

Fugue No. 20

A minor

Well-Tempered Clavier Book I

Johann Sebastian Bach

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To read this essay in its hypermedia format, go to the Shockwave movie at <http://www2.nau.edu/tas3/wtc/i20.html>.



Subject: Fugue No. 20, *Well-Tempered Clavier*, Book I

This fugue is perfect in its purpose and design. Complemented by Bach's unerring craftsmanship, it is one of the most studied fugues in the *WTC*. And with good reason! In this analysis we shall consider how:

- the fugue works
- Bach entered it
- design reveals the designer
- meaning implies person
- the Creator dwells in His creation
- S.D.G. reveals Bach's purpose

The Fugue Works

This fugue is a great one because it works! Before showing you how it works, let's pause for a commercial break. Please be patient with that link (a Quicktime movie). It is well worth the wait, and necessary for this analysis.

"Cog" as it is called, is the ultimate Rube Goldberg contraption. Its aim, ostensibly to move the new Honda Accord a couple of feet, belies its true reason: to imply something about purposefulness and design. Notice that it does this by aesthetic means.

While it is technical, Cog has less to do with technology and more to do with art. It is a kinetic sculpture; it exists to fuel the imagination, not tool the environment. I especially admire its process, economy of means, proportionate

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energies, creative bridging from one episode to the next--you get my drift. Cog is like a fugue!

If the reason for Cog is to "accord" an elegance of design to a car, the reason for this fugue is to illustrate the unrelenting logic that sustains Bach's counterpoint. This logic can be heard in a subject that is executable in:

- its melodic inversion
- canon with itself
- canon with its inversion
- canon at the fifth

It is vital to our understanding of fugue to stress, again, that each of these developments exists in the embryonic possibilities of the subject. There can be little doubt that its invention worked two ways; the composer worked on it, but it also worked on him.

The subject's latent tendencies, once discovered, suggested a certain elaboration: right side up (*recto*) with upside down (*inverso*). As for form, the composer has employed a symmetrical series of expositions and developments in alternate contours.

Beginning with a customary exposition, Bach has proceeded to a counterexposition of the *inverso*. The first development is of the fugue's exposition *recto* and in canon at the octave. The second development, also in canon at the octave, is of the counterexposition *inverso*. The third development combines both contours in a studied display of stretto including four episodes of canon at the fifth.

Bach Entered It

Every canonic segment is by definition a stretto--14 of them. By fugue's end, its stretti will have articulated 14 statements of the subject right side up and 14 upside down. In Bach's music the number 14 acquires a special significance as the sum of the letters in his name: B+A+C+H.

The three instances of the number 14 in this fugue give pause to wonder, has the composer associated persona with art? Has he entered, as he did elsewhere in the *WTC*, the universe of his own creation? If these are not decided instances of Bach's number, the symmetry is remarkable nonetheless. But if purposeful, what might they represent--artistic ego or humble autograph? I shall attempt to answer that question by teasing out the analogy between Cog and fugue and by exploring the Christian conception of creation.

The purpose of the following argument is to help us to understand a dimension to J. S. Bach that was deeply religious and prompted him to inscribe his scores with *J.J. (Jesu Juva)*, *J.N.J. (In Nomine Jesu)* and *S.D.G. (Soli Deo Gloria)*. While Bach wrote two of these inscriptions in documents pertaining to the *Well-Tempered Clavier*, they were not applied directly to this fugue. So my argument is philosophical, even somewhat polemical, drawing together various other threads of Bach's personal life and Lutheran belief. If this type of reasoning does not interest you, then you should skip it.

Design Reveals the Designer

The connection between Cog and fugue is one of *purposefulness*. Oh I do not mean that they are utilitarian; obviously they were created for a purpose. Instead I refer to them having been written *on* purpose--in not just any form but one that is praiseworthy in its plan and execution. The artists chose to make them just the way they are. Their choices are appreciable as being well conceived--even good and beautiful. I am writing of *design*.

Purposefulness and design do not just happen. It has been claimed that the creators of the Cog movie filmed it in real time, without splicing or animation. But it required more than 600 tries before Garrison Keillor could say how nice it is when things "just work." In truth, things don't just work. One has to work at them.

Who knows how many drafts Bach discarded before he discovered that this subject works. He himself was fond of telling his students, "I have worked hard; anyone who works just as hard will go just as far." Bach is also reported to have quipped: "Playing the organ is easy; all you have to do is put your fingers on the right keys at the right times and the instrument plays itself." In other words, being well intentioned is not enough; one must accompany this with planning and skill.

In the world of created things, purposeful designs always manifest the intelligence of a *being*. There exists no evidence of intelligence apart from the thoughtfulness of the being behind it--the artist, the engineer, the honeybee. So-called "artificial intelligence" is oxymoronic; it too is the product of a being! Purposefulness is inextricably woven with being.

In the design of Cog and fugue, we sense a special type of being; it is that of the *human beings* who made them. As Lewis Thomas wrote, "We listen to Bach transfixed because this is listening to a human mind" (*On Thinking About Thinking* 1979). It is in the nature of *being human* that, by creating and discovering designs like Cog and fugue, we find meaning.

Meaning Implies Person

It has occurred to me that there is a connection between *meaning* and the word "demean." It would *demean* the artists to imply that Cog and this fugue "just happened." Equally, it would demean Dr. Korevaar to imply that his beautiful performance "just happened." This would deny the skill and planning that went into making sure his fingers hit the right keys at the right time!

Of course none of these things "just happened." Were Bach with us today he might add that neither did we. I feel quite certain that he would agree, we are not, as posited Sartre, cogs in a mechanistic universe, alone but with a terrifying freedom to choose. We are with each other. We admit this when we acknowledge that Cog, this fugue, this performance, and some would say *we ourselves*, were created and didn't just happen.

By honoring the artists in this way we accord meaning to ourselves as well as them. Meaning is found in the connections that we make between them and us. They are, like us, capable of forethought, informed evaluation, and perceiving beauty. This realization gives us, and them, not only meaning, but also a purpose. It is in discovering and giving such meaning that our sense of

personhood is realized and established.

So the analogy between Cog and fugue illustrates that there is a progression from the perception of purposefulness and design to intelligence, which makes us aware of the being behind it. We recognize this being as human because it, like us, is capable of perceiving and making metaphors--it recognizes the likeness of seemingly unlike things such as Cog and fugue. In making these connections we discover meaning and purpose. This discovery helps us to realize our own personhood.

One of the more important meanings of personhood is that we do not refer to our own being, or that of others, as "it" (as I was unfortunately compelled to do, for the sake of argument, in the preceding paragraph). The artist, too, has personhood, and may be addressed as you or I: thee or thou, him or her, who or whom.

The Creator Dwells in His Creation

In the interest of understanding why Bach sometimes entered into his own artwork, it shall be necessary for us to leave Cog and fugue in order to consider the Christian idea of creation.

Of course belief in a Creator is not unique to Christianity; all theistic religions teach this. What is uniquely Christian, and a central tenet of that religion, is articulated in the doctrine of the *incarnation*: meaning literally, "having been made into flesh." The phrase, "*God with us*," expresses the Christian belief that the Creator entered into his own creation in the *person* of a historical Jesus of Nazareth. This person is, or so Christians believe, at the same time fully God and fully human. The best statement of this belief is found in the Nicene Creed that Bach set to music most famously in the *Symbolum Nicenum* of his *Mass in B Minor*.

As a teacher of classical languages in the St. Thomas School in Leipzig, Bach was probably aware that the Greek word for creator is *Poeiten* from which we derive "poet." So there is an etymological justification for comparing what artists do with what the Creator does. In accord with Lutheran dogma, it is likely that Bach conceived of the artist as a trustee or executor, rather than as a "creator" in the theological sense of that word. Only God creates--humans assemble and arrange what God has created.

Bach's music reveals a consistent recognition of this principle: the composer does not create but mediates. Bach understood that composition involved the utilization of processes whereby music is released from materials that God alone created. The contrapuntal possibilities of this subject are, in this mode of thought, a phenomenon of the created order--more discovered than invented.

The sacramental implications of this way of perceiving art are uniquely Christian. If skill and design reveal the personhood of the artist, they also reveal a *personal* God behind the design that is seen in everything that exists. Couple this with a belief that the Creator's attitude was not one of indifference, but of dwelling with his creation in the flesh and blood, and one has a way of understanding why Bach sometimes entered himself into his own works of art.

While composition necessarily involves the composer "entering" into the

mental processes of creation, I mean something quite different. Bach actually composed *himself* in the music. He did this by writing his name in tones as well as by including the numerical symbols of his name: 14 and 41. If this topic intrigues you, study the fugue in c#m. Follow that with the bm and the conclusion of my discussion of the fugue in C. In each of these works (all in Book I of the WTC), Bach entered himself into his own compositions.

S.D.G. Reveals Bach's Purpose

This view of the artist implies something, too, about the artwork. If the artist does not create, but arranges, then the artwork is a continuing manifestation of God's creation. Sacramentally, it is a reflection, however dim, of the incarnation. God is with us in the work of art. God is also with the artist even as he re-discovers the created order and arranges it in beautiful ways.

Undoubtedly it was Bach's belief in "*God with us*" that prompted his custom of writing *J.J.* or *Jesu Juva* (Jesus Help Me) on many of his scores. Alternatively he sometimes wrote *J.N.J.* meaning *In Nomine Jesu* (In the Name of Jesus). This latter inscription appears at the beginning of the *Clavier-Büchlein* for Wilhelm Friedemann, a volume containing eleven preludes later enfolded into the *Well-Tempered Clavier*.

Not only did Bach enter himself into his own art, he invited God's presence as well. It was his custom to append *S.D.G.* (for *Soli Deo Gloria*) to his completed cycles.² Here we have a more direct connection to the *Well-Tempered Clavier*, for Bach concluded Book I with this very *S.D.G.* In so doing Bach himself provided us with evidence of his ultimate design: *Only to God be the glory* for he is the Poet Creator who in all things "is worshiped and glorified" (from the Nicene Creed).

In numerous repetitions of this phrase, Bach gave his music an essentially liturgical function. With such a purpose the artwork itself reflects divine Being and is, in Lutheran tradition, another expression of the incarnation. This attitude infers an iconological purposefulness and design in which music transports the listener from the material world to the spiritual.

In conclusion, Bach's artistic conception was one of humility: music should not be used to express the self (a typically romantic concept) but should be a vehicle whereby one enters into something larger than himself. We shall explore the topic of Bach's humility more fully in the next fugue.

Many years after his death, Bach's pupils recalled how he loved to quote the Pythagorean, Gerhardt Neidt: "The sole purpose of harmony is to glorify God." By composing his number into this fugue Bach has not aggrandized himself, but entered into that grander purpose and design.

² The Protestant Reformers advanced five core beliefs that they called *Solis*. These were: *Sola Scriptura* (only Scripture), *Sola gratia* (only grace), *Sola fide* (only faith), *Solus Christus* (only Christ), and *Soli Deo Gloria* (only to God be the glory). These beliefs reflected an overarching commitment to the justification for, and authority behind, continual reformation: *Ecclesia reformata semper reformanda dia vox Deo*, which translates as, "The Church Reformed, always reforming, according to the Word of God."