bach and I were to have not heard it ever before, and you played me a tune, I might not be able to predict where it's gonna go next -- because I know Bach is gonna do something that surprises me.

WB *[plays first notes of Musical Offering subject, C, E-flat, G, A-flat]* What do you think the next note is?

DH *[sings B-natural]*

WB Very good! You were awfully close. And then the next . . . *[plays the next chromatic phrase]*

DH Oh, OK. Yeah . . .

WB Yeah, and that's the piece that he wrote as a thank-you note to Frederick the Great for his visit in 1747.

DH There, you're talking about the Musical Offering.

WB The Musical Offering, yes.

DH There's no occasion I experience, or emotion I experience, that the music of Bach in some way cannot be a good companion.

WB Indeed. *[plays Aria from Goldberg Variations]* Is that beautiful?

DH . . . completely beautiful . . . the Aria from the Goldberg variations. And, even within that work there's tremendous variety. Even if the theme is the same . . . *[plays beginning of 1st variation]* Yeah, that grabs you immediately.

WB Immediately.

DH . . . and there'll be movements within their very specific variations that just take flight. But then there's solemn ones, and . . . and heartfelt ones at the same time and it is within his almost every

part of his output -- whether it's keyboard music -- whether it's the works for solo cello or violin -- whether it is the cantatas or - Oh, my gosh - the, you know, the bigger choral works like the passions or the B minor mass . . .

WB And yet, right at the end of the Goldberg Variations, here comes this tune. And the words to that are (I'm paraphrasing the German) "my mother drove me away because of her cabbage -- if she had cooked more meat, I would have stayed home." I'm paraphrasing, but that's as down-to-earth as you get.

DH Yeah.

WB And that's right after 30 magnificent variations.

DH So, I want to point folks to your presentation: where is it, and when?

WB On Friday, March 28th -- that's Friday of this week -- at 12:50 in the Music Building 101, which is the former band hall, now a recital hall in the School of Music. The School has a Creative Lecture Series, and I asked if I might be on that this Spring -- because it's the Organ Centennial, and it's also when I've sort of made this discovery, and I'm going a little further with it. So, Kevin Orr, the Director of the School, was kind enough to put me on the Creative Lecture Series. So, Friday, March 28th, at 12:50 in Room 101 of the Music Building, I will talk about this at perhaps greater length.

DH Well, Professor Bodine, it's been a real pleasure having you, and I appreciate you talking to me about the music of Bach.

WB My delight.