

KODÁLY, KINAESTHETICS AND KARAWITAN:
towards a paedagogy of Javanese gamelan in the West

or,

GAMELAN TEACHING:
an “uncommon approach”

by **Nikhil Dally**

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This paper is dedicated to all my gamelan students,
past and present,
who have taught me so much;
especially to the members of
Kridha Anggara
and the Hertfordshire Gamelan Ensembles.

December 2005
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Abstract

Developing an effective paedagogical strategy for teaching Javanese gamelan to Westerners requires that we take careful and sensitive account of the vast differences between the world-views of Java and the West. The West has since the Renaissance tended to develop an attitude to the world which is rational, linear, man-centred, individualistic and product-oriented; Java has tended to remain more instinctive, indirect, spiritual, communal and process-oriented. Western obsession with product over process has had a deleterious effect upon certain aspects of its musical and educational cultures. A more spiritual and communal world-view can help to heal this, and can guide us in forging a paedagogy for gamelan in the West which, whilst directly imitating neither the product-obsessiveness of much Western music education nor the informal “osmosis”-based learning styles of Java, helps our students to engage deeply in the processes of *karawitan* and be themselves transformed by the experience. By using certain European concepts of music education (such as that of Kodály) which parallel the implicitly vocal nature of *karawitan*, and by emphasising the importance of kinaesthetic, aural, and emotional aspects of music, we can teach gamelan in such a way as to transform our students’ attitudes not only to music and learning but also to the world they live in.

Acknowledgements

I would like to thank the many people who have given me advice on the writing on this paper: Philip Dale, Angela Dally, Chris & Ranu Dally, Laura McColm, Sarah de Nordwall, Brian Noyes, Paskasari Permana, Tushaar Power, Alan Thomas, Christine Waite.

Note

Throughout this paper, the masculine personal pronoun doubles as the epicene. This is purely for grammatical convenience.

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Preface: Four “*Bapaks*”

If we want to become better teachers of anything, we learn most from collecting the ideas and methods of inspiring individual paedagogues. I would like to thank four people who have been great inspirations to me, principally because of their willingness to speak fearlessly about what is important to them in their teaching.

Alec Roth was the undisputed *bapak* (lit., “father”) of British gamelan education in the early 1990’s, and his example and discourse on the subject ¹ inspired many of us who taught gamelan at that time. The late *Bapak* Al. Sutiknowati (Pak Tikno) is one of the few Javanese I have ever met who dared to be openly opinionated; his understanding of the challenges involved in British gamelan pedagogy was deeply insightful. And Jody Diamond (a metaphorical *bapak*) revolutionised my whole approach to the teaching of gamelan over the course of three days in Jakarta in 1989. Finally, it is probably safe to assume that *Bapak* Zoltán Kodály never realised that his concepts of music education might be applicable to Javanese gamelan; perhaps it is a sign of true genius in a paedagogue if his ideas are so profoundly perceptive that they can be so broadly, even universally, relevant.

I. Introduction

The growth of interest in the West in Javanese gamelan over the past three or four decades is remarkable. Particularly in the USA, the Netherlands and Great Britain, Javanese gamelan has become one of the most visible and well-known non-native musical traditions.

One of the most notable aspects of the British love affair with Javanese gamelan is the manner in which gamelan has been embraced as a context for music education, both for children and adults. Schools, music services, education authorities and cultural centres up and down the country have latched on with enthusiasm to the educational potential – or at least to the political correctness – of gamelan. Gamelan teaching is a thriving niche market.

Ironically, though the proliferation of gamelan teaching around Britain is almost universally lauded, very few searching questions are asked – and still fewer answered – about how exactly to do it. It is my hope, in this paper, at least to begin a public conversation which may redress this balance.

There does seem to be a certain reluctance amongst us British gamelan teachers to discuss openly how we teach; discussions on the subject often lead to a retreat to the well-trod position that “everyone is different; there is no one way to teach gamelan.” This statement may be juridically true, but it is not of great paedagogic utility. There are indeed many ways to teach gamelan, but it is up to us teachers to discern which methods help students to learn in the most profound and effective manner.

Another frequently stated view is: “It doesn’t matter *how* we teach gamelan; the only important thing is that we teach *gamelan*.” This statement, which is presumably meant to reassure, unfortunately prompts more questions than it answers: for instance, “What *is* gamelan?” Is it a set of instruments? a style of music? a repertoire? a process? a way musicians relate to each other? a feeling? And therefore, as Jody Diamond puts it, “What does it really mean to ‘teach gamelan?’”²

This reluctance to discuss paedagogical detail is a shame, because it militates against the exchange of potentially valuable ideas, such as routinely happens amongst American gamelan teachers via the Dartmouth Gamelan Listserv. It is also misleading, because, as Maria Mendonça found whilst researching for her PhD dissertation,³ a British gamelan teacher interviewed on his own, unhampered by the presence of others, can be as opinionated as anyone, even an American...

*

A trawl through the archives of the Gamelan Listserv, as well as through comments collected by Maria, suggests an awareness of two main poles of paedagogical theory: on the one hand the so-called “traditional Javanese” way, involving an emphasis on aural skills, rote learning, memorisation, imitation, trial and error, and the gradual assimilation of concepts through practise; and on the other, a so-called “Western” way, using more notation, less memorisation, and a greater emphasis on clarity of explanation and “getting it right”.

Here are some comments from the “aural/memorisation/‘traditional’” side of the argument:

“Reading really does inhibit listening.”⁴

“The most enjoyable way I’ve found to learn... was by ear... It seems to be more deeply rooted than other ways.”⁵

“Having a piece internalised... is an entirely different experience, and to me a more sublime one.”⁶

“Sometimes the most efficient... method is not the preferred one.”⁷

“Getting lost is an important process that I like to happen in my classes.”⁸

countered by some views from the “notation/explanation/clarity” side:

“Some people can pass a lot of time in repeated contact but only remain bewildered.”⁹

“Notation may be a necessary component for us in learning to play musics that are traditionally not played with notation.”¹⁰

Though this divide clearly has some validity, I suggest that the situation is far more complex than these quotations on their own imply. When transposing an art from one culture to another, appealing merely either to the “authentic practice” of the culture of origin or to the “normal practice” of the destination culture is of limited use. We need to forge a pedagogy which combines the best of, but also goes beyond, both “Javanese” and “Western” ways of teaching. This is not a way of restating the pedagogical impasse that “everyone is different; there is no one way to teach gamelan.” On the contrary, it is a way of moving beyond that, with care.

*

When Western students meet gamelan for the first time, both the learner and the thing learnt bring with them certain deeply-rooted, often subconscious, cultural presumptions. We need therefore to start by seeking a deeper understanding of the cultural implications of Javanese gamelan, and their contrast with the cultural implications of our own and our students’ upbringing. This will help us to do two things, which are necessary preliminaries to formulating a teaching strategy for gamelan in the West:

First, examining the deep underlying cultural presumptions behind different ways of learning and teaching will help us to discuss intelligently their advantages and disadvantages.

Second, it will help us to answer the question: “*Why* teach gamelan to Westerners?” This question, if left unaddressed, sabotages all further discussion. Javanese musicians have a natural cultural affinity with *karawitan* and are therefore not normally faced with the question of why it is *gamelan*, rather than any other kind of music, that they have chosen to teach. But we British gamelan teachers all have different ideas about why we have chosen to teach this kind of music, and unless we deal with this question, any attempt we make to discuss British gamelan pedagogy will inevitably founder.

If we can achieve some understanding of the profundity of the cultural clash inherent in the process of teaching a British person a Javanese art, then we will begin to see the potentially revolutionary benefits which learning gamelan can bring to people in this country – benefits which are, at their best, profound and life-changing. We will then no longer say that “the only important thing is that we teach *gamelan*,” for we will see that gamelan itself, both for the Javanese and potentially for us, is but part of a far greater process of personal growth, communal development and spiritual enlightenment. We will know then that *how* we teach gamelan is crucial in determining the extent to which we can help our students access those ideals.

II. The cultural clash

*Marsudiya kawruh jroning gendhing,
taberiya ngrasakké irama,
pangolahé lan garapé,
ngrasakna wosing lagu
witing pathet saka ing ngendi,
ing kono golekana,
surasaning lagu
rarasen nganti kajiwa,
karya padhang narawang nora mblerengi,
tatas nembus Bawana.*

Strive to understand the wisdom contained in *gendhing*,
be diligent in feeling its *irama*,
its development and treatment;
feel the essence of *lagu*,
know where lies the origin of *pathet*,
seek there
the meaning of *lagu*,
feel it until your soul
is made clear, bright, and your view unclouded -
a clarity that penetrates the universe.

This acrostic poem by the great twentieth-century Javanese musician R. L. Martopangrawit forms the final section of his *Catatan-Catatan Pengetahuan Karawitan (Notes on Knowledge of Karawitan)*.¹¹ The rest of the book consists of a detailed examination of various aspects of *karawitan*, in a style which partly resembles Western models of academic music analysis. It is instructive and enlightening for us, therefore, that his final word consists, not of a page of analysis, but a very Javanese poem imputing to *karawitan* a distinctly spiritual power. It is an apt reminder to us that the way the Javanese think about music, indeed the world, may be very different from ours.

Discussing the cultural clash between “East” and “West” is a notoriously difficult issue. Almost by definition, anything anyone can say on the matter can be construed as racist, bigoted, patronising, triumphalist, generalised, or failing which, “politically correct”. Because of my own mixed cultural background I am well aware of the difficulties inherent in discussing cross-cultural matters, but also of the absolute necessity of doing so if we are to understand anything as knotty as cross-cultural paedagogy.

Read any author who discusses cross-culturalism (for example Buruma & Margalit,¹² and Edward Said),¹³ and one comes across a plethora of adjectives used to characterise the difference between “East” and “West”. Just as in the discussion about gamelan paedagogies above, they tend to group themselves into two mindsets which seem to refer to a sort of cultural opposition:

traditional	vs.	modern ¹⁴
spiritual		materialist ¹⁵
communal		individualist ¹⁶
internal		external ¹⁷
profound		rootless ¹⁸
organic		mechanical ¹⁹
holistic		specialised ²⁰
mystical		empirical ²¹
wise		clever ²²
intuitive		rational ²³

non-discursive	discursive ²⁴
childlike	mature ²⁵
quest-oriented	goal-oriented ²⁶

Though this oppositional conceptual framework clearly has only limited objective validity, it exists in the minds of many on both sides of the divide. As Buruma and Margalit point out, “this is not about policies, but about an idea.”²⁷ This framework describes trends in human thought which, real or imagined, conscious or subconscious, have had a profound effect, both in the Occident and the Orient, upon attitudes both to music and to education.

I will discuss these specific areas in greater detail below, as they are crucial to our discussion of the pedagogy of gamelan. But we must not underestimate the extent to which attitudes to music and education in both “East” and “West” represent and are shaped by more general cultural contrasts. If we spend all our time immersed in the values of British society we can sometimes forget just how profoundly different are the attitudes embedded in and implied by Javanese gamelan. If we are to have any hope of effectively domesticating British people to Javanese gamelan, or vice versa, we must become aware of the far-reaching differences between the general world-views of Java and “the West”, even if we can only describe these differences inexactly.

Therefore, before discussing the choices which face us in choosing models of music education, I first submit my interpretation of the “Java vs. the West” cultural clash. It is of course generalised and incomplete, and admits many exceptions. I am discussing societal trends here, not making blanket accusations about the individuals who make up these societies. But I hope it will help to clarify the answer to the question, “Why teach Javanese gamelan to Westerners?” Therefore it is my first step in formulating a pedagogy of gamelan.

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Martopangrawit concludes his analysis of *karawitan* by emphasising the central importance of spirituality, of the artist’s relation to the immanent. Clifford Geertz, in his book The Religion of Java, points out that “playing (or listening to) a *gamelan* is a spiritual discipline, not just a mere amusement.”²⁸ For the Javanese, *karawitan* and God are inextricably linked. We in modern Britain may well find this an awkward fact to deal with, but we must face up to it if we are to have any proper understanding of gamelan. Further, if we are to gain any insight into our own interface with gamelan, we must, whatever our feelings about religion, face up to and understand the nature of our own spiritual outlook, and the attitudes to spirituality with which secular Western society may have inculcated us.

It will be clear to anyone who has spent any time in Java that for the Javanese, spirituality is a *sine qua non*, an absolutely fundamental pre-requisite to understanding the world we live in. The Javanese world-view also holds that devotion to community is at least as important as individualism. Personal ambition is best left subservient to the communal good. Individualism, and single-minded devotion to achievement and progress, are often held in distrust.

We can learn much about life, therefore, not by taking it apart and analysing it, but by living it and experiencing it in time-honoured ways. Subjectivity, contemplation, stillness, instinct, ritual: all these can be our teachers. We can achieve wisdom by navigating life in measured, graceful and curved pathways, not in goal-oriented straight lines. Wisdom comes from living the life we are given and seeking that which is ineffable and transcendent, that which has its roots beyond the visible world, but which manifests itself in the interior essence of a thing rather than in its outward appearance. This attitude is expressed with great power (albeit not in a Javanese context) in Vicki Baum’s A Tale From Bali:

Pak knelt and put his clasped hands to his forehead... He did not give thanks for anything and he did not pray for anything; he only felt that there was meaning in everything and that things happened as the gods ordained... His children were dead and his father had been killed; but his heart was filled with a contentment the white man does not know.²⁹

*

How different this attitude is from the one taught us by modern Western society. But perhaps it was not always like this. As Christopher Small points out,

Europe in the centuries before the Renaissance was an oral, mainly non-literate communal culture, not so very different in style from the rest of the world. It was around the middle of the fifteenth century that our culture began to reveal those new attitudes and concepts, ways of feeling, seeing and hearing, that were to cut Europe off from the rest of mankind and make her culture, including her music, unique.³⁰

In the past five hundred years or so, Europe and her cultural offspring have changed massively in comparison with the rest of the world. Just as a major part of the Javanese world-view is intimately connected with its spirituality, so too have Western attitudes to life been shaped by a growing secularism. If we are to investigate the ways in which British people can learn Javanese music, we need to look deeply at the roots, as well as the implications, of Western secular cultural presumptions. I base much of the following upon Small's analysis.

From around the Renaissance onwards, two new ideas began to establish themselves in the West, eventually becoming the new orthodoxy: first, that man's importance challenges that of God; and second, that the importance of the individual challenges that of the community. These ideas so contradict the ancient view of the world that it is inevitable that they will revolutionise any society which takes them to heart.³¹

If man aspires to displace God, then it follows that his moral framework needs re-examination. Superstition can be displaced, and replaced with result-oriented mores. The notion that certain actions or states of being can be intrinsically good ceases to be self-evident. Tradition is there to be overturned, ritual a pointless routine. Passivity is no longer a virtue.³²

If the individual is as important as the community, then it is right for him to set goals, to improve himself, and to advance, rather than to accept the realities bequeathed to him. Man can therefore become more result-oriented, seeking the most efficient, linear way to reach his goal. Product becomes more important than process. The route to that end, and the processes engaged in on the way, become less important. Taking diversions, pausing for contemplation or the fulfilment of ritual, become less relevant.

If self-betterment is an end in itself, then so must be the pursuit and acquisition of productive, useful knowledge. The authority of divine revelation needs to be questioned. Reason, logic and science, rather than insight, intuition or experience, are exalted as the supreme tools in the search for knowledge.³³ Areas of human activity which appear to be based on the subjective assessment of individual personal experience attract less respect.³⁴ Areas of thought which are hidden, interior, or intangible, are suspect.

If there is such a thing as objective human knowledge, then those who have followed the logical designated path to acquire that knowledge can be deemed experts in their field. We expand our own knowledge by imbibing information recognised and collated by experts. Since logical paths are by definition direct paths, breadth of knowledge is accorded less and less value: to be an expert in anything, one needs to specialise.

From this small clutch of cultural presumptions flow many of the greatest achievements of Western civilisation: science, technology, medicine, education, exploration – the list is endless. Without these changes in world-view, the West might have remained, as much of the rest of the world did, “in the Dark Ages”.

However, “neither intellect nor power of logical thought is any guarantee of insight.”³⁵ The danger of being too fixated upon approaching things in a linear, goal-oriented, product-based manner, is threefold. First, we can end up baffled and impotent when faced with the unintended, illogical or deleterious consequences of our individual or collective actions. Second, we run the risk of rendering ourselves incapable of understanding or relating to areas of human thought which are not themselves exclusively based on reason. Third, we can blind ourselves to the deep-level unifying connections between different areas of knowledge which can help our understanding of the world around us, and of ourselves:

As the secular life is content to remain godless, and so deprives itself of any... unifying aim, it is but natural that success in each of its many branches should come to be regarded as an end in itself... The man of science should deify positive knowledge,... the statesman should regard political power as intrinsically desirable,... the merchant and the manufacturer should live to make money... Even the ardent reformer... pursues the ideal to which he devotes himself, as an end in itself, and makes no attempt to define or interpret it in terms of its relation to that supreme and central ideal which he ought to regard as the final end of human endeavour.³⁶

This is perhaps an over-generalisation, but it is certainly true that the man-centred, product-oriented, linear way in which our society has learned to function over the past few centuries has had a profound effect on both the musical and the educational cultures we have created in the West. Whatever our background, the chances are that the assumptions we subconsciously make about music, and about learning, will be deeply challenged when we come face to face with so intrinsically spiritual and interior an art as gamelan.

III. Music

Because music is humanly organized sound, there ought to be a relationship between patterns of human organization and the patterns of sound produced as a result of human interaction.

- John Blacking³⁷

These words by John Blacking are true at many levels. At the most obvious level, it is undoubtedly the case that the outward forms of musical organisation produced by any nation (whether symphony or *srepeg*) are inseparable from the societal patterns which have given rise to those forms. But at a more profound level, the music of any society will subtly reflect the often intangible ways in which people in that society think, their relationship to their “supreme and central ideal.”³⁸ Where a society holds the efficient achievement of individual human goals as its central ideal, the way its music is organised may reflect this; if instead its ideal is passive communal co-operation with an interior divine reality, its music may function very differently indeed.

Music in the West

Listen to music composed in Europe before c. 1420, therefore, and you may be getting a glimpse of how the European mind might have thought prior to the Renaissance. There is much we don't understand about how composers such as Vitry or Machaut chose which notes to write. But theirs is clearly not music which is linearly constructed, arguing its way forward to a logical conclusion like a classical sonata or symphony. There are some obvious cyclical aspects to their music. But even at a more detailed level, this is music which moves in gentle curves, exploring and decorating its space, tarrying awhile when it finds something particularly beautiful to say. Its melodies are wonderfully shaped, even if we can't find identify systems of motifs which function as “generating cells”³⁹ of whole works. Its harmonies are gorgeous, even if we can't find “large-scale harmonic structures”⁴⁰ underlying whole pieces.

More importantly, perhaps, this is music which, whether by design or by default, represents not just man's view of the world, but also God's.⁴¹ God can see all places and all times simultaneously. Thus the mediaeval motet presents us with a multitude of simultaneous lines, all describing their own paths through the soundscape, co-operating with, but not controlled by, each other. The melodic, harmonic and structural foundation, the *cantus firmus*, is ironically often the least obvious aspect to the analytical listener: it underpins and guides and unifies, but, like an unseen paraclete, does not impose upon our exterior consciousness.

From the Renaissance onwards, composers in the West begin increasingly to seek a musical language which more accurately expresses their developing faith in reason and humanity. The development of functional tonality allows composers to unify and control their musical lines in a way they had never chosen to before. With tonality, all aspects of the music, from the largest-scale structures down to the smallest details, can be imbued with an explicit purpose. The composer can have full control and mastery over his notes, taming them to his own needs, and using them to express his own individual vision. Pieces of music can now develop in a more directional, linear, rational way; they can strive to achieve, to progress, to drive forward to their overt logical conclusions.⁴² They do this by musical argument and musical drama: statement, opposition, modulation, conflict, build, climax, resolution. This is a type of music qualitatively different from any other. It lies at the heart of Western civilisation, and is the expression in sound of the fundamental ideas about mankind which have shaped our history. Its uniqueness, its greatness, and its essential relevance to our lives cannot be disputed.

In many cases, and for a long time, Western classical music has been able to develop the implications of tonality without losing its spiritual or communal roots. An exploratory attitude to

music, including a good deal of improvisation, remained common into the early nineteenth century. Instrumental music-making remained a largely co-operative venture, only threatened by the rise of the cult of the conductor towards the end of that century. As long as classical music has remained linked to the Church, and to popular theatre,⁴³ it has not entirely cut itself off from the communal life of society. And the influence of communal musics old and new, folk music and jazz, for example, has continually challenged the attitudes of composers.

Unfortunately, if the rationalist is too sure of his own logic to stop and assess the unintended consequences of his mission, he may not always recognise the problems he is storing up for himself.

Increasingly the Western classical composer devotes himself to the manufacture of musical products, works of personal self-expression which are designed to be reproduced over and over again with considerable efficiency, largely independent of the particular performance circumstances. “The essence of the music lies in the notes, not the performer.”⁴⁴ Nowadays the composer often does not communicate directly with the performers, instead creating his musical product in isolation, committing it to a final fixed form in symbols on a page, and presenting it to the performers only when it is complete.

Goal-oriented efficiency is paramount in this creative process. This efficiency is of course greatly helped by the use of a very precise system of notation, and of visual cues from the conductor, which mean that an ensemble of musicians can perform an entirely new piece with remarkable competence without any of them having any clue in advance of what the piece should actually sound like.

Active communal engagement in the creative process becomes therefore less and less necessary. For performers the goal is often to gain mastery over their discipline. We strive for higher and higher levels of technical excellence, often at the expense of making ourselves depressed, or burnt-out, or even injured in the pursuit of physical control at all costs. To achieve this mastery we must specialise, becoming either pianists, or violinists, or (dare I say it?) gamelan players. This technical expertise is of course hard won, and thus a gap emerges between the professional and the amateur, the latter sometimes denying that he is musical at all because of his perceived technical inferiority.

In a modern classical concert hall the members of the audience are separated from the performers and expected to sit in one area which has been designated as the best place from which to consume the musical product. From there they can hear the piece in the most efficient way possible, ideally with the correct musical balance between the various different instruments so that the cogency of the whole musical argument is inescapable. Of course audience members are not expected to contribute in any way to the creation of a work: that job is left to the professionals.⁴⁵

Finally, recording technology allows us all to consume musical products without ever experiencing live acoustic sound or interfacing even passively with living musicians. When we buy a CD we are not in fact necessarily buying a recording of a performance, but a spliced-together compilation of snippets of music from sometimes hundreds of different recording takes. The final CD is quite literally a musical product, put together in its final form by engineers, and not containing any of the continuity of emotion of any of the performances which might have contributed to it. The balance of the instruments will have been perfected, so that every last iota of the musical argument is perfectly audible. All mistakes or infelicities, however tiny, will have been removed: the music has been successfully de-humanised.

Western classical music since the Renaissance has achieved things no other music on earth has ever done. Functional tonality, in its single-minded, directional, goal-oriented efficacy, is the musical emblem of the post-Renaissance Western mindset. Its legacy has been magnificent, but in some ways also, especially in its twilight, troubled. For approximately a century now – or perhaps longer

– composers have begun to chip away at the musical certainties presented by tonality and all its implications.⁴⁶ But changing the values by which our musical culture operates is much harder. If we could go back to the days of Power and Dunstable, that would be interesting. But without that option open to us, we need to look for other ways, not only to re-balance our musical culture, but also to heal the many other excesses into which uncritical adherence to our post-Renaissance Western mindset has led our society. As John Blacking says,

The history of many civilizations has shown that a society and its culture may ultimately collapse because of human alienation. The machine runs down without the only power that can change it, the creative force that springs from human self-consciousness.⁴⁷

Perhaps this is where gamelan can help us.

Music in Java

Gamelan embodies and expresses Javanese sensitivities; and in doing so, it suggests that parallels between music and behavior may provide valuable insights into the patterns and processes that influence us all.

- Joan Suyenaga⁴⁸

We who play gamelan are fortunate indeed to do so, for gamelan is built on very different cultural sensitivities from Western society around us. Indeed, perhaps the mindset of the Javanese is not so very different from that of our European forefathers six hundred or more years ago. It is true that, in general, the Javanese honours God at least as much as man, community as much as the individual, and process as much as product. And, as R. Anderson Sutton points out, whilst his “external behavior and appearance are accorded considerable importance, it is the inner that is felt to be somehow closer to truth.”⁴⁹ It is also true that, compared to us in the West, the Javanese probably lives his life with less single-minded personal ambition, less rationality, and less haste, taking much more time for contemplation, diversion, ritual and stillness. Perhaps that is part of the reason why so many people in Java remain, in material terms, so poor. But this mindset brings a certain spiritual, emotional and cultural richness, and perhaps learning gamelan can bring a small part of that richness to our own society.

Let us examine first how this mindset manifests itself in the music.

The Javanese sense of musical structure is very different from ours. Every piece starts explicitly at the same place it ends, with the *gong*. This cyclical nature is not such a significant thing on its own; after all, a Western piece may start in a home key, move away from it, and return to it several times before the end. But the difference is that a Western piece establishes its home key as the opening salvo in a tonal dialectic, returning to re-establish it as part of the process of resolving the argument. The Javanese do not “establish” *gong* tones; as soon as one is stated, it becomes a springboard for exploring the musical universe around, often in ever wider circles. Each return to the *gong* is but fleeting, the *panerusan* instruments immediately forcing us back into our explorations, which only ever cease once the final *gong* is struck. The art lies not in the cogency of a musical argument, but in the communal grace and beauty which the musicians can bring to their exploration of the musical universe set up by the *gong*.

More importantly, though more confusingly for the inexperienced listener, this musical exploration is happening in several different voices at once. Unlike in tonal music, where the vertical relationships between instruments are strictly controlled and directed toward the expression of a single logical argument, the notes Javanese musicians play are not all vertically tied to each other. This has led some Western commentators to use the term “heterophony”, implying that the Javanese

do not care, or are insufficiently clever, to do any other than simply let all the notes of the scale bounce around at random, reaching consonance only at certain fixed points. (Similar accusations, of course, have been made of even the greatest of pre-Renaissance Western composers. For example: “From the vertical standpoint Machaut appears to be less advanced than the fourteenth-century theorists, but he makes constant progress towards a greater degree of consonance, even in the difficult four-part writing.”⁵⁰ An example of how to damn with faint praise!)

The fact is, of course, that the absence of a single unifying system for vertical relationships is more than made up for by a vast amount of sophisticated melodic and harmonic wisdom which informs the musicians of the best ways to find their way through the music. Good Javanese musicians are always aware of a *lagu batin* (inner melody) which guides them through the music, but does not enslave them to fixed musical parts. They are also deeply aware of what their fellow players are doing; together they produce a multitude of simultaneous lines which co-operate with each other but are not controlled by each other. Joan Suyenaga sees this as the musical parallel of the Javanese social and spiritual ideal of *rukun* (lit., “compatibility”):

The musician must be responsive to his fellow musicians’ expressions of the lagu, but he must also be aware of and responsive to the lagu as he himself conceives and feels it. It is the lagu that unifies the ensemble, and the complementary expressions of it that create and realize harmony. Similarly, rukun is maintained not only through conscious acts that respect the boundaries of individual sensitivities, but also through an inwardly directed awareness of a higher-order “flow of nature.”⁵¹

Both in music and in life, therefore, the Javanese ideal is of mutual co-operation, gently subordinated to an intangible divine (or at least idealised) reality. Gamelan is music which represents God’s view, and man’s communal attempt to follow that divine lead.

The Javanese feeling for co-operation over and above control and mastery extends to their attitude to their instruments. Gamelan instruments are there not to be mastered, but to be co-operated with. Instruments are treated with a degree of respect normally reserved for people, because instruments, like people, have characters, have voices, tell stories, speak eternal truths, sing songs. If there is no obligation to master an instrument in the Western sense, then there is no need to show off. There is little room for the individual virtuoso; he is more likely to ruin the music by drawing attention to himself at the expense of the group.

A piece of *karawitan* will never be entirely, or even largely, fixed in advance. The notes which are performed proceed from an act of communal aural musical exploration. The subtleties of how this happens have been discussed in detail by Benjamin Brinner:⁵² it is not my intention to attempt to add to his insights. However, it is important to note the Javanese recognition that, as Judith Becker points out, “only when music becomes notated is the process of continual creation arrested.”⁵³ So traditionally they have a reluctance to use written notation when they can avoid it, preferring to engage in the process of getting to know the music by using their ears. Here is Roger Vetter on the subject of rehearsals in the Jogja *kraton*:

Part of the pride of being an *abdidalem niyaga* is to perform without notation... A few musicians... would ask on occasion... to see or to copy my notation of a particular piece. However, these copies never surfaced in a palace rehearsal or performance...

During the early rehearsals there would often not be a single gong-phrase repetition with the correct number of beats... As the rehearsals approached the broadcast, the mistakes became more minor and the gong-phrase lengths consistent and correct.

During the early rehearsals of *Taliwangsa*, even though a state of musical chaos existed during the thirty to forty minutes it was played, the music never once stopped. The structural and melodic designs of the piece were totally obscured; but somehow the last thirty-two or so melodic beats

would eventually re-emerge, the *gong ageng* would be struck, and they would return to the beginning of the repeated cycle for another attempt...

The successful performance... seems to have been based on a confidence that problems will be resolved through musical repetition... Because experienced musicians do have good memories, several repetitions of a troublesome passage or an entire piece are often all that is necessary to straighten out the problem...

For loud-style pieces such as *Taliwangsa*, it is the *bonang barung* who carries the greatest responsibility in determining the group's version of a piece's *balungan*. He literally feeds the melody of the piece to the other players... In this fashion, even inexperienced players who are unfamiliar with a piece can play along... Notation is not used.⁵⁴

Vetter is right to marvel at the Javanese musicians' ability to function without notation, though a couple of his points perhaps need clarification: The fact that no correct and unified rendering of *Taliwangsa* existed during the early rehearsals does not of course imply that "chaos" reigned and the "designs of the piece were totally obscured"; evidently this was not the case for the Javanese musicians, or the last 32 beats of the *gongan* would not have re-emerged. And whilst Vetter puts the eventual success of the piece partly down to the musicians' memories being re-kindled through rehearsal, it is essential to emphasise his last paragraph, noting the perhaps greater importance of aural cues as a means by which the musicians put themselves back on course.

Gamelan notation, even when used, is nowhere near the comprehensive detailed score Western classical musicians expect. Every piece demands interpretation and exploration. Every piece also changes over time, as successive generations communally re-interpret their musical material. Performers are co-composers. Just as in the vast majority of pre-Renaissance European music, gamelan pieces are hardly ever attributed. Even if the name of the "original" composer is known (K. R. M. H. Wiryadinigrat's *Ladrang Mugirahayu*, for example), it is rarely mentioned: the music has become communal property.

In the creation of new music for gamelan too, an unhurried, intuitive, communal approach is the norm. In 1988 I had the good fortune to be able to follow some of the rehearsals for a new composition by Al. Suwardi entitled *Sak-saké*, scored for an exciting variety of home-made instruments. Prior to the first rehearsals, Suwardi had already designed and built most of his instruments, though he admitted that he "didn't know yet how to play them." He had also written some musical motifs for the piece, which were gradually explored in rehearsal with his group. When it became clear that the resulting piece would not be long enough for the purpose for which it had been commissioned, Suwardi invented another instrument, learnt to play it, and used it as the basis for a new section of music. He made no secret of the improvised origins of the piece, which are enshrined in its title, loosely translatable as "Whatever You Like".⁵⁵

Most interestingly, in Java the audience members too are tacitly expected to be co-composers. The pieces are not musical products; therefore the audience members do not feel expected to act as though they are consumers. They are not being presented with linear musical arguments; therefore they can dip into and out of them at will, entering or leaving the performance space when they want to, chatting, eating, or falling asleep. Because the musical explorations are happening in many different instruments simultaneously, and constantly changing, there is no way a listener can follow the full sum of the musical commentary in one sitting. Therefore there is no point in him sitting in one place listening to one officially-approved sound balance for the piece: it does not exist. He can move around the music, sometimes literally, concentrating on whichever parts of it most interest him at the time. Each listener, therefore, will hear a different rendering of the piece. The music is not just what the composer makes up, nor even just the notes which the performers play; the music is what the listener hears, and that depends very much on his own free will, and on the interior essence of his own character.

There is a certain irony, then, that such communal music as gamelan perhaps gives listeners more scope for individualism than Western classical music; and that Western classical music, which is founded on a philosophy of individualism, can often restrict the degree to which its audience members can individually shape their responses to the music. Individualism does not necessarily bring true freedom.

Thus in gamelan the divisions between composer, performer and listener are blurred. So too the division between amateur and professional. It is far harder in Java than in Britain to find someone who claims to be “unmusical”. Most will say “Oh yes, I can do that, a little.” The Javanese know instinctively that communal music-making is one of the lifebloods of any healthy society.

If gamelan pieces are not intended to be fixed products, this has implications not only for the uses of notation, but also the use of recordings. Many Western gamelan students have spent a lot of time over the years cursing the low quality of Indonesian audio cassettes. They are of course right, but may be missing the point. The Indonesian does not put up with poor-quality recordings because he knows no better or has intrinsically low standards. He knows instinctively, however, that a recording is not the music itself (just as the shadows are not the *wayang* itself.) He knows that there is no such thing as the perfect musical product, or the ideal rendering of a musical concept. He knows, ultimately, that the only perfection in this universe is divine, and that we as musicians are doing our best in our own imperfect ways to represent this divine perfection to our world. The task of the musician, as Martopangrawit says, is to

feel it until your soul
is made clear, bright, and your view unclouded -
a clarity that penetrates the universe.⁵⁶

That is why gamelan is a good thing to learn. And that is why we should teach it to others. By teaching gamelan we can help people to experience a different way of thinking about our relationships with each other and with the world. Through gamelan, “non-musicians” can discover that making music is as therapeutic, self-transforming and natural as breathing, and available to all people, not just specialists. And “musicians” can discover that music-making need not be a competitive rat-race, and that it is possible to rediscover some of the primeval joy which doubtless once sparked their original enthusiasm for music. By restoring to people in this part of the world some communality, spirituality and absence of ambition to their lives through music, deep down their assumptions about how they should relate to each other and to the world around us are being challenged.

Of course, even with the best will in the world, we British gamelan teachers, and our students, are also products of a goal-oriented product-obsessed Western mindset. That is why it is not good enough to say, “The only important thing is that we teach *gamelan*.” We need to make conscious choices to teach gamelan in a way which will gently but genuinely transform our students’ way of thinking about what and how they learn, and about their implications for their lives as a whole. For this, we need to look at the whole vexed question of paedagogy.

IV. Towards a sound music paedagogy

Product-oriented teaching

“Something must be done,” they said. “More and more kids are being left on their own and neglected. You can’t blame us - parents just don’t have the time these days - so it’s up to the authorities...”

“Unsupervised children run wild,” declared others... “The authorities must take steps to round them up. They must build centres where the youngsters can be moulded into useful and efficient members of society...”

Before long, big buildings known as “child depots” sprang up in every neighbourhood. Children whose parents were too busy to look after them had to be deposited there and could be collected when convenient...

None of Momo’s friends escaped the new regulation... They were naturally forbidden to play games of their own devising. All games were selected for them by supervisors and had to have some useful, educational purpose. The children learned these new games but unlearned something in the process: they forgot how to be happy, how to take pleasure in little things, and, last but not least, how to dream.

- Momo by Michael Ende ⁵⁷

Education is one of the crowning glories of Western civilisation. In a society that values knowledge, reason, self-betterment, progress and achievement, education has long been recognised as the key to unlocking what the West calls “success”. Western society, eager to unify and rationalise, has in the last 150 years or so invented a huge apparatus to organise and standardise the process of education: compulsory schooling, timetables, subject divisions, curricula, syllabuses, tests, examinations, marks, certificates, diplomas, degrees.

All these, when applied with wisdom and integrity, can be useful, allowing one to impart large amounts of knowledge to large numbers of people with remarkable efficiency. But when wisdom and integrity are sidelined, and the unbridled operation of the system becomes more important than the students it was originally designed to serve, then our society has fallen into the age-old trap of being too concerned with its own end-gaming to recognise the unintended dehumanising consequences of its actions.

Many writers, among them Edmond Holmes, ⁵⁸ John Holt ⁵⁹ and John Taylor Gatto ⁶⁰ have discussed at length the problem of what has gone so wrong with our compulsory school system that it manages to produce so many patently uneducated young people. My task here is not to add to their voices, but to look specifically at the effect which our product-based, goal-oriented mentality has had on our attitude, both as children and as adults, to the process of learning, for this will be profoundly relevant to our attitude to learning and teaching gamelan.

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Firstly, if it is held that knowledge is a product to be consumed, then it follows that it is the responsibility of those who hold themselves to be experts to decide what is worth knowing, and to whom and when it should be taught. The notion of curriculum is born. If a curriculum were merely a flexible wish-list, then it would not be such a bad thing. But in a society where teachers and schools are held responsible for “delivering” a standardised curriculum to every child in the country, then it has patently back-fired: the notion that a child should be taught something whether or not he is intellectually capable of understanding it, simply because a government document says

so, is destructive. It fates those that through no fault of their own are unready for what they are being taught, to fail, and to join the detritus of modern society.

The other implication of a goal-based culture is that the achievement of those goals should be rationally measurable. The notion of assessment is born – again not such a bad thing *per se*, but desperately destructive of the learning process when it becomes an end in itself, as it has in the UK. Here children up and down the country are tested at 5, 7, 11, 14, 16, 17, 18 etc. Their educational lives are dominated not by what they know or what they are learning, but by how they can prove it. The inevitable result is a tendency “to mistake the externals for the essentials of education, and to measure educational progress in terms of the ‘appearance of things.’”⁶¹ Assessable results are accorded more importance than a true and profound understanding of the subject.

Both these ideas, curriculum and assessment, fail when they become ends in themselves. They distract teachers from what should be their primary concern, understanding the on-going processes by which their students learn, and the principles and methods used to help them do so. Look through any page of the English National Curriculum⁶² and you will find non-negotiable lists of tasks that students should be able to perform, or facts they should be able to regurgitate at various stages of their school career. The various schemes of work produced by curriculum authorities and educational publishers contain lists of activities which can be performed to ensure the successful “delivery” of the Curriculum. But you will find nothing in these documents to inspire in teachers a deep-level understanding of the processes by which students can acquire the necessary interior feeling for a subject to achieve their goals intelligently and sensitively. Teachers are thus tacitly encouraged to take less and less of an active intellectual or emotional role in their craft. Increasingly they are turned into mindless functionaries of the state:

Once the teacher ‘delivers’ someone else’s curriculum with its precisely defined ‘product’, there is little room for that *transaction* in which the teacher... responds to the needs of the learner... When the ‘product’ is the measurable ‘targets’ on which ‘performance’ is ‘audited’, then little significance is attached to the ‘struggle to make sense’ or the deviant and creative response... This sense of the teacher as a professional – deliberating about the value of proceeding in this way rather than that, or about the most appropriate way ahead for particular students – is lost.⁶³

Product-oriented music teaching

If our society’s attitude to education in general has become so fatally compromised by our blind obsession with external product over internal process, it is inevitable that the effect upon music education in particular will be just as destructive. In recent years, the music-teaching institutions of this country, especially county music services, have fallen prey to the same level of governmental interference and stultifying documentation as schools. Between grade examinations, the National Curriculum, the Music Manifesto,⁶⁴ the Common Approach,⁶⁵ all the attendant apparatus of accountability imposed by various bureaucratic tiers, as well as a shocking lack of funding, the British music teacher has very little room in which to remain passionate and creative about his work.⁶⁶

His plight is worsened by the appalling lack of esteem in which his art is held. In a society where devotion to product, wealth and consumerism hold such sway, music only commands respect if it can present itself as subservient to those ideals. As Frank Furedi bemoans, these days “knowledge and art are not likely to be valued for themselves, but because of their usefulness for society... How knowledge and art are regarded is determined... by their utility for some other purpose.”⁶⁷ Thus a booklet putting forward “the case for music in the school curriculum” lists the values of music as follows:

Learning music helps children from an early age to improve their:

- reading ability
- ability in maths, science and engineering
- speech-fluency in native and foreign languages...
- reasoning capacity
- time management skills...
- ability to handle... stress...

These skills give children... the very abilities that employers are seeking. ⁶⁸

This instrumentalism is undoubtedly well-meaning, but inevitably leads to a decline in respect for standards. As Furedi explains:

If we cannot value... cultural achievements in their own terms, it becomes difficult to discriminate between them. Claims to excellence sound self-serving... to the extent that... the insistence on upholding a particular standard is represented as a form of... discrimination... Once the inner content of art and knowledge ceases to have a socially accepted meaning, the standards become negotiable. ⁶⁹

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But knowledge should be a process, not just a product. Education is a journey, not a goal. There is no such thing as a “learning outcome”. If we become obsessed with the exterior results of our teaching, then we may be able to produce in our students the superficial appearance of competence (or even of “the very abilities that employers are seeking”) but it will be rootless and will crumble at the first opportunity – usually the day after the exam or the performance. Even worse, we give our students an attitude to learning which perpetuates “those states of mind by which we see... products as all-important regardless of the process by they are obtained, and knowledge as an abstraction” ⁷⁰ which does not demand of us any commitment, passion or sense of struggle. Too often, as in the words of Jaques-Dalcroze:

The word “music”... has come to stand for the mechanical production, or, rather, reproduction of sounds... Not music, but a mere imitation of music, continues to be taught in most schools. ⁷¹

For any kind of music learning, this is a terrible shame. For gamelan, it would be nothing short of a disaster. For gamelan, as we have seen above, is based upon entirely different presumptions about what is important in life from those which inform the frantic end-gaming of our own society’s attitude to music education. Can we learn something, therefore, from the way the Javanese learn their music? Should we be trying to teach gamelan the way they do?

Learning by “osmosis”

The Javanese are as varied in their approach to learning and teaching gamelan as we are, so the appeal to authentic Javanese practice is only of limited use. In fact the Javanese are far more likely to learn gamelan without any, or with only very limited, formal instruction. Most of them learn by listening, by watching, and by imitating, over a long period of time, starting from early childhood, gradually allowing a deep-level instinctive understanding of the music to develop. The apparently formal and formulaic methods which sometimes predominate in the prestigious conservatories of music such as STSI in Solo are, for most Javanese players, the exception rather than the rule. This has given rise, amongst some gamelan teachers, to a “theory of osmosis”, the idea that the best way to learn gamelan is just by getting on with it and letting the understanding drift into you by accident.

There is much to commend this theory, for it is certainly true that if educational osmosis works, as it clearly does with many Javanese musicians, then what results is a truly deep-rooted feeling for

karawitan, one which is far more profound than if we simply impart systematised instructions to our students at a purely intellectual level.

The theory of educational osmosis actually has a long pedigree, and works brilliantly in the right circumstances. People the world over, whether or not they are formally educated, learn by osmosis the very complex skills they need to live in their societies, including most importantly their own language. Very young children in any culture learn their basic skills such as walking, talking, numbers, colours etc. by being immersed in a social context and by imitating those around them.

Even in a highly-schooled environment such as Britain or the USA, non-school-going children learn the traditional subjects such as reading, writing, maths etc. with as much competence as their school-going peers, though usually by far less formal, indeed sometimes seemingly haphazard, methods:

Shared learning is an everyday feature of home education... Learning at home becomes an interactive process rather than a series of tasks to be tackled... In fact, any mistakes [the children] make, rather than creating barriers to learning..., simply become steps on the route to enlightenment... This kind of informal learning... is a naturally occurring, largely social conversation in which the pedagogical element simply goes unnoticed... It is simply cultural transmission by osmosis... Informal learning has much in common with learning in infancy.⁷²

From my own experience, I would add one more item to this description of informal education: a relative disinterest in the “products” of learning. Pre-school or informally-educated non-school-going children are not greatly interested in creating educational set-pieces to be shown off and preserved. What interests them is the process of creation, after which they are happy to discard the “fruits” of their labour and start again or do something else. It is the adult world which encourages children to treasure proof of their abilities: children are not naturally much interested in that.

These informal models of learning have one great advantage over the product-oriented model of education: they allow students time to develop a deep and instinctive understanding of their subject, a type of understanding which is far harder to assess than the superficial knowledge often produced by an assessment-obsessed, curriculum-based schooling system. Edmond Holmes, Chief Inspector of Schools in England in the early twentieth century, describes these two types of understanding with great perceptivity:

The knowledge that is real and effective is absorbed into... the subconscious strata... When knowledge... rises to what I may call the surface-level of consciousness, it is ready... to give itself off as... genuine information, not to be confounded with... that spurious information which floats... like a film on the surface of the mind,... artificially deposited,... that in due season will be skimmed off... for the delectation of an examiner.⁷³

Thomas & Pattison suggest why informal learning is often so much better than formal instruction at encouraging deep-level understanding:

The shifting state of the informal curriculum may be an advantage in that it forces learners to become engaged with and to question their information, move it around, juggle ideas and resolve contradictions in ways which do not generally feature in formal learning.⁷⁴

We have a lot to learn from this, for the differences between school-type education and informal learning parallel the contrasts between the hyper-rationalist mindset and the spiritual ideals of gamelan: on the one hand a deep concern with individualism, competition, goal-setting, achievement, assessment, “getting it right”; and on the other, a greater sense of interaction, co-operation, diversion, and the value of inner process over exterior product. These ideals of informal

learning or educational osmosis are clearly worth working towards, both in our approach to education in general as well as to gamelan specifically.

Despite my own personal enthusiasm for this kind of learning, however, I would suggest that osmosis only works if the right circumstances exist for it to occur. Scientifically, osmosis is the passing through a membrane of molecules in solution. Osmosis only happens, however, if the three following conditions are met: (1) the membrane is permeable; (2) the molecules are soluble in the liquid on the other side of the membrane; and (3) there is sufficient time for osmosis to take place. Home-educated children are usually immersed in a family which is literate and knowledgeable, and skills pass relatively effortlessly from the adults or older siblings to the children. Javanese musicians have usually had their whole lives to absorb the subtleties of *karawitan*, and they have minds and hearts which are culturally prepared and ready to receive such information, so musical osmosis works well. And in the case of some Western students of gamelan osmosis clearly works well, especially if they are fortunate enough that their own talent and experience have given them a good deal of musicality, technical flexibility, kinaesthetic sense, and a superb inner ear.

For many, however, especially adults brought up in a Western culture, musical osmosis is far harder, for any of three reasons: (1) They might have an “impermeable membrane”, i.e. come to gamelan with an attitude which may not be conducive to the development of sensitivity to *karawitan*. (2) They may “lack solvent”, i.e. have a dormant or under-developed sense of musicality. (3) They almost certainly have not had lengthy exposure to the sounds of *karawitan*, and so start from a position of being completely unfamiliar with it. As Benjamin Brinner puts it, “foreign students generally lack the fundamental passive competence gained by hearing *gamelan* played since early childhood.”⁷⁵

Neil Houston, on the subject of osmosis as a paedagogical approach in British gamelan teaching, writes:

The approach, heavily dependent on... assumption and assimilation, has not transferred easily to our preferred learning styles in the west.

Of those interviewed, all members of gamelan programmes in this country, this lack of connectedness led to a “very confused” and “fragmented” understanding of the music, particularly of... the inter-relation and interaction of the musical lines within a piece... Lack of clarity of explanation was a recurrent issue. As a consequence, this lack of knowledge blueprint or schemata resulted in personal frustration and was a key contributor to a decline in learner motivation.⁷⁶

“Knowledge blueprint”, “schemata”, “preferred learning styles” – it all sounds a bit systematic and rational and Western, doesn’t it? Is that really what we want? Well, perhaps not, but Neil does have a point, and that is that if we want our students to begin to absorb a profound understanding of *karawitan* by osmosis, we are duty bound to help them develop the right personal conditions to make this possible. We cannot assume that informal exposure to *karawitan* will necessarily result in our students assimilating an understanding of it; we need to make that assimilation possible.

If the ideals of osmosis are to work, we gamelan teachers will have to apply a certain paedagogical rigour which is not necessary in Java. If we are careful and meticulous about how we teach, we can help our students to achieve the principal virtue of learning by osmosis, namely a type of learning which is deep, broad and long-lasting, and which concentrates on developing an inner understanding of the processes of *karawitan*, not just the pieces of music which are its products.

This we can do by what I call “process-oriented music teaching”.

Process-oriented music teaching

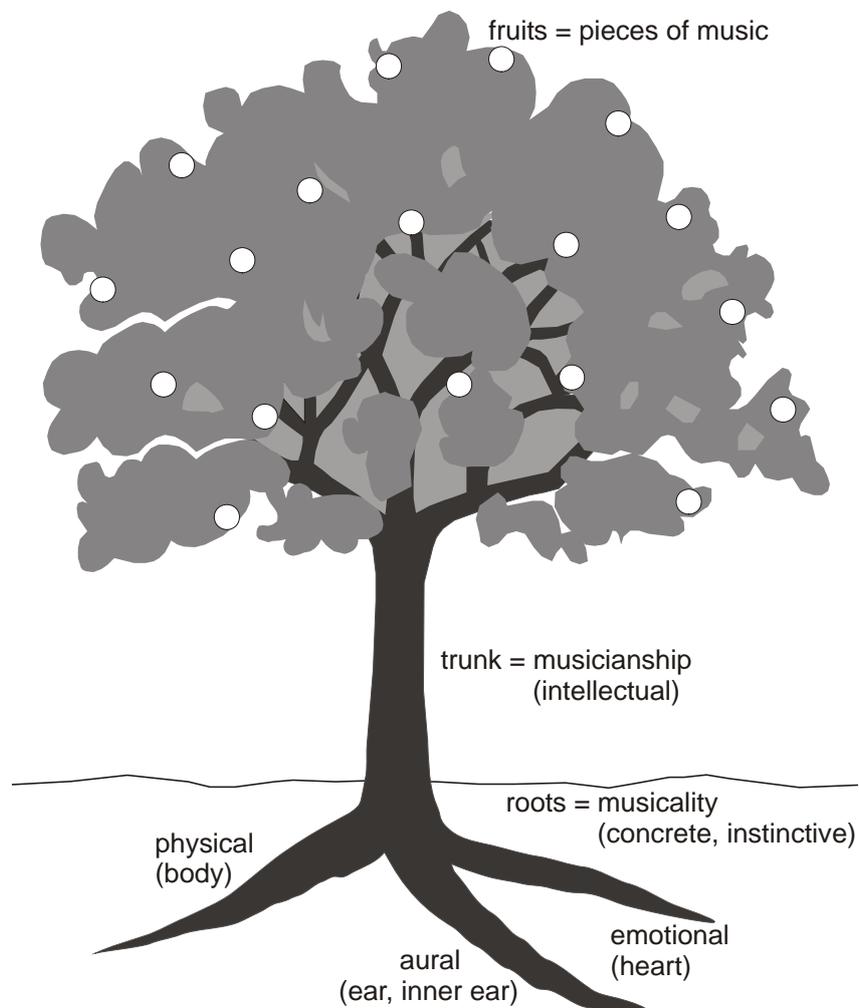
A well-trained ear... A well-trained intelligence...
 A well-trained heart... A well-trained hand.
 All four must develop together, in constant equilibrium.

- Zoltan Kodály ⁷⁷

It is nothing less than lunacy to set a child to study an instrument before he has been trained to appreciate rhythm and distinguish sounds.

- Emile Jaques-Dalcroze ⁷⁸

What then is the goal of a music teacher? To some extent, it must be to teach his students to play pieces of music. This is all very well, but a good music teacher will always remember that playing pieces is but the most obvious part (the external product) of being a musician, and that the roots of musicianship (the interior process) go very deep. My favourite analogy is of a tree:



The roots of the tree, which are hidden, represent musicality, which I define as the instinctive, internal, feeling for music which a musician needs if he is to play well. The roots support the trunk and branches; these are visible, and represent what I call musicianship, the conscious intellectual understanding of music and how it works. What we are all waiting for, of course, are the fruits, the products, which are the pieces of music the musician plays. If the fruits taste sweet, then we will not worry too much about how the tree is growing; in other words, if the musician plays in such a way

as to move and delight us, we will not worry about his musicality. But if the fruit tastes bitter, we will wonder whether the roots of the tree are sound, or what kind of soil it is growing in; we may, not unreasonably, conclude that, in the words of Edmond Holmes quoted above, the fruits have been “artificially deposited... like a film on the surface of the mind”.⁷⁹

As I have made clear above, the principal reason for this is that music teachers, no less than any other teachers in the world, are often in too much of a hurry to produce assessable results. To be fair, we, like school teachers, are often put under intolerable pressure to do so by the bureaucrats. The consequence, to continue the analogy above, is that we pour masses of chemical fertiliser on our growing tree; the fruits come thicker and faster, but they are more and more tasteless, the bark grows thin, the roots grow weak, disease strikes the tree, and eventually it withers and dies, or is blown down in the first gale of autumn.

If we music teachers were less obsessed with producing musical results, we might be more likely to think carefully about the processes we use to teach. We would recognise that the first thing a tree needs to grow is time: there is no point in planting it too early in the season, nor is there any point in attempting to accelerate its growth. No teacher should attempt to hurry a student’s musical development, or to timetable it, or to plan it too much.

We would also recognise that a tree needs deep strong roots if it is to grow strong and healthy. Therefore, the teaching of music must always facilitate learning at the instinctive level, to develop an internal sense of musicality before all else. It may be hard to curb the self-impatience of some of our students, especially adults if their musicality has not had much chance to develop earlier on in life; but patience is necessary, and one of the main tasks of the teacher will be to reassure, and to encourage students to be forgiving of themselves.

The teaching of musicality, if it is truly to transform inner musical perceptivity, needs to involve the student’s whole self in the learning. Therefore, it must be done not just intellectually (and consequently mechanically), but first and foremost physically, aurally, and emotionally. [See picture above.]

What a student can *do* is not what we should be most concerned about. A student will *do* music well if first he *feels* it well in his body, *hears* it well in his ears and in his inner ear, and *feels* it well in the depths of his heart. All this is just as true for adults as for children. And it is just as true for students of gamelan as it is for students of violin or piano.

Let us examine these three roots of musicality (physical, aural, emotional) in some more detail.

Physical intelligence

I look forward to a system of musical education in which the body itself shall play the role of the intermediary between sounds and thought.

- Emile Jaques-Dalcroze⁸⁰

We live in a society which gives our bodies short shrift. We exercise less than ever before in our history. We eat more, and we eat worse.

Pity the children who grow up in this culture. From younger and younger ages they are removed from the real world, like the children in Momo. At a time when their bodies are still growing, when they should be out in the world running, jumping, climbing and rolling, we instead seat them still in chairs, at desks. And in those chairs we expect them to learn to write from the age of four, straining every sinew to control their fine motor skills at an age when instinct would lead them to focus on

their gross motor skills. A complex system of punishments, rewards and competition applies sufficient stress to their young lives to ensure their compliance.

We carry these values into our adult life and perpetuate them. We end up with bodies which are tense, de-sensitised and inflexible, because we have forgotten how to use them properly.

Our task as music teachers, therefore, must be to help develop our students' physical sensitivity. There are three main reasons for this:

First, the whole functioning of the body depends upon the flexibility of the centre, the torso. If the torso is rigid, then so too will be the arms, the hands, and the fingers. Instrumental technique begins, therefore, at the centre. It is our responsibility as teachers to help all our students achieve this flexibility and freedom of movement.

Second, rhythm is nothing more than the expression in sound of physical movement. And if our bodies cannot feel rhythmic movement because they are tense and clumsy, then they will never be able to play rhythmically on an instrument. That is why whole-body movement is an indispensable part of any child's musical education, and should, as much as possible, form part of an adult's.

Third, the body is a channel for musical memory. So many things in music are remembered in the muscles far better than in the intellect. If we use this capacity of the body to help our students to internalise the music they learn, then we can deepen and enrich their experience and understanding.

Aural intelligence

Developing the ear is the most important thing of all... Your pieces must not be in your ten fingers only: you must also be able to hum them... Train your imagination... Do not play a piece without hearing it very clearly in your mind.

- Zoltan Kodály ⁸¹

Every sound method of teaching must be based on the hearing, as much as on the emission, of sounds.

- Emile Jaques-Dalcroze ⁸²

We live in a society where listening is a devalued skill. Indeed we live in a society where if we truly listened to all the voices that come at us from all quarters we would go mad. We learn to turn our ears off for the sake of our own sanity.

Children learn this lesson at an earlier and earlier age. Placed into the care of well-meaning professionals determined at all costs to stimulate them intellectually, they are talked at all day long, about things they may have no interest in whatsoever. No wonder they are so eager to switch off their ears at the first opportunity.

Increasingly our information comes at us visually instead of aurally, on paper, billboards, computer screens, text messages. These are reassuring for a society which has forgotten how to listen, because of course if everything is written down you don't need to listen to anything when it is told to you because you will always be able to look it up later. A vicious circle is created.

The difference between listening to something and just hearing it is profound, but it is fairly easy to pretend (even to yourself) that you are listening to something when you are not. Some schoolchildren are experts at this. But when a musician is not listening to himself and to others as he plays, it always shows in the execution: -

First, for most instruments, listening is essential to playing in tune.

Second, for all instruments, quality of sound depends upon listening. Only those students who truly listen to the sound they make will play in such a way that others want to listen to them.

Third, in any ensemble playing, listening is essential to playing well together. Tempo changes, tuning, balance, phrasing, dynamics: cues for all of these come from hearing others play and fitting in.

Fourth, for any musician, it is important to develop an “inner ear”, an ability to hear music in our mind and heart even when it is not being physically played. Using our inner ear transforms our interpretation of notation or other symbols. Without an inner ear, notation is merely a set of mechanical instructions to the fingers or hands; the sounds that we make will be an accidental by-product of the operation of our fingers. With an inner ear, notation can fulfil its true function, which is as an expression in code of real sounds; if we can hear a piece in our inner ear before playing it, then our playing will be a deliberate, conscious and intelligent expression of the sounds we hear inside us.

Most people brought up in modern society are physically inured to not listen. Overcoming this deep instinct is not easy, and it won't happen simply by being told. We need to help our students develop an instinctive, deep-level ability to listen. This can be developed through singing.

Singing

Nobody can play well if he does not feel and know where the essence of the melody is, and if he cannot bring it to life with his voice... To teach... an instrument without first... developing singing... is to build upon sand.

- Zoltan Kodály ⁸³

There is so intimate a connection between the vocal and the aural processes that the development of the one virtually involves the development of the other. The mechanical production of sounds on an instrument does not call for any special effort on the part of the ear... On the other hand, the efforts necessary to ensure the accuracy of *vocal* sounds conduce to the steady development of aural faculties.

- Emile Jaques-Dalcroze ⁸⁴

Singing is the one kind of music making which we cannot do automatically. For when we sing, every aspect of the music must be consciously made by our own bodies; it forces us to listen acutely to ourselves. Singing is the best way to get students to feel a musical point with clarity, especially anything relating to pitch or melody. Singing is the easiest way to internalise any kind of melody. Singing is the one way to awaken the music in a music-less body.

But getting people to sing can, these days, be a terrible struggle. In years gone by in this country, live communal singing was an indispensable part of everyone's life: people sang as they tilled the fields or did manual work; they came together to sing in worship; and they sang and danced together for recreation. Nowadays, however, much of this has gone: our sedentary work habits are not conducive to any kind of spontaneous singing; participation in communal acts of worship is less and less common; and even for recreation we prefer to allow our music to be presented to us by electronic means. For some cultures in the world, “I can't sing” is a meaningless statement. But our country is full of people who claim to be unable to sing. In children, some of that is peer pressure,

and some is the result of inadequate music teaching. In adults, it often comes from a lifetime of self-consciousness and fear: a destructive self-fulfilling prophecy.

But an adult who is frightened to sing will probably always be a poor musician. For any music he makes will be forever by-passing his body, and thereby probably by-passing his ears, his feeling, and his memory. If he can be encouraged, gently and over time, to use his voice to express himself musically, then a true musical education can begin.

Emotional intelligence

This burning quality... should be there in every human being, really. In order to live a full life, you have to burn about something... Let's not pretend that this is a nicely air-conditioned room. This is a furnace at times, and so it should be, because you're dealing with things which are at the absolute heart of what it means to live a meaningful life.

- Stephen Hough ⁸⁵

Clearly the sound development of our body, our ears and our voices depend to a great extent upon the sound development of our emotional life. If we have failed to grow up singing, listening and moving our bodies rhythmically, it may be due to a number of self-protective reflexes hammered into us by our emotional or scholastic upbringing which cause us to be tense, self-conscious and fearful. Therefore we have "become afraid of the encounter with new musical experience, where knowledge and expertise are no guide and only the subjective experience honestly felt can serve." ⁸⁶

If we are truly to express ourselves musically, we need to learn to re-connect with that part of us, however deeply buried, where we still feel beauty and passion and are able to be vulnerable. In the words of Kodály, "If the music has come from the core of your being, if you have really felt it, it will have the same effect on others, too." ⁸⁷

Learning to allow ourselves to feel music like this may be a long and slow process, but it is necessary if we are to play in such a way as to really move men's hearts. But this surely is the best thing about music: that, taught and learnt properly, it can help to transform our hearts, to sweep away the emotional cobwebs which may be paralysing us, to teach us to look away from ourselves. Learning music with the right priorities can teach us that what we achieve is less important than how we relate to others, that what we say is less important than how we listen, that what we play is less important than how we feel what we are playing.

This is how we need to teach gamelan.

V. Teaching gamelan

Teaching gamelan to Westerners will always be the paedagogical equivalent of walking a tightrope. At one end will be the ideals of *karawitan* and of the Javanese world-view. At the other will be the ideals of Western society, which are likely to represent the mentality in which our students spend their lives immersed. Bridging the gap between these two extremes is difficult, and we will not always succeed. But the ideals I have outlined above, of sound process-based paedagogy, should be our guide.

Before proceeding to the specifics of how I teach gamelan, there is one important issue which needs to be examined, principally because it can be the cause of a certain amount of misunderstanding and aggravation in gamelan-teaching circles: the use of notation.

Notation

Over here people learn in a very English or European way - they write all the parts into their notations, which can lead to problems because people don't feel the melodies. So, if something has to be repeated for instance, everybody is counting...

I would like to do more teaching by my own methods over here, but people want to learn in their own way, and often the teacher has to go along with this. It's as if the students are in charge of the teachers!

- Al. Sutiknowati ⁸⁸

It is a tragedy that Pak Tikno did not live to teach us more about gamelan paedagogy. Or perhaps we should have listened to him better when he was alive. But I think he made his point though: that when osmosis fails, or perhaps even before it has been given a chance to succeed, it is all too easy to reach for the notation. We must tread carefully, for notation, when used with care, can be immensely useful, but when used indiscriminately, can become a fig-leaf for the absence of a sound paedagogical strategy.

What, then, is gamelan notation good for? And what is it bad for?

Judith Becker and Sumarsam have both discussed at length the effects of the use of notation upon the development of Javanese musical culture. In brief, they suggest that notation is "the most pervasive..., insidious type of Western influence"⁸⁹ upon gamelan, one originally adopted "to legitimize the status of gamelan as 'high art'".⁹⁰ The result, they claim, has been the development of a mistaken theory leading to the "positioning of the balungan part as the melodic theme of a *gendhing*,"⁹¹ and a "great deal of homogenization of gamelan style".⁹² Becker hopes that

it may be that Javanese musicians will come to realise that their traditional oral system is actually the more modern, and notation may once again be relegated to libraries, of interest to scholars and historians but not of any particular use to a practising musician.⁹³

Becker is perhaps over-stating the case, though she may be pleased to know that, according to Rahayu Supanggah,

musicians at STSI have actually reduced their reliance on notation over the past decade or so as they have become aware of its shortcomings.⁹⁴

It is certainly the case that if one wants to learn to play something in a hurry, notation can be useful. It enables a gamelan group to play a piece they have never heard before without actually learning it first – rather in the way that Western orchestras often do. If the group is full of musicians who have

a great deal of musicality and sensitivity to *karawitan*, then playing from notation may be an aid to learning the piece. Each player will be able to read and play his own part and still listen to the rest of the music, learning thereby how the whole piece fits together.

However, I contend that the vast majority of gamelan players in this country do not start their gamelan-playing careers anywhere near capable of this kind of listening. We are not sufficiently familiar with gamelan to be able to apply to it both our aural and our visual faculties simultaneously; for us, written notation clogs our mind and our ears, impeding our listening. Notation becomes a crutch, something to disguise our own relative lack of musicality, something which enables us to get through the piece in a mechanical fashion without properly assimilating the music. My filing cabinets are full of notation for hundreds of *gendhing* I have played over the years, the vast majority of which have made no lasting impression on me because I have played them through mechanically, starting at the beginning, one *gatra* to the next, till I got to the end. The only pieces which I truly delight in, and remember well enough to delight in, are those I was taught or have taught myself aurally, by listening and singing.

It is certainly true that notation can be a very useful tool for the explanation of certain concepts in gamelan, such as the relationships between different parts, for example between *balungan* and *peking* or *bonang*. But it is important to remember that no system of notation actually enlightens those who have not yet learnt to understand it. And, as Becker points out, “notation is not an object but a technology that implies its own theory.”⁹⁵ Gamelan *titilaras* can be very useful for those who have learnt not just to comprehend it intellectually (i.e. count up numbers of beats etc.) but also to feel its musical implications as regards accentuation, phrasing, *padhang-ulihan*, register, *céngkok*, *irama* etc. - in other words, for those who have begun to develop an inner ear for *karawitan*. But for those who have not, notation can be more confusing than enlightening.

First of all, in Javanese notation the stress is placed at the end of a *gatra* rather than the beginning. So there is no point in giving a student a page of *gatra* to play on his *saron* unless we also teach him to feel the phrasing of *karawitan* melodies.

Second, gamelan notation visually over-emphasises the *balungan*. So our teaching of gamelan needs to compensate for this by emphasising all the other parts of the music more.

Third, gamelan notation visually under-emphasises the structural element, especially *gong* and *kenong*. We need to compensate for this by teaching our students to feel the various *bentuk* at a profound and instinctive level.

Fourth, gamelan notation foists upon the player a concept of the *gendhing* which is linear, sequential, and layered. We instinctively read a page of notation from top to bottom, left to right; we can therefore easily lose sight of the structural totality of the piece, which can make it harder to find our way through it. Notation also allows and encourages the player to conceive of the music as a series of bits (usually *gatra*) arranged sequentially, thereby losing sight of its long-breathed melodic aspect. And because “the dependence upon written music trains the musician to grasp only one musical line at a time,”⁹⁶ it can make it harder for us to hear the inter-relatedness of all the parts which is so important for our understanding of the music. If we are to use notation, we need to teach our students how to derive from it a sense of the wholeness of the piece, both vertically and horizontally.

Fifth, notation does not readily admit flexibility or ambiguity. As Becker writes, “The introduction of notation into an oral tradition brings with it the concept of a fixed formula that is to be repeated exactly.”⁹⁷ Yet so much *karawitan* is intrinsically flexible or ambiguous. Indeed, the whole point of playing it is to explore a process, not to make a fixed product. Even at a fairly basic level, a *kenong* might be delayed, a *kempul* player might choose to *mlèsèd* or might not, the *peking* might prefer to

follow the *gérongan* at a particular point rather than the *balungan*, the *bonang* might choose to mark a *gantungan* or instead stick to *pipilan*. If we try to notate all these possibilities we may be missing the point. If instead we direct our efforts at teaching our students to feel how the music works, then all this flexibility can start to become instinctive.

Sixth, gamelan notation arguably omits the most important aspects of any given *gendhing*. Whilst certain parts of the music, such as *bonangan*, *pekingan*, and related techniques (e.g. *saron kinthilan*, *pinjalan* etc.) may be more-or-less reliably derived from the *balungan*, others, such as the “soft” instruments, cannot. We need to make it clear to our students that the *balungan* is literally just that, a “skeleton”, and that the piece will remain lifeless until we begin to recognise and understand the melodic feeling which informs the whole of the music.

Let’s be clear: notation is not intrinsically a bad thing. But it is not a panacea to lack of musicality; indeed, used inappropriately, it often encourages lack of musicality, or cements it in. As Hardja Susilo says, notation “hinders your playing: it makes you less sensitive to interrelationship, less perceptive to signals, oblivious to concurrent events.”⁹⁸ This is more likely to be the case if the students are not all naturally highly talented musicians. As Simon Steptoe points out, “it is clear that teaching music by rote brings the trained and untrained, the seasoned professional and the enthusiastic amateur, together more fruitfully than when the barrier of notation intervenes.”⁹⁹

We must not be distracted from our most important task, which is teaching our students to feel *karawitan* deeply. This we must do in the same way that teachers like Kodály and Dalcroze taught their students to feel Western music: through the body, the ears, the voice and the emotions, as well as the intellect. If we pursue this goal with care, then there will be no harm in giving students notation to study away from the gamelan, after they have internalised the music. But routinely depending upon notation to play from will not be necessary or even particularly useful in group gamelan classes, for we will instead already have created conditions in which true aural musical osmosis can begin to happen.

I propose now to describe concretely some of the methods which I use to teach gamelan to Westerners, which follow from the principles I have expounded above, and which presume the absence of written notation in the group learning process. All the following points of pedagogy are of course inter-related, so they do not necessarily follow a rational goal-oriented chronological sequence.

The gong

The sound of the gong is not an acoustic phenomenon of vibrating air, but a voice. All the forces operating beyond and behind the visible world find ways to speak to man. In Java, gongs are the favored way.

- Judith Becker¹⁰⁰

Fundamental to all *karawitan* is the *gong*. This is where every melody begins and ends. This is where all the music comes from, and returns to. Like the Hindu concept of birth, death and rebirth, the *gong* punctuates our journey through eternity, re-generating each new cycle of our existence. And that final *gong* at the end of the piece is the only point of rest, the point that we are all striving and hoping for, the point where all is unity and nothing more need be said.

If we want to play gamelan well, we too need to learn to yearn for the *gong*, to aim our hearts at it, to expect and rejoice in its arrival, and (crucially) to feel bereft when someone misses it! The word *gong* is crucial: onomatopoeic, deep and expressive, we need to learn to say it that way, an echo of the “*om*” of the Hindu priest.

The *gong* represents the totality of the *gendhing*. All the rest of the music is, in a sense, implicit in the *gong*. The *balungan*, the *lagu* – all these are merely ways to decorate the *gong*. This is another reason why the Javanese are often so disinterested in analysing their music, or taking it apart, or rehearsing it in sections, or using any of the other musical practices we in the West take for granted: they are more concerned with the totality of the piece than with its parts. Becker describes the early musical “osmosis” of a Javanese musician as follows:

The totality, the experience of the whole piece is learned first, and only slowly and gradually does he learn to fill in the component parts. A child begins his gamelan performance as young as five or six, at rehearsals in his neighbourhood gamelan, by playing the *gong*... He thus learns to experience a complete musical section... He is still far from playing anything close to a “melody.” What he is learning is the overall structure of a composition by first experiencing the largest units of the structure. As a result, the particular melodic content of a composition never becomes more important than the formal structure.¹⁰¹

We need to capture some of this attitude when we learn and teach gamelan, and that is why it is always a good idea to start by teaching the *gong*. If we start by teaching a *balungan*, then we are unwittingly giving our students the message that gamelan music is, as one British classroom music teacher once put it to me, “a tune with knobs on.” Also, because of the nature of *balungan*, we will probably teach it sequentially from beginning to end, which means that the most important moment, the *gong*, will be learnt last. It will also be very difficult, when teaching Westerners, to effectively communicate the notion of the strong beat coming at the end of the phrase rather than the beginning; almost inevitably our students will end up feeling the *gong* as the weakest beat in the phrase rather than the strongest.

We cannot expect Western gamelan students to understand by unaided osmosis the importance of the *gong*. After all, it goes against all our instincts, both musical and social, to expect the last thing to be the most important. It needs to be constantly reinforced, through the body and through the voice.

The voice, structure, *lancaran* and *srepeg*

One of the most useful things about teaching music through the voice is that it distracts the student from trying to achieve correct results. It is this desperation to achieve which often destroys people’s musicality, because it distracts them from what is really important (the music) and makes them concentrate instead on what they are as yet incapable of doing (playing the notes right). Singing, on the other hand, helps internalise the music. Once it is internalised, then it will be relatively painless for that internalised music to express itself through the hands. Singing helps students to concentrate on process rather than product. It helps to anchor musicianship at an instinctive level, rather than merely an intellectual one. It encourages listening, for one can only sing if one is listening. It distracts students from the notion of mastering their instruments, and encourages them instead to let the music master them.

It is also the case that the use of the voice is particularly appropriate in the learning of gamelan. As Sumarsam has shown,¹⁰² so much gamelan music derives directly or indirectly from vocal models; singing is the most natural way to learn such music.

*

The *gong* is the foundation of what the Javanese call *bentuk* (shape, form) and which we in English often call the “structure” of a *gendhing*. The “weaker” structural instruments serve to help orientate ourselves in relation to the *gong*. After introducing the *gong*, I often continue by building up

lancaran structure, using a sequence taught to me originally by Jody Diamond (to whom I am of course exceptionally grateful).

The first stage in this process is the introduction of the *kenong*. Once students have listened to the *kenong* and established that it too is onomatopoeic, I teach them to recite

nong *nong* *nong* *gong*

over and over. If they are listening to what they are doing they may notice that the word “*gong*” instinctively feels heavier, and makes their bodies want to move down, and that in comparison the *nong* feels lighter, both vocally and instrumentally. If they are not really listening, they may need to have this pointed out to them. Thus they are already beginning to internalise in both voice and body the crucially important principle in *karawitan* that the strong beats always follow the weak, and that the weaker beats are but a preparation for the *gong*.

The next stage, by the same principles, is of course

pul *nong* *pul* *nong* *pul* *nong* *pul* *gong*

again making the *puls* sound light like upbeats to the *nongs*, and the *nongs* sound like upbeats to the *gong*. If I ask my students to listen carefully to that and notice anything which doesn’t sound very nice, they frequently notice the nasty “woof” which you get if a *kempul* directly follows a *gong*. We can therefore move on to

rest *nong* *pul* *nong* *pul* *nong* *pul* *gong*

Throughout this basic build-up, it is crucial that the students learn to say the complete structure (at whatever stage we have reached) before attempting to play anything, and that they keep saying the structure as they play, swapping around and taking turns as they go. They will find that it helps them stay on track and know where they are, as well as constantly maintaining reference to the *gong* beat.

*

Of course *lancaran* is not the only structure suitable for beginners. Sometimes, especially for one-off introductory workshop situations, I start with a sort of curtailed *srepeg*: First

pul *pul* *pul* *gong*

then

nong *pul* *nong* *pul* *nong* *pul* *nong* *gong*

(making sure, of course, that the *kenong* players know to play on “*pul*” and “*gong*” as well as “*nong*”.)

I find that students often internalise the feeling of this structure with greater ease than *lancaran*. I suspect that we Westerners instinctively find the sound of the *kempul* heavier than that of the *kenong*, and therefore find it easier to play it on the stronger beats of the structure rather than the weaker ones.

Once our students are all fully comfortable with the notion of an eight-beat *lancaran* (or *srepegan*) structure (without *kethuk* at this stage), then, and only then, do I introduce the *balungan* as the *second* most important part of the music.

The voice, body rhythm and damping

So many more aspects of gamelan musicianship can be anchored using the voice. For example, learning to damp a *saron* correctly can be one of the most difficult of tasks for some people, usually if they have poor co-ordination in the first place. Explaining the theory of squeezing one key when you play the next one is all very well, but such end-gaming will be to no avail if you have students whose bodies are physically out-of-tune with themselves because of years of learned tension. The tension needs to be unlearned first; the co-ordination will follow.

One of the best ways to help this along, whilst still maintaining the focus on gamelan, is to distract the students' attention from their hands entirely and get them to sing the *balungan*, bouncing their arms in front of them in time with their singing. The important feeling to get through is that the hand is but an extension of the arm, and the arm but an extension of the body, and that the voice will guide the body. If the hands learn thereby to move simultaneously with the voice, then the basic feeling of *saron* damping will be internalised. Learning to stop the correct notes will gradually follow, with relatively little fuss.

Similarly, the voice can be a great help in teaching students to damp the structural instruments correctly. In a *lancaran*, for example, damping the *kenong* and *kempul* at the right times can cause some confusion. Rather than saying, "damp them half-way in-between the strokes", which means nothing to someone without a good sense of rhythm, I say, "damp the *kenong* when you say 'pul' or 'rest', and damp the *kempul* when you say 'nong' or 'gong'." By not end-gaming, i.e. by concentrating on singing rather than on what their hands are trying to do, they are more likely to achieve correct and comfortable results.

The voice, Kodály, hand-signs and *balungan*

The more ways a student can internalise a concept the better, and the other wonderful way to anchor a musical concept in a student's subconscious memory is through physical gesture away from the instruments.

We owe a great amount of credit for the development of this idea to Zoltan Kodály, the great twentieth-century Hungarian composer and teacher. Kodály's ideas are perhaps not given the recognition they deserve in Britain these days, which is ironic considering the great debt he owed to the British musician John Curwen. Perhaps it is because Kodály's concepts are the opposite of a "quick fix" for music education, as they are concerned with the long-term methodical development of a deeply rooted sense of musicianship, using the ears and the voice. Perhaps also it is because Kodály was also greatly concerned with the cultural coherence of his repertoire, which is a somewhat politically incorrect notion in modern Britain. This is ironic, because one of the best things about Kodály's concepts is that they are so easily adaptable to new musical cultures. I have found them to be invaluable in the teaching of gamelan, precisely because gamelan is so singable.

One of Kodály's tools was his system of pitch hand-signs, adapted from Curwen, which he used to represent the seven degrees of the relative solfa scale. In gamelan both scales use more or less fixed pitches, and the Javanese already have their own system of pitch hand-signs:

- 1 = index-finger up
- 2 = two fingers up
- 3 = three fingers up
- 4 = four fingers up

5 = five fingers up

6 = thumb up

7 = thumb and little finger up

I sometimes add to these my own invention, a clenched fist (no fingers up) to represent a “dot” (*pin*) in the *balungan*.

These hand-signs are exceptionally useful, because they can be used as a sort of transient pitch notation. With them, students can be reminded of certain pitches in the music, without having to be glued to a fixed sheet of written numerals. If we use these hand-signals well, they can fulfil the most useful function of notation, i.e. as an *aide-mémoire*, without causing our students’ attention to be curtailed and their listening stultified.

In my teaching I use these hand-signs a lot, but adapt them for Kodály-type use:

When I teach my students to sing a *balungan* I ask them to represent all the pitches with hand-signs, and to move their hand-signs up and down according to the relative pitch of the notes. This has many benefits. First, it encourages them to be conscious of the melodic shape of the *balungan*, where and how it rises and falls. Even if they have difficulty forming the correct hand-signs, the rise and fall of their arm with the pitch of the *balungan* begins to forge a physical connection between melody and arm, between voice and body. They will begin to feel *balungan* not just as numbers, but as melody. I hope that this goes some way towards applying Al. Sutikno’s injunction to gamelan teachers:

They must learn and understand the two scales so they can feel the melodies. Otherwise, they are just playing numbers, and they will always be limited by how many numbers they can remember!¹⁰³

Another specific benefit of making hand-signals move up and down with pitch is that it clarifies to students very early on in their gamelan career that *balungan* is often a multi-octave construct, regardless of the limitations of the *saron* range. When *balungan* tunes, even simple *lancaran* ones, are sung using the full vocal range, they immediately have more purpose and beauty to them, and are far more memorable. If when learning them the students use their arm to follow the shape of the melodies, they will begin to appreciate their true musical value. Here is an example:

Lancaran Béndrong (pélog nem)

5 3 5 2 5 2 5 (3)

5 3 5 2 6 3 5 (6)

↑ 6 ↑ 5 ↑ 5 ↑ (6)

↑ 6 ↑ 5 ↑ 5 ↑ (6)

2̇ 3̇ 2̇ ↑ 6 5 2 (3)

When played as a sequence of numbers on a *saron*, the beauty of this melody is not immediately apparent. In particular there is a lot of awkward up-and-down movement in the third and fourth *gongan*, and a strange disjointedness at the midpoint of the last *gongan*. But if sung (and arm-signalled) using the full vocal range, the beauty and coherence of the melody become clear. Students will notice that the first pair of *gongan* and the second pair have basically the same tune, and that the last *gongan* follows a graceful curve which returns the piece to the pitch-level it started at. The tune becomes more beautiful, and a lot easier to remember.

Multi-layered consciousness, Kodály, *balungan* and structure

One of the great challenges for any gamelan student is learning to be conscious not just of what he is doing, but of what everyone else in the ensemble is doing. All gamelan teachers accept, I think, the principle that learning to listen to cues from other musicians is an essential part of learning gamelan. Becker goes further:

Parts of the composition are not isolable or separable... This kind of flexibility produces great awareness of, and sensitivity to, other members of the gamelan... The total sound of the gamelan is passing through the mind of the musician even if he is playing alone... Never does one hear a musician playing alone without his singing some other part simultaneously.¹⁰⁴

This is a massive challenge for Western gamelan students, but the consequences of not rising to it are serious, as Hardja Susilo recalls of one of his early American gamelan groups:

It would only sound acceptable as long as nobody missed a note, or added notes, which would cause them to go out of synch with the rest of the ensemble. The problem was that when they got out of synch, they didn't know how to return to the ensemble, because they only knew their parts and not their relationship with the other instruments... It's at that time when you hear the result of the wrong thoughts. Learning a culture, in this case a musical culture, is not just learning how the natives physically do it, but also how they think about it.¹⁰⁵

How can we possibly develop that kind of empathy with *karawitan*? How can we teach our students to “think about” gamelan like the Javanese? Well, we can make a start, and once again Kodály helps to point the way.

Kodály recognised that in order to be good musicians, we need to learn to multi-task. Specifically, we need to be able to play our own part whilst also being fully aware of what others are playing at the same time. To train students in multi-tasking, Kodály teachers use a number of exercises such as singing one part while showing hand-signals for another, or singing one part while playing another. These are invaluable when adapted to gamelan.

So, one of the first things I ask my students to practise when learning a new piece is to sing the words for the structure of the piece, to the pitches of the *balungan* tune, whilst also showing the hand-signals for the *balungan*. This helps them to internalise the piece in many different ways simultaneously: the melody in their hands, the melody in their arms, the melody in their voices, and the structure in their voices. It also allows them to work out from first principles what notes to play on the *kenong* or (often) *kempul*.

This will help them to begin to appreciate some of the melodic characteristics of different types of pieces. For example, they will notice that in many *lancarans* (e.g. *Ricik Ricik*, *Singanebah*, *Manyar Sèwu*, part of *Kotèk*) the three “*nong*” notes in each *gongan* are identical, whilst the *gong* note is different. If I teach them any fragments of *srepegan* (one of my favourites for beginners is the two short *gongan* of *Srepeg sanga*, i.e. 65653212 32323565), they will notice a different type of *padhang-ulihan*, wherein the *kempuls* are grouped in pairs and the latter pair in any *gongan* forms the starting pair of the next *gongan*.

Once students have started to practise the above, then they can try playing the *balungan* whilst singing the structure. This helps them to think in two dimensions at once, so that whatever they are playing they can relate it to something else in the ensemble. If a *balungan* player gets lost, I encourage him to sing the structure and listen to the *gong* or *kenong* to find his way in, rather than depending only on following the other *balungan* players, or worse, staring desperately at a piece of paper full of numbers.

More multi-layered consciousness and more hand-signs

The Javanese also have their own hand-signs to represent the structural instruments, all imitative of the movements used to play them:

gong = right fist and arm outwards

kenong = right hand with pointed index finger downwards

kempul = right fist inwards

I am not sure how authentic the next two are, but I find them useful:

kethuk = left hand down onto right knee

kempyang = left hand down onto left knee

And the following I have borrowed directly from Kodály:

rest (*wela*) = two open palms upturned (as if to signify “I’m not holding anything”)

Initially these are useful for reinforcing the concept of whatever structure I am working on with my students. Singing the structure and doing the hand-signs reminds them of the alternating pattern made by *kempul* and *kenong*, which is a very useful way to find your way around a piece. Then singing the full structure while showing only some of the signs helps them to aurally extract individual parts in preparation for playing them.

Later of course these structure hand-signs can be used as part of a multi-tasking exercise. Try singing the numbers of the *balungan* at the same time as showing the hand-signs for the structure: this is the mirror-image of the exercise I describe above. The most useful versions of this exercise, I find, are: (1) doing the hand-signals for *kenong* and *gong* whilst singing the *balungan* for a *lancaran*, and (2) doing the hand-signals for *kempul* and *gong* whilst singing the *balungan* for a *srepeg*. In both these cases, the hand-signs will follow a regular pulse, and the student can concentrate on the numbers he is singing to indicate what pitch to play. Having done this, he will be ready to play any of these instruments and will not need notation to guide him.

Kethuk, anticipation and *bonangan gembyangan*

When teaching *lancaran* to beginners, I usually leave the *kethuk* out as long as I can, at least until I feel that the group is developing the right feeling for the phrasing and the accentuation implicit in the structure and *balungan*. That way, when we move on to reciting

<i>thuk</i>	rest	<i>thuk</i>	<i>nong</i>	<i>thuk</i>	<i>pul</i>	<i>thuk</i>	<i>nong</i>
<i>thuk</i>	<i>pul</i>	<i>thuk</i>	<i>nong</i>	<i>thuk</i>	<i>pul</i>	<i>thuk</i>	<i>gong</i>

I can be confident that the “*thuks*” will genuinely be treated as the weakest and most insignificant beats in the structure, and that the “*puls*” will not suddenly be treated as stronger beats than the “*nongs*”. For only if the eight-beat version of *lancaran* (i.e. *sans thuk*) is securely internalised will Western students be able to withstand their natural instinct to put a stress on the first “*thuk*” of the structure, or failing which, the first “rest”.

Also, if the correct accentuation of the structure is well internalised then the correct relationship of each *thuk* to the other beats will be clear. It is important for the students to realise that the *kethuk* is a weaker instrument than the *kempul* and therefore comes before, not after, each of the other eight beats. To help them develop this feeling I often build up the following exercise cumulatively: first, sing the structure; then add in the *thuks*; then add the hand-signs for the *balungan* in the right hand; then also tap the *thuk* rhythm with the left hand on the knee.

The reason it is essential that the students feel the *kethuk* as preceding each other beat is that they need to feel each pair of “*thuks*” as preparatory to, and therefore related to, the “*nong*” which

follows them. For then they will be half-way to developing the right feeling to be able to play *bonangan gembyangan*.

One of the most common mistakes for beginner *bonang* players in *lancaran* is to lose orientation in relation to the structure, and to begin to play following the *kenong* rather than anticipating it. I find the best to avoid this is to ensure that the *bonang* player sings the structure of the *lancaran* (including the *thuks*) as he plays: the tune he is singing will keep him linked with the *balungan*, and as long as he is aware that he must always play when he sings “*thuk*” and change note only *after* he sings “*nong*”, then he will stay on track.

Lancaran, memorisation, making mistakes etc.

It is one of the ironies of gamelan that the pieces which are perhaps technically the easiest to play (e.g. *lancaran*) are also the hardest to understand and to internalise. The *balungan* of most classic instrumental *lancaran* in *irama lancar* can seem quite stark. They are generally not “tuneful” in any conventional Western sense, and as a consequence can be hard for Westerners to internalise and to appreciate. The response of many Westerners is to memorise them as a series of numbers and to start talking about how mathematical gamelan is, how “I’ve never been any good at memorising things,” and “couldn’t we use notation for this,” etc.

Students who get into this frame of mind are of course missing the point. They are worried about not being able to “get it right”, because the mentality they have grown up with teaches them that the end-product is all important, and that the job of the musician must be to play the notes correctly. They will presume, for similar reasons, that the best way to “get it right” is to keep their heads down, concentrate ever so hard, and ignore everyone else: this after all is the attitude which the excesses of modern Western civilisation have largely inculcated upon us through school and the workplace.

Part of the problem is that we can make the mistake of thinking of the process of memorisation as different from, and separate from, the process of learning to play the music. For the Javanese who has learnt his *karawitan* by aural osmosis, the two processes are in fact one and the same. However, if we have grown too used to depending upon notation, it becomes too easy to separate them, to the detriment of our musicianship. By routinely playing pieces of *karawitan* from notation before we have internalised them in any way, we can fool ourselves into thinking that the job of the teacher is merely to get the students playing the notes right, devolving any responsibility of memorisation onto them as individuals. This of course is utterly contrary to the spirit of communal osmosis which informs Javanese thinking. Memorising *karawitan*, just like listening to, singing, playing or understanding it, must be an integral part of the communal process. It is not an add-on.

This means that the process of learning (and memorising) a piece will have to take place slowly, gradually, with much communal singing and movement exercises as well as instrumental practise, perhaps over the course of several sessions, probably involving much forgetting and re-learning of things. This is not a bad thing. We internalise something better the more opportunities we have had to forget and re-learn it, and each new re-learning will anchor the piece in our aural subconscious more securely than the previous time.

Students will of course make large numbers of mistakes in the process. This also should not bother us. Even the best Javanese musicians are for ever making mistakes. When they play they are, after all, exploring their musical space, and re-creating their part in a different way from any previous rendering of the piece. Especially if playing instruments which require the playing of lots of notes (e.g. *gambang*, *gendèr panerus*, even *sarons* much of the time) they will inevitably play lots of notes which they would prefer not to have done. But they know three important things: first, that the more notes they play the less important each individual note is; second, that the most important

thing is that the most important notes (e.g. *gong*, *kenong* etc.) be right; and third, that the best way to improve their chances of playing more notes right is to look away from themselves and to listen to what others around them are doing.

If the Javanese get their notes right, it is as much by listening (and singing to themselves) as by remembering things. As Simon Steptoe points out, “it is perhaps a case, not of learning music by memory, but of learning to play by ear.”¹⁰⁶ In the words of one of my former gamelan students (now herself a superb *pesindhèn*): “The emphasis on playing without worrying about playing it wrong was very refreshing... The lack of notation... seemed to make it easier to make mistakes without worrying about it - it emphasised the fact that mistakes are a natural and important part of learning. If the part is written out it seems as though one should be able to follow it accurately and therefore mistakes become something unwanted.”¹⁰⁷

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It is true that many *lancaran balungan* melodies (I am thinking of *Kebogiro*, *Maésa Liwung*, *Manyar Sèwu*, *Singa Nebah*, to name but a few) are, to Western ears, quite “un-tuneful” and therefore difficult to remember, especially if first encountered in *pélog* where some re-arrangement of the tones is necessary. The reason is, of course, that *lancarans* are, by definition (and arguably by name) deliberately compressed structures. The repetitive *dhing-dhong* rocking motion of each *gatra* may well represent something graceful and memorable to the Javanese musician who is aware of all the implied counter-melodies, but to a Western beginner it sounds just like “the same thing over and over again, just with different numbers.”

To help our students with these conceptual difficulties, there are two very obvious paths: (1) constantly drawing attention to, and encouraging the singing of, the *lancaran* structure rather than just the *balungan* numbers; and (2) choosing less “doctrinaire” but more satisfyingly tuneful *lancarans* such as *Béndrong*, *Rena Rena* etc.

I would like to add two other ways to help which are not so clearly goal-orientated, but which are related to each other and will in the long run bear fruit:

(1) It can be very helpful to teach *lancaran* through the vocal melodies of *lagu dolanan* in *lancaran* style. For beginners *E E E O O O* and *Suwé Ora Jamu* have proved firm favourites. I will discuss the importance of vocal melodies and *gérongan* in greater depth below.

(2) Learning longer structures such as *ladrang* can re-illuminate the students’ understanding of *lancaran*.

Ladrang and longer structures

Put a sheet of notation in front of a gamelan novice and probably the last thing he will notice will be the structure. Yet it is one of the most important things he could learn about *karawitan*. He may not notice the close connection between *lancaran* and *ladrang* structures, yet this connection is so fundamental, and makes the learning of *ladrang* without notation such fun.

I usually divide the class into three groups. Get one group to recite *lancaran* structure (including *thuks*) slowly. Then ask the second group to insert “*pyang*” before each beat. Then ask the third group to recite the composite structure. After trying this in various combinations, the class will have begun to develop a feeling for some of the most important points about *ladrang*, such as: (1) it is merely a stretched-out *lancaran*, with *pyang-thuk-pyang* before each of the eight main beats; (2) each *gatra* starts with a *pyang-thuk-pyang* anacrusis and ends with a rest, *pul*, *nong*, or *gong*; (3) the tempo is slower, so we can put a *balungan* note on every beat, not just every other; (4) therefore we

now have 32 *balungan* notes per *gongan* instead of just 8; (5) therefore our *balungan* can be more expansive and obviously lyrical than was possible in *lancaran*.

It is this clear lyricism which is one of the greatest revelations to beginner gamelan players, especially if they have been reared hitherto on a diet of *lancaran*. They will find *balungans* such as those of *Eling Eling*, *Mugirahayu*, *Pangkur* quite singable, which will make their internalisation much easier.

The essential thing, with *ladrang* no less than with *lancaran*, is to keep practising the multi-tasking exercises: singing the structure to the *balungan* tune whilst doing the hand-signs for, or playing, the *balungan*; singing the numbers of the *balungan* whilst doing the hand-signs for, or playing, the structure. The latter exercise is particularly useful for *ladrang*, as the *kenong* player will probably be playing *kethuk* and *kempyang* as well; for him the kinaesthetic memory of doing the hand-signs for the structure will be of great help.

The benefit of these methods is that it makes the learning of each new *lancaran* or *ladrang* easier and easier. No longer will students need to ask, “What does the *kenong* do in this piece, then?” They will already know, or at least be able to make an intelligent stab at it, without having to refer to bits of paper.

If we have done our job well as teachers, then after a few months of singing and playing *lancaran* and *ladrang*, our students’ internal feeling for the quadratic nature of gamelan *bentuk* will be well-grounded. The development to *ketawang* (= half a *ladrang*) and to *mérong gendhing kethuk 2 kerep* (= a half-density *ladrang* with *kempyang* and *kempul* omitted), if explained clearly, sung repeatedly, and practised thoroughly, should not cause undue confusion.

Bonangan pipilan, elaborating patterns in general, getting lost and finding your way in again, irama changes, and pekingan selang-seling

In *ladrang*, *ketawang* and *gendhing*, the *bonang* player needs to develop a deeply-rooted instinct for the relationship between *bonangan pipilan* and the *balungan* it is based on. If he doesn’t, he will end up playing the part perfectly, but a half- or quarter-beat too early or too late. The best way for him to anchor his *bonangan* is to learn always to sing the *balungan* as he plays. For example, for the first *kenongan* of *Ladrang Eling Eling* (*pélog lima*):

sing:	six	five	three	two
play:	6 5 6	5 3	2 3	2

sing:	one	two	three	five
play:	1 2 1	2 3	5 3	5

It will take time for gamelan students to develop this knack, and they will not do it unless encouraged to practise it frequently and with supervision. For large portions of my lessons I will sit on the “wrong” side of the *bonang*, singing the *balungan* with the *bonang* player and pointing out the *pipilan* for him with my fingers. There are some important points to make about this:

First, the object of this is not to get the *bonang* player to “get it right”. The object is to gradually help him to feel the correct relationship between *bonang* and *balungan*. This will not necessarily happen quickly.

Second, the essential element in the development of this feeling is that the *bonang* player must sing the *balungan* as he plays. Even if he attempts to do so but fails to get it right yet, he will be doing his musicianship far greater good in the long run than if he merely goes through the motions of

playing the notes of the *bonangan* in the right order but without any internalised idea of its relationship with the *balungan*.

Third, it follows that singing the *bonang* part whilst playing the same thing (e.g. “six five six five three two three two”) is of limited value. It does not help the student to relate one musical part to another; indeed it forces him to direct both his oral and his kinaesthetic faculties to the same end, blocking out any possibility of being aware of the relationship with the *balungan*. However, if the student sings *balungan* as he plays *bonangan*, then his voice will be aware of one part while his hands become accustomed to another: he will be actively developing the link between his kinaesthetic sense of *bonangan pipilan* and his aural/oral sense of *balungan*. Body and voice co-operate to teach the student the instinct for multi-layered musicianship.

Fourth, everybody must practise this. One British gamelan teacher once said to me, “The problem is that after a while, the group stagnates. It’s always the same people who play *bonang*.” This can be a danger, but we condemn ourselves and our students if we allow this to happen in our gamelan classes. The gamelan player should be learning not just the production of one part of the music, but the relationships by which the whole music functions. As the simplest of the “elaborating” instruments (at least at the beginner level), regular practice on *bonang* is absolutely essential for everyone in the group.

Fifth, as the number of *bonangs* in any gamelan will be limited, it can be useful to encourage the other students to stand or sit behind the *bonang* player physically shadowing his movements as they sing the *balungan*. Merely watching and thinking about it will not do. Their understanding of the relationship between *bonang* and *balungan* must be *physicalised*, and not allowed to rest at the intellectual level. For children, the use of a bank of silent paper-plate “*bonangs*” can be very useful; the reward for progress on the paper plates is that you get to do it on a real instrument!

Sixth, *bonangan pipilan* is but one of the simplest of many elaborating styles which students will learn as they go through their gamelan career. But it lays down some absolutely fundamental principles, which are applicable to many of the things that students will learn later:

- (1) Elaborating instruments usually move faster than the beat of the structure or *balungan*.
- (2) Elaborating patterns always begin in anticipation of the *balungan* they are based on.
- (3) These elaborating patterns end in unison on a strong beat. This is always the latter note in each pair of *balungan* notes, or sometimes the last in each group of four.
- (4) Therefore, the player of the elaborating pattern needs to be able to internally “sing” ahead of the *balungan* players.
- (5) This means that the player of the elaborating instrument, if he gets lost, needs to go through the following procedure to find his way back in again:
 - listen to work out where he is;
 - sing the *balungan* (or sometimes structure) to physically and aurally anchor that feeling in himself as to where he is;
 - establish to himself the speed of his elaborating pattern in relation to the *balungan*;
 - identify a point coming up sometime soon where he will know exactly where he is and will know exactly how to continue (maybe a *gong*);
 - continue singing up to that point, and keep singing as he joins in playing his elaborating part.

This procedure is neither self-evident nor easy for many students. It needs to be explained often, and many opportunities for its practice need to be provided.

(6) *Balungan* players, if they learn to listen to the elaborating players, can receive much advance warning about what they have to play, including sometimes practically a note-for-note dictation of the *balungan* part.

This is the rationale behind another exercise I do with my students, after they have learnt the basics of any elaborating style. I sit at the *bonang* or *peking* and “dictate” a piece to the *balungan* players by playing the appropriate pattern on my instrument. This is an exercise which I have found exceptionally fruitful at all levels of gamelan study.

It is of course most fruitful at slower *iramas*, when the *balungan* players have more time to listen to the cues given them by the elaborating instruments. Indeed, when gamelan students are used to depending for their orientation not upon written notation but upon consciously listening to other instruments, I find they have little difficulty in negotiating *irama* change. For example, if I have taught them to play *bonangan pipilan* in both *irama tanggung* and *irama dados*, always whilst singing the *balungan*, then they can learn to make the transition from one to the other on the *bonang* even before they try it on the *sarons*. So, in *Eling Eling*:

sing:		six		five		three		two									
play:	6	5	6	5	3	2	3	2									
sing:		one		two		three		five									
play:	1	2	1	2	3	5	3	5									
sing:		six		five		three		two	(slowing...)								
play:	6	5	6	5	3	2	3	2									
sing:			one			two		three		five							
play:	1	2	1	.	.	2	1	.	3	5	3	.	.	5	3	.	etc.

Then, when they try playing *saron* across an *irama* change, it will be relatively smooth and painless, because they will already have developed a feeling for how to listen and sing through such transitions.

Similar principles apply to *pekingan selang-seling*. When teaching this, I usually sit on the “wrong” side of the *slenthem* facing the rest of the ensemble sitting at their *pekings* or *sarons*. I play the *balungan* whilst singing the numbers of the *peking* part, and get the students to do the same. Then I ask them to do it the other way around, singing the *balungan* whilst playing the *pekingan*. When they are gaining in confidence with both of these possibilities I get them to swap from one to the other on each gong, or whenever I shout “Change!” All of this helps them to internalise the *peking-balungan* relationship, and to always be aware of the *balungan* when playing *peking*.

“Lagu”, the importance of *gérongan*, and *céngkok*

Hitherto I have only discussed the teaching of gamelan from the point of view of structure, *balungan*, and those elaborating patterns which are normally closely linked to *balungan* such as *bonangan* and *pekingan*. This can give beginner gamelan students the impression that all gamelan is like that, and that so long as one knows the *balungan* one can work most things out.

Of course this is not the case. Much has been written over the years, most pre-eminently by Sumarsam¹⁰⁸ and by Marc Perlman,¹⁰⁹ on the subject of what has come to be called “*lagu*”, “*lagu batin*”, or “inner melody” in *karawitan*. Some effort has been spent on trying to isolate and define “*lagu*” as a single hypothetical melodic line which guides the progress of a piece – which can be of

definite value to gamelan students.¹¹⁰ But at the end of the day *karawitan* resists reduction to a single line as much as Machaut or Mozart. And to suggest that the Javanese need a single melodic line to guide them through their *gendhings*, without which they would lose their way, is to take a dim view of their musicianship.

But the notion of *lagu* does tell us one useful thing: that good Javanese musicians know instinctively “how a piece goes.” Ask a Javanese musician to sing *Gambirsawit* to you and he will probably vocalise some sort of polyglot combining elements of *balungan*, structure, *rebaban*, *gérongan*, *kendhangan* and several other parts, depending upon what he reckons to be significant at the time and upon what he thinks you want or need to hear; the specific content of his vocal rendering of the *Gendhing* will not encapsulate the whole of the music, but it will show that he has a profound and deeply-felt understanding of “how the piece goes.” Similarly, if you were to ask an experienced Western musician to sing the beginning of Beethoven’s Fifth Symphony to you, he would also come up with a vocal polyglot in which points of melody, timbre, instrumentation and harmony will all appear; the sum total will not add up to Beethoven, but it will demonstrate the depth of your interviewee’s feeling for Beethoven.

If we take “*lagu*” to mean nothing more abstruse than “how the piece goes,” then it becomes a very useful concept, even for the beginner gamelan player. For the student needs to be taught as early as possible in his gamelan-learning career that the *balungan* is not “how the piece goes.” *Balungan* is a mere skeleton, one of many elements in the *lagu* (as defined above), but other instruments, such *rebab*, *gendèr*, vocals etc. express the *lagu* in a more profound way.

The beginner is of course unlikely to launch straight into learning *rebab* or *gendèr*. But the one thing which all beginners can do which can help them to penetrate to the core of *karawitan* is to sing, especially to sing vocal parts such as *gérongan*. If we want to respond constructively to Pak Tikno’s complaint that British “people don’t feel the melodies”,¹¹¹ then we should pay great attention to vocals. They are one of the most useful tools for a gamelan teacher, especially when teaching Westerners.

The point is that group vocal parts such as *gérongan* are genuinely tuneful, even to un-trained Western ears, and consequently memorable. Learning them by reading from notation is quite unnecessary, when they are so satisfying to sing by heart. With a bit of patience they can be taught by rote with very little effort. And after learning a couple of basic texts off by heart (e.g. “*Parabé Sang Smarabangun*” and “*Nalikanira ing dalu*”), a massive repertoire of pieces is opened up.

In most pieces, vocals give the student a better feeling for the *lagu* than *balungan*. Therefore, where appropriate, I try to teach a piece starting not from the *balungan* but from the vocals. After I have taught the students the vocals by rote, I usually ask them to sing them with me whilst I show the hand-signs for the structure. They can thereby work out which *bentuk* the piece is in.

I then usually ask them to sing the vocals whilst showing the structure hand-signs. They will immediately notice the close relationship between the phrasing of the vocals (especially *gérongan*) and the arrangement of the structure. This helps to bring home to them the fact that the structure is not just an abstract scheme of strokes on various instruments; the structure is an element of *lagu*: it defines and anchors the natural feeling and direction of the *lagu*, as exemplified in this case by the *gérongan*. Therefore, if a student is encouraged to sing the *gérongan* as he plays a structure instrument, he does not need to recite or even be consciously aware of the structure or *balungan*: true multi-layered consciousness and true osmosis can begin to take place. For example, in a *ladrang* in *irama dados* using “*Parabé Sang*”, the *kenong* player needs merely to sing *gérongan* and play *kenong* at the end of each line of text - a far easier task than relating his part to the *balungan* or even singing the structure.

If *lagu* as embodied in the vocals can shed light on structure, even more so for *balungan*. For almost all pieces using vocals, I ask my students to join me in collaboratively trying to work out the *balungan* from the vocals, and then to accustom themselves to singing the vocal part whilst playing *balungan*.

It helps initially to choose a piece where *balungan* and vocals follow each other quite closely and where the rate of movement of the *balungan* is relatively close to that of the vocal part, e.g. *Lancaran E E E O O O*, *Ladrang Enggar Enggar*, *Ketawang Gandamastuti*, *Ketawang Kinanthi Pawukir* etc. Once the students have got used to some of these it is useful to introduce pieces where the *balungan* is more sparse, e.g. *Ketawang Subokastawa*, *Ketawang Puspawarna*, *Ladrang Srikaton* etc.

In fact, using *gérongan* is an excellent way to introduce sparsely-spaced *balungans* such as one might encounter in *balungan nibani* or in *irama wilet*. Trying to read such *balungans* off a page whilst counting up the number of sub-divisions in-between notes can be a fraught experience. But if students sing *gérongan* as they learn sparsely-spaced *balungan* they will start to feel the *lagu* guide them to each successive *balungan* note; this is far more satisfying, and far more musical.

When teaching a *balungan* via a *gérongan*, then, I usually ask my students to sit at *balungan* instruments. By singing the *gérongan* and doing the hand-signs for the structure we can isolate each chunk of *gérongan* (often a *gatra*'s worth) to be investigated. Then, by exploring the *saron* trying to match notes, we can discuss various options for the accompanying *balungan*. The students may find it useful to have presented to them some of the principles which usually underpin the formation of *balungans* (or prior experience may have taught them these already): (1) Step-wise motion is the norm. (2) Smooth, graceful up-and-down phrases are nice to have. (3) Repeated notes are avoided, except for deliberate purposes such as *gantungan*. (4) A steady note-rate is normal most of the time. (5) Phrases often tend to move in the same direction as the *gérongan*.

By applying these principles, by listening and by singing, and with a bit of guidance, I find that students can almost always work out the *balungan* from the *gérongan*. This is so important a skill, because it clarifies to gamelan students the true priorities: *lagu* is the most important thing about *karawitan*, and all else is but an abstraction from the *lagu*; *balungan* is but a skeleton, and of subordinate importance to the vocal element.

Through this vocal-based approach, students can also be introduced to a concept which they would otherwise not usually come up against unless they wanted to learn one of the more difficult “soft” instruments: *céngkok*. Indeed, even for an aspiring or beginner Western *gendèr* player, the concept of *céngkok* will make more sense if approached through the voice than through the analysis of written-out *gendèr* patterns.

I find it useful to point out to my students the *céngkok* names attached to certain vocal melodies they encounter in *gérongans*. For instance, if they learn *Ketawang Puspawarna* from the *gérongan*, they will become aware of the melodic shape of *kacaryan* and *ayu kuning*. This will mean that if they find themselves singing those melodic *céngkok* in a new context, for example in the *wilet* section of *Ladrang Srikaton*, they will be more likely to recognise them and to recognise their implications. This will help them to internalise the new piece, and to understand and predict the *balungan*, *pekingan* and *bonangan*.

“Long-play”, and creating a musical learning community

One of my favourite ways of helping my students to consolidate a piece of music they have been learning is what I call “long-play”. This is my shorthand for playing a piece for a long time, with multiple repetitions of each section, and encouraging the students to swap positions with each other

several times during the course of the play. The intention is that when a person feels that he has made some progress with the part he is currently playing, he should quietly put down his beater and go and sit next to someone who is playing a part which he feels he needs practise at. He watches for a while, physically shadowing the part whilst singing the structure or *balungan* or whatever is most useful; when he feels ready to give it a try, he politely nudges his colleague out of the way and has a go himself, perhaps asking his colleague to hang around awhile just to check that he has got the general idea. If all students do this as they play (though hopefully not all abandoning their instruments simultaneously!) they can all make excellent progress with consolidating the various parts of the piece.

Even more important, however, than the progress they make in getting the various parts right, are the subconscious messages they receive about what is important about playing gamelan. First of all, they learn that the object is not to “get it right”: they must move on often before they have perfected their part. Second, they learn that the most important thing is to learn the multiplicity of parts of the music. Third, they learn that their understanding of one part is enlightened by their experience of another part: all are inter-linked. Fourth, they learn that all parts of the music, even the very simple ones, are important: no one can exempt himself from playing something on the grounds that it is “too easy”. Fifth, they learn that part of the essence of learning is helping others to learn: educational selfishness is destructive of the ensemble. Sixth, they realise that singing with, observing and imitating others obviates the need for written notation in the learning process. Finally, and perhaps most importantly, they learn that perfection is beyond the grasp of all musicians: if they start out feeling self-conscious about their own lack of skill, they discover fairly swiftly that none of their colleagues has attained gamelan perfection; they are all in this together, and the mistakes they make, like their successes, are but staging posts on a long journey.

These are the subconscious values of a truly educational, truly musical community. They are so different from the values implicit in the way so many of our schools and workplaces function. They do, however, resemble those ideals espoused, consciously or subconsciously, by gamelan musicians in Java, and by people all over the world who learn anything by informal means or by osmosis.

VI. Objections and conclusions

I could go on describing in more detail and with more examples my approach to gamelan pedagogy. But I hope that the principles are clear, as well as some of the ways in which I put those principles into action.

There will of course be those who object. The most common objections I have heard to my methods of teaching are that (1) “it takes a long time” and (2) “it’s very difficult”. To both those accusations I plead guilty. Learning any music well, in such a way that it truly transforms our inner perceptions, will be difficult, and will take forever. However, if we do dare to teach gamelan in this way, we will probably find ourselves surprised by what our students achieve over the long term. I myself have led classes of mixed-ability amateur adults to the point where they have been able to perform, by ear, without notation, with ease, confidence and a superb sense of ensemble, pieces as challenging as *Gendhing Kutut Manggung* (with a *rangkep* section and a full set of *andhegans*), and the dance accompaniment to *Gambyong Paréanom*

I contend that this slow aural approach to gamelan teaching is worth the time and effort, for it leads to an understanding and a feeling for *karawitan* which at least begins to move in the direction of the ideals described by Kodály, Sutikno, Martopangrawit and others. If as teachers we are persistent but patient, firm but encouraging, then we can lead our students down paths of learning which can truly renew their way of relating to others, of regarding themselves, and of living in the world. This is so much more important than whether we can produce the expected “public performance every semester”,¹¹² or whether we can shoe-horn any given *gendhing* into *irama rangkep* “on schedule”.

We Western adults find it hard to run counter to our years of training in achievement-obsession. But I have yet to meet a gamelan teacher in the West who is not delighted with the extent to which young children here emulate the best aspects of an informal, process-based, osmotic learning style when removed from the presumptions and procedures of school-type education and placed into the very different environment of the gamelan. There seems to be some affinity between the subjective, exploratory and spiritual ideals of the Javanese mindset and the world of the young child, which our rationalist adult world finds threatening and is determined at all costs to reform through the institutionalisation and systematisation of education.

Edward Said paraphrases the attitudes of the early twentieth-century “Orientalists” thus:

The Oriental is irrational, depraved (fallen), childlike, “different”; thus the European is rational, virtuous, mature, “normal.”¹¹³

Here clearly the term “childlike” is used as a term of disparagement. But perhaps beyond the negative connotations lies a grain of truth; perhaps becoming a bit more “childlike” in our attitude to learning gamelan would genuinely benefit us.

There is an interesting link here with Jesus’s injunction, “Unless you change and become like little children, you will never enter the kingdom of heaven.”¹¹⁴ Perhaps, as Martopangrawit intimated, playing gamelan is a bit like entering the kingdom of heaven – and we will only become good *pangrawit* ourselves to the extent that we are prepared to become like little children, shedding our obsession with musical success, learning by exploration in ritual communion with others, open to the processes of inner enlightenment rather than the dogged individualistic pursuit of assessable goals, and listening to the music speak and tell us its own wisdom.

No, the most important thing is not just that “we teach gamelan”, for gamelan is but a path on a far greater journey. Gamelan, taught and learnt well, can remind us of what the Javanese mindset at its best already proclaims: that what really matters in life is something transcendent, something rooted

beyond the visible world. Nothing we can do or make can express it, yet we must for ever strive to represent it to ourselves: that is what music is for. To guide our students on that greater journey and to keep their eyes fixed not on transient goals but on an eternal process – that is the true privilege of being a gamelan teacher.

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To conclude: three anecdotes.

One: One of my students was particularly wedded to notation. The thought of getting anything wrong threw her into a panic. Without her sheet of numbers, she felt bereft. However, one day she arrived at class and said: “You know, I was standing on the tube the other day and I found myself humming a tune. At first I didn’t know what it was, and then I realised it was the song you’ve been teaching us!”

Two: One of my students was a quiet man, a bachelor. It took him a while to get used to singing as a way to learn things. Gradually over the years, however, he became a reliable musician and a pillar of the class. One day, much to my distress, he told me he was going to leave the gamelan class to join a choir. He said, “I never thought I could sing. I’ve always wanted to sing in a choir but thought I wouldn’t be good enough. Now, through your class, I’ve realised I can actually sing!”

Three: One of my students was a school music teacher, one of the finest I know. He learnt some gamelan, which set him thinking about the educational presumptions of the system he was working for. He visited Java, which challenged him even more. Eventually he decided to leave school-teaching. His words: “The system is setting up all these kids to fail. I don’t think I can do it any more...”

Finally, a quotation from a letter written to me by a teacher at the Guildhall School of Music:

What I took away from the morning’s work was a very specific sense of well-being. This must be in some part due to the music’s peculiar kind of order. There is a sense of rightness and security about it, if that’s the correct word, that you don’t often encounter in western classical music, and stemming from a set of values that seem to be the antithesis of European ones, and which make me ponder.¹¹⁵

Ponder we must.

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