

This interview with Glenn Branca was conducted with Brian Bridges by telephone on Friday 18th April, 2003, and lasted approximately 1hr, 10 mins.

The following is an edited transcript.

GB: So you wanted to know how I got into the tuning stuff?

BB: Yeah, and what was the whole progression...One thing I was listening to today was Symphony No. 1 and I noticed...did I hear a just tuned fifth: were you beginning to throw in all sorts of tuning systems and then have them 'slug it out'...and then the whole harmonic series thing developed, or what was the real genesis?

GB: Well in the late seventies, I started doing a rock band, and then I wanted to do things with rock instruments that were a little more interesting to me than doing a rock band - it was an experimental band called Theoretical Girls and, ah, so I still had a lot of ideas about experimenting with guitars that weren't gonna work with the band, so I started working with, like, a number of guitars. I wrote my first piece called *Instrumental for Six Guitars* and, ah, at that point is when I started fooling around with tuning - well, that was just another one of the experiments that I was doing, and it worked out really well, this kind of octave tuning that I came up with, where all the strings were tuned to the same note, but in three octaves, and I found that there was a lot I could do especially [indistinct] clusters. And the sound of that particular piece was so interesting to me that I figured I needed to start developing that, and eventually I dropped the whole idea of the band and started just working on this whole guitar-type thing. I'm trying to get up to your question, here! Because, what happened was with Symphony No. 1 I was continuing the process of experimenting with different tunings, and for instance, in that piece I got into the idea of unison tunings that involved soprano, alto, tenor, baritone guitar, where I was actually not using one single tuning for every guitar, but using these tunings and creating guitar sections, much like an orchestra. And, to really answer your question, what happened in that piece was I also wanted to fool around -and that is the proper word to use at this point- with microtonal things, and so I had, in a couple of the movements, I had a couple of the guitar sections out of tune by about a quarter-tone, basically to see what would happen, and I'm saying if you heard a perfect [just] fifth there it was entirely accidental, if you see what I'm getting at, because I was just trying ideas out; I hadn't discovered the harmonic series at that point. But I did want to try some ideas, so I basically had these 'unison-tuned' guitars, meaning that there were six strings all tuned to the exact same note, except the sopranos would be, like, a quarter tone lower or higher than the altos, and they would be a quarter tone off from the tenors. So I was getting what I thought of at the time as a unison cluster, because I was very interested in working with clusters, but here was a potential for me to get a cluster that was an even smaller interval than your regular half-step. So that was strictly a matter of experimentation and basically I was working with that same type of experimentation in Symphony No. 2 except in that case I wanted to hear more open strings and I actually built some dulcimer-like instruments that allowed me to hear lots

and lots of open strings like I can't do with just ten or eleven guitars - I had the equivalent of thirty or forty guitars on these big dulcimer-type instruments that were actually played with mallets in Symphony No. 2. Now what happened when I finally got into seriously considering the idea of the harmonic series tuning was... I discovered the harmonic series through a friend of mine who was in the ensemble, Ned Sublette, who worked with La Monte Young, and at one point I asked him, 'What is this harmonic series that I constantly hear La Monte talking about?' and Ned explained it to me in an extremely simple way - it's basically the series of natural numbers that applies to vibrations [?], and I found it...it seemed incredibly interesting to me to make a tuning that was directly derived from the harmonic series itself, which in fact is not what La Monte is doing, I don't know if you're familiar with La Monte?

BB: Yeah, well I was gonna focus on him as leading up to this whole thing, the fact that it seems like he discovered the whole just tuning thing through amplification, because it seems like John Cale was doing some really high harmonics and stuff, so I was gonna have that as a little introduction, so he was picking and choosing certain prime number ratios, right?

GB: Yeah, whereas I decided to take it as a whole - the entire harmonic series, although it's an infinite series, I decided to choose the first seven octaves, and as far as I know, up to that point, this is something that hadn't been done, and the reason why I did it was very simply that I saw the connection between number theory and sound, and obviously what Harry Partch was working with, and obviously La Monte, and I suppose even people like John Cale, maybe even people like Lou Reed at the time...Lou Reed was influenced by La Monte as well, you know, with his *Metal Machine Music*. Yeah. So, the whole thing with Symphony No. 3 was incredibly crazy because I had to build these instruments, these harpsichord-like instruments that I thought of as being like keyed guitars, because in those days you couldn't get a synthesizer where each key could be separately tuned - of course nowadays it's very easy - but there was only one synthesizer that existed that could do that and it cost something like fifty thousand bucks and no-one knew when the time was going to come, whatever, so you could do this, so I was partially...crazy. So I had these amazingly gorgeous instruments built because I was able to get a grant from some organisation that for some reason was funding instrument building and I really was able to create, you know, a tuning system that included the first seven octaves of the harmonic series, and as far as the top octave was concerned, I actually had as many as sixty-four notes in the octave, and it required that I tune these things to... excuse me, I'm just lighting a cigarette...to a sine-wave generator. I mean, it was incredibly austere and absurd, I mean just in terms of frequency tuners.

BB: Yeah, I'm just wondering if you had any hassle with this live, in terms of tuning etc. in a hot club environment/ hot venue or was that beyond the whole club scene at this stage?

GB: Well, at that point I had pretty much gone out of the club scene - there was no way I could do these gigantic pieces.

BB: I was wondering!

GB: Well, I mean, ironically...that piece was commissioned by the Brooklyn Academy of Music, so, you know, straightforward festival gig in a theatre and all of that, but ironically I did actually perform some of these things in a club, and when we toured the

Symphony No. 4 , which was the second harmonic series piece I actually lugged all these damned instruments to Europe, and we actually did get up in clubs - we did a good old-fashioned rock and roll tour with a fucking symphony based on the harmonic series - I mean, when I look back on it, I think it must have been insane. And, I mean, I took a loss of somewhere around twelve to fifteen thousand dollars on that, and this was money I didn't have; I went into debt for years because of that thing.

BB: Is there a recording of Four available?

GB: Well, it's not available...

BB: Could you send me a copy? Would you have a copy?

GB: I have, as yet, not been able to find a decent live copy of that, so I couldn't do that.

BB: Okay, fair enough.

GB: I am thinking about going back over this tape and trying to resurrect something. There are a lot of recordings that were made when we were in Europe - we did about twenty shows - but I don't have them, so that's gonna be something that you're not gonna get, so with the Five and the Three.

BB: So with Five, you used a Clavinet as well, you retuned that?

GB: I was using the Clavinet pretty much for all three of them.

BB: Was that part of what you were doing in terms of instrument building, you were adapting the Clavinet, or...

GB: The Clavinet was an obvious choice, you know, from the fact that it's got strings!

BB: Yeah, yeah, strings and pickups!

GB: Yeah, and I'd get all these instruments at pawn shops, so I had that laying around and I thought, fuck, I can retune this thing! I mean, I had about six of these harpsichord-type keyboards built, but I also had a number of my dulcimer-type instruments left from the Symphony No. 2, and I also adapted the Clavinet and then, later, I had a kind of organ built for Symphony No. 5 where you hear that organ-type sound. Yeah, that was an instrument that a friend of mine who was good at electronics built for me, again, before the tunable synthesizer...I mean you could tune a synthesizer like, you could tune the octave, but then you'd have to have the same octave repeated throughout, which wouldn't work for my music. It was a pretty simplistic idea, I mean, my fundamental tone was 10 Hertz, and I had added 10 Hertz to each one, so it was, like, 10, 20, 30, 50, 60, 70, 80 all the way up to...I dunno [the 128th harmonic] , now of course you never actually hear the 10 Hertz, I think the lowest you actually have is 30 Hertz, from one of the very large keyboards.

BB: It probably doesn't come through much on the recordings, anyway.

GB: Well, on the Symphony No. 3 that was actually a very good recording, so it does pretty-much come through on that one, but, I mean, that Symphony No. 3 piece was really a kind of demonstration because at that time I'd only been working...by the time I started writing that piece, I'd only been working with the harmonic series for maybe three months. So I had to devise the entire tuning system and have all the instruments built and write the piece in a matter of three months, so, in the end, the piece was sort of a demonstration of this...sound...and these compositional ideas I had, so I wasn't really ... extremely creative, although I'm very happy with way the piece worked.

BB: So how long did you actually have to write the piece?

GB: Well...let's see... from the time I conceived the piece to the time it was performed in the Brooklyn Academy was about six months, but most of the first three or four months

were spent refining the instruments, and making the charts and graphs that were necessary to derive a way to compose for the system, and then the actual writing of the piece took place in the last two months, and in fact what's on the record is only about half of the the piece, because in those days we could only get forty-five minutes, or at most, fifty, on a record, so there is more of that piece but I'm not particularly thrilled with it, anyway. I mean it was an experiment; not all of it worked - luckily we got enough that worked for the recording. I mean, the fact is all of my music is an experiment, it never stops being an experiment., I mean, I have a very strong idea of what I want to hear, but, getting it, I mean, in every case starting with the graph, I can't pull out a whole Mahler score, you know, or a Penderecki score and sort-of work from there. I mean, at this point I'm not really standing on anyone's shoulders, the way they usually talk about Classic music, you know.

BB: Yeah, I mean, you're pretty much outside the Classical tradition.

GB: Right.

BB: I think Kyle Gann said that you're the only symphonist not to come from within that tradition.

GB: Yeah I would be...as far as symphonies go, that would be entirely true, and that's certainly the way they see me as well.

BB: Yeah, would you still have this thing of being an outsider, would there still be a lot of suspicion in that sort of world in New York? I mean how liberal have things got?

GB: Ah....Not very liberal! Not from my point of view. I mean, I'm basically not allowed in the door! I mean, pretty much everything I've done has been through....kind of coming through the back door...most of my commissions come from the art world, or people who are interested in, you know, New Music, which is in no way connected to the serious music scene, meaning orchestral music. I mean, at this point I've written maybe fifteen or twenty pieces for orchestra, and almost all of them have been performed! But they've been performed under, maybe, 'special circumstances', you know, like a festival in Europe will commission me to write a piece and I'll say, 'Well, can you get an orchestra for me?'

BB: And it'll be that sort of once-off, and then, that's it.

GB: It's that thing exactly, I mean I have had a few pieces that have been performed, you know, multiple times by various orchestras, but I am in no means part of that scene - I never had a work commissioned by straight academic music. And it seems as though they are less than interested...In fact, they'd like nothing to do with me. It doesn't surprise me because I am familiar with the problems of twentieth-century composers all the way down the line, I mean even Messaien, I mean, he practically had to be dead before they started taking any of his music seriously...And Charles Ives...

BB: Yeah, he had to make his money out of insurance and have his scores rediscovered when he was about seventy! Just since you mentioned Messaien, I was wondering if you had any interest in the French Spectral Music guys, you know the guys who do the Fourier analysis of tones and... I mean, they use a nearer portion of the harmonic series. Do you feel any affinity with that at all, or any interest in doing analysis of tones yourself? You know, the way they analyse low E on the trombone and then get the series from that.

GB: Well, I'm actually not that familiar with that scene. Are there any composers I've heard of who are doing this?

BB: Tristan Murail, or Gerard Grisey...

GB: Out of all the microtonal stuff that I've heard, the vast majority of it hasn't done anything at all for me, and again, very, very academic and, you know, much more like a demonstration than an attempt to write a piece of music. And I know there's a whole German scene, especially in Southern Germany where they've been working with microtonal stuff for a very long time, and in the context of for an orchestra. Are these people working with orchestras or is it an electronic thing attached to the whole Pierre Boulez thing in Paris?

BB: IRCAM? Yeah, it's connected with that. What they do is they analyze a tone and then they go, 'Okay, these are the harmonics present and then they'll just take the near ones so they don't have to go into anything smaller than a quarter-tone, and they'll just orchestrate it like that, with the whole orchestra, and they'll pick, maybe, a weak orchestral sound for a weak harmonic...

GB: I see, well, again this goes back to the whole serialist, twelve-tone mentality, when (again it's not fair for me to discuss this particular stuff if I'm not familiar with it) but I am familiar with a *lot* of work that's been done with music relative to mathematics, and of course, a lot of electronic music composers are working with these ideas, and, you know, working with the Fibonacci series and with attempts to sort-of get a musical analogue for chaos dynamics...you know, all of that, and, you know everything I've ever heard has been, you know, uninteresting *musically* - it may be interesting, I dunno, at some level... A lot of it ends up sounding like New Age music! But, ah, part of my problem was that I felt that I went, at least for my own work, as far into a purely theoretical approach as I could possibly go before my works became simply academic. I mean I wanted to find a way to write, you know, music! I was not interested in being an academician. And, again, I'm not sure what these guys are doing, but it does make me nervous the moment people start making these analogues to any mathematical idea, although that's what I was doing! But, as I said, I felt as though I hit a brick wall with this. I mean, this goes back as far as Milton Babbitt and classic serialism! And, I mean, as far as I'm concerned that stuff has been all a total dead end.

BB: Well that was one thing about spectral music, it was moving completely away from the whole integral serialism thing, and it is going further back to acoustical 'reality', you know, if you can say that. In some ways it's not too far from what you're doing, except it doesn't go very far up the harmonic series.

GB: Well, let me say one thing, and then if you can remember what you were going to say...I mean, one thing that I felt was that it was an easy way out. I mean, writing music is *really fucking hard!* It's *unbelievably* hard - give anyone an easy way out and they will take it, and...I have a big problem with what I see as formulaic music, I don't mean formulaic in the pop music sense, but...

BB: You mean, sort of, 'process music', yeah?

GB: That's what I mean by twelve-tone or serialist mentality. It seems like composers are constantly trying to find a way to write music without them having to fucking think about it! *The hard part!* And I know this because I was attracted to this idea, and I certainly have seen many composers who have fallen into this particular trap, and I think it's extremely dangerous to have more to say about your music than the music sounds. I'm sorry, what were you gonna say?

BB: I've actually forgotten, but, well...

GB: Ah, I knew that was gonna happen!

BB: Ah, it's cool, don't worry about it! What was I gonna say... Just in terms of electronic music and, I mean, the control you could have in terms of crafting whole arrays of sine tones, you know, having the utmost control over things... Does that attract you at all, or is it the sort of thing that would get far too academic, really?

GB: You got it, exactly, that's exactly where I've gone.

BB: So you wouldn't be interested in doing a harmonic series kind of thing like La Monte Young's *Drift Studies* only with your own...

GB: Well, not, well, again not when it involves deriving music from mathematical formulae. I still use what I would think of as minimalist techniques, I still use...process in the music, but the process is not derived - or I'm trying as hard as I can not to derive it - from...

BB: Purely from the...?

GB: Purely for formulaic reasons because it looks good on paper, I mean, they used to call it 'eye music'! I do *not* wanna write eye music! And I'm finding other ways to write music - I still am using microtonality, and I think it's extremely valuable and important, but I think that the most powerful instrument for creating music is, without adoubt, the human mind. I mean, if there's one discovery I've made, it's that! And again, it's sort of like coming all the way back to zero again! But I mean, in a certain sense...No, I won't go into all of that! But I feel as though I wasn't gonna get where I wanted to go with these approaches. Now, I find these approaches interesting, but it very rarely produces interesting music. I mean, I felt as though there was some connection between sound and natural process, and it's still interesting, but to me, my mind is a much more interesting natural process than a fern, you know, than the growth process of a plant, or even the orbit of the planets or whatever other natural process you might wanna use, or any mathematical system. I think the mind by far the most complex and evolved natural process that exists and that is what I feel as though I have to tap into if I wanna find a way into music which is truly new, and that's what I wanna write, and I know it exists. But so many people think, especially this kind of postmodern mentality - which I find very interesting - you know, that you can't write anything new. You know, this is the most *ridiculous* idea you can possibly imagine! And I've seen the new music, I just haven't been able to figure out how to get it on paper! You know, I've seen it and heard it, you know, in music, but I need to find a way...the way I put it in a bottle, which may not be possible, but...I think you have to spend more time listening and less time looking...

BB: Looking in obscure scientific journals for some bit of maths you can crib.

GB: Right, exactly. 'Oh boy, I just found some mathematical idea that nobody else has turned into music yet, so I'm gonna make my name doing that.' That's just not the way to go. It's gonna marginalise us even more.

BB: What about, in terms of composition again, the whole intuitive side, the whole experimental side to composition? One thing that came up in our composition class (which probably isn't of the sort typical in most academic institutions), is the whole thing of delving into something in a very intuitive fashion, and the possible danger of an attention-span problem where you go, 'Okay I'll try this, no I'll try that, no I'll try *that*.' I mean, do you find it's easy enough to focus, and you tend to have the big idea that just carries through, or do you tend to take a lot of side-roads and then edit the whole thing.

GB: Yeah well, I don't know how old you are...

BB: I'm twenty-six.

GB: ...but that's what I would do when I was your age. So that's exactly what I was doing, and that's exactly the problem I had. I found as I got older, I was able to concentrate more on some things in particular - I dunno, it's a long process, you have to fight your way through, and that's the only way I can describe it, and that's why I know the only person who will ever write my music is gonna be someone who went through the whole process that I went through. And it requires fighting your way. I mean, there was a point in the late twenties when I had a kind of revelation - the work, which had been all over the place, started to find its direction. And since then, the one problem I don't have is a clear direction, and I don't know how else to put it. It's now a matter of getting that...sound. It's no longer a matter of...

BB: Trying to find that direction...

GB: Well, trial and error is there, but with a much more concentrated, you know, a much more limited field.

BB: It's experimental, right?

GB: Well, it's experimental, but not experimental in the sense that I'm just trying whatever comes to my mind.

BB: It's sort of 'rigorous experimental' - you know where you're going with it?

GB: Yeah, I mean there's millions of ideas that go through my mind, but they don't fit, so I just throw them out, though they might be good...and the truth is, most of what I do is not a success in my mind, but it seems like each step does get me a little close - I mean, I've a few new pieces I've written that no-one's heard, I mean the Eleven, Twelve and Thirteen haven't been released, but those are much more interesting to me than most of the previous stuff.

BB: Could you tell me a little bit more about them, i.e. what sort of tunings, what sort of approach?

GB: Right, right...Well, one thing that was interesting about the most recent one, the Thirteen, was that it was for one-hundred guitars, so in a sense it was that sound that was the most interesting thing - being able to treat the guitar *truly* like I would treat an orchestra, and to have such an incredibly rich sound, I mean, to basically have that multiple-string sound that you get from the gigantic string-section in the orchestra. It really does make a difference to have more than ten or twenty or thirty guitars, but to actually have ninety or one-hundred - I won't even go on about it but in the Symphony No 11, which was the last piece I wrote for orchestra; that's the one where I pushed it as close as I've ever come to getting the sound that I've been going for. And in that case, I was using every trick in the book to get it, and, in my mind I came very close to getting it. I mean, I wanna hear a sound that's almost organic, that's just inventing itself for a moment, but at the same time has this homogenous continuity.

BB: So you're still into this whole idea of a sound continuum or a sound field, and the whole orchestra is just this single instrument?

GB: I want it to not even sound like you're listening to a piece, it would be like an aural hallucination, is really what I'm trying to go for with the music. I know it's there and I know it's to be had... Whether I'm gonna be the guy to get it or not is another story! But it's an unbelievably gorgeous sound, I mean, it's the sound of music you would hear in dreams, or something. And, I mean, I've heard it, I've heard it onstage with my

music, but it's been inside of a gigantic cacophony of guitars and loud electronic instruments and, you know, it's happened accidentally, and I'm trying to find a way to have it, you know, in a composed way. And, personally, I think it will entirely change the course of music, I mean serious music, I mean music is... we're still in the fucking eighteenth century!

BB: Well, yeah, there seems to be this lack of rigour, in terms of the fact that they chucked out proper tuning around then, and later, when anyone criticises equal temperament, they're like 'No, no, that just doesn't make any sense!' without looking at the data. Is that what you mean?

GB: Well, that's *sort of* what I mean, I mean I'm sort of talking about the idea of linear music, about the sort of thing of one thing happening after another, instead of a lot of things happening at the same time in a completely integrated way. In fact, that is what is supposedly was so great about Western harmony in the first place. I mean, you listen to the music of any ancient culture, it's basically monolithic, what's the word I'm looking for, mono-harmonic music - one thing happens after another in a very overt way, whereas in Western music we were able to have many things happen in a kind of integrated way. But it kind of *stopped* at one point, you know, we kind of stopped carrying that idea any farther. In fact, I think it's almost the point that we stopped, I think, in the eighteenth century, I mean, I don't think it goes much farther. And I certainly see, I think, twelve-tone serialism as a kind of aberration, personally - I think there's a lot of ideas there that were necessary, but that isn't the music, that *can't be* the music.

Because they left the whole idea of what's beautiful about music behind with all of that.

BB: I suppose it's kind of like postmodernism, really, you know, everything's arbitrary.

GB: Right. I mean, it is possible, I mean I have been accused on so many occasions of writing *formless* music with *no* structure, I mean, this is exactly the *opposite* of what I'm doing - I'm trying to create a *new* form and a *new* structure, just far more *complex*. But not complex in the way that twelve-tone serialism is complex, not complex in a way that is confusing and difficult to follow, but is complex in a way that is so perfectly integrated, a truly new kind of harmony - I think of it as diagonal harmony, I think of it like fourth-dimensional harmony, harmony that, I don't know, I try to find ways to put words to these things...but it is a different idea, and it seems, the more New Music I hear, it seems like the less people are working in this direction. And, to me, it's the only direction to work in, if you truly wanna extend Western music to the next level, *this is the level!* I mean, people like Charles Ives were the first people to work with this, because they were working with this, because they were working with arbitrary, collage-type of relationships - the idea of working with relationships that are truly integrated, but at the same time have that organic feel that a collage-piece would have, of just playing three pieces all at the same time - the kind of stuff that twentieth-century composers have experimented with.. . And I think that it's cool to see what would happen, and there's a lot of information there, but imagine taking that idea, and actually *composing* for it, the same way *anyone* would compose a carefully-crafted work of music. That's what I'm working towards.

BB: So, you mean, taking all those disparate elements and composing with them, but not say, going 'Okay, I'm just gonna run three lines together and just see what happens!', so [by] taking a more structured approach, is that what you mean?

GB: Well, there's always an element of arbitrariness, and part of what I'm working on is arbitrary - in my view, I've completely thrown out the idea of harmony, I don't think in terms of fifths and fourths and sixths, I think in terms of interval relationships, I mean, when I say interval, I mean interval *size*. I've simplified it down to a... to me, that's not important - I don't really care in many places what actual note is played - I mean, there may be a time when this idea may be sophisticated enough to start bringing back in ideas of classical Western harmony from the eighteenth and nineteenth century, but at the moment it's unnecessary for what I'm trying to get at. I mean, it's hard to explain... I had a proposal for my Fourteenth Symphony - I'm always trying to raise money - and I made a list of the types of harmony that I'm using, that I'm working with, and I'll read you the list. And you'll see...well, I'll just read it to you...Diagonal harmony...acoustic phenomena...interpenetration...superimposition...microtonality...generative forms...the illusion of non-linearity...inter-developing change...relative pitch-relationships - that's what I'm talking about...continuous movement...self-reference...I even put in 'orchestrational tricks'! ... neutral harmony...vertical dynamics...density. I mean these are the ideas that I'm working with, they're not... I don't have the definitions for what all of these things [are] ... it'd probably take me a couple of chapters of a book to write proper definitions for all of these things, but I'm working with very specific ideas of harmony...that are hopefully going to generate this sound that I know exists, and it's...well, I've said it before, it's irritating the living hell out of me that there isn't one *single* person out there that is working in this direction, I mean I can't do it by myself, you know. And, I have to admit, it's sort of uninspiring [to] me, it's sort of like I feel I'm totally alone, and, like, nobody cares!

BB: So, just in terms of this diagonal harmony, then, do you mean harmony that can take into account a sort of linear progressions as well, like, something that's happening now, that's forming a harmony with something that's happened a little while ago and...no...

GB: No, I'll tell you...I use tracing paper...graph-printed, and at least when I'm working on this particular idea, especially in the Symphony No. 11, this idea can only really work with an orchestra where I have *real* transparency. I have three or four sheets of tracing paper on top of each other, and the parts are running on top of each other, but I can see exactly how they're going to relate to each other - it's almost impossible to describe. It's connected to an idea of non-linearity. Not non-linearity in the mathematical sense, but non-linearity in the classic sense that what happens *before*, is not what makes what happens next 'next', it's all happening at the same time. But that doesn't mean that it's not connected. In fact, it's connected...for instance, look at a chart of the harmonics vibrating on a string...if you graph out...and I'll send you one of these, you can see it...if you graph out the curves of each harmonic you'll see that all of those harmonics are all connected with each other: they create a whole variety of new patterns. They have nothing to do with the linear movement of any one harmonic. And that's what creates a tone as you know. But when you actually look at it...you see, I see music there, I see this non-linear music - music that is flowing in and out of itself, that is referring back to itself, that is penetrating or inter-penetrating with itself and it progresses...and that's why I have to throw out the whole idea of Western harmony to work with this, because it's completely unconnected. Now there are ideas that I can... I mean Schoenberg talked about the harmonic series as being the basis of his whole

twelve-tone system, and it seemed like nobody understood what he was saying because when you get into the really higher areas of the harmonic series... I mean, there's no more music....I mean, theoretical music harmony just falls away! You have to look at [an] entirely different thing...the whole system of music that we have is based on the first six harmonics! The moment that you get above the first six harmonics, not only do you get into microtonality, but you get into, well, I won't get into the whole thing, but a whole variety of other issues that can't be described by Western harmony. And it's funny that Schoenberg based his whole idea of twelve-tone on the fact that there were harmonics above the sixth! But it seems like nobody paid attention to that! I mean, if you look at some of the very last writings, it seems that he imagined a new music, and he imagined a music that wasn't an imitation of his music, that wasn't simply an imitation of his twelve-tone serialism...that, in fact, that was just a stepping-stone, and you should look at...I don't have the book in front of me...but you should look at some of his last writings, I think you'd almost be shocked, if you've ever had any of his stuff forced down your throat!

BB: So, basically, what you're talking about is a sort of, maybe an exponential harmony as opposed to a linear harmony, is that closer to the idea? In terms of the the different interval sizes and the relationships changing in an exponential manner?

GB: Well, I'll tell you, all you have to do is, you know, going back to La Monte Young, because [this is what] I think he's trying to do - I just wish he'd continued to take it farther - listen to a single drone fairly loud. In fact, if there's some kind of machinery near your home that is making a loud sound, just stand there and listen to it for maybe fifteen or twenty minutes and you'll begin to hear the music! It's an interpenetration that is not limited to Western harmony. It invents itself as it goes along and is in a constant state of change, and this is what I'm doing right now...and this is the music I'm trying to write down, I don't know what more I can say. Or you can simply put on...no, sit down at the piano and play a single note or a single chord for five or six minutes - you'll start to hear the music, with the pedal open. You'll start to hear: I mean, you'll hear things that are just amazing that you'll wanna write down; you'll get out your fucking score book and start writing them down - I guarantee you. But I wanna write that music, I don't wanna write that music, I don't wanna steal melodies from it, I wanna play *it*.

BB: Actually, that's one thing I tried the other day, was I just tuned an acoustic guitar to E major, and I was just amazed at the whole resonance that just came out of it, that you wouldn't otherwise hear if a few strings were maybe a tone off from where they are. So I've some idea of where you're coming from on that.

GB: Right. Well, that'll work for *any* chord whatsoever, just, the more complex the chord, the longer the duration of time before you start to hear anything (related to the harmonic number). As I said, I'm trying to write the cloud of sound that hovers over La Monte Young's piano when he's playing *The Well-Tuned Piano*, that's what I'm trying to do, to get that music down on a piece of paper.

BB: And that sort of long duration seems to be incredibly important.

GB: Yeah, exactly, it is important, 'cause, you know, the higher the harmonic the more complex the harmonic relationships are which requires the ear a longer time to get used to hearing it - I believe it's something like that. I'm not really concerned with this, I'm trying to bring it down to earth. I'm not asking people to listen to harmonics, like Rhys Chatham or La Monte or whoever else is working with harmonics. I don't work with

harmonics, I use them as compositional material. I'm not trying to get a harmonic cloud going - which is always there, one way or another. I'm trying to actually compose the harmonic cloud of a piece of music. And I'm trying to find out a way to write down that interpenetrating cloud that occurs, where you're constantly hearing music coming out of music and going into music in a way that isn't, you know, *linear!*

BB: Okay, I think I've got more of a conception of this, is it kind of more like a sort of fractal dimension, not in the whole dry sort of sense, but in the sense of going in for more and more detail the further you get into it.

GB: Well, it's something like that. Again, fractals are another example of things [where] people have, you know, created music analogues for...

BB: Yeah, but I mean, it is this whole area that you look closer, you see more detail, and there's more connections.

GB: Right, it's definitely there.

BB: Just one thing I was wondering was with the whole thing with combination tones, and the role they play. And one thing you mentioned in interview was that you felt that the way they seemed to work in your music didn't seem to fit classical theories.

GB: Right, well, I'm not sure which interview you looked at...

BB: It was in *Talking Music*, William Duckworth.

GB: Okay. Well that was an interview I did, I think, about twelve years ago. Well at that time I was still using the term 'combination tones' to describe some of the stuff I was doing. Again, that's a factor of the music occurring above the music. I mean, combination tones are [also] a function of any chord or interval that you play - that's what creates the particular quality of any chord or interval, and even the quality of me knocking {Branca knocks} on my desk. That's a result of combination tones or resultant tones. Yeah, there was a time when I was deriving musical material from working on combination tones, but I'm not really working on that anymore, and, ah...I don't think I want to get into...

BB: Okay, fair enough. What else...yeah, just another thing I was interested in was what you said yourself in another interview, well, well back, I think, that, was that even though you were using these incredibly loud volume levels was that it didn't seem to bother you, or the people in the audience. And the interviewer attested to that! I think it was, [also,] you'd been to Ramones gigs and you were [saying]'Jeez, that did something bad', but with your own music it didn't seem to cause any ill effects whatsoever.

GB: Well, it seems to me that I started being criticised for the high volume levels very early on and when I started I simply played at what I thought of as a rock volume!

BB: So it probably wasn't even that loud, it was probably just loud to classical people.

GB: Well, I was using a lot of dissonance, which people equate with high volume. I mean, I know of at least one concert I did where we weren't even coming through a PA at a concert hall that seated a thousand people, and one of the critics at the New York Times wrote that I wanted to make people's ears bleed. It was probably one of the softest-volume concerts that I've ever done in my entire life! But, at the same time, it's true, especially in those days, I liked to use massive clusters on top of clusters, and I was creating an *extremely* dissonant sound. So, there's no doubt in my mind that people confused dissonance with volume. And I guess you do hear higher harmonic texture when you're using close harmonies, which means that in the higher ranges, the

sound will be more harsh, but at the same time, as far as pure decibels, this was not a factor...and, I dunno, it's something I've had to deal with for years and it seems like, at this point, no-one's gonna listen to me, everyone's so nervous about sound these days, my musicians wear ear-plugs on-stage, you know...the critics have everybody scared out of their minds!

BB: Actually one thing I came across was...one of my lecturers was saying he came across the drummer from U2, Larry Mullen, and he was using a 4 kilowatt rig for his monitors, and the guy was saying 'is he crazy, he's going to deafen himself', but then he realised that he just has that so he can only turn it up to 1 or 2, and get next to no distortion, because it's the distortion that really, you know, lots of square waves add lots of energy further up, so that's probably the big thing...

GB: Right. Absolutely, I mean part of the reason why I use a high-powered setup is because you get this very, very clean sound. I mean, you know, you're in a recording studio and you use amps like a hundred watts per channel, but they don't have to be turned up that loud. Yeah, but one thing I wanted to say... I mean, the irony was that I'd be playing these places that were, like, rock discos, so after my band would stop, then the fucking disco music would come on and it would be *three* times the volume, as I'm sure you know how fucking *loud* it is in these places... I mean how could I *possibly* be criticised for volume when you walk into a disco and the tune is, like, *beating* through your chest! I mean, gimme a break! I mean, I might as well be like a string quartet compared to *that*! I mean, this whole thing about volume is just another way to attack me, you know...I don't know why a lot of people hate me, so they try to find ways of turning people off me. I'm definitely seen as a threat in many quarters!

BB: So, what about, even with one-hundred guitars, I mean how loud does that get? It was open air of course...

GB: Yeah, and the only thing that came through the PA was the drums, so, in fact, those hundred guitars were, in fact, much lower volume than my band is in a club! In fact, it sounded gorgeous, it sounded like an orchestra...that's the difference!

BB: Are there any plans to record that?

GB: At the moment, no. I don't have a decent recording of the last three symphonies. But it's a drag, man, but, no, I'll have to get the hundred people back together and record it.

BB: And, just in terms of Number Eight, then, I saw it written in interview that you were using the standard E, A, D, whatever, guitar tuning.

GB: No, I mean I was using a standard ... I wasn't using microtonal intervals, but I was using my octave and two-octave tunings and the sort-of soprano, alto, baritone guitars I'd set up.

BB: Yeah, that makes much more sense...

GB: Yeah, you just don't get that sound with a standard E, A, D tuning.

BB: Yeah that whole sort of transparent, 'glassy' sort of sound.

GB: Right.

BB: So now you have had to through out the harmonic series in terms of being your whole focus, what has been your whole focus in terms of the actual tuning, in terms of numbers Six and Eight and Ten.

GB: Well, for a while I went back to standard tuning, because I felt as though the tuning was arbitrary, and as far as working with orchestras was concerned, it was just too

much of a problem to fool around with microtonality, although they are are very unfamiliar with it, there's nothing you can do about that stuff... I mean there's standard notation...Eventually I started using standard notation for microtonality, and that's basically what I'm gonna stick with if I'm gonna work with orchestra, and even that can become problematic for a lot of musicians when you're using a lot of it, which means there's never a time when they feel as though they're in tune...you know, it irritates some people. But, so far, I've never had an orchestra that's walked out on me. It happens to people! But they, you know, fight there way through it, and all of the pieces so far have been very nicely played, considering the small amount of rehearsals etc. etc. etc. But...Yeah, I'm basically using every single weapon in my arsenal, at this point, to get what I wanna hear - I use whatever I think necessary. I have gotten away from using specifically-derived harmonic series number charts, but, occasionally, I'll still use a little bit of that... I mean there are some nice chords I can kind of get [...] but for the most part I'm still, kind of pushing ahead and trying to do it in a more, as you say, intuitive kind of way...in fact, the more I do it, I realise that I'm more powerful than any number system.

BB: So it's still this whole 'controlled experimentation' stage?

GB: Exactly, you could say that, yeah.

BB: So that's really gone from, when, the Sixth Symphony on up or...

GB: Well, the Sixth Symphony, right, in that case I went back to using more standard tuning, although I think there's a little microtonal stuff in that.

BB: Yeah, and I think there's certainly this kind of wash where, I think it's in the second movement, where the whole ensemble is sort of glissing up...

GB: Yeah, I'd started using slide-bar. And, as far as electric music is concerned, I've gotten into using my Harmonics Guitar a lot more, and as of right now I'm doing a quartet with my wife, and we're trying to get...I'm trying to get this Harmonic Guitar that I've been using for years to really become a kind of real instrument.

BB: That's the one that was in that magazine, *Experimental Musical Instruments*, was it?

GB: Yeah, that's right, except that now I've made one that I can actually play...it actually lokks sort of like a real guitar except that it looks like two guitars, one on top of the other, it's actually very funny to look at! And I'm sort of working on that idea when it comes to the band kind of thing, anyway.

BB: So, you're moving more towards small ensembles?

GB: Well, no, I basically don't have any major commitments at the moment, and that's what I'm doing, but...the way I see it is I'm doing it all depending on what commissions - I'll do a hundred guitar piece or I'll do a piece for orchestra and chorus or I'll do a piece for my ten-guitar ensemble or I'll do a piece for quartet, that's where it's at - I mean I'm working in every one of those areas. There are interesting things to be done in each of them. And it all depends on what people feel like commissioning me for at this present time, you know....What I'd like to write is for orchestra. In fact, well then there's the fifth type of ensemble which I'd like to write for which is, like, extremely expensive, but it's a piece called *Music for Strange Instruments* where I'd like to start incorporating very unusual instruments into the context of the orchestra - | mean, to the extreme, like home-made instruments....There's actually a very large instrument-building scene in the United States now...It's not very well-known because these are people just working in

the margins of the scene. But then, I've been interested in instrument-building for a long time, and then using so-called ethnic instruments in the context of an orchestra, that would be the sort of fifth thing that I wanna do, but that would require a very major commission to be able to put a piece like that together. I mean, to set up all these instruments, and to have a place where they could all be worked on and rehearsed with...would all be, you know, costly! But eventually, some day, I'm sure I'll get around to doing that. And, you know, timbre is an extremely important factor, too, you know...

BB: Well that's one thing which the classical tradition seems to through out, to an extent, which seems to be much more important in rock...is that where you kind of got the whole interest in timbre, yeah?

GB: I mean, I think they've thrown the whole *idea* of music out! I mean, the composer is the last man on the totem pole with the Classic music scene, I mean, they don't need us any more, they've got plenty of...

BB: They've got the back catalogue!

GB: And, not only that, we're not gonna write virtuoso music for their musicians [so] they don't wanna know about it! I mean, to me, at this point, it's you know, like athletics or something! I mean it's, you know, bullshit. I mean it's got nothing to do with the composer game, which is what I'm trying to do, and if you don't play their game then they won't let you in! And I'm not gonna do it!

BB: Have you any interest in writing for electronics and ensembles?

GB: Well, okay, well that would be number six. In a sense, it's how I got started, in the seventies. Before I was doing rock bands I was working with electronics and I guess you'd call electroacoustic music - I was using a lot of contact mikes on gongs and that whole thing, a lot of concrete tape-stuff and I sort of still feel as though I can do something with that in a kind of, I dunno, techno kind of context. But, again, it creates what I think of as kind of what I think of as 'symphony problems' - I mean it interests me, but I still haven't been able to afford to go out and buy Pro Tools yet...

BB: Although you can get the free version - Pro Tools Free...

GB: But I'd probably need to get another computer, and I'd just get a little studio area set up in my apartment... I mean, it'll all happen, but at the moment it's all very touch and go. But yeah, that's one area I want to go into and I think there's a hell of a lot of potential, but then, it shocks the hell out of me that there are so many people and I don't think they're doing anything interesting, and I'm sure there are people out there that I haven't heard who are doing something interesting, but...

BB: But there's a lot of people sort of taking their data from scientific journals and mapping it straight across to some music programme in the electroacoustic scene.

GB: Right, well, as I said I haven't heard most of that but...I tend to think that when somebody does something interesting it'll probably come around to my ears at some point, but I could be wrong about that!

BB: I certainly think there is some interesting stuff to be done as part of the whole 'sound continuum' side of things, the fact that you can take in samples and convolve them, and give one instruments the spectral characteristics of another.

GB: Yeah, I mean, the potential of the thing is mind-boggling....*Why isn't anybody fucking doing anything!* So that's my problem...

BB: 'Cause they're probably too busy learning the software, that's probably it!

GB: It seems like the moment someone starts working with it, they see the potential to start making some money or something, I dunno, everybody's concerned about becoming a fucking star, putting a fucking drum box under it and, I dunno... doing some boring stuff. [...] I'm not going to go back to first grade at this point, you know! *Please!* It had to go commercial, you know!

BB: So is there anything out there at the moment where you go, 'Woah, that's really interesting, I hadn't thought about that' or do you simply concentrate on that direction you've seen?

GB: Well, the only thing that still interests me is the kind of underground rock scene. I mean, as far as the whole New Music scene, it's an abomination, I mean I don't hear anything that interests me...I don't hear anything interesting, it's so fucking academic. The whole Downtown scene has completely sold out to the Uptown scene, and everybody's trying to get teaching gigs, and...

BB: Yeah, even the so-called 'rock-influenced' stuff seems to be quite tame and quite polite and quite airbrushed...

GB: Right, yeah, everybody's scared, everybody's scared to be loud, or excessive, and, I mean, that's what it's about!

BB: Actually, just on that point, have you any plans to amplify other instruments or have a look at that sort of thing...Like [amplified] multiphonics in brass instruments and that sort of thing...

GB: Right, right. Well I haven't thought so much about that, at this point I'm not so much interested in amplifying acoustic instruments - I quite like the acoustic sound of an acoustic instrument, and to me, if you're gonna go electronic, then use electronic instruments! But there's potential...I mean, it's who does it! I mean, there's no such thing as a particular way to work that's wrong if you have an idea about it, I mean, there's no question of that! I mean, I would much prefer to see a concert where the composer is at least trying to do something and is trying to, I dunno what they say, push the envelope. And maybe it's not very good, but at least there's the sense of something new - that's what I wanna hear, and it's never what I hear, it's always people repeating this crap that everybody else has already done, and I don't think it matters what genre you work in, what tuning system you use, what instrumentation you use, if you have interesting ideas about it. You can do anything with *anything*, no matter how simple the system may be, nor how complex the system. I mean, Christ, I remember when I was living in London, you know, in the early seventies, and I was so broke I had a guitar with only two strings on it, but I could get some cool stuff out of that once I was resigned to the fact that I was not gonna have any more strings on that guitar! And I just played it as though it was a fucking guitar, and I was able to do shit with it! I mean, I think it's a part of a problem with the whole technological thing that's happened is that people think that you have to have more and more and more and more, and that you can't do anything unless you've got the most state-of-the-art equipment, and that's all bullshit! I mean, I used to make music with music with broken tape recorders I had lying around the house. In fact, I think that limitations can be extremely valuable, and if you wanna do something, you know, sit down with what you've got and do it! And a lot of people as I said have a problem with 'Well, I don't have this, I don't have that...' It's bullshit, yes you can! I mean, look at those Jamaican guys who invented dub music, with broken-down eight-track machines with a couple of fucking reverbs and a couple of fucking

digital delays, and they completely invented an entirely new kind of music which, to this day is still enormously influential.

BB: Yeah, I suppose it's also like the difference between the whole 'proper' rock ethos and the, you know, 'proper' musician, cover band sort of ethos...like 'I have to learn to play this solo exactly like them'...

GB: Yeah, well, I mean you can play that game, but the competition is gonna be incredibly hard!

BB: Anyway, that's probably you talked out at this stage!

GB: Yeah, I am just about talked out! So, anyway, over the next few days I'll put together that stuff for you and send it over.