

THE STUDY OF A MUSICAL INSTRUMENT AS AN ALTERNATIVE SYSTEM OF BELIEF

by

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The study of a musical instrument is often a 'calling' and can be a 'way of life'. Learning an instrument well enough to play it professionally involves years of practice. Students must master difficult repertoire and develop musical insight, physical dexterity, stamina and memory if they are to play to professional standards of excellence. The commitment required is comparable to but often greater than that needed to pursue other academic, sporting, artistic or religious professions. Both working and student musicians have been studied intensively by psychologists and neuroscientists (cf. the overview in D. J. Levitin, *This Is Your Brain on Music*, 2006).

Recent writings on the sorts of preparation known to yield good results in musical performance have highlighted many parallels with sport, especially sports like golf, diving, gymnastics, high jump, skating, etc., where athletes 'do their thing' as individuals and win by giving the 'best' performance. Top musicians share characteristics not only with elite sportsmen and -women but also with people who excel in less overtly 'athletic' competitions like chess, 'University Challenge'-type quiz contests, and memory contests. Learning to play a musical instrument has many features in common with other arts, hobbies, or fields of study, drama and dance most obviously. It is, however, an outlier on some dimensions. It also has some 'higher' qualities that would arguably make it deserving of special encouragement in the world's educational systems and in society generally. This essay is an exploration of why this might be the case.

Playing an instrument with any seriousness is arguably more demanding and stressful than some other artistic hobbies or academic fields of study, even though it can be fun and rewarding and strike deep emotional chords in both player and listener. The main differentiator is that music must be played in "real time". The notes must be played in the exact array, horizontal and vertical, in which the composer has written them. Learning to do this competently takes a lot of real time as well - months and years of intense, committed practicing in the 'right way'.

When musicians make recordings of music that was intended to be played live, the 'real time' can be stretched and stopped, and mistakes and infelicities

spliced out, but the basic constraint remains. There is room for interpretation and rubato, to be sure, but the basic tempo, the rhythmic structure and the notes themselves have already been set out by the composer: the musician has no freedom to change them (We are mainly talking about classical music as a model here - not improvisatory music such as jazz or Indian ragas.)

Arguably, most pop music, folk music and hymns are performed as written and worked out in advance, with notes, lyrics, verses, scores, acts and so on. These genres of music are comparable to classical music in that sense, so the arguments applied below to classical music apply to them, *mutatis mutandis*.

To my (admittedly imperfect) knowledge there was no art requiring the same level of real-time skill known or practiced before modern times. The dramas, juggling and other performing arts of the ancient civilizations were probably somewhat looser in their real-time requirements. The discus- and javelin-throwing sports of the Greeks and Romans were of course almost identical to today's versions, but I doubt they were practised with the current level of specialization in the agricultural or warrior castes of the classical civilizations, as ancient people both privileged and needed to have many skills, not just one.

To become an expert musician requires many years of specialized training. The profession of 'virtuoso' playing of written music dates to before the time of Bach, Handel and Scarlatti; patronage of such highly proficient musicians spread from the church and the courts of Europe to a wider educated public in the Classical period. Training of professional and amateur musicians became a well-institutionalized activity in the 19th century, with the emergence of schools, the publication of pedagogical works like études, and the establishment of conservatories.

The types of preparation or study required to bring a piece to professional performance standard are of a different order of magnitude from those valued in and useful for more open, 'liberal' arts and hobby pursuits such as painting, sculpting, composing, or cooking. Painting, sculpting, public speaking, teaching and lecturing, and cooking a fine meal do not take place in "real time" to anything like the same degree as performing a piece of music. A teacher or lecturer may shuffle his papers for some seconds or minutes, digress to talk about administrative matters, or pause to write some formulas on the board while gathering his thoughts.

A painter may stay up all night or sit out all day under the hot sun trying to capture an image with the desired brush strokes and colours, but if he makes a mistake or does not like what he has done, if he is working in oils or acrylics, he may wipe it out and try again. Moreover there is no requirement that the afternoon's output be of a quality to merit being sold to a collector – the artist can take all the time he or she needs to produce an artefact deemed worthy of showing to critics. Such activities do not take place in indefinite real time; there is invariably some constraint on practitioners' activities: barring some other source of income, artists or poets or novelists do have to produce work and sell it if they are to "give up the day job" and make a living from their calling, but such artists can take their time about it.

Good timing e.g. of jokes in lectures or celebrity interviews is a 'good thing', but professional comics are not subject to 'real time' constraints to the same degree as performing musicians. (Stand-up comedians may prepare for real time performance, however, in ways quite similar to musicians.)

Students, journalists or researchers who study a subject based on their interests and perceived comparative advantages do not need to do their reading and writing in 'real time' either, as any procrastinator who has stayed up all night to finish an essay or cram for an exam will remember.

Acting on the stage has many aspects in common with musical performance, insofar as there is a written play and the actor must learn and deliver his or her lines. But there may be at least some leeway with respect to 'real time'. Film acting is more like painting, in that numerous retakes are possible and even expected: there are plenty of second chances if one fluffs one's lines, even though these add to the cost of production. It is the director who must deal with real time, more than the actor.

The musician's way of life has more in common with that of the athlete, who is also a 'performer' who has to 'deliver' under pressure on the day, in front of a crowd of aficionados and fans. There are no second chances in an elite sporting competition such as an Olympic final.

Both music and sports require long hours of often solitary practice or training. Moreover, the practice must be 'of the right kind', currently usually said to be 'deliberate' practice. Many expert teachers have summarized the research into what practice regimes are effective in both sport and music (e.g. Coyle, Greene, Green and Gallwey, Gladwell, Grante).

The need for 'deliberate' practice sets musicians apart from e.g. visual artists, whose courses of study are more fluid, or at least have been so for the past century; they are designed to spark creativity and experiment rather than transmit a craft or skill. Dance is, of course, comparable to both music and elite sport in that it takes place in real time; it may even be seen as a synthesis of the two (albeit without the win-or-lose, rank-oriented mindset of e.g. gymnastics).

The skills needed to play music to critical acclaim or to win sponsorship in elite sports are known to require years of lessons from coaches and gurus, and hours of regular, 'deliberate' training. There tends to be a huge commitment of time and money on the part of parents, who may be "pushy" or even "tiger parents". The pressures involved can lead to all sorts of emotional difficulties in the player. These are perhaps inevitable in professions that are highly competitive, where failure is all around, and a manic-depressive character type is probably privileged - the manic side being so conducive to great effort and to risk-taking, thrilling performances.

Both musicians of promise and athletes develop an intense focus, a single-minded obsession with improving their performance. They may feel an overwhelming drive to train, work and improve, and may need to armour themselves with a kind of selfishness to protect their practice time from

competing commitments. This selfishness, which may be paired with arrogance or conceitedness if the performances bring constant applause and a cupboard full of trophies, may alienate friends and partners, increasing the isolation of the athlete or musician, who has few peers in any case, having developed superior abilities and having repeatedly been a ‘winner’ at the expense of “also-rans”. In both music and sport this intense focus has been described as the ‘rage to win’ or ‘to master’.

The wellsprings of excellence in competitive sport are complex. There is obviously a hereditary factor re body type, build, coordination, and so on. Elite athletes have been intensively studied, so that they might better maintain motivation and commitment, improve their outcomes through better mental anticipation, improve their strength and endurance, and develop the toughness to recover mentally and physically from defeats, setbacks, losses and injuries. An army of coaches, trainers, psychologists, and medics accompany Olympic and paralympic athletes around the world from meet to meet, taking samples after every practice session, tweaking the training regime and diet, encouraging mental imaging, and so on. (e.g. S. Mott, ‘The Ennis system: ...How 'Team Jennis' built Jessica's gold medal body,’ Mail on Sunday, 18.08.2012)

However, unlike chess, bridge or memory competitions, or golf or diving, for example, music has the ability to serve as a total belief system for the practitioner, and not just as a “metaphor” for some aspect of the human condition. To say that golf is one’s religion is somewhat facetious or humorous, but with music such a statement seems more credible.

Because music is constrained by the “score” (written or not), there is a devotional, subordinate aspect to the player’s playing, a kind of worship of the intentions of the creator (the composer). This tends to make the study of a musical instrument into a “quest” or “pilgrimage”, involving sacrifice, piety, intense devotion, and the experience of transcendent states of concentration that are comparable to prayer (Csikszentmihaly’s “flow state”).

Unlike the activities of academic researchers in the arts or social sciences, the profession of playing an instrument is “physical” in that music is played with the hands. This makes it satisfying in a more primordial way, more comparable to sports, because it is “hard work” physically. This links it with “manual” labour, as Neuhaus noted during the Stalin era. (The Art of Piano Playing, 1964, but cf. H. Boss [Heslop], Theories of Surplus and Transfer: parasites and producers in economic thought)

For this reason, learning an instrument may be positive for mood (subjective feelings of happiness or well-being) and release endorphins in a way similar to aerobic exercise. Severely depressed mental patients are known to improve if given manual tasks to do, such as sorting coloured beads. Modelling with clay or sculpting in other media is similarly satisfying work with the hands, as is carpentry, in the sense of *homo faber*. The modern economy has reduced the relative demand for many such activities. The huge increase in depression and other mental illnesses in the past century in modern urban centres of the west is discussed by e.g. McGilchrist, though his argument involves far more than

the nature of the typical job. (Iain McGilchrist, *The Master and His Emissary: the divided brain and the making of the Western world*, 2009, ch. 12)

Singing (making music with the voice) is well known to lift the spirits and impart a sense of well-being in the singer. St Augustine of Hippo said that he who sings well, prays twice. The current fashion for choirs is encouraged by public officials at least in some western countries, because of the perceived social-cohesion and mental-health benefits of singing in groups. The deep breathing with sound production involved in singing has been compared to the benefits of meditation and yoga.

Happiness studies put large store by communal voluntary activities such as hobby clubs, that not only create links between people who might otherwise be isolated and lonely, but are participatory rather than 'passive' like solitary tv-watching or, arguably, attending sports matches. Obviously there is a continuum, but more 'active' activities may be said to 'burn more calories'. Choirs fit this bill. Choral singing is more conducive to well-being than "bowling alone", though the latter involves participation of a sort. It is not just the social aspect, but the effect of the music on the brain that is also beneficial; this is partly physical, through the breathing, and partly aural, in how music, especially diatonic and cadential music, uplifts, calms and soothes.

Music is a profession that involves creators and practitioners, the composers and performers, on the one hand, and consumers, music-lovers, the audience of concert-goers and purchasers of recordings, on the other. Music-making requires a slew of ancillary professionals such as teachers, recording engineers and critics, who help and feed off the producers of music and help train the next generation of same.

Almost all performers are also teachers, there being a hierarchy of fame and excellence in both teachers and pupils. This has made for a religion-like 'apostolic succession' amongst professional musicians, who invariably mention that they studied with x, who studied with Cortot or Hofmann, who studied ... with Chopin or Liszt, or with Czerny, in an unbroken line going back to the great composers of the 19th century; alas there appear to be no Bachs in this wide-branched family tree.

Regarding the intimate, 'family style' nature of serious music teaching, it has much in common with the transmission of knowledge in not just sport but also science and medicine, where there is also much one-on-one or small-group teaching of the next generation of specialists. This type of teaching is more 'natural' and 'loving' than what goes on in the typical modern school, as it builds on the ways Early Man's children evolved to learn from their elders; the patterns are also found in modern hunter-gatherer and village agricultural societies. (Konner: *The Evolution of Childhood: relationships, emotion, mind*, 2011)

Musicians may be compared to the monks, saints, priests, apostles, disciples and ascetics of the Christian and other faiths, whose attributes and 'character' may be said to lie along the spectrum of virtue, nobility, heroic responsibility, empathy and selflessness. The 'virtue' and 'nobility' stem from the need for

sacrifice, understanding, dedication and ‘purity of heart’ if the player is to be able to delve deep enough to fathom and be ‘true to’ the music as written.

The ‘responsibility’ derives from the need for the musician always to be ‘completely ready’. He or she must plan long in advance to be certain of having done the right sorts of difficult preparation in time to be ready to perform well on the day. All but the most charismatic soloists make a point of building up a reputation for reliability, of never letting the orchestra or the audience down; they do not cancel no matter how sick, etc.

Empathy and sensitivity is attributed to musicians because they must be able to render pathos and strong emotion. Actors, of course, are also deemed to have such qualities. Listeners may feel that the music played resonates with their own emotions -- they may therefore feel that the artist ‘understands them’ and has communicated with them personally.

The ‘saintly’ quality of selflessness or humility in musicians derives first from the need to let the music itself ‘speak’ through the artists’ playing, which requires that the musicians efface themselves and strive to be ‘mere vehicles’ for the composer’s intentions.

Ensemble players and accompanists are of necessity good leaders and followers, able to co-operate and communicate clearly with their fellow players. This presumably makes them of high emotional intelligence and empathy. They are, ideally, also self-effacing and ‘tactful’ in their playing, e.g. not showing off at the expense of the team or the music. (Artur Rubinstein’s memoirs are most amusing re lapses of that etiquette.)

The fact that there is no limit to musical excellence makes musicians lifelong ‘strivers’ and learners, ever trying to play more beautifully or with fewer mistakes. Most feel a great humility, notwithstanding their good playing or enviable reputations. There is some reason to believe that musicians of the future will play even ‘better than’ the greats of today or the immediate past knowable from recordings. Music education is a field of serious research, yielding concrete results, many taken over from sports. Sports records have been dropping “like flies”: for example, the current world record marathon time for 70 to 74 year olds, 2 hours, 54.48 minutes, is faster than that of the gold medallist in the 1908 Olympics; the present world record for all marathon runners is 51 minutes faster than in 1908. Teenagers still in elite music schools are encouraged to tackle pieces once thought playable only by rare geniuses and/or mature international virtuosi, like the Beethoven or Tchaikovsky violin concerti, Paganini caprices, Ravel’s *Gaspard de la Nuit*, concerti by Brahms, Rachmaninov, Bartók, and Prokofiev, études by Liszt, Chopin and Godowski, and so on.

A striving for excellence in performance is a *sine qua non* for musicians; they are virtually by definition perfectionists. This gives their ‘quest’ a high seriousness and, to some, a holy or religious cast. The quality of *areté* is prized in all world monotheisms and in e.g. Greek and Hindu mythology. I recently observed a well-known pianist give a two-day master class in which he played brilliantly extracts from many of the best known and most difficult

works of Chopin, then sat down and played all ten students' pieces far better than they, then played some other works by Chopin as a concert, but then declined to illustrate a question about another of Chopin's compositions, saying he 'would not want to disgrace himself'.

Other musicians may cultivate or naturally have attributes more in common with the gods of the great polytheistic religions. The gods, demigods, and heroes of classical Greek and Roman (and e.g. Indian) mythology offer a delightful variety of attributes for veneration: something for every fan to adore or identify with. The performers may seem 'Promethean', with extraordinary powers, drive, knowledge; they may perform amazing feats of memory. They may display 'Herculean' stamina, resourcefulness or courage, or 'Apollonian' grace, good taste and intelligence, or 'Orphean' passionate love. These qualities are somewhat different from the ascetic 'goodness' preached by most monotheisms. Such musicians are often praised as prodigious or 'fearless'.

Female musicians often appear in the guise of 'goddesses'. The convention is that classical pianists and other soloists perform in sleeveless, often backless evening gowns and high heels. The range of attire for male performers is currently much wider, so that they can project a musical persona through traditional vs. more casual dress.

Music since at least Haydn (mediaeval minstrels?) has been able to convey humour, wit and surprise. Amusing pieces and scherzi (literally, 'jokes') aimed at entertaining children and adults were popular in the 19th century. Numerous classical composers have succeeded in conveying wit, humour and irony, both playful and black; effects designed to communicate such emotions were much favoured in the early 20th century by composers such as Bartók, Stravinsky, and Shostakovich.

A huge difference between music and sport is that (as far as I can see) there is virtually no humour in sport. High-level competitions like the Olympics may be exciting, uplifting and dramatic, but they are rarely funny. Medals, rank and fame seem to be the goals motivating participants in 'individual performance' sports like gymnastics, diving, long jump, archery, shooting, golf and so on.

'A vs. B' sports like tennis or football involve 'game theory' and 'strategy'. Many of the A vs. B. sports, either with teams or in 'opposed teams of one', involve balls (rowing and running do not); occasionally e.g. a weird roll of the ball or an amazing get may evoke laughter not just from the crowd but from the players themselves. Elite strategic sports may afford a laugh or two from time to time, but the humour tends to be either unintentional or *Schadenfreude* on the part of supporters of the team that did not hit a ridiculously bad shot or miss a penalty kick. By contrast, strategic considerations are not important for musicians during real-time performance in the way they are crucial for athletes. It is only perhaps over decades that e.g. choice of repertoire may affect exposure and career.

Accomplished musicians, though, must be able to convey humour in their music, and so are often taken to be witty and amusing. They are also perceived as hypersensitive to the rest of the gamut of emotions: benevolence, good cheer, longing, sadness, wretchedness, grief, passionate love, and so on.

Performers spend long hours alone practicing their devotion to the composers' music as written. 'Deliberate practice' that achieves a 'flow state' in them has been compared to prayer or meditation. On the 'supply side' of musical output, therefore, the techniques required to play well enough to meet a market test (to sell recordings or tickets, or lessons) will have taken years of intense effort, comparable to the level of commitment of a mediaeval knight taking the Cross or a yogi or penitent moving to the wilderness. This level of commitment has something heart-rending and heroic about it. Athletes are invariably thought of as heroic; musicians tend to be less so viewed, but that does them an injustice in my view.

The focus and concentration required to perform well in public require something akin to religious fervour. Some musicians adopt ascetic practices such as avoidance of alcohol or undertake punishing fitness regimes, something not often viewed as important or helpful by artists such as painters or writers. (e.g. Donald W. Goodwin: *Alcohol and The Writer*)

Performers who are deemed to fulfil the composer's wishes faithfully are respected by their peers, critics and listeners. Music students are taught to see their task as being as faithful as possible to the needs of the music, to bring the score to life. So they see their life as at the same time that of *servants and masters*. This complicates their task but increases the richness and fascination of it. Painters and other sorts of artists do not suffer this intrinsic conflict, as there are 'no rules' in the visual arts or literature, at least not since the 19th century.

Amateur music-making does not meet a market test, in that others are not normally willing to pay to hear amateurs play. But from the amateur's personal point of view, practicing an instrument yields similar *homo faber* and 'quest' benefits to those enjoyed by the professional musician, if on a reduced scale. The number of lifetime hours and years spent trying to play better are necessarily fewer, and there may still be a 'day job'. Music-making is however an ideal pastime or hobby, because studying the instrument rewards effort, is physical, gives 'flow' benefits, and provides 'identity' and thus may enhance perceptions that life has 'value' and 'meaning'. The player is associated, however modestly, with something beautiful, moving, and 'sublime'. However modest the talent or time allotted, virtue (practice) is positively rewarded with improved playing, which endows music-making with a bias towards hope and optimism. A virtuous circle of practice and improvement raises mood. The delights and satisfactions of increasing mastery and of discovering new repertoire may divert attention from the sadnesses and stresses of life. Music-making tends moreover to be addictive and to 'crowd out' other activities. As amateur music-making is often also somewhat competitive, with contests, exams, performances and festivals, the amateur may feel driven to spend every free moment improving his or her

playing, leaving virtually no time for passive, ultimately depressing activities of ‘couch potato’ type.

The professional musician’s career can last many decades; many never retire at all. This allows for a lifelong development of repertoire, skill and nuance, something not available to most athletes, or, sadly, dancers. The brevity of the competitive career of most individual-performance athletes (Hammer Throw and Pistol Shot?) invariably means they must move on to some other profession after a decade or so, so that diving or whatever cannot give their life focus and meaning past an extended youth. Somehow it does not seem plausible that individual-performance sports like golf or archery could provide emotional connections of music’s complexity and depth, but perhaps that is the author’s blindness. At least golfers and archers are out ‘in Nature’.

On the demand side, listeners, when they listen to a recording or go to a concert, enter a world of excitement, drama, beauty and harmony which may, depending on the type of music and their tastes, thrill them or put them in a meditative or ‘oceanic’ state. Glenn Gould is the author of the beautiful statement ‘the purpose of art is ... the ... construction of a state of wonder and serenity.’ Concert-goers or listeners typically ‘feel good’, i.e. emerge happier and with a new memory to treasure. Listeners who are keenly interested in their favourite style or styles of music may develop a knowledge of the repertoire comparable to, despite being necessarily less sophisticated and profound, that of the musicians themselves, that is, listeners too may study the music they appreciate, and listen with devotion and intensity.

The house of music has many mansions. Listeners may not just love and be interested in the music, but also in those who produce it. Listeners may make pilgrimages to the hometowns of their favourite composers and musicians, and read their biographies and histories of their musical times. Those with side interests in the history, economics and ‘lore’ of the music industry may find lots to look into.

Musicians’ interpretative skills as shown in their performances may be perceived as quasi-magical or ‘genius-like’, even though most listeners are well aware that the musicians must have worked very hard to be able to play what they can play. The listeners may accord some performers a god-like status, and worship them as fans or ‘groupies’. This easily compares to the ‘celebrity saints’ of the Middle Ages, when each town or city or guild had its own favourite patron saints, and relics of these saints were fought over like bits of clothing of rock stars after concerts or on eBay.

Instrumental music differs from religion in one very important aspect, namely that its ‘meaning’ cannot really be articulated in words. Even the texts of operas and cantatas do not carry the weight of meaning or expression that the music itself carries. No one (except for a scholar of it) would read a libretto for its own sake, except for greater insight into the music as sounded. Programme notes are fascinating if well done, but do not give the reader a musical ‘experience’, but rather an intellectual one.

Music is 'mute' and beyond language, or is expressed in its own, 'higher' non-verbal language. It may be a form of communication anterior to language - what language evolved out of, and may thus be more deep-wired in our brains than language. (Mithen, *The Singing Neanderthals: the origins of music, language, mind and body*, 2006) (Darwin speculated that music came to be universal across all human societies because of sexual selection. Mates with musical gifts were more popular, so the ability got selected for, analogously to peahens preferring males with magnificent peacocks' tails. Humour may have evolved via a similar mechanism.) (G. Miller, 2001; D. C. Dennett)

Music's non-verbal character has both costs and benefits. One benefit is that with music there can be no exact 'meaning' and so there is less to argue about. There are fewer pretexts for dissension and bigotry than in the case of the organized religions, where there are written texts (if in contested translations). At least the laws of physics re harmonics are 'really true'. Music is itself, the way it sounds, its melodies, harmonies, timbres, rhythms, etc. and neither advocates nor proscribes, as words can do. This implies that were religion gradually to cede to music as a system of 'veneration', or if religious observance were to evolve into a predominantly musical activity rather than a verbal one, the domain of words, politics, institutions and law would be further secularized.

A side benefit of this possible development is that e.g. China could be more easily integrated into world (let's just admit it, western) culture. Music has no language barrier. The already huge interest in China in western classical music, where millions of young people acquire instruments and invest in years of lessons, would continue, with possibly interesting spin-offs for music itself.

The world's religions are not the same thing as their texts, the Old and New Testaments, Korans, Bhagavad Gitas, lives of the saints, apocrypha, etc. It has been argued that Christianity has an advantage over e.g. Islam and Judaism in that the key figure, Jesus, did not himself put anything in writing; his reported speeches and precepts were set down decades after his death, and other parts of the doctrine took form centuries after that, permitting enormous space in the ensuing centuries for exegesis, reinterpretation, and ever more 'scientific' theology. (R. Stark: *The Victory of Reason*, 2005)

Modern Christianity is wonderfully selective in what it now takes from the tradition, whereas Judaism and Islam are stuck with words written down millennia ago that no longer help people from hundreds of countries and ethnic groups to live cheek-by-jowl in large cities. The Anglican church may be reinventing itself as ecologist and friend of animals and the former colonial peoples, rather than defending the Biblical 'dominion' given to Man over land and sea, or sending out missionaries to win converts. Many hymns are never sung owing to their embarrassing imperialist lyrics.

Music fills most of the emotional void that religion has aimed to fill. (I will not say all of it, as many e.g. Bible stories and myths are dramatic, compelling and touching, and give e.g. children metaphoric anchors that may help them to understand ethical and social issues.) Music touches the emotions and calms negative passions without recourse to the naïve (if moving and charming)

origin myths and miraculous births of gods of the several world religions. It respects people's intelligence by not promising (since it cannot speak!) impossible boons such as eternal life (or roasting in Hell), which most modern people are far too sophisticated to believe in literally in any case. It does its thing without giving cause for inter-tribal conflict by insisting (it cannot talk!) on nonsensical if identity-marking prohibitions such as: not showing certain locks of hair, not carrying handbags or riding in buses on certain days of the week, not eating certain protein-rich foods, not controlling fertility, and not using electrical appliances (e.g. the Pennsylvania Amish).

'It' cannot 'intercede' or answer prayers, and its performers certainly have no such role at present. But it may provide figures who can serve as objects of veneration comparable to those of the great religions, e.g. '5-year-old W.A. Mozart' or 'young J.S. Bach' could be admired and adored like the child Jesus or Mohammed. (The portrayal of Lenin's childhood in Soviet children's literature was directly lifted from the Biblical. Tumarkin: Lenin Lives!)

An objection to the conjecture outlined in this essay is that participating in a great religion is effectively 'free', or at least cheap, in that there is no official *quid pro quo* for attending church or for asking the priest to officiate at a rite of passage, whereas learning an instrument requires getting access to an instrument, lessons, scores, and so on. These have market prices that may seem non-trivial to all but quite affluent people. A state's public school system could give children a start with instruments and choirs. The Venezuelan El Sistema system is much praised as a way to get children to begin with music, and was funded by the state in that country. Such models could be readily adapted to other school systems, were the benefits more deeply appreciated. The main religious institutions have built up a huge capital stock of real estate and financial investments that provide income to finance their activities, beyond what parishioners contribute and bequeath. Music could never be a funded 'institution' of that sort, as it cannot 'speak' or 'write contracts' and so could not have a hierarchy overseeing its academies, concert halls, record labels, etc. Adults would have to continue to pay for lessons and instruments in order to increase the quality of their participation in a religion of musical performance.

Music, we have argued, can provide wordless objects of veneration that can substitute in many ways for the objects promulgated by the organized religions. The latter are being marginalized in any event, under the double onslaughts of science, and 'sex, drugs and rock'n'roll'. The gods and saints of music (the composers), the compositions and recordings, and the disciples, gods and goddesses, who are the interpreters, all make worthy objects of veneration by the public. If they are alive (Elvis!) there may be a celebrity quality to the adulation. As there are many styles of music, there is huge opportunity to worship the saint or god that appeals to you, much as was done in ancient Greece, or in the Middle Ages with personal saints or name-days. Indeed, this increase in choice is often cited as a charming benefit of polytheism.

Large subcultures of many societies still find comfort in monotheistic religious observance, however. They may practice these religions daily or weekly, as

was near universal in the Middle Ages and early modern times, or they may mainly dust off their adherence for rites of passage (name-giving ceremonies for new babies, followed by ceremonies to mark the age of reason, puberty, marriage and death), or in times of crisis. The religious impulse has deep roots in the human psyche and is often seen as the originator of science, in that the earliest priests, the shamans of palaeolithic times, scanned heaven and earth in search of pattern and meaning in natural phenomena (Mithen: Prehistory of the Mind).

The degree to which a given person is religiously or not religiously inclined is known from twin studies to be partly heritable. (William Wright: *Born That Way*, 1999) Well-known scientists like Dr Robert (Lord) Winston somewhat apologetically admit to being of a religious disposition against their better (scientific) judgment, in the sense of liking going to synagogue, finding comfort and identity in adhering to rules on food and dress and so on, and holding a nostalgia for an earlier age when it was possible to believe the doctrines to be 'true'. (The Story of God; see also J. Haidt: *The Righteous Mind: why good people are divided by politics and religion*, 2012). Writers like Sam Harris, Daniel Dennett, Christopher Hitchens, Matt Ridley, Richard Dawkins and Steven Pinker have well sifted what evils religious bigotry and hypocrisy are responsible for in modern history. They tend to paint all who claim to be e.g. Christians, or who occasionally attend a place of worship or use such places to add majesty to rites of passage, as benighted fundamentalists, however. They strongly dispute the clerics' claim that humans need to believe the tenets of the great religions in order to be kind to one another, refrain from theft and violence, or share resources with the worst-off in society. In my view, the Golden Rule would not be overthrown by a religion of music.

The organized religions feature naïve origin myths, arbitrary prohibitions and commands, food no-nos with no present basis in public health, appalling historical records of superstitious killing of 'human sacrifices', 'witches' and 'heretics'; they may have sexually frustrated priesthoods or tolerate embarrassingly politically incorrect attitudes towards women, homosexuals and non-co-religionists. Such beliefs and institutions now seem either irrelevant or out of sync with modern human values and rights. Religious intolerance would seem to underlie most of the armed conflicts and violence in the world. A further waning of traditional religiosity and a reinforcement of the still-nascent fashion for making and appreciating music (including religious music) and for venerating musicians of all kinds, might lead to an emotionally-rich but justifiable type of participatory religion. This might be positive for human happiness.

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