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UNHEARD MUSIC PLATO'S NUMBER, MUSIC AND GENDER

1. INTRODUCTION

It has been recognised that gender and music are intertwined, not only in the experiences of women artists, but also in the theory of music. In this article, I will try to account for the experiences of women composers and theorists by examining the underlying system of power. My aim is to combine insights of feminist musicologists with feminist theological methods. I want to draw out how music becomes encoded in theological and philosophical discourses and how those discourses are intertwined in gendered discourses that privilege a male symbolic. Those discourses underpin the structure of music today in the West and consequently, this may undermine women's creativity in so-called Christian 'religious' works.

In a first instance I will refer to other feminist attempts to examine the power system that is at stake in the Western music. Secondly, I will provide the historical background of the thinking behind the structural underpinning of music. Thereafter, I will give several examples to illustrate the impact of the numbered musical philosophy on the Western music. After an exploration of the influence of Plato's use of the Pythagorean table of opposites, I conclude by pointing out that music portrays a structure that is not gender neutral, but is actually bought at the price of women.

2. COMBINING MUSIC, GENDER AND THEOLOGY

According to Marcia Citron, a feminist musicologist, women have been 'denied full access to (...) the power of expression' granted to their male counterparts, in part because historically women were excluded from the academy and moreover considered too emotional to create music.¹ The result of such denial to women composers and theoreticians is that women

^{1.} M.J. Citron, Gender and the Musical Canon, Cambridge: Cambridge University Press 1993, 53.

have anxieties about authorship and problems surrounding their experiences that differ from men; and these anxieties, moreover, can detract from their creative processes.² Citron and another feminist musicologist, Susan McClary, as well as a feminist theologian, Mary McClintock Fulkerson, recognise from their different perspectives the need to account for those women's experiences by examining the systems of meaning and power that produce and underpin them. They see this, in Fulkerson's words, as 'giving those experiences a framework so that they will not be trivialised, considered individual, located differently, marginalised and ignored by academic systems'.³

Susan McClary developed her own method to examine the system of power. She studies individual pieces of music to expose how they are structured. She says:

(...) music's beauty is often overwhelming, its formal order magisterial. But the structures graphed by the theorists and the beauty celebrated by aestheticians are often stained with such things as violence, misogyny, and racism. And (...) more disturbing still to those who would present music as autonomous and invulnerable, it also frequently betrays fear – fear of women, fear of the body.⁴

And, in addition, McClary examines the musical theory that underpins a given structure. This analysis clearly gives weight to the experiences of women composers. She finds, for example, that music theory betrays reliance on gender metaphors for its formulations. See for instance the following standard definition of cadence found in the 1977 Harvard Dictionary of Music:

A cadence or ending is called 'masculine' if the final chord of a phrase or section occurs on the strong beat and 'feminine' if it is postponed to fall on a weak beat. The masculine ending must be considered the normal one, while the feminine is preferred in more romantic styles.⁵

This standard definition is not arbitrary; it focuses on the 'binary opposition of masculine/feminine mapped onto strong/weak', and it is the masculine cadence which is considered 'normal'.⁶

^{2.} Citron, Gender, 53.

^{3.} M. McClintock Fulkerson, Changing the Subject: Women's Discourses and Feminist Theology, Minneapolis: Fortress Press 1994, viii.

^{4.} S. McClary, *Feminine Endings: Music, Gender and Sexuality*, Minnesota: University of Minnesota Press 1991, 4.

^{5.} As quoted in: McClary, Feminine Endings, 9.

^{6.} McClary, Feminine Endings, 10.

From her theological perspective, Mary McClintock Fulkerson interprets women's experiences as embedded in various discourses. For her, discourses include not only texts but also a complex web of significations and embodied practices, which of course from my perspective could also include music. She aims to 'change the subject' from Christian theology that makes universal claims on what it means to be human to one which identifies difference, but a difference where there is no 'authorisation that escapes the particular discursively constructed situation out of which subjects are produced'.⁷

For music, similar claims to those seen in Christian theology are made. The discourses on theology and music map onto or mirror each other in various ways, some of which I shall discuss here. It is sometimes difficult to see how music could be caught up in a web of discursively constructed significations because of its seemingly abstract nature. It appears to have no meaning outside of itself. The construction of a sounded note therefore appears to be 'natural' or even 'neutral'. But as Fulkerson has pointed out:

(...) naturalization is one of the functions of ideology. It occurs when the assumptions of a community or social order are allowed to remain invisible as assumptions, making them appear true and beyond question. Beliefs are naturalized when they seem to reflect the very order of things; for example, views that woman has 'natural' domestic duties suited to the 'natural' fit of her body and nature to the needs of the child.⁸

In the same way as Jacques Attali, another commentator on the political dimensions of music, has said the 'code of music simulates the accepted rules of society' and that various musics become ideological norms and seen as 'natural musical' codes.⁹ Fulkerson also says that by

recognizing the textual or coded nature of all of reality we can perceive its conventional or made character, then look at the existing forms of unity granted texts and subjects and the systems of meaning that create them, and discover their cracks and occlusions (...).¹⁰

Drawing on the concerns of the above mentioned authors, and using methods borrowed from them and others, I want here to connect what

^{7.} McClintock Fulkerson, Changing the Subject, 394.

^{8.} McClintock Fulkerson, Changing the Subject, 67 n.11.

^{9.} Cf. J. Attali, Noise: The Political Economy of Music, Manchester: Manchester University Press 1985, 29.

^{10.} McClintock Fulkerson, Changing the Subject, 67.

Susan McClary says about the structure of music with Fulkerson's theological discursive method. Thus I want to draw out how music becomes encoded in theological discourses and how those discourses are intertwined in gendered discourses that privilege the male symbolic.

3. THE BACKGROUND OF CONTEMPORARY THEORY ON MUSICAL STRUC-TURE

The thinking behind the structural underpinning of music today can be traced to the Pythagorean–Platonic era. Pythagoras was supposed to have 'discovered' a direct correlation between the sound of notes and mathematics. One of the implausible stories on this discovery is that one day, when Pythagoras was walking past a blacksmith's shop, he heard two hammers sounding together and discovered that they were consonant with one another.¹¹ Moreover, he found that one was a 6lb hammer and the other a 12lb hammer. This produced a ratio of 2:1, a musical interval of an octave, and was considered consonant. Similarly, another two intervals came near in sound to the octave and, although not considered so attractive, were also considered consonant: these were the ratios of 3:2 and 4:3, a musical interval of the 5th and 4th respectively. All other intervals were considered discordant.¹² These ratios fitted very well into the Pythagorean notion of the reverence for the numbers 1 - 4.

The numbers 1 through to 4 were particularly significant and seemed to embrace the whole of life, and they were characterised in gendered terms. In ancient number symbolism the number 1 = Zeus was God, unity and usually male; the number 2 was a female principle as an even number. The number 3 as an odd number was a male principle; 4 a female principle of justice; 5 (2+3) = marriage; 6 (3+3) = double male principle or sometimes marriage (2x3); 7 = virginity. In a similar way they found it significant that the numbers 1, 2, 3, 4 when added together equal the number 10 which was considered the most sovereign number.¹³

F.M. Comford has described how the gendered nature of the Pythagorean numbers was seen by their biological genital difference:

^{11.} Implausible because the sound would most certainly have been dissonant. For more details see T. Levenson, *Measure for Measure: how music and science together have explored the Universe*, Oxford: Oxford University Press 1994, 22.

^{12.} M.L. West, Ancient Greek Music, Oxford: Clarendon Press 1992, 160.

^{13.} W. Burkert, Lore and Science in Ancient Pythagoreanism. Translated by E.L. Minar, Jr., Cambridge, Mass.: Harvard University Press 1972, 22, 40, 467.

(...) when numbers are divided into equal parts, the even is completely parted asunder, and leaves within itself as it were a receptive principle or space, whereas, when the odd is treated in the same manner, there is always left over a middle (...) which is generative. (...) when numbers are equally divided, in the uneven number a unit is left over in the middle, while in the even there is left a masterless and numberless space, showing that it is defective and imperfect.¹⁴

The receptive principle, the number 2 is the first even number. This, 'stands for the female receptive field, the void womb of unordered space, the evil principle of the Unlimited'. Whereas the odd number, the 'Triad is its opposite, the good principle of Limit, the male whose union with the Unlimited produces Limit'.¹⁵

So the 'discovery' of the musical ratio 2:1 would have had significant gendered underpinning governing the whole of their thinking. Music was translated into number and the whole of the cosmos could be explained in these specifically gendered musical terms. But it was Plato who connected the Pythagorean Table of Opposites with this scheme, and I shall come back to this later on.

4. THE IMPACT OF THE NUMBERED MUSICAL PHILOSOPHY

I will give a few examples showing how number has importantly influenced music in the West, in order to illustrate the equal importance of the gendered symbolic that has carried on through it.

Such was the power of this numbered musical philosophy that it permeated Christian theological thought and was adopted by such notable men as Nichomachus of Gerasa of the second century C.E.; St Augustine of Hippo of the fourth century (354-430); the Roman philosopher and theologian Boethius of the fifth century (480-524); and, through them right up to and through and beyond the Renaissance to today. But the music these men were referring to, has no sound. It is unheard. The music they upheld was the music of number, that they thought was purified of the contamination of 'other' uses of music and it is this music which became the canon or rule. The belief that number is the defining characteristic of acoustic music and that that music was also mirrored in the harmonic structure of the universe went as far as defining everything in it, including attributing it also to the rationale of God. But number was also gendered.

^{14.} F.M. Cornford, 'Mysticism and Science in the Pythagorean Tradition', in: Classical Quarterly 12 (1923), 1-12.

^{15.} Cornford, 'Mysticism and Science', 2.

In his *Enchiridion* or 'Handbook', which incidentally was addressed in patronising tones to 'the best and noblest of women' deliberately without 'technical detail', Nicomachus wrote in Chapter 4 under the heading 'That things to do with notes are ordered in accordance with number': 'Hence it is clear that all these things (that is tensions in strings and agitation of the air) are ordered by number, since it is of nothing but number that quantity is a proper characteristic'.¹⁶

St Augustine wrote:

He [God] has created and rules all things through, so even the sinful and miserable soul may be moved by numbers and set numbers moving even to the lowest corruption of the flesh. And these numbers can be less and less beautiful, but they can't lack beauty entirely. (...) But number also begins from one, and is beautiful in equality and likeness, and bound by order.¹⁷

Moreover, according to Henry Chadwick 'in [Augustine's] tract on Christian Instruction he was certain that "music and number" are the keys to unlock the exegesis of scripture (...) and are a signpost to the unchanging Creator'.¹⁸

According to Henry Chadwick, in Boethius' Treatise on Music a similar idea can be found:

Like Augustine he sets out to describe the science, not the art [of music]. The Pythagorean doctrine of the cosmic harmony lies at its heart, and this came to him with the high authority of Plato's Timaeus (...) the harmony of the heavens and the seasons, her 'love' that produces concord out of the warring elements in the world, the binding of the elements by numbers, and the 'consonant members' of the world-soul. Arithmetic directs the mind towards immutable truths unaffected by the contingencies of time and space. (...) The theory of music is a penetration of the very heart of the providence's orderings of things.¹⁹

The seventeenth century philosopher Leibniz (1646-1716) wrote in a similar vein: 'Music charms us although its beauty only consists in the harmony of numbers, and in the account which we do not notice, but

^{16.} Nicomachus of Gerasa, Enchiridion, in: A. Barker (ed.), Greek Musical Writings, Vol.II, Cambridge: Cambridge University Press 1989, 244.

^{17.} St Augustine, On Music. Translated by R.C. Taliferro, Washington DC: The Catholic University of America Press 1947, 375.

^{18.} H. Chadwick, Boethius: the Consolations of Music, Logic, Theology, and Philosophy, Oxford: Clarendon Press 1981, 80.

^{19.} Chadwick, Boethius, 101.

which the soul none the less takes, of the beating or vibration of sounding bodies, which meet each other at certain intervals'.²⁰

Again, in the nineteenth century those numbers became so abstract as to become 'absolute'. For example, the idea of 'absolute' music, that is music without words, a term coined by the German composer Richard Wagner (1813-1883), became too readily used by scholars and composers to mean that which stands above meaning or without meaning. Absolute music also provided a parallel with notions of the absolute or God as that which offers a glimpse of the infinite. Ernst Kurth (1886-1946), writer on music, saw the double meaning of 'absolute' as in a: 'technical sense, it means dissolved from song; in a spiritual sense, dissolved from man'. Out of this notion came 'the pure concept of art' and 'art-religion' which some scholars also interpreted as: 'a manifestation of religious consciousness' and 'attributes of the absolute, godly spirit'.²¹

The notion of number as being somehow 'right' within music has also found its way into the twentieth century through such composers as the English composer John Tavener (born 1944) and the Estonian composer Arvo Pärt (born 1935), both of whom write music largely on religious subjects and themes. Both come from very different parts of the world with different cultural backgrounds. John Tavener came to Russian Orthodoxy via Presbyterian-Anglicanism and Catholicism, whereas Arvo Pärt, a Russian Orthodox man, found himself involved in the political upheaval that was affecting Estonia.

But, although they both come from very different locations, they reverence the same number, symmetry and proportion of tonal music located in ancient Greece. Both seek to use number in order to go beyond number. Arvo Pärt says that 'everything in the world is numerically arranged in one way or another' and that in his music he became concerned with the numinous – pieces which seek eternal silence which for him is at the heart of sound.²² Similarly, John Tavener says that he writes music that leads him to a sacred art that 'can only be judged on how near it comes to its primordial origins.' Those primordial origins somehow for

^{20.} G.W. Leibniz, *Philosophical Writings*. Translated by M. Morris and G.H.R. Parkinson, London: Everyman Press 1973, 203.

^{21.} C. Daulhaus, *The Idea of Absolute Music*. Translated by R. Lustig, Chicago: University of Chicago Press 1989, 40.

^{22.} J. McCarthy, 'An Interview with Arvo Pärt', in: Contemporary Music Review 12 (1995) 2, 57; and W. Mellers, 'Arvo Pärt, God and Gospel...', in: Contemporary Music Review 12 (1995) 2, 37.

him have the 'right' notes. Finding those 'right' notes was, he says, 'the norm in Plato's Greece'.²³

And so with Tavener's words Plato is carried on and is still being used as an authority regarding music and the measurement of music. He seems to have secured firmly the idea that it is number in music that testifies not only to music's true essence but to the true essence of the universe and the divine as well. Thus it is Plato who comprehensively wrapped number within a discursive web of significations that has not changed throughout history. The music which writers from Nichomachus onwards have been discussing, is symbolically male, and it is from Plato that the West has taken its lead in this, as I shall now try to show.

5. PLATO'S USE OF THE PYTHAGOREAN TABLE OF OPPOSITES

Perhaps Plato's most immediate and best known set of comments relating music to gender comes in the *Republic*, where he reduces all musical modes (musical styles) to the male Dorian and the ambiguous gender of the Phrygian mode as its 'other' and at the same time reduces the function of women to mirror men. The Phrygian mode relates to Dionysus, that is a male/female figure associated with effeminacy. All the modes relating to women and women's practice such as lamenting the dead were banned.²⁴ Therefore, his city-state was left with no symbolically female musical modes (of course if Plato were arguing for the immortality of the important part of the soul, then for him to have a mode which lamented the dead would be irrelevant).

The body had to be 'attuned' like the strings of a lyre to the soul, just as women also had to be 'attuned' to the same education as the men.²⁵ Thus, as the male/female Phrygian mode was to be 'attuned' to the Dorian mode and seen in relation to it, then in the same way, women were 'attuned' to men and only had meaning as a relation to them. Women as completely 'other' have no worldly symbolic of their own, as they are to share in the male symbolic.

But I want to argue that this gender based strategy Plato employs with regard to music, has a deeper significance which, while less direct, is more pervasive in his own work and influential on later thinkers. This can be

^{23.} J. Tavener, 'The Sacred in Art', in: Contemporary Music Review 12 (1995) 2, 49-54.

^{24.} Plato, *Republic*. Translated by P. Shorey, Cambridge, Mass.: Harvard University Press 1935, 399a ff.

^{25.} Plato, *Republic*, 452a. Plato, *Timaeus*. Translated by R.G. Bury, Cambridge Mass.: Harvard University Press 1929, 18c.

seen in the way he re-configures the male-female dichotomy of the Pythagorean Table of Opposites bringing them together into one simple male figure in order to support his ideas about the cosmos and the divine.

As I have discussed above, number was not gender neutral. Number was always gendered and part of the cultural discursive code which underpinned Pythagorean reality. To explain this I turn to the Pythagorean Table of Opposites.

Pythagorean Table of Opposites (in Aristotle's Metaphysics)

Limited	Unlimited
Odd	Even
One	Many
Right	Left
Male	Female
Rest	Motion
Straight	Curved
Light	Dark
Good	Bad
Square	Oblong

I think that it can be recognised here that number-in-music will readily equate with the kind of Platonic rationality and therefore with 'logos' which can be found on the male 'good' side of this Pythagorean Table of Opposites as it gives limit to expression. Also, anything that is not number or measure appears on the 'other' female 'bad' side of it, which is unbounded.

So here is the first step toward a denial of the 'other'. The 'other' is not rational and therefore does not have the 'logos' associated with the rationale of number. But there is a problem. How can the Even numbers on the other side of the Table represent that which is indefinite, unlimited and evil at the same time as containing the notion of number which is itself some form of measurement, as 2, 4, etcetera?

Plato's solution is to re-configure the ideas contained within the Table of Opposites; and he does so in several ways.

Firstly he separates the intelligible from the perceptible world. For the Pythagoreans number, although divine, was always corporeal: but Plato held a notion of Ideal Numbers separate from numbers used in the phenomenal world. In the intelligible world, the world of thought, he maintains the notion of the One (male good principle) and the Indefinite Dyad (female evil principle) that are ideas mirrored in the perceptible or phenomenal world. In his oral lecture called *On the Good*, he derives the numerical finite number 1 and number 2 from his Ideal Numbers the One and the Indefinite Dyad. These Ideal Numbers are the first principles which reflect the Good and Evil principle respectively and to some extent both uphold, re-configure and replace the corporeal Limit and Unlimited of the Pythagoreans. But, as I shall go on to discuss, the only significant number is the number 1 that derives from the One.²⁶

Secondly, Plato turned the universe into numbers that mirrored the Ideal Numbers, the One and Indefinite Dyad. Although the number or figure 2 still represented the female Indefinite Dyad, as the ground of all evil, it does so only because, according to his oral lecture, the One 'fell' into the Dyad, and not because the Dyad herself entered the universe. In other words, the number 2 is really the product of the number 1 but mirrors the evil of the Dyad by becoming two. Therefore, it is as if by some accident that the One fell into Two. The corollary is that the number 2 is really the number 1 that went astray by falling into the number 2; thus it is only in this way that it reflects the Dyad. (This could be seen as reminiscent perhaps of the story of the Fall). The 'real' Indefinite Dyad is fixed beyond the corporeal in the realm of ideas only. And it is clear from the Timaeus that actual women who exist in the phenomenal world only do so because in their previous incarnation they were men who failed to master their opposite character, which consists of all kinds of violent affections.²⁷ Because of Plato's reconfiguration of the number 2 it becomes a mere figure of generation: a doubling of 1. It could therefore be wondered if for Plato women qua women actually existed at all.

Thirdly, in the *Philebus* Plato can be seen bringing together the elements of the Pythagorean Table of Opposites by the use of number:

(...) let us divide all things that now exist in the universe into two, or rather if you please, three classes (...) We said that God revealed in the universe two elements, the

^{26.} A discussion of Ideal Numbers and Plato's oral lecture can be found in: Burkert, Lore and Science, 17ff.

^{27.} Plato, *Timaeus*: 'human nature is two-fold, the superior sex is that which hereafter should be designated "man"' (42a); 'And when by virtue of Necessity, they should be implanted in bodies, and their bodies are subject to influx and efflux, (they are subject to the following results) sensation, (...) violent affections, (...) desire mingled with pleasure and pain; and (...) fear and anger and all such emotions as are naturally allied thereto, and all such as are of a different and opposite character. And if they shall master these they will live justly, but if they are mastered, unjustly. And he that has lived his appointed time well shall return again to his abode in his native star, and shall gain a life that is blessed and congenial; but who so has failed therein shall be changed into woman's nature at the second birth (...)' (42b-c).

infinite and the finite, did we not? (...) Let us then assume these as two of our classes, and a third, made by combining these two (...).²⁸

Plato goes on to say that the thing that combines the infinite and finite is measure. His third class is number or measurement. But a glance at what gender the third class represents, shows that it is of course the male symbolic, the phallus. It is a male symbolic that brings unity to the two sides of the Table. The number 2 is merely that through which the number 1 travels to get to its first 'real' number: the number 3.²⁹ This leaves all the relevant and important numbers as symbolically 'male'.

In the *Timaeus* the numerical musical proportions which create the world soul are supposedly a mixture of the Same and the Other: that is, male and female. But it is clear from the groundwork that Plato has done in the *Republic* that I have mentioned above that women are to be treated as 'men'. Therefore, Plato's notion of the 'Same' and the 'Other' is that the 1 of the Same when it is duplicated and becomes 2 is the Other, but it is the other of the same. The number 2 is a mere doubling of the male number 1. There remains the sense of the space that is created between them. The number 2 then has been appropriated by Plato and re-configured by him as a fallen male figure and remains metaphorically the master-less and numberless space.

This mathematical account of the creation of the cosmos is also the musical ratio of 2:1, the octave – the other of the same. There is now a new binary of the form 1 and 2. Rather than the odd and even being completely bipolar, they are now in relation in the ratio of 2:1. In other words, the 2 is merely the same as the number 1, only an octave higher. Plato's version of the Pythagorean Table of Opposites which is supposed to incorporate the Same and the Other is really all the Same, only multiplied and located in a different position:

Plato's production of numbers in the Timaeus:

		1	
	3	2	
	9	4	
	27	8	
(The Same - the power of	of 3)	(The Other – the power of 2))

^{28.} Plato, *Philebus*. Translated by H.N. Fowler, Cambridge, Mass: Harvard University Press 1925, 23c and 23d.

^{29.} The number 3 is capable of making a triangle, and therefore produces a plane figure. For further details of number see C. Butler, *Number Symbolism*, London: Routledge 1970, 3.

The symbolic function of the number 2 is simply to act as an octave facilitator – a spacing – which will be filled by the third principle, all the smaller intervals which fill that main gap. The female principle as the completely 'other' evil principle has been reduced to a relation to the 1 as likeness of the 1. The completely other has dissolved and been made invisible. She that remains does so only as a reminder of the incorporeal Indefinite Dyad or as a corporeal male/female number 2 facilitating the notion of the symbolic one and three. Could it be that this is replicated in the notion of the Christian Trinity – a three in one unity?

The One and the Dyad (represented as octave ratio 2:1) become configured as the fundamental principles of the cosmos, in the *Timaeus*, as Sameness, that is the notion that like is known by like; and Difference in that context simply means the 'Other' of the same.

The discursive formation of music through his discussion of number reveals that like the Pythagoreans Plato needed the symmetry of consonance, a harmony made of likeness and not difference. It is clear by looking at the history of number-in-music that priority is given to consonance. Plato's belief is that true being is perfect consonance, regardless of whether it relates to acoustic music, nature, the cosmos, the body being an attunement to the soul, or the divine. All mirror this fitting of likeness with the same pattern throughout his scheme.

Furthermore, in the vast majority of instances tonality and the fitting together of this sameness has remained the norm throughout history. Dissonance is not seen in Platonic terms as the 'other' because the 'other' for him is really the higher version of the same. Dissonance *as* the totally 'other' is either not admitted or glossed over. Traditionally, dissonance is that which resists a harmonic function. It jars, it signals conflict and instability and chaos and is totally outside of the system of consonance. In music consonance functions as a measure and order.

The musicologist Schenker wrote that 'consonance manifests an absolute character; dissonance, on the contrary, merely a relative and derivative [character]: In the Beginning is Consonance! – It is what is primary, dissonance what is secondary.'³⁰ It is interesting to see just what counts as consonance and dissonance and who (by that I mean which gender) that description is symbolically referring to.

However, within the traditional system there is a flaw. The system does not quite come out as consonant. When the musical patterns are numerically worked out over several octaves there is a small interval

^{30.} In D.E. Cohen, 'Metaphysics, Ideology, Discipline: Consonance, Dissonance, and the Foundations of Western Polyphony', in: *Theoria* 7 (1993), 3-80.

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which occurs, which refuses to render full consonance. Hence in the sixteenth and seventeenth centuries work was done to 'temper,' which means to alter, to even out the so-called perfectly natural system because as was always known, even by Plato, their system was not actually perfect.

The tempering – as in Bach's well-tempered clavier – created the possibility of absolute reason and absolute number making absolute music: thus it was made to fit those desired, perfect, pure intervallic and equal relations. In this sense perhaps mirrors the absolute and pure cogito of Cartesian reason which is discussed by Susan Bordo 'where' she says, 'his entire system is devoted to circumscribing an intellectual arena (...) immune to contamination'.³¹

6. WOMEN AND THE POWER OF EXPRESSION

So wherein lies natural music, natural tuning? Music it seems, is ever adjustable to fit an order of ideology. And where are women in it? What did Plato fear when he said in the Republic that: 'a change to a new type of music is something to beware of as a hazard of all our fortunes. For the modes of music are never disturbed without unsettling of the most fundamental political and social conventions'?

Fulkerson asks feminists and theologians to:

(...) do the work of explaining by connecting their claims with the systems of discourse and social relations that produce them. Otherwise, as the trivialization of these issues into 'political correctness' reminds us, the appeal to women's (or any marginalized) experience in academic systems can be (...) ignored.³²

My purpose has been to connect her entreaty to the feminist claims in music. Of course this is to some extent not new. Feminist musicologists such as Marcia Citron and Susan McClary, to whom I referred at the beginning of this article, have been doing this for several years. But their critiques are about gender in construction of the canon, or in individual works, or the relation of gender in the professions of composer or reader, and gender inequality within society itself.

My own endeavour is to show that gender difference is at work within the ideological discourses which structure music itself; that the structure, and hence the gender difference, is shaped by the relation of music to number and reason, which was itself shaped and expressed by Plato; and

^{31.} S. Bordo, The Flight to Objectivity: Essays on Cartesianism and Culture, Albany, NY: State University of New York Press 1987, 82.

^{32.} McClintock Fulkerson, Changing the Subject, viii.

moreover, that this way of thinking links directly into the discursive ideologies surrounding the God of Christian Platonism.

Susan McClary has said that each era has its different way of configuring and marking gender difference in music. But I want to say that there is concurrently at work a very long and deep and continuous thread within the history of thinking about musical structure which from the outset in its absolutist thinking has served to disfigure women. Therefore, as Susan McClary has said, music's beauty, which is often overwhelming and magisterial in its formal order, often betrays a structure that is far from beautiful. Its structure is neither gender neutral or natural. It is made and bought at the price of women and much of the time it perpetuates misogyny and violence.