

MELODIÆ INCOGNITA;  
EXPLORING THE  
BOHLEN–PIERCE SCALE

AN EXEGESIS IN FIVE PARTS

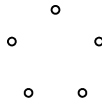
In fulfillment of the requirements of the DOCTOR OF CREATIVE ARTS degree offered by the  
UNIVERSITY OF TECHNOLOGY SYDNEY

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Bachelor of Sound and Music Design  
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Faculty of Arts and Social Sciences  
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And certified thereby to be his own original work in every salient particular.

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Θα προτιμούσα να είμαι τυχερός παρά έξυπνος.  
Johannes Dobeus Præstigiator, *Crede Quod Habes, Et Habes*, 1525

## CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Rowan Glyndwr Holmes, declare that this exegesis is submitted in fulfilment of the requirements of the award of Doctor of Creative Arts, in the Faculty of Arts and Social Sciences at the University of Technology Sydney.

This exegesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the exegesis. This document has not been submitted for qualifications at any other academic institution.

Production Note:

Signature removed prior to publication.

Rowan Holmes

Chaoflux, Setting Orange 50 Chaos YOLD 3186  
(Wednesday 19 February 2020 Old Calendar)



(Revised Edition: Bureflux, Prickle-Prickle 50 Bureaucracy YOLD 3186  
(Sunday 27 September 2020 Old Calendar))

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## DEDICATION TO THE REVISED EDITION, BCY 3186 (SEP 2020)

Whatever remains of merit in this exegesis is souspirably dedicated to the late Professor Alasdair Gray of Glasgow, who also:

- ☞ Strove to write of complex things with the utmost clarity and elegance; and also
- ☞ Took great care with the appearance and style of his books; and also
- ☞ Resented interference (even well-meant interference) with their layout and content, and also;
- ☞ Thoroughly divided the critics and slept the better for it.

## IN MEMORIAM 3100-3185 (1934-2019)



(With thanks to Steven Rae for the initial suggestion.)

## ACKNOWLEDGEMENTS

Much as it might appear so to the doctoral student, an exegesis is not created in isolation. Many factors and individuals affect the process, for good and ill. It is traditional to mention at least some of these in preamble, and in this case I will bow to tradition.

Any acknowledgements must begin with my wife, for reasons of which she is well aware and which could not be listed in anything approaching proper detail here. I would also like to explicitly thank my fellow musicians and friends, David Manning and Terry Buckridge, the latter also a fellow performer in the Spectral Om Ensemble. Without their constant help and encouragement, these words would likely not have been written at all. I must also particularly thank Korowal School in Hazelbrook in the Blue Mountains for its diligent and nurturing care of my children while this project was being undertaken—a care that in many ways went well beyond the call of mere duty. My adored children themselves had to deal all-too-often with a father discernibly short of time, temper and sleep. Kimberley Bianca of the University of New South Wales took an open-platform approach to her custody of the Electrofringe Festival of electronic music in Sydney; I thank her for this philosophy, which resulted in the Ensemble performing twice at Electrofringe, and I wish her all the very best with her current doctoral studies in Colorado. I thank my friends who bravely read drafts of the work in progress.

Associate Professor Clare Maclean and Dr Andrew Milne of the University of Western Sydney were unfailingly helpful and encouraging, and this process, which has often proven trying beyond the normal experience of such things, very nearly wound up being finished under their aegis. The intrepid sponsors of my initial application for doctoral study also have my deep and abiding gratitude. I hope this document is sufficient reward for their faith.

I would also like to thank and acknowledge the MARCS Institute for Brain, Behaviour and Development, also of the University of Western Sydney, for its offer of a fully funded scholarship to convert my studies into a more conventional PhD in music perception and cognition. I have often since regretted the nevertheless pressing personal reasons that led me to reluctantly refuse the offer. I am also deeply grateful to the academics and journals who published and otherwise supported my research in Australian history—a process that is now outside the ambit of this document, although it was an outgrowth of early research into possible final creative products. These specifically include Paul Sprute of *Global Histories: A Student Journal* and Associate Professor Carol Liston of *The Journal of the Royal Australian Historical Society*.

I will refrain, on advice, from directly acknowledging the entirely negative contributions of certain particular academics and institutions who helped in their various ways to make the doctoral process seem even more like a cruel, absurd, pointless and extremely cynical hazing ritual than it otherwise might. However, like a Roman emperor in partially yielding to the pleas of a citizen's influential friends for a black mark to be removed from his record, 'I want the erasure to show'.<sup>1</sup>

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<sup>1</sup> 'Litura tamen exstet'. Suetonius, *De Vita Caesarum*, Claudius, 16 (Thayer 2012).

Acknowledgements of this kind traditionally conclude by approvingly mentioning the author's parents, but in my case frankly I would rather not even mention their names. My cats, Dhūmra and Nilagra, were more helpful and more humane, and my ex-parents did everything in their once-considerable power to discourage and to prevent me from becoming a musician. If it was up to them, this document would not exist at all; they are therefore the last people in the world to have any right to preen themselves by such faint refulgence as may eventually reach them. I do regret that my late brother, a musician himself and of no mean attainment, did not live to read (or to refuse to read) this document. He would probably have shrugged equivocally—it was the way he evaluated most of my endeavours, musical and otherwise—but on balance, he might have secretly approved.



I acknowledge the assistance of the Research Scholarships Section of the Graduate Research School of the University of Technology Sydney for their furnishing of a small but significant Thesis Completion Equity Grant to me in September 2019, and some smaller general Equity Scholarships in previous years. The funding provided in 2019 made it possible for me to expand my practice in a number of highly worthwhile ways, including the provision of adaptive technology to help with chronic illness, the obtaining of enough external storage devices to finally be able to back up all the files relating to this project, and the purchase of new software instruments and the tools to work on possible new hardware approaches. If the funds did not make up for a long and desperately weary period of virtual destitution during the earlier years of the doctorate, when I had no financial support whatsoever for this research, they at least made it possible to complete it in a far more respectable form than would otherwise be the case, and I am grateful for that. This exegesis has been professionally copyedited by Kylie Lowe in line with the Guidelines for Editing Research Theses and sections D and E of the Australian Standards for Editing Practice. I thank her for her efforts.

Finally, I would also like to particularly acknowledge the practitioners of *musiqi-e assil* (or the Iranian or Persian classical style<sup>2</sup>), among whom Ostâdân (Masters/Maestri) Mohammad-Rezâ Lotfî, Ahmad Ebâdi, Dariush Talâ'î, Parviz Meshkatian and Hossein Alizâdeh come particularly to mind. Their immense skill at performance and deep commitment to beauty have been constant companions and admonitions throughout this pilgrimage.<sup>3</sup>

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<sup>2</sup> See Professor Laudan Nooshin's discussion of this significant distinction in Nooshin (2003), p. 243, footnote 8.

<sup>3</sup> Needless to say in one sense—but very necessary to say in another, given current geopolitical events—the musicians of Iran are no more responsible for the current political organisation and objectives of their nation than Australian musicians are responsible for our own.

## STATEMENT OF THESIS FORMAT

This doctoral thesis consists of the exegesis here present and a series of accompanying creative works in the form of musical pieces. Seventeen of these are presented as a coherent artistic whole in the form of a ‘virtual album’ of approximately two CD lengths. This is entitled *Plaksha: Authentic Music of the Ancient Laramidians*, and it can be accessed at the address:

<<https://cloudstor.aarnet.edu.au/plus/s/LSJhyx7vBfshQ7H>>.

### *Plaksha: Authentic Music of the Ancient Laramidians*

#### Track Listing

	The music of Suloma (South Appalachia)	Type	Duration
1	Grāvā	Folk	0:54
2	Madhyapatita	Folk	0:50
3	Nagodara	Folk	3:34
4	Krāntipātagati	Courtly	2:34
5	Mārgasodhaka	Courtly	8:07
6	Pavanamāyā	Sacred	24:22
7	Mattavāraṇa	Sacred	16:35
	The music of Sūrmi (North Appalachia)		
8	Makṣikatoupan	Folk	1:03
9	Dārudaśrava	Courtly	3:43
10	Tārakitadravaja	Courtly	8:28
11	Antarhāsa	Sacred	5:01
12	Parṇavādya	Sacred	4:19
	The music of Praśāsītṛ (The Island of Laramidia)		
13	Nakṣatravinoda	Popular	8:06
14	Vyālamṛganṛtya	Popular	3:22
15	Vṛkatātviśvavidyālaya	Courtly	21:23
16	Tatpara	Sacred	7:43
17	Kṛtrimakeśāvartī	Decadent	4:07

## PREFACE

He must sow in tears that others may reap in joy.  
Frater Perdurabo, *Liber 536*

A preface to a conventional doctoral thesis is sometimes used to contain personal material considered ‘irrelevant’ to the main body of the text and the exposition of the research and its findings. But this is a ‘creative’ dissertation, which is partly a record of a personal creative journey into and within a system of making music—the Bohlen–Pierce or BP scale—which is ‘new’. So new, in fact, that it was first articulated in theory in 1971, and the body of work in the system is presently slim at best. As will be further expounded in Part 1, ‘BP’ is *so* new that the question of the bearing of conventional music theory upon it is one of the matters investigated here.

Precisely because of this ‘newness’, areas of theory and perhaps even practice that might not enter into an exegesis, even a ‘creative’ one, about a more established system have necessarily come into play in this project. The lack of a single defined and established ‘BP theory’ raises questions about the philosophy of music—and is affected by questions about the perception and cognition of music—which cannot be evaded if justice is to be done to the subject. That, at any rate, is how I feel about it, which seems an opportune point to add some prefatory remarks about my own background and creative practice. (I use the first person throughout because I became weary of paraphrases.)

My experience as an ‘underground’/‘experimental’ musician stretches across three or four decades. I was originally self-taught in the days of ‘bedroom electronica’ in the early- and mid-1980s, when the first generation of digital synthesisers and the advent of the cassette-based portable 4-track recorder made it possible to do whatever one pleased within the limitations of the technology. And, working with a collaborator, that is what I did. The resulting ‘bleeps and blorps’ attracted some amusement, some irritation and some airplay, but never enough of any of these things to make it finally worthwhile to keep the project going. Some of the stronger influences were Throbbing Gristle, The Residents, Suicide and Chrome, as well as Australian ‘lo-fi’ acts of the sort given an airing by the Sydney label M Squared. However, ‘The Palcontents’ never worked up to an actual release, and eventually I had to abandon such work for other commitments.

In the 2000s I finally had some time to resume musical creation. While engaging in relatively ‘conventional’ ‘rock’ music, I had side interests in ‘experimental’ work, often the creation of improvised soundtracks for old silent films. These—together with a longstanding interest in the ‘xenotonal’ music of people like Harry Partch—eventually led me to the Music and Sound Design faculty of the University of Technology Sydney. There I discovered the BP scale for the first time—I can no longer recall just how or where—and became intrigued by its potential for a new musical language. This doctoral exegesis is the result of a long process of labour in this area. It has been difficult and challenging in many ways. I hope my exposition of these challenges—and the concomitant rewards—will prove useful to others toiling in these rich new fields.

## ABSTRACT

This work is a description of several years of intensive study into the Bohlen–Pierce (BP) scale, a tonal framework discovered in the early 1970s in which the scale is larger in compass than the conventional 12-tone-to-the-octave equally tempered (12–ET) scale. The BP scale repeats at the tritave—an interval larger than the octave—and all 13 notes within the tritave are either different in frequency to the 12–ET notes or used in different ways in different positions within the scale.

This difference, together with the fact that the scale is constructed entirely from odd-integer ratios of a fundamental frequency, where the 12–ET scale is based on tempered ratios of an almost entirely even-integer nature, poses many questions about both theoretical and practical approaches to the new scale. The ambit of this study has been to interrogate some of these questions through practice-based research with a view to answering the overall research question: ‘Are there ways in which creative explorations of the Bohlen–Pierce scale can offer an effective context and/or impetus for the creation of new musical works?’

The ultimate outcome of this process has been the production of a two-CD-length studio recording, *Plaksha—Authentic Music of the Ancient Laramidians*. This is the ‘creative’ component of the project. The exegesis is divided into five parts. Part 1, Chaos, examines the context and historical background of ‘xenotonicity’—making music in ‘strange tunings’—and the BP scale in particular. Part 2, Discord, sets out the philosophy, objectives, boundaries and context of the study. Part 3, Confusion, describes the instruments I have built or adapted in the course of my study, and describes the construction, performance, and underlying assumptions of each of the seventeen music tracks which constitute the sonic component of this project. Part 4, Bureaucracy, reports on the outcomes of the study and attempts to weigh its ultimate value with a certain degree of objectivity. Part 5, Aftermath, consists of a summary and suggestions for further research.



## INTRODUCTION

A scientist, an artist, a citizen is not like a child who needs papa methodology and mama rationality to give him security and direction, he can take care of himself, for he is the inventor not only of laws, theories, pictures, plays, forms of music, ways of dealing with his fellow man, institutions, *but also entire world views, he is the inventor of entire forms of life.*

Feyerabend, *Science in a Free Society*



Figure 1: Plaksha—mock-up of ‘CD cover’.  
(Original artwork, incorporating Martyniuk  
2006)

This exegesis exists to describe and to explain, somewhat, a body of musical works that I have been creating for the last few years. If these works were collected into a physical album of material, it would be called *Plaksha: Authentic Music of the Ancient Laramidians*. Nearly all of these terms require some deplication (vulgarly, ‘unpacking’) to be properly understood. ‘Plaksha’ is the Sanskrit name of the quasi-imaginary ‘sunken continent’, where the entirely imaginary society that produced the music was ‘located’. The music is thus not ‘authentic’ in anything other than an ironically intended sense. Nevertheless, all of the pieces composing this project share a common property; without exception they are wholly or partially in some version of the Bohlen–Pierce (BP) scale. This scale, as the full title of the exegesis indicates, is the true subject of this study, and I will define and describe it in

the forthcoming Part 1. ‘Ancient’ is also a term requiring definition; insofar as the imaginary ‘inhabitants’ of Plaksha ever ‘existed’, they did so at a time we regard as the Cretaceous Period (145–66 million years ago). They are here called the ‘Laramidians’ because the continent they inhabited—present-day North America—has, since 1996, been called ‘Laramidia’ by palæontologists attempting to describe it in its state at that time. Obviously, this implies that the Laramidians, although participants in a society or civilisation sophisticated enough to have evolved its own musical ethos—and one very different to anything in present-day human experience, at that!—were not likely to actually have been human. And, in fact, they were not human. They were both more and less than that.

Why this venture into the demiurgical—into world creation? Partly it is an inheritance from my own Honours study, in which many of the preoccupations of the current study were first established. Partly it is a framing and even a distancing device; the BP scale, first described in 1971, is a radically new approach to making music for which only a relative handful of works have been created so far. Even the very notes (to say nothing of the ‘theory’) no longer bear anything beyond a remote resemblance to those used in *any* system heretofore (although there is emerging evidence of a relationship between this system and the 12–ET one; see pp. 70–71 for discussion of a track, ‘Kṛtrimakeśāvarī’, which is in *both* of the systems at once). Such an ‘alien’ system invites, perhaps inevitably, the invocation of an ‘alien’ species to create and perform it. Partly it was simply for fun, although over the four years of this project, what seemed at first to be a tolerable ‘joke’ increasingly became a severely tedious burden to me. Nevertheless, I persisted, usually grimly, and I only

attempted to abandon the ‘Laramidian’ idiom once or twice. These occasions will be spoken of in their place.



I need to prepare the reader; what is ahead will, at times, depart from the structure of a conventional PhD dissertation. There is a growing body of work that suggests that this is a legitimate method of proceeding in a ‘creative’ exegesis. For the moment, the reader should know that what they will shortly encounter is in five parts. Part 1, Chaos, summarises the impetus towards ‘xenotonicity’ in ‘Western art music’, and particularly describes the influence of Harry Partch (1901–1974) in this area. Xenotonicity refers to music or tuning systems that are outside the common run of musical experience; I myself do not particularly care for this term, as it implies that the currently dominant 12–ET scale that finds a practical expression in a piano or synthesiser keyboard is a ‘natural’ or ‘normal’ form of musical expression to which everything else imaginable is ‘foreign’. This is not necessarily so—and this is a subject that will be discussed at some length—but the term is in current use and is thus retained for convenience.

Part 1 continues with an account of the circumstances surrounding the initial articulation and expression of the BP scale in 1971 by its first discoverer, Heinz Bohlen (1935–2015). The subsequent and entirely separate rediscoveries of the scale by Kees van Prooijen in the mid-1970s and by Charles R. Pierce and his collaborators in the early 1980s are also described, along with the differing theoretical assumptions and practical expressions that each particular occasion brought to ‘BP theory’. In fact, there *is* no overarching BP theory, at least at present, and the very different nature of BP to the 12–ET scale on a fundamental theoretical basis raises many questions that need to be answered if such a theory is ever to be articulated. Although an attempt to furnish such a theory was never within the scope of this project, some of these questions are necessarily touched on in the description that follows of BP research and practice to the present day. A description of some of the several different forms of BP notation that have so far been attempted concludes Part 1.

Part 2, Discord, attempts to place this theoretical material in the particular philosophical context of my practice in this project. For this reason, it opens with a somewhat general discussion of some relevant aspects of music theory. One major subject here is the ‘right’ or ‘best’ way for a ‘xenotonicist’ to proceed in these circumstances of ‘*tona incognita*’. Which—if any—assumptions of ‘conventional’ music theory are to be retained as useful in proceeding under these circumstances? There is a discussion of certain aspects of ‘conventional’ music theory in the xenotonic sense—particularly the ‘tension’ between the two philosophies of music articulated in ancient Greece by Pythagoras (c. 570 BCE–c. 495 BCE) and Aristoxenos (also Aristoxenus, c. 375 BCE–? BCE). Pythagoras’ theory of strict just temperament, in which all musical intervals used were to be derived from small-integer ratios of a base tone, contrasts with the more flexible view of Aristoxenos, who insisted that the ear should be the arbiter of all musical decisions. But *whose* ear? Despite the raucous vehemence of Harry Partch in defence of just temperament, more modern research is presented that appears to lend significant support to the Aristoxenian view. I refuse to come down decisively on either side of the still-current argument, partly under the strong influence of the ‘epistemological anarchism’ of the ‘iconoclastic’ philosopher of science Paul Feyerabend (1924–1994), and partly under the also-strong influence of the ‘Zetetic Pyrrhonism’ of Sextus Empiricus (c. 160 BCE–c. 210 BCE), who wrote a stinging attack on all forms of dogmatic assurances in the form of a broadside called *Against the Professors*. One

book of this is called *Against the Musicians* (*Adversus Musicos*, Empiricus 1986), and it puts forward a series of arguments against *any and all* overarching ‘theories’ of music, as distinct from its practice. Some of these arguments are examined in the light of more contemporary guesses at theory.

The rest of Part 2 describes the context, objectives, background and boundaries of my study. It includes an account of my initial research in my previous Honours work. This was also in the BP scale, and it involved the construction and modification of some simple acoustic instruments (owing much to Partch’s beautiful examples) and their use to sound all 45 of the then-known ‘theoretical’ modes of the BP scale—a mere handful of which had been experimented with up to that point. Part 2 then describes the early theoretical research in this doctoral project, in which dissatisfaction with the existing corpus of these modes (and the influence of Feyerabend) led me to step outside that tradition. Strongly influenced by Persian/Iranian classical music and a postulated general theory of ‘Mediterranean tonality’, I played with the chromatic BP scale until I stumbled upon an entirely new family of modes that disobeyed BP concepts derived from Western art music but that sounded irresistibly attractive to me, at least in monophonic and heterophonic practice. I called this family generally the ‘Vathek Modes’, and I then set out to create a body of creative works in variations of these modes. Many of these pieces interrogated theoretical concepts, but that was not necessarily the main impetus of the works; they were all intended to have merit as creative material in their own right as well.



Part 3, Confusion, is divided into two major parts; the first is a thumbnail description of the various BP instruments that I created for this project, as well as the various uses that I put (and did *not* put) them to. The second section of Part 3 is a description of the processes and practices which were followed in the course of making each of the seventeen tracks which comprise the sonic portion of the project.

Part 4, Bureaucracy, corresponds roughly to the ‘discussion’ phase of a conventional dissertation. An attempt is made to assess the outcomes of the project in terms of the research question and more general objectives. Implications of the findings are explored, both specifically as they relate to questions of BP ‘theory’ and, to a lesser extent, to ‘music theory’ more generally. Finally, in Part 5, Aftermath, a summary of the project and its findings is attempted, together with some suggestions for future research directions in light of what has been achieved so far. The curtain is then drawn on the whole process, still without many dogmatic ‘conclusions’ having been reached.

Appendix A follows, opening with a ‘Discordian Disclaimer’. This takes its title partly from the ‘parody religion’ of Discordianism, which was originally a product of the hippie era of 1960s California but is now slowly working its way into more general cultural acceptance. Discordianism stresses adherence to the chaotic aspects of life, as personified in the Greek goddess Eris. (Discordianism’s basic ‘holy’ text is known as *Principia Discordia* (Jackson et al. 1994).) The contrast between human attempts to impose order-as-structure onto the ‘natural’ phenomenological world

and that world itself, with all its erratic unquantifiability, is emphasised in Discordianism to the advantage of the latter, which is held to foster ‘natural’ creativity and humour.<sup>4</sup>

The reader is cautioned in the Discordian Disclaimer to not accept everything that follows in the remainder of the section as literal truth in the strict academic sense, but rather as a poetically ‘true’ account of the ‘history’ of the continent of Plaksha or Laramidia, as well as its inhabitants and their ways—particularly their music. A potted ‘history’ of Laramidia then follows, positioning its inhabitants as the ‘Second Root Race’ dreamed up by Madame Blavatsky (1831–1891), the founder of the Theosophical Society. (According to the anti-Darwinian Blavatsky, present-day humanity is the ‘Fifth Root Race’ of a total of seven such races—ours being the only human race in the conventional biological sense—that are destined to exist on Earth and every other inhabited planet such as Jupiter.) The ‘Ascended Masters’ are present-day immortal ‘adepts’ that inhabit an ‘astral’ city in the Himalayas and are invisible to normal eyes. These Ascended Masters, to whom Blavatsky attributed her voluminous and febrile writings, are augmented by a new Ascended Master invoked especially for this project, one Jāgand Mara. Unfortunately, like his predecessors, he is far from being an entirely reliable narrator (and, unlike them, his personal life, his conduct and particularly his manners sadly leave much to be desired)!

This general ‘account’ of the Laramidians is then supplemented with an ‘esoteric’ description of the purpose and function of each musical track in Laramidian society based on material ‘channelled’ by Jāgand Mara. They are presented in ‘chronological’ order as exemplars of the three great divisions of the music of the three main islands that together comprised the continent of Laramidia. (This is not the chronological order of their actual creation.) The three islands were inhabited and abandoned in succession by the Laramidians, and the music—whether folk, courtly or sacred—of each island is somewhat distinct in its form, while still all being in the BP scale in one way or another. The music of the southern island, Suloma, is relatively ‘primitive’ in form, being that of the earliest stage of Laramidian culture. It is entirely equally tempered; the simplest possible form of the scale. The music of Sūrmi, the next inhabited island to the north, is more austere and complex in nature. It generally insists on just temperament and begins to use quarter tones. This proved to be such a controversial approach in its various forms (more than one of which is presented) that a civil war developed partly over this question, which devastated the continent and forced the scattered survivors to emigrate en masse to the main island of Praśāsitr. Here all forms of previous expression were synthesised, although again not without controversy. Other methods of tuning were also experimented with, despite the warnings of the elders that such rash reformism could only bring about a terrible, total and final calamity. And so it eventually did...

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<sup>4</sup> This is also the source of the prefixes for each of the five parts of this document, which reflect the Discordian *weltanschauung* as per ‘Dogma 1—Metaphysics #2, “Cosmology”’ in pp. 44–45 of *Principia Discordia*.

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## GLOSSARY

All non-technical words—obscure or allegedly ‘obsolete’ as they may be—that are used here (other than the neologism ‘fnord’) may be found in the *Oxford English Dictionary*.

Fnord, <i>x</i> .	This word does not mean anything at all. It is sometimes employed as a metasyntactic variable, originally in the <i>Principia Discordia</i> and <i>The Book of the SubGenius</i> , but more recently by graffitists, EDM fans and computer programmers.
Just tempered, <i>adj.</i>	A musical interval (or array of such intervals) derived from small-integer ratios, in contradistinction to equally tempered intervals, scales etc., which alter the ratios slightly to achieve an equal acoustic distance across all intervals of a scale. It is also known as ‘justly tempered’, ‘just intonation’ etc., but here we will follow the usage of the <i>Oxford English Dictionary</i> .
Macrotone, <i>n</i> .	Any interval larger in span than a semitone.
Macrotonal, <i>adj.</i>	Usually used to describe a scale containing macrotonal intervals.
Microtone, <i>n</i> .	Any interval smaller in span than a semitone.
Microtonal, <i>adj.</i>	Usually used to describe a scale containing microtonal intervals.
Octave, <i>n</i> .	The repeating interval of the 12–ET scale. By definition, an interval of 12 semitones and therefore 1200 cents.
‘Pataphysics (also Pataphysics), <i>n</i> .	The science and art of the epiphenomenology of metaphysics. A field of study originated by Alfred Jarry (1873–1907).
Practice-based research, <i>n</i> .	This exegesis will adopt the definition used by the Creativity and Cognition Studios at UTS, whereby the critical distinction between this project and one defined as practice-led research is that the outcome of this project includes a series of creative works in the assessable items (see Creativity and Cognition Studios, n.d.).
Semitone, <i>n</i> .	The basic material used to construct the 12–ET scale. By the definition of Helmholtz and Ellis ([1885] 1954, fn p. 41), 100 ‘cents’. Twelve such intervals make up the 12–ET scale, which repeats at the ‘octave’.
Tritave, <i>n</i> .	The repeating interval of the Bohlen–Pierce scale.
12–ET, <i>n</i> .	The twelve-tone-to-the-octave equally tempered scale, which is the basis of the vast majority of our present music. The keyboard of the piano or synthesizer is one of its practical expressions. It is also known as ‘12–TET’ and ‘the Western scale’—terms used interchangeably here.